Tendring Colchester Borders Garden Community Development Plan Document Preferred Options

Habitats Regulations Assessment: Screening Report

February 2022

Essex County Council

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Report version control:

Version	Date	Author	Description of changes
1.1	06/12/2021	Hamish Jackson	Drafted
1.2	04/01/2022	Sue Hooton	Reviewed
1.3	19/02/2022	Sue Hooton	Amended
1.4	21/02/2022	Neil Harvey	Issued

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Glossary of Acronyms

AA	Appropriate Assessment
CBC	Colchester Borough Council
CEMP	Construction Environmental Management Plan
DC	District Council
DPD	Development Plan Document
EA	Environment Agency
Ha	Hectare
HRA	Habitats Regulations Assessment
IRZ	Impact Risk Zones (for SSSIs)
Km	Kilometre
LPA	Local Planning Authority
NE	Natural England
NPPF	National Planning Policy Framework
PRoW	Public Right of Way
RAMS	Recreational disturbance Avoidance and Mitigation Strategy
RIS	Ramsar Information Sheet
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSI	Site of Specific Scientific Interest
TBC	Tendring District Council
WFD	Water Framework Directive
WRC	Water Recycling Centre
ZOI	Zone of Influence

Summary

A Habitats Regulations Assessment (HRA) has been prepared by Place Services for the Tendring Colchester Borders Garden Community Development Plan Document Preferred Options to comply with Regulation 63 of The Conservation of Habitats and Species Regulations 2017 (as amended).

As the policies contained in the Development Plan Document (DPD) cannot rule out Likely Significant Effects on Habitats (European) Sites at Stage 1 HRA Screening, there is a need for further assessment of impacts and Stage 2 Appropriate Assessment is necessary.

This report aims to consider the elements of the DPD which need to be screened in as having the potential for Likely Significant Effect (LSE) and hence requiring further assessment of their potential to result in adverse effects on the integrity of one of more Habitats (European) Sites.

There are a wide range of potential impacts upon Habitats Sites which could arise as a result of components of the DPD; in line with HRA of the Shared Strategic Section 1 Plan.

The following have been considered most likely to cause a Likely Significant Effect:

- Habitat loss and fragmentation / land take by development;
- Loss of functionally linked land (land outside the SPAs and Ramsar sites);
- Increase of any type of disturbance;
- Changes in water availability, or water quality;
- Changes in atmospheric pollution levels.

The following Habitats Sites have been screened in as it has been identified that they may be affected by impacts relating to the Tendring Colchester Borders Garden Community Development Plan Document - Preferred Options.

- Abberton Reservoir SPA
- Abberton Reservoir Ramsar Site
- Colne Estuary SPA
- Colne Estuary Ramsar site
- Essex Estuaries SAC
- Stour and Orwell Estuaries SPA
- Stour and Orwell Estuaries Ramsar site
- Blackwater Estuary SPA
- Blackwater Estuary Ramsar site
- Dengie SPA

- Dengie Ramsar site
- Hamford Water SAC
- Hamford Water Ramsar site

A number of policies and all the Preferred Options within the DPD require further assessment and consideration of mitigation: this will be undertaken at appropriate assessment stage. The complete list of policies screened in for further assessment is set out within Appendix 1.

1. Introduction

1.1 The Purpose of This Report

1.1.1 This report is to provide a Habitats Regulations Assessment (HRA) for the Tendring Colchester Borders Garden Community Development Plan Document Preferred Options in accordance with Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended).

1.1.2 The Conservation of Habitats and Species Regulations 2017 (as amended) require the Competent Authority (in this instance Colchester Borough Council and Tendring District Council) to undertake a HRA before making a decision about permission for any plan or project that may result in an adverse effect on the integrity of a European Site[1] as defined in the National Planning Policy Framework (NPPF, 2021).

1.1.3 In line with the Court judgement (CJEU People Over Wind v Coillte Teoranta C- 323/17), mitigation measures cannot be taken into account when carrying out a HRA Screening assessment to decide whether a plan or project is likely to result in significant effects on a Habitats Site. As the Tendring Colchester Borders Garden Community DPD contains land within the Zone of Influence (ZOI) for a number of Habitats Sites, it is not possible to rule out Likely Significant Effects, without mitigation in place.

1.1.4 The Court judgement (CJEU Holohan C- 461/17) now imposes more detailed requirements on the competent authority at Appropriate Assessment stage:

> […] 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.
>
> […] 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

[1] Habitats Site: Any site which would be included within the definition at regulation 8 of the Conservation of Habitats and Species Regulations 2017 (as amended) for the purpose of those regulations and those listed in paragraph 180 of the NPPF (2021). This includes potential Special Protection Areas and possible Special Areas of Conservation; listed or proposed Ramsar sites; and sites identified, or required, as compensatory measures for adverse effects on Habitats Sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

[…] 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.

1.1.5 This HRA draws upon the Habitat Regulations Assessment of the Shared Strategic Section 1 Local Plan, which was carried out by Land Use Consultants (LUC) in May 2017, on behalf of the North Essex Authorities.

1.1.6 This report therefore provides an updated Stage 1 HRA Screening as required by Regulation 63 of The Conservation of Habitats and Species Regulations 2017 (as amended).

1.1.7 The Conservation of Habitats and Species Regulations 2017 (as amended), are commonly known as the 'Habitats Regulations'. Requirements are set out within Regulations 63 and 64 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect Habitats Sites. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' process. The Government has produced core guidance for competent authorities and developers to assist with the HRA process.

1.1.8 It demonstrates how the Plan or Project is compatible with EU obligations, which includes the need to undertake a HRA and forms a plan level HRA as required by Regulation 63 of The Conservation of Habitats and Species Regulations 2017 (as amended).

1.1.9 Plans and projects should only be permitted when it has been proven that there will be no adverse effects on the integrity of Habitats Sites. The legal process can allow projects that may result in negative impacts on the integrity of a site if the competent authority is satisfied that, there are no alternative solutions, the plan or project must be carried out for Imperative Reasons of Overriding Public Interest (IROPI) (Regulation 64). However, this will require suitable compensation to ensure that the overall coherence of the series of such sites is retained.

1.1.10 The HRA should be undertaken by the 'competent authorities' - in this case Colchester Borough Council and Tendring District Council - and Place Services has been commissioned to complete this on behalf of the Councils. The HRA also requires close working with Natural England as the statutory nature conservation body.

1.1.11 This HRA report aims to:

- Consider the elements of the draft DPD screened in as having potential for Likely Significant Effect (LSE) for further assessment of their potential to result in adverse effects on the integrity of the Habitats Sites.
- Assess the potential for in combination effects from other projects and plans in the area.
- Identify if there are any outstanding issues that need further investigation.

1.1.12 It is not considered that there are any serious limitations to this HRA.

1.2 Overview of the Tendring Colchester Borders Garden Community

1.2.1 In terms of overall land use and the spatial approach for the Garden Community, some of the main requirements expected to be covered in this Preferred Options DPD, as set out in the policies of the adopted Section 1 Local Plan, include:

- a defined boundary for the new community and the amount of development it will contain (including 7,000-9,000 new homes, as well as 25 hectares of employment land, new 'centres', new schools and early years facilities, and provision for gypsies and traveller accommodation);
- land to accommodate the future expansion of the University of Essex;
- a conceptual plan showing the disposition and quantity of future land-uses;
- a three-dimensional indication of the urban design and landscape parameters which will be incorporated into any future planning applications;
- defined landscape buffers to maintain clear separation between the Garden Community, existing development in Colchester and the villages of Wivenhoe and Elmstead Market;
- the relationship and integration of the Garden Community with the A120/A133 Link Road and the Rapid Transit System (RTS) – including their proposed route and access points;
- designating a new country park along the Salary Brook corridor, incorporating Churn Wood; and
- a layout that draws upon the context and considerable assets within its boundaries (including woodland, streams and changes in topography) and the opportunities afforded by the proximity of the University of Essex.

1.3 Habitats (European) Sites

1.3.1 Habitats Sites is the term used in the NPPF (2021) to describe any site which would be included within the definition at Regulation 8 of the Conservation of Habitats and Species Regulations 2017 (as amended) for the purpose of those regulations. These now form part of the UK national network of sites for nature protection. The aim of the network is to assure the long-term survival of the UK's most valuable and threatened species and habitats.

1.3.2 All Special Protection Areas (SPAs) are designated for birds and Special Areas of Conservation (SACs) are designated for other species, and for Habitats. Wetlands of International Importance (Ramsar sites) are also part of the National Network of sites. This is because all SPAs and SACs are comprised of Sites of Special Scientific Interest (SSSIs) and all Ramsar sites in England are SSSIs. Together, SPAs, SACs and Ramsar Sites make up the Habitats sites in England. The following table (Table 1) offers a description and explanation of SPAs, SACs and Ramsar Sites.

Table 1. Description and Explanation of SPAs, SACs and Ramsar Sites

Special Protection Areas (SPAs)
SPAs are areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within EU countries. Example: Stour and Orwell Estuaries SPA. This SPA straddles the eastern part of the Essex/Suffolk border and include extensive mudflats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. *Legislation: Conservation of Habitats and Species Regulations 2017 (as amended)*
Special Areas of Conservation (SACs)
SACs are areas designated to protect habitat types that are in danger of disappearance, have a small natural range, or are highly characteristic of the region; and to protect species that are endangered, vulnerable, rare, or endemic. Example: Essex Estuaries SAC. *Legislation: Conservation of Habitats and Species Regulations 2017 (as amended)*
Ramsar Sites (Wetlands of International Importance)
Ramsar Sites are designated to protect the biological and physical features of wetlands, especially for waterfowl Habitats. For example, Stour and Orwell Estuaries Ramsar site is important due to the extent and diversity of saltmarsh and which supports 7 species of nationally scare plants. Ramsar sites often overlap with SACs and SPAs and UK planning policy

determines that they should be accorded the same importance when developments are proposed. *Legislation: Ramsar Convention (1971) – Wetlands of International Importance.*

2. Method and Approach

2.1.1 HRAs are a statutory requirement and should be undertaken by the competent authority to ensure that plans and projects comply with the Conservation of Habitats and Species Regulations 2017 (as amended).

2.1.2 HRA is the process by which the requirements of the Conservation of Habitats and Species Regulations 2017 (as amended) are implemented and ensures that plans or projects will not adversely affect Habitats Sites.

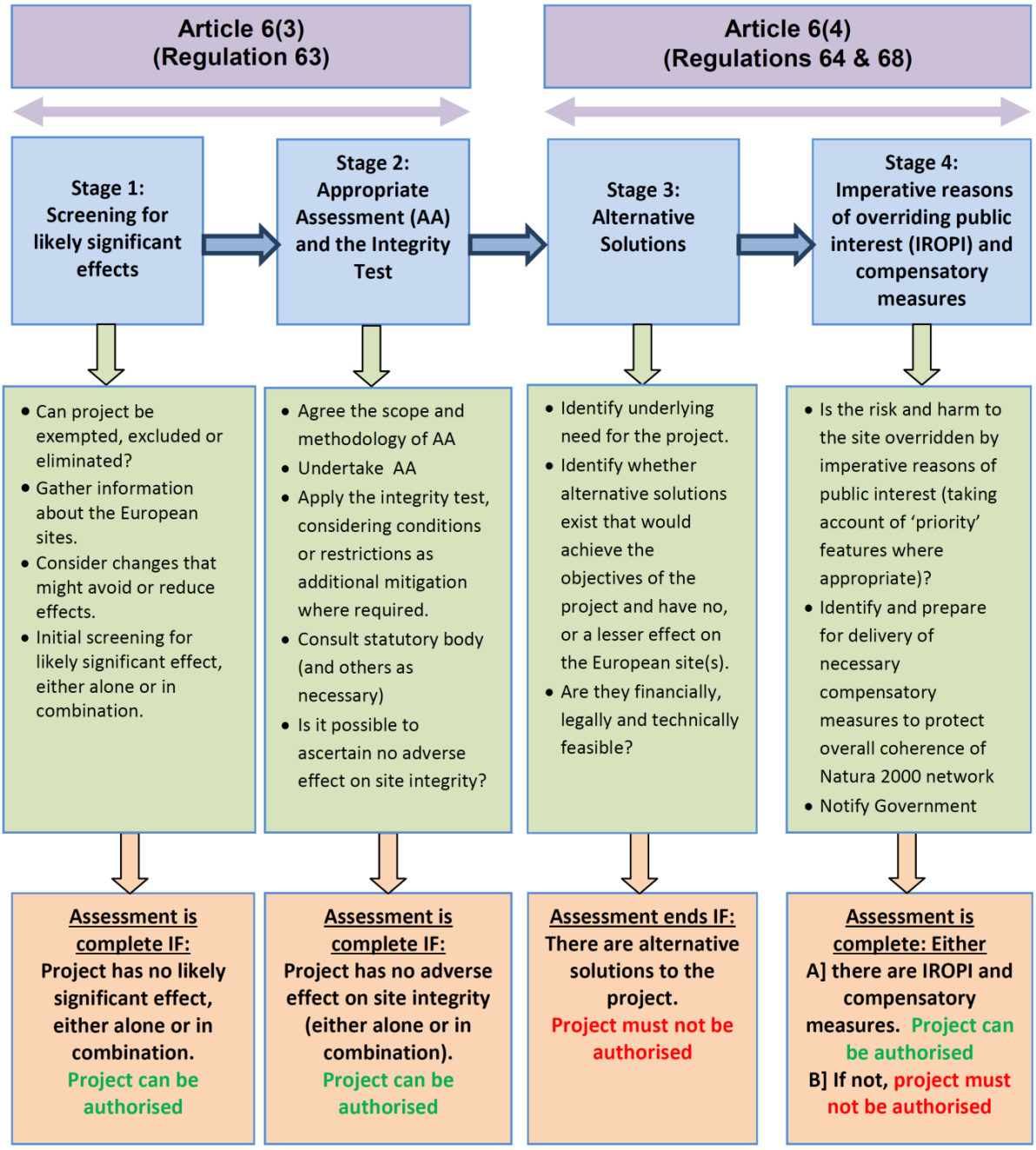
2.1.3 The legal process does not require a fixed method, but case law has shaped the way it should be undertaken. The HRA is a sequential process and it is generally divided into four stages, which are set out below in Table 2. Each of the stages contains a number of sequential steps, comprising the tests or procedures required by the Habitats Directive. This report addresses Regulation 63 of The Conservation of Habitats and Species Regulations 2017 (as amended). which covers the first stage, *i.e.* HRA Screening.

2.1.4 Each of the stages contains a number of sequential steps, comprising the tests or procedures required by the Habitats Directive. This report addresses Regulation 63 of The Conservation of Habitats and Species Regulations 2017 (as amended). which covers the first stage, *i.e.* HRA Screening.

2.1.5 Figure 1 below shows the recommended approach taken in the DTA Publications Handbook[2].

[2] The DTA Publications Handbook can be found at www.dtapublications.co.uk

Figure 1. Outline of the Four Stage Approach to the Assessment of Plans under the Habitats Regulations



Extract from *The Habitats Regulations Assessment Handbook*, www.dtapublications.co.uk
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2.1.6 Plans should not contain proposals that would be vulnerable to failure under the Habitats Regulations at project level stage, as this would be regarded as 'faulty planning'[2] by the European Court's Advocate General Kokott (Opinion delivered on 9 June 2005 Case C-6/04)[3].

2.1.7 'Significant effects' has been defined through case law. A significant effect is any effect that would undermine the conservation objectives for the qualifying features of Habitats Sites potentially affected, alone or in combination with other plans or projects. There must be a causal connection or link between the DPD and the qualifying features of the site(s) which could result in possible significant effects on the site(s). Effects may be direct or indirect and a judgement must be taken on a case-by-case basis. The decision as to whether or not a potential impact is significant depends on factors such as: magnitude of impact, type, extent, duration, intensity, timing, probability, cumulative effects and the vulnerability of the habitats and species concerned. So, what may be significant in relation to one site may not be in relation to another.

2.1.8 An effect which is not significant can be described as 'insignificant ', 'de minimis' or 'trivial'- *i.e.* it would not undermine the conservation objectives.

2.1.9 A risk-based approach involving the application of the precautionary principle has been used in the assessment. A conclusion of 'no significant effect' was only reached where it was considered very unlikely, based on current knowledge and the information available, that a proposal in the DPD would have a significant effect on the integrity of a Habitats Site.

2.1.10 Key advice guidance and information has also come from the following sources:

- DTA Publications Handbook: **https://www.dtapublications.co.uk/**
- Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS) Strategy Document
- HRA of the adopted Shared Strategic Section 1 Local Plan
- HRAs of neighbouring authorities Local Plans
- Extensive experience of producing other HRAs
- Government information regarding Habitats Sites and their 'zones of influence', *e.g.* www.magic.gov.uk

2.1 Assessment of Likely Significant Effects

2.1.11 The screening stage identifies whether the DPD may result in a Likely Significant Effect to any Habitat Site, alone or in combination with other plans or projects. The screening process should identify all aspects of the DPD that are:

[3] Case C-6/04 Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland

- Exempt from assessment
- Excluded from assessment
- Eliminated from further assessment
- Have no Likely Significant Effects, alone or in combination with other plans or projects and therefore be screened out
- Screened in as it is not possible to rule out Likely Significant Effects. In line with the 2018 Court judgment (CJEU People Over Wind v Coillte Teoranta C-323/17) mitigation measures cannot be taken into account when carrying out a screening assessment. Consequently, any aspect of the Local Plan which cannot be ruled out as having Likely Significant Effects should continue to Stage 2 Appropriate Assessment.

2.1.12 Habitats Sites which have been included for assessment are those which are within the ZOI for the underpinning Site of Special Scientific Interest (SSSIs) as identified on MAGIC www.magic.gov.uk.

2.1.13 It has been established that this DPD requires an HRA for the following reasons:

- Can the plan be exempt? - No, the Development Plan is not directly connected with or necessary to management of any Habitats Sites.
- Can the plan be excluded? - No, the Development Plan cannot be excluded as it falls within the definition of being a plan within the Habitats Regulations.
- Can the plan eliminated? - No, the Development Plan as a whole cannot be eliminated as it proposes a number of policies which may have a Likely Significant Effect on one or more Habitats Site. However, individual polices can be eliminated.

2.2 Identifying Habitats Sites, their Conservation Objectives and Qualifying Features

2.2.1 The qualifying features and conservation objectives of the Habitats Sites, together with current pressures on and potential threats, was drawn from the Standard Data Forms for SACs and SPAs and the Information Sheets for Ramsar Wetlands as well as Natural England's Site Improvement Plans (SIP) and the most recent conservation objectives. An understanding of the designated features of each Habitats Site and the factors contributing to its integrity has informed the assessment of the potential Likely Significant Effects of the Local Plan.

2.2.2 Key sources of the Habitats Sites information were found at:

- JNCC: http://jncc.defra.gov.uk/

- Site Designation features and Conservation Objectives- Designated Sites View: https://designatedsites.naturalengland.org.uk/
- Site Improvement Plans, *e.g.*: http://publications.naturalengland.org.uk/publication/6270737467834368
- MAGIC (the Multi Agency Geographic Information website): www.magic.gov.uk

2.2.3 The list of Habitats sites, their qualifying features and conservation objectives can be found in Appendix 2 including web links to further information.

The list of key vulnerabilities / factors affecting site integrity can be found in Appendix 2, including links to further information.

2.2.4 The HRA for Section 1 Plan considered the Tendring Colchester Borders Garden Community within the overall scope for the Assessment for the Plan however HRA is an iterative process. The purpose of this HRA Screening report is to review and if necessary, update the conclusions. This assessment is informed by the Planning Inspectors comments on likely significant effects and mitigation measures needing to be secured to avoid adverse effect on integrity of Habitats sites for specific impact types from the Section 1 Plan, either alone or in combination with other plans and projects in 2017. The Essex Coast RAMS provides an evidenced Zone of Influence for recreational disturbance for all of the coastal Habitats sites which updates the information in the HRA for Section 1 Plan.

2.2.5 A distance of 20km was used to identify Habitats Sites likely to be affected by impacts relating to the Tendring Colchester Borders Garden Community Development Plan Document. There are 14 Habitats Sites which lie within 20 km of the Tendring Colchester Borders Garden Community site boundary. However, the Impact Risk Zones can be interrogated on MAGIC and these show which elements may have an effect including any evidenced Zone of Influence. Those sites not identified as having been screened out by the HRA for the Section 1 Plan as well as those which also are outside any IRZ, have been scoped out for any further assessment in this HRA screening report. The sites scoped in and out are shown in Table 2.

Table 2. Habitats Sites within 20 km of the Tendring Colchester Borders Garden Community

Site	Location	Scoped in or out
Abberton Reservoir SPA & Ramsar Site	Reservoir in Essex located to the south of Colchester	**Scoped in** The Tendring Colchester Borders Garden Community site boundary falls outside of the IRZ of these Habitats sites. However, the HRA for the Section 1 Plan concluded that Likely Significant Effects from loss of

Site	Location	Scoped in or out
		offsite functional land for qualifying features could not be ruled out.
Blackwater Estuary SPA & Ramsar site	Estuary in Essex located from Maldon to Mersea Island	**Scoped in** The Tendring Colchester Borders Garden Community site boundary falls within the IRZ as identified on MAGIC. The HRA for the Section 1 Plan concluded that Likely Significant Effects from loss of functionally linked land and recreational disturbance could not be ruled out. Therefore, Likely Significant Effects from the development plan must be considered for these Habitats Sites.
Colne Estuary SPA & Ramsar site	Estuary located in north Essex, situated from Colchester to East Mersea.	**Scoped in** The Tendring Colchester Borders Garden Community site boundary falls within the IRZ as identified on MAGIC. The HRA for the Section 1 Plan concluded that Likely Significant Effects from water quality, loss of functionally linked land and recreational disturbance could not be ruled out. Therefore, Likely Significant Effects from the development plan for water quality, loss of functionally linked land for qualifying features must be considered for these Habitats Sites.
Dengie SPA & Ramsar site	A coastal peninsula located between the Blackwater Estuary and the Crouch and Roach Estuary	**Scoped in** The Tendring Colchester Borders Garden Community site boundary falls within the IRZ as identified on MAGIC. Although the HRA for the Section 1 Plan ruled out any Likely Significant Effects on Dengie SPA and Ramsar in relation to recreational pressures due to distance, the site lies within the overall ZOI for the Essex Coast RAMS. Therefore, Likely Significant Effects from the development plan must be considered for these Habitats Sites for recreational disturbance
Essex Estuaries SAC	Estuaries from Clacton on Sea to Southend	**Scoped in** The Tendring Colchester Borders Garden Community site boundary falls within the IRZ as identified on MAGIC. The HRA for the Section 1 Plan concluded that Likely Significant Effects from water quality recreational disturbance could not be ruled out Therefore, Likely Significant Effects from the development plan must be considered for these Habitats Sites.

Site	Location	Scoped in or out
Hamford Water SAC, SPA & Ramsar site	Estuary situated to the north-east of Essex.	**Scoped In** Tendring Colchester Borders Garden Community site boundary falls outside of the IRZ as identified on MAGIC. The HRA for the Section 1 Plan concluded that Likely Significant Effects from loss of functionally linked land and recreational disturbance as the site lies within the overall ZOI for the Essex Coast RAMS could not be ruled out for Hamford Water SPA and Ramsar. No LSE was predicted for Hamford Water SAC. Therefore, Likely Significant Effects from the development plan must be considered for Hamford Water SPA and Ramsar only.
Stour & Orwell Estuaries SPA & Ramsar site	Two estuaries to the south of Suffolk. The Orwell Estuary is located from Ipswich to Shotley. The Stour Estuary is located from Manningtree to Shotley	**Scoped in** The Tendring Colchester Borders Garden Community site boundary falls within the IRZ as identified on MAGIC. The HRA for the Section 1 Plan concluded that Likely Significant Effects from water quality, loss of functionally linked land and recreational disturbance could not be ruled out. Therefore, Likely Significant Effects from the development plan must be considered for these Habitats Sites.

2.2.6 A map of all 14 Habitats sites with the 20 km radius of the Tendring Colchester Borders Garden Community can be found in Appendix 3.

2.3 Screening and Impact Pathways

2.3.1 2.3.1 During the Screening stage each policy has been screened for Likely Significant Effects. Where it is not possible to rule out Likely Significant Effects we have moved straight to Appropriate Assessment.

2.3.2 There are a wide range of potential impacts and the following impacts summarised below, were considered most likely to cause a Likely Significant Effects:

- Loss of functionally linked land (land outside the SPA and Ramsar site). Impact on site features (species) which travel outside the protected sites may be relevant where development could result in effects on qualifying interest species within the Habitats Sites, for example through the loss of feeding grounds for an identified species.

- Increase of any type of disturbance, for example from recreational use resulting from new housing development and / or improved access due to transport infrastructure projects;
- Changes in water quality as a result of new development and greater pressure on water treatment services,
- Changes in water quantity as a result of increased surface runoff or increased groundwater extraction;
- Changes in atmospheric pollution levels due to increased traffic, waste management facilities etc. Pollution discharges from developments such as industrial developments, quarries and waste management facilities.

2.3.3 The IRZs which are provided on the MAGIC website **www.magic.gov.uk** have been used to confirm the scope of this assessment. The HRA for the Section 1 Local Plan considered Likely Significant Effect on Habitats Sites and Natural England and the Planning Inspector agreed with its conclusions.

2.3.4 Spatial data has been used to determine the proximity of the Garden Community to the Habitats Sites. There are many uncertainties associated with using trigger 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 based on professional judgement have been applied in relation to assessing the Likely Significant Effects on Habitats Sites that may result from the Development Plan, as described below.

Loss of Functionally Linked Land (Land outside the SPA and Ramsar Site)

2.3.5 Loss of land may have the potential to result in Likely Significant Effects to Habitats sites where the habitat affected contributes towards maintaining the interest feature for which the Habitats site is designated.

2.3.6 Mobile interest features listed in the relevant Habitats sites- *i.e.* the birds- may use off-site habitat (*i.e.* land outside of the SPA and Ramsar site boundary) for feeding, roosting, foraging and loafing, especially large fields comprising arable and pastoral land uses and coastal habitats.

2.3.7 The Shared Section 1 Local Plan requires wintering bird surveys to ascertain if the Tendring Colchester Borders Garden Community site provides any functionally linked land to any Habitats site within scope. The HRA of the Section 1 Local Plan recommended this mitigation measure on a precautionary basis. Accordingly, wintering bird surveys have been undertaken alongside the HRA of the DPD.

Wintering Bird Survey Results

Methods

2.3.8 The survey methodology included daytime surveys, which involved a walkover of the parts of the survey area (and some adjoining fields) considered suitable to support species associated with the Habitats sites, as assessed during the October survey. Each field was observed from different viewpoints with binoculars. During each survey, the numbers and locations of all key species were recorded on field maps, with notes about their behaviour – feeding, roosting, bathing, etc. Key species are defined as:

- Species identified as Qualifying Features for the Habitats sites scoped in
- Other waterbirds that could contribute to an assemblage of international significance on the Habitats sites scoped in (includes non-native species)

2.3.9 In addition, nocturnal surveys were carried out in December, January and February covering those parts of the survey area to the south of the A133 where Features of Interest had been recorded during the daytime surveys, together with a number of other fields to the north of the A133. These surveys involved fixed point observation with a Pulsar Helion2 XP50 Pro thermal imaging camera. In December and January, surveys were carried out in the evening after dusk and in the morning pre-dawn and in February an evening survey was completed. Numbers and, where possible, species of birds were recorded

Results – Daytime surveys

Table 3. illustrates the numbers of key bird species recorded on each of the daytime survey visits.

Survey date	**18/10/2021**	**15/11/2021**	**13/12/2021**	**10/01/2021**	**14/02/2021**
Species					
Barnacle Goose		2	2		
Black-headed Gull	3	305	405	299	277
Canada Goose		19			
Chaffinch		40	35	22	16
Common Gull		3		1	10
Coot	8	16	21	66	35
Cormorant			1	1	
Curlew		4	10	4	
Egyptian Goose	2			8	
Gadwall			2	12	
Golden Plover			1		
Great Crested Grebe		1	1		

Green Sandpiper		1			
Greylag Goose		218	299		50
Herring Gull			1		
Kestrel	1		2	1	1
Lapwing		3			
Little Grebe	7	6	1		
Mallard	43	94	43	82	25
Moorhen			9	6	3
Mute Swan	2	3	2	1	3
Pochard				*1*	
Shoveler		5			
Tufted Duck	15	18	25	63	31
White-fronted Goose		1	1		
Wigeon		6	75	119	132
Yellowhammer	2	1	2	1	2

**Species names in bold type are those identified as Features of Interest for one of the scoped in Habitats Sites*

Results – Nocturnal surveys

2.3.10 On 23rd December 2021, a flock of 60 plovers was observed on a field to the south of the A133 at 6.30pm. Some individuals were feeding, but the majority appeared to be roosting. Specific identification wasn't possible due to the limitations of the equipment and the distance of the observation, which was necessary to avoid disturbance. A return visit at 6.30am on the morning of 24th December 2021 revealed a group of eight Lapwing leaving the same field, identified by their flight pattern. No other plovers remained in the field as it became light.

2.3.11 On 17th January 2022, no plovers were located before dawn 5.30-6.00am, but at 7.30pm, after dark, six plovers were observed roosting in the same field to the south of the A133. It was noted that the ground was frozen at first light, and a frost was already forming during the evening survey. Other fields visible form the public highway to the north of the A133 were also surveyed, but no other plovers were located.

2.3.12 On 14th February 2022, no plovers were seen within the survey area after 7.30pm, the survey including all fields to the south of the A133 and a sample of fields to the north. It was noted that the height of winter wheat by this time may have affected the suitability of the fields for foraging plovers.

Summary of Results

2.3.13 The summary of results for Qualifying Features of the Habitats sites within scope is shown below:

- Curlew; the latest five-year averages for the Colne and Stour Estuaries are below the level of national importance. The presence of birds feeding in the same location in three consecutive months is of interest and there seems a clear link to the Colne Estuary population, but the numbers are very low (max. 10) and the habitat in which they have been recorded is unremarkable. This is less than the threshold of significance (*i.e.* >1% of the associated Habitats site) so the Tendring Colchester Borders Garden Community site is not considered to act as functionally linked land for Curlew population of any Habitats site within scope of this assessment.

- Gadwall; the latest five-year average for the Stour Estuary is below the level of national importance. The small number present (max. 12) is of no significance, with no obvious link to the population in the Stour Estuary. The Tendring Colchester Borders Garden Community site is therefore not considered to act as functionally linked land for Gadwall of any Habitats site within scope of this assessment.

- Golden Plover; although there is likely to be a clear link to the population present on the Colne Estuary at the time, only one bird was recorded on one survey visit. The available habitat is unremarkable and widespread in the area. Golden Plover is specifically listed in the HRA for the Section 1 Plan for assessment of cumulative impacts which could adversely affect the integrity of the SPA/Ramsar sites. However, a single bird is less than the threshold of significance (*i.e.* >1% of the associated Habitats site) so the Tendring Colchester Borders Garden Community site is not considered to act as functionally linked land for Golden Plover population of any Habitats site within scope of this assessment.

- Great Crested Grebe; the latest five-year average for the Stour Estuary is below the level of national importance. The single bird present is likely to be resident on the lake and so not linked to the Stour Estuary wintering population. The Tendring Colchester Borders Garden Community site is therefore not considered to act as functionally linked land for Great Crested Grebe population of any Habitats site within scope of this assessment.

- Lapwing; the latest five-year averages for the Colne and Stour Estuaries are below the level of national importance. The birds present, including a flock of 60 during the nocturnal survey in December, are likely to be associated with the population on the Colne Estuary, but are most likely from the Upper Colne Marshes SSSI at Hythe Lagoons, which is outside of the SPA boundary. The habitat on which they were feeding is unremarkable and widespread in the area. This flock represent 4.5% of the five-year average peak count for the Colne Estuary Lapwing is a qualifying feature of the Colne Estuary SPA, Lapwing is specifically listed in the HRA for the Section 1 Plan for assessment of cumulative impacts which could adversely affect the integrity of the SPA/Ramsar sites.

- Mute Swan; the latest five-year average for the Stour Estuary is below the level of national importance. The birds present are likely to be resident and so not associated with the estuary. The Tendring Colchester Borders Garden Community site is therefore not considered to act as functionally linked land for Mute Swan of any Habitats site within scope of this assessment.
- Wigeon; the latest five-year averages for the Colne and Stour Estuaries are below the level of national importance. The number present on the Allens Farm lake in December are not inconsequential, amounting to 5% of the latest five-year average for the Colne Estuary. There is clear potential for these birds to be linked to the Colne Estuary population, although it is likely that they remain in this location unless there is a significant period of freezing weather, in which case the lake and its adjacent field of winter wheat would be unusable. This is more than the threshold of significance (*i.e.,* >1% of the associated Habitats site) so the Tendring Colchester Borders Garden Community site is considered to act as functionally linked land for Wigeon of any Habitats site within scope of this assessment.
- Waterbird assemblage; The peak count for overall waterbird assemblage was an average of 742, with a peak count of 1162 birds recorded in November. The average waterbirds present represents 2.9% of the total waterbird assemblage recorded at the Colne Estuary SPA & Ramsar site (25,603 individuals, 5-year peak mean - 2013/14 - 2017/2018) (BTO, 2018) or 1.55% of the total waterbird assemblage recorded at the Stour and Orwell Estuaries SPA and Ramsar (47,966 individuals, 5-year peak mean 2010/11 – 2014/15) (Frost et al., 2017). This is more than the threshold of significance (*i.e.,* >1% of the associated Habitats site) so the Tendring Colchester Borders Garden Community site is considered to act as functionally linked land for overall waterbird assemblage for these Habitats site within scope of this assessment.

2.3.14 In line with the HRA of the Section 1 Plan, the requirement for wintering bird surveys for master planning relates to the site's individual importance for Golden Plover and Lapwing to inform mitigation proposals. Based on the results of the wintering bird surveys undertaken, the loss of functionally linked land is considered within the scope of the HRA screening, with specific consideration for Lapwing and Wigeon which are qualifying features for the Stour & Orwell Estuaries SPA & Ramsar and the Colne Estuary SPA.

2.3.15 The HRA of the Section 1 Plan considered the Tendring and Colchester Borders Garden Community site and larger housing allocations on the edge of Clacton-on-Sea were identified as providing suitable offsite foraging habitat for Golden Plover and Lapwing in the form of arable fields and short grazed pasture. The potential for the loss of offsite habitat to adversely affect these species related primarily to the cumulative effect of reducing the extent of feeding areas. The likelihood of this occurring was considered low given the quality of the habitat affected and the small amount of habitat affected as a proportion of that available around each of the European sites.

2.3.16 Given the dependency of these species on offsite arable fields and grasslands, inclusion and a commitment to implementation of appropriate safeguards and mitigation as well as phasing of the Tendring and Colchester Borders Garden Community has been included in the Shared Strategic Part 1 for Local Plans. This is necessary to provide certainty that there will be no adverse effect on the integrity of the Stour and Orwell SPA/Ramsar, Hamford Water SPA/Ramsar, Colne Estuary SPA/Ramsar, Blackwater Estuary SPA/Ramsar, and Abberton Reservoir SPA/Ramsar.

2.3.17 Wintering bird surveys and a commitment to mitigation and phasing of the Tendring and Colchester Borders Garden Community was considered precautionary, appropriate and effective. There is a need for the HRA of this DPD to take into account the cumulative numbers of SPA birds affected as parcels of land come forward for development.

2.3.18 Given its size, the Tendring and Colchester Borders Garden Community would likely be capable of mitigating for their own impact on-site if necessary, and therefore these measures were recommended to provide certainty that the cumulative effect of habitat loss would not result in significant adverse effects. In the unlikely but possible event that cumulative numbers of SPA birds affected are likely to exceed thresholds of significance (i.e., >1% of the associated Habitats site), appropriate mitigation in the form of habitat creation and management in perpetuity, either on-site or through provision of strategic sites for these species elsewhere, will be required. If required, mitigation will need to create and manage suitably located habitat which maximises feeding productivity for these SPA species, and such mitigatory habitat would need to be provided and fully functional prior to development which would affect significant numbers of SPA birds.

2.3.19 The loss of functionally linked land as a result of housing and employment development within the North Essex Authorities has the potential to result in Likely Significant Effects on the qualifying SPA/Ramsar bird species as a result of loss of foraging habitat upon which they depend.

2.3.20 The impact pathway of loss of functionally linked land Tendring and Colchester Borders Garden Community **for SPA birds cannot be ruled out either alone or in combination and will require further consideration at Appropriate Assessment stage to determine whether the loss of habitat would adversely affect site integrity, either alone or in-combination and consider if mitigation measures need to be embedded in the DPD.** These are likely to include further wintering bird surveys as part of any project level development proposals at application stage for each phase of the Tendring and Colchester Borders Garden **Community coming forward.**

Water Quality

2.3.21 An important determinant of the nature of wetland Habitats sites and the species that they support is the quality of the water that feeds them. Poor water quality can have a range of environmental impacts.

2.3.22 High levels of toxic chemicals and metals can result in immediate death of aquatic life and have detrimental effects even at lower levels, including changes in wildlife behaviour and increased vulnerability to disease. Therefore, any discharge from construction sites into water sources which are functionally linked to designated sites could therefore result in a Likely Significant Effect if management plans or discharge consents from the Environment Agency are not provided to support schemes.

2.3.23 Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. In the marine environment, nitrogen is the limiting plant nutrient, so eutrophication is often associated with discharges containing available nitrogen. Algal blooms, which commonly occur due to eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, increasing the oxygen-depleting effects of eutrophication.

2.3.24 Sewage discharges contribute to increased nutrients levels in Habitats sites, particularly to phosphate levels in watercourses leading into them. Some components of sewage effluent, pesticides, and industrial chemicals, are suspected to interfere with hormones, possibly having negative effects on the reproduction and development of aquatic life. Diffuse pollution, including that from urban run-off, is considered to be a major factor in the unfavourable condition of some Habitats sites. Tidal mudflats, on which many SPA bird species depend, are vulnerable to smothering by increased macroalgal growth due to treated effluent discharge and scouring by increased flow volumes.

2.3.25 Furthermore, greater pressure on water treatment services due to new development, especially housing, may increase the risk of effluent entering aquatic environments. This is because the proposal of large numbers of new homes in certain locations may result in the capacity of existing available infrastructure being exceeded, a situation that could potentially cause service failures to water and wastewater customers.

2.3.26 The North Essex Garden Communities Integrated Water Management Strategy (Stage 1) has identified that the growth for Tendring Colchester Borders Garden Community would be best served by the Colchester Wastewater Recycling Centre (WRC) due to capacity and proximity of the WRC to the proposed site boundary. This would require approximately 5.2 km of new pipeline and a new pumping station, with pipeline route crossing the River Colne and the A133 dual carriage road, as well as the B1028, the B1027 and a number of minor roads. Alternatively, it has been proposed that the Tendring Colchester Borders Garden Community could be served by the construction of a new WRC, but this may be attributed to high costs and further investigations to determine a suitable location.

2.3.27 The assessment concludes that there are workable wastewater options within the limits of conventional treatment for the Tendring Colchester Borders Garden Community which would not impact on the Water Framework Directive status of the Colne River. However, there is an impact pathway to the Colne Estuary SPA and Ramsar and Essex Estuaries

SAC, which lies approximately 4km south-east of the Colchester WRC and further considerations will be required upon the likely impacts upon these Habitats Sites from reduced water quality. A Stage 2 Integrated Water Management Strategy has been commissioned. This will provide further evidence to support the DPD and the HRA.

2.3.28 Change in water quality is therefore within scope of the HRA screening.

Water Quantity

Surface Water Flooding

2.3.29 Development on green field locations can create impermeable surfaces which can increase surface drainage rates. This can cause changes in depth, duration, frequency, magnitude and timing of water supply or flow, which can have significant implications for some water birds in sensitive habitats. Such changes may affect the quality and suitability of habitats used by birds for drinking, preening, feeding or roosting.

2.3.30 Magic.gov.uk indicates that the Tendring Colchester Borders Garden Community is within the 5km IRZ for high levels water discharge for the for the Colne Estuary SPA and Ramsar site and Essex Estuaries SAC. This includes consideration of any discharge of water or liquid waste of more than 5m³/day to ground (*i.e.* to seep away) or to surface water. Therefore, impacts from Surface Water Flooding will be required to be determined upon the Habitats Sites.

2.3.31 Change in water quantity related to surface water flooding is therefore within scope of the HRA screening.

Reduced Water Resources

2.3.32 Housing growth is likely to increase regional water abstraction rates, which can have serious negative impacts on Habitats sites. This is because over-abstraction can reduce water levels in rivers, causing reduced flow velocity. This can have wide ranging effects on river and wetland habitat parameters, including increased temperatures and nutrient concentrations and reduced oxygen concentrations. Such impacts can be significantly detrimental to rivers' floristic characteristics and to notable species.

2.3.33 Increased use of water sources by a proposal also has the potential to affect terrestrial habitats. Excessive abstraction from underlying aquifers could cause a lowering of the water table and affect the water quality of sensitive wetland habitats.

2.3.34 Reduced water resources as an impact pathway has been scoped out as no sensitive habitats are considered likely to be affected.

Air Quality

2.3.35 There are a number of atmospheric pollutants which can result in direct or indirect impacts to Habitats Sites. These impacts are usually caused when the qualifying features are

plants, soils and wetland habitats. However, some species may also be indirectly impacted from air pollution causing changes in habitat composition. The primary contributor to atmospheric pollution is transport related activities. Therefore, the main pollutants to atmospheric pollution are considered to be oxides of nitrogen (NOx) or sulphur dioxide (SO2) from traffic emissions. However, high intensities of agricultural practices are also considered to have a significant impact to air pollution. Potential impacts from air pollutants and their sources have been highlighted within Table 4.

Table 4: Main sources and effects of air pollutants on Habitats sites

Pollutants	Source	Effects on habitats and species
Acid Deposition	SO_2, NO_x and ammonia all contribute to acid deposition. Although future trends in sulphur emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, it is likely that increased nitrogen emissions may cancel out any gains produced by reduced sulphur levels.	Can affect habitats and species from acid rain, as well as, dry deposition. Some habitats will be more susceptible depending on soil type, geology, weathering rate and buffering capacity.
Ammonia (NH_3)	Ammonia is released following decomposition and volition of animal wastes. It is naturally occurring trace gas, but levels have increased considerably within increased agricultural practices (primarily pig or poultry farming). Ammonia reacts with acid pollutants such as the products of SO_2 and NO_x emissions to produce fine ammonium (NH_4) containing aerosol which may be transferred much longer distances (Can therefore be a significant trans-boundary issue).	Adverse effects are as a result of nitrogen deposition leading to eutrophication. As emissions mostly occur at ground level in the rural environment and NH_3 is rapidly deposited, some of the most acute problems of NH_3 are for small relict nature reserves located near to intensive agricultural landscapes.
Nitrogen oxides (NO_x)	Nitrogen oxides are mostly primarily produced in combustion processes, such as coal fire power stations.	Deposition of nitrogen compounds (Nitrates, nitrogen dioxide and nitrate acid), can lead to both soil and freshwater acidification. In addition, nitrogen compounds can cause eutrophication of soils and water. This alters the species composition of plant communities and can eliminate sensitive species.
Nitrogen deposition (N)	The pollutants that contribute to nitrogen deposition are derived mainly	Species-rich plant communities with relatively high proportions of slow

Pollutants	Source	Effects on habitats and species
	from NO_x and NH_3 emissions. These pollutants cause acidification (see also acid deposition) as well as eutrophication.	growing perennial species and bryophytes are most at risk from Nitrogen eutrophication, due to its promotion of competitive and invasive species which can respond readily to elevated levels of N. N disposition can also increase the risk of damage from abiotic factors *e.g.* drought and frost.
Ozone (O_3)	A secondary pollutant generated by photochemical reactions from NO_x and volatile organic compounds. These are mainly released by the combustion of fossil fuels in the UK has led to a large increase in background ozone concentration, leading to an increased number of days when levels across the region are above 40ppb. Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	Concentrations of O_3 above 40 ppb can be toxic to humans and wildlife, and can affect buildings. Increased ozone concentrations may lead to a reduction in growth of agricultural crops decreased forest production and altered species composition in semi-natural plant communities.
Sulphur Dioxide SO_2	Main sources of Sulphur Dioxide emissions are electricity generation, industry and domestic fuel combustion. May also arise from shipping and increased atmospheric concentrations in busy ports. Total sulphur dioxide emissions have decreased substantially in the UK since the 1980's.	Wet and dry depositions of Sulphur Dioxide acidify soils and freshwater, and alters the species composition of plant and associated animal communities. The significance of impacts depends on levels of deposition and the buffering capacity of soils.

2.3.36 The World Health Organisation[4] has determined the critical threshold of NOx concentrate for the protection of vegetation at 30 µgm-3 (one-millionth of a gramme per cubic metre air). Consequently, studies have been undertaken to determine the 'critical loads' of atmospheric nitrogen deposition (that is, NOx combined with ammonia NH3) for various habitats within Habitats sites.

[4] World Health Organisation (2006). WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulphur dioxide http://apps.who.int/iris/bitstream/handle/10665/69477/WHO_SDE_PHE_OEH_06.02_eng.pdf;jsessionid=E274B7697403E0EC4B008261B936A0F4?sequence=1

2.3.37 Nitrogen deposition has been included as a key vulnerability/ factors affecting site integrity for the Site Improvement Plans for the Stour and Orwell Estuaries SPA and Colne Estuary SPA because Nitrogen deposition exceeds relevant critical loads for these sites.

2.3.38 The leading cause of increased Nitrogen deposition at these Habitats sites has been identified locally from agricultural practices, *i.e.* land spreading, outdoor pigs, high nutrient inputs on fields. This may result in protected habitats being altered, which may in turn, may impact the SPA Birds which rely on these specific habitats.

2.3.39 No other pollutants listed above have been identified as a factor affecting site integrity and the DPD will not relate to agricultural practices. However, impacts caused by these pollutants may not be known due to a lack of evidence on local impacts, albeit impacts are considered unlikely as the proposed location for the Tendering Colchester Borders Garden Community is located further than 200m from any Habitats site (DMRB, 2019).

2.3.40 Nevertheless, Natural England has recommended that air quality is screened in for the Development Plan Document and that Air Quality modelling is undertaken to confirm whether impacts will be caused from increased vehicle emissions and other construction activities, either from the development alone or in combination with other plans and projects. As a result, Air Quality is therefore within scope of the HRA screening.

Disturbance

2.3.41 Disturbance concerns species, rather than habitats *e.g.* wetland birds. It may be limited in time (noise, source of light etc.). The intensity, duration and frequency of repetition of disturbance are therefore important parameters. The following factors can be regarded as significant disturbance.

2.3.42 Any event, activity or process contributing to the:

- The long-term decline of the population of the species on the site.
- The reduction, or to the risk of reduction, of the range of the species within the site.
- The reduction of the size of the available habitat of the species.

2.3.43 Factors such as noise, light, dust and vibration, litter are capable of causing significant disturbances for species, *e.g.* Wintering waterfowl populations.

2.3.44 *Managing Natura 2000 Sites* states that: “Disturbance of a species occurs on a site from events, activities or processes contributing, within the site, to a long-term decline in the population of the species, to a reduction or risk of reduction in its range, and to a reduction in its available habitat. This assessment is done according to the site’s conservation objectives and its contribution to the coherence of the network.”

2.3.45 Recreation can create increased pressure on the qualifying features of the Habitats sites scoped in. They all have bird interest and / or associated habitats which have the potential to be adversely affected by increased recreational pressure.

2.3.46 The Site Improvement Plans identify the following as potentially disturbing activities: visual and noise disturbance of bird populations by walkers, especially those with dogs; marine activities such as angling, jet skiing and kite surfing, bait digging, powerboating and recreational boating. Localised damage to vegetation and soils by frequent pedestrian traffic, mountain bikes and trail bikes could also result in adverse effects, particularly if there are qualifying habitats, and have been included as part of the consideration of recreational pressures.

2.3.47 Habitats Regulations Assessments for a number of Local Plans in Essex have established that proposed housing developments may cause a likely significant effect arising from recreational disturbance either alone, or in combination with other housing developments. The subsequent appropriate assessments have resulted in the development of the Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS) to assess the potential impacts caused by housing growth in Essex and has involved extensive research, including visitor surveys. This is considered the most effective strategic solution to deliver mitigation to avoid adverse effects on site integrity for the Tendring Colchester Borders Garden Community DPD.

2.3.48 The Essex Coast RAMS provides evidenced Zones of Influence (ZOI) for recreational disturbance, and those relevant to the Development Plan are set out in Table 5 below. Although the Tendring Colchester Borders Garden Community site boundary lies outside of the 8km ZOI for recreational disturbance for Hamford Water SPA and Ramsar, these Habitats sites have been included within Table 5. This is because there are predicted effects in combination with other plans and projects which includes all of the coastal Habitats sites within the adopted Essex Coast RAMS and SPD. Given the predicted and considerable draw of the coast to the new residents of the Tendring Colchester Borders Garden Community, it is considered precautionary to include these sites within scope for this assessment as future visitor surveys may evidence an increased Zone of Influence for Habitats sites including Hamford Water SPA & Ramsar sites.

Table 5. Current Zones of Influence for Recreational Disturbance

European Designated Site	Underpinning SSSIs	Zone of Influence (km)
Blackwater Estuary SPA and Ramsar site	Blackwater Estuary SSSI	22
Dengie SPA and Ramsar site	Dengie SSSI	20.8
Colne Estuary SPA and Ramsar site	Colne Estuary SSSI	9.7

European Designated Site	Underpinning SSSIs	Zone of Influence (km)
Essex Estuaries SAC	Blackwater Estuary SSSI Colne Estuary SSSI Crouch and Roach Estuaries SSSI Dengie SSSI Foulness SSSI	*
Stour Estuary SPA and Ramsar site	Stour Estuary SSSI	13
Hamford Water SPA and Ramsar Site	Hamford Water SSSI	8

2.3.49 Natural England's involvement in the Section 1 Local Plan and preparation of the Essex Coast RAMS supported the HRA process and resulted in a Statement of Common Ground at Examination.

2.3.50 On behalf of the Councils, LUC prepared a HRA report in May 2017 to support the submitted Section 1 Local Plan. That HRA report concluded that through the iterative process of HRA and the appropriate assessment stage, it was likely it would be possible to ensure that no adverse effects on integrity of Habitats sites within scope would occur. The HRA report provided key recommendations and mitigation requirements, and these have been incorporated into the Section 1 Local Plan. The Councils and LUC liaised with Natural England throughout the preparation of the Section 1 Local Plan and took account of comments from Natural England throughout the process. Natural England agreed with the Councils conclusion of no adverse effects on integrity of Habitats sites from the plan either alone or in- combination with other plans and projects and stated that provided each of the recommended safeguards are fully incorporated into the relevant policies, they agreed that the Section 1 Local Plan is unlikely to have an adverse effect on the integrity of Habitats sites. During the Section 1 Local Plan examination, the Councils agreed a Statement of Common Ground with Natural England.

2.3.51 The Councils worked closely with Natural England on the Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS). The need for a RAMS was identified at an early stage in the iterative HRA process for the Section 1 Local Plan. The Essex Coast RAMS report, which will ensure that the RAMS is delivered in perpetuity, was finalised in January 2019 and a RAMS Supplementary Planning Document (SPD) was consulted on in January-February 2020. The Strategy report and SPD have been adopted by the twelve local authority partners, including Colchester Borough Council and Tendring District Council. Natural England are part of the RAMS steering group and have confirmed that they endorse the Strategy report and SPD.

2.3.52 The Section 1 Local Plan Inspector concluded in his Final Report (December 2020) that subject to the Main Modifications, the Plan is therefore capable of being adopted in compliance with the Conservation of Habitats and Species Regulations 2017 (as amended). The Section 1 Local Plan Inspector concluded that the RAMS provision for

monitoring its effectiveness, which it is intended will feed back into the mitigation measures in an iterative fashion, enabling adjustments and improvements to be made in response to evidence of how successful the measures are, is a strength of the RAMS approach. The Section 1 Local Plan Inspector concluded that: "requiring adequate wastewater treatment capacity to be provided before dwellings are occupied, will ensure that no adverse impact on any European site will occur as a result of changes in water quality."

2.3.53 The adopted Section 1 Local Plan includes Policy SP2: Recreational disturbance Avoidance and Mitigation Strategy (RAMS). This policy and the Essex Coast RAMS SPD, which has been adopted by all partner LPAs, including Colchester and Tendring, requires mitigation for predicted recreational disturbance.

2.3.54 The Tendring Colchester Borders Community DPD will therefore need to secure appropriate mitigation to ensure that it is sound. In line with People Over Wind EU Court Ruling, this mitigation needs to be considered at Stage 2 Appropriate Assessment.

2.3.55 The provision of suitably attractive Green Infrastructure to demonstrably meet the latest guidelines from Natural England on Suitable Accessible Natural Greenspace (SANG) is required to avoid predicted recreational impacts from the Garden Community.

2.3.56 A network of green infrastructure within the garden community was secured by Policy SP8 of the Section 1 Local Plan including a community park facility, a new country park of a minimum of 70 hectares in size provided along the Salary Brook corridor and incorporating Churn Wood, the provision of sports areas with associated facilities and play facilities.

2.3.57 If this mitigation is secured by appropriately worded policy text e.g. Policy 3 Nature Part A, this can be considered as embedded or intrinsic mitigation. Such measures must be incorporated into the DPD so that they are integral parts of it and they are guaranteed to be delivered i.e. mitigation by design. Provision of sufficient SANG will need to be secured to support each and all phases of residential development.

2.3.58 The design of greenspace to provide sufficient and suitably attractive natural greenspace which will function as SANG should include the following features to divert and deflect daily visits away from the Essex coastal Habitats sites:

1) At least one circular dog walk of 2.7km minimum;
2) a dedicated 'dogs off lead area';
3) information to households to promote this area and other open spaces for recreation;
4) dog waste bins; and
5) a commitment to the long-term maintenance and management of these provisions.

2.4 Screening categorisation

2.4.1 Screening is set out in Chapter 3 of this report and Appendix 1 considers each policy in the draft DPD and masterplan options and the results of the screening exercise recorded, using the precautionary principle. Each policy included in the draft DPD and masterplan option has been categorised. A 'traffic light' system has been used to record the potential for policies and allocated sites to have a Likely Significant Effect, using the system of colours in Table 6 below.

Table 6. Habitats Regulations Assessment Screening Categorisation

Category A: Significant effects not likely
Category A identifies those polices that would not result in a Likely Significant Effect and are considered to have no adverse effect. These policies can be 'screened out' and no further assessment is required. This is because, if there are no adverse effects at all, there can be no adverse effect to contribute to in combination effects of other plans or projects.
Category B: Significant effects uncertain
Category B identifies those polices which will have no significant adverse effect on the site. That is, there could be some effect but none which would undermine the conservation objectives, when the policy is considered on its own. Given that there may be some effect this now needs to be considered in combination with other plans or projects. If these effects can be excluded in combination, the policy can be screened out and no further assessment required. However, if the possibility of a significant adverse effect in combination cannot be ruled out there will be a Likely Significant Effect in combination, and Appropriate Assessment will be required.
Category C: Likely Significant Effect
Category C identifies those polices which cannot be ruled out as having a Likely Significant Effect upon a Habitat site, alone, that is the effect could undermine the conservation objectives. In this case an Appropriate Assessment is triggered without needing to consider in combination effects at screening stage, although they may need to be considered at Appropriate Assessment.

2.5 Appropriate Assessment and the Integrity Test

2.5.1 Where the Development Plan Document for Tendring Colchester Borders Garden Community may cause Likely Significant Effects, the second stage is to undertake an 'Appropriate Assessment' of the implications of the plan (either alone or in combination with other plans or projects) and establish whether there may be an Adverse Effect on

Integrity (AEOI) of any Habitats Sites in view of their Conservation Objectives. The process undertaken for the Appropriate Assessment is set out in Chapter 4 of this report.

2.5.2 Some policies of the DPD can be used to mitigate some of the potential Likely Significant Effects which have been identified. These can be considered at Appropriate Assessment. This stage thus becomes an iterative process as avoidance and reduction measures can be incorporated in order to be able to ascertain that there is *no Adverse Effect on Integrity* on any Habitats site, before making a final assessment.

2.5.3 The Appropriate Assessment should by be undertaken by the competent authority and should assess all aspects of the DPD which can by themselves, or in combination with other plans and projects, affect the sites' Conservation Objectives. The assessment must consider the implications for each qualifying feature of each potentially affected Habitats Site. Key vulnerabilities are set out in Appendix 3 and the Site Improvement Plans were used to obtain this information. Site Improvement Plans have been developed for each Habitats site in England as part of the 'Improvement Programme for England's Natura 2000 sites (IPENS)'. The plan provides a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outlines the priority measures required to improve the condition of the features These can be found at:http://publications.naturalengland.org.uk/category/5458594975711232.

2.5.4 In order to identify potential in combination effects other plans and projects which may affect the Habitats sites need to be identified. The list of county and district level plans which provide for development in Colchester Borough Council and Tendring District Council as well as Nationally Strategic Infrastructure Projects (NSIPs) to be considered will be identified in liaison with the Sustainability Appraisal.

2.5.5 In accordance with the requirements of the Habitats Regulations, Natural England should be formally consulted on the Appropriate Assessment document for this DPD.

3. Screening of Likely Significant Effects

3.1 Screening Policies for Likely Significant Effect

3.1.1. This chapter summarises the potential for Likely Significant Effects identified, based upon Chapter 2 and using Categories A, B and C above. It advises as to where Likely Significant Effects can be ruled out. The need for an 'Appropriate Assessment' is triggered where the HRA Screening stage identifies policies which may have a Likely Significant Effect on any Habitats sites (see Appendix 1).

3.1.2. A number of impact pathways have been identified in Chapter 2 above and these have been screened in below. Fourteen Habitats sites have been scoped in for HRA screening. Where this is likely to result in a significant effect, or where there is uncertainty, in line with the precautionary approach being applied in the HRA, until significant effects can be ruled out, they are treated as giving rise to Likely Significant Effects.

3.1.3. Criteria from relevant development management policies from Tendring and Colchester's Section 2 Local Plans have been included in this draft DPD. These have already been considered in the HRA report to support examination (LUC, 2017).

3.1.4. Other draft DPD policies and Preferred Options for allocating land are screened out where they would not result in development because they either set out criteria relating to development proposed under other policies, are very general in nature or they seek to protect the natural environment.

3.1.5. A summary of the assessment is set out in Appendix 1. Conclusions take into account the potential effects of other plans and projects. Each policy was considered in the context of the policy Screening criteria above.

3.1.6. The Habitats sites whose IRZ or ZOI which falls partly within the Tendring Colchester Borders Garden Community site that are within scope are listed below:

- Abberton Reservoir SPA
- Abberton Reservoir Ramsar Site.
- Colne Estuary SPA
- Colne Estuary Ramsar site
- Essex Estuaries SAC
- Stour and Orwell Estuaries SPA
- Stour and Orwell Estuaries Ramsar site
- Hamford Water SPA
- Hamford Water SAC
- Hamford Water Ramsar site
- Blackwater Estuary SPA

- Blackwater Estuary Ramsar site
- Dengie SPA
- Dengie Ramsar site

3.1.7. The HRA appropriate assessment for the North Essex Authorities Shared Strategic Section 1 Plan identified a number of avoidance and mitigation measures to be implemented, to ensure that development proposals in the Plan will not result in adverse effects on the integrity of any Special Area of Conservation, Special Protection Area or Ramsar site, and are HRA compliant.

3.1.8. These are for changes in water quantity/quality, recreational disturbance and for loss of functionally linked land.

3.1.9. An initial assessment has been undertaken to identify whether the draft DPD policies have the potential to have any Likely Significant Effects on any Habitats sites. The notes in the RIS for Ramsar sites of factors affecting site's ecological character are not considered as necessary for HRA screening purposes and noteworthy features are not treated as qualifying features in the application of HRA tests. The assessment under the provisions of the Habitats Regulations is strictly limited to the qualifying features which meet the Ramsar site criteria.

3.1.10. Table 7, below, lists the policies to consider if any have the potential to cause a Likely Significant Effect, before taking mitigation into account and therefore require Appropriate Assessment. All polices including those screened out are shown in the Screening Table in Appendix 1.

Table 7. Draft Policies and Masterplan Options that have the Potential to Cause a Likely Significant Effect and their Impact Pathways

Policy	Loss of Functionally Linked Land	Disturbance	Water Quality	Water Quantity	Air Pollution	In Combination Effects	Screening Categorisation
Policy 1: Land uses and Spatial Approach	Yes	No if suitable SANG embedded in DPD under Policy 3 Part A Green	Yes	No if suitable SuDS embedded in DPD	No	Yes	Category C

Policy	Loss of Functionally Linked Land	Disturbance	Water Quality	Water Quantity	Air Pollution	In Combination Effects	Screening Categorisation
		Infrastructure					
Policy 2: Requirements for all new development	Yes	No	Yes	No if SuDS are suitably embedded in DPD	No	Yes	Category C
Policy 3: Nature	No	No	No	No	No	No	Category A Screen out
Policy 4: Buildings, Place and Character	Yes	No	No	No	No	Yes, includes student accommodation and gypsy & travellers pitches	Category C
Policy 5: Economic Activity and Employment	Yes	No	Yes	No if SuDS are suitably embedded in DPD	Yes	No	Category C
Policy 6: Community and Social Infrastructure	Yes	No	Yes	No if SuDS are suitably embedded in DPD	Yes	No	Category C
Policy 7: Movement and Connections	Yes	No	Yes	No if SuDS are suitably embedded in DPD	Yes	No	Category C

Policy	Loss of Functionally Linked Land	Disturbance	Water Quality	Water Quantity	Air Pollution	In Combination Effects	Screening Categorisation
Policy 8: Sustainable infrastructure	No	No	No	No	No	No	Category A Screen out
Policy 9: Delivery, Implementation and Monitoring	Yes	No if suitable SANG embedded in DPD under Policy 3 Part A Green Infrastructure	Yes	No if SuDS are suitably embedded in DPD	Yes	Yes	Category C
Masterplan Option 1	Yes	No if suitable SANG embedded in DPD under Policy 3 Part A Green Infrastructure	Yes	No if SuDS are suitably embedded in DPD	No	Yes	Category C
Masterplan Option 2	Yes	No if suitable SANG embedded in DPD under Policy 3 Part A Green Infrastructure	Yes	No if SuDS are suitably embedded in DPD	No	Yes	Category C

Policy	Loss of Functionally Linked Land	Disturbance	Water Quality	Water Quantity	Air Pollution	In Combination Effects	Screening Categorisation
Masterplan Option 3	Yes	No if suitable SANG embedded in DPD under Policy 3 Part A Green Infrastructure	Yes	No if SuDS are suitably embedded in DPD	No	Yes	Category C

3.2 Policies carried forward to Appropriate Assessment Stage

3.2.1. All polices are shown in the HRA Screening Table in Appendix 1 and those marked red or amber are screened in as having the potential for Likely Significant Effects, alone or in combination with other plans and projects, before taking mitigation into account and therefore require Appropriate Assessment.

3.3 Habitat Sites Screened in for Appropriate Assessment

3.3.1 The potential impact pathways, between Habitats sites and DPD polices, identified at HRA Screening stage, are shown in Table 8 below.

Table 8. Habitats Sites, Impact Pathways and Examples of LSE Identified at Screening Stage

Nature of potential impact	Which Habitats Site(s) could the Tendring Colchester Borders Garden Community DPD affect (alone or in combination with other plans and project)?	How the Tendring Colchester Borders Garden Community DPD (alone or in combination with other plans and projects) could affect a Habitats site?	Likely to result in Significant Effect and therefore require further assessment?
Habitat loss / Land take by development	None	N/A	No
Impact on features (protected species) outside the protected site boundary	Stour and Orwell Estuaries SPA and Ramsar Colne Estuary SPA and Ramsar	The wintering bird surveys identified that the site is functionally linked to the Colne Estuary and Stour Estuary. Although, the majority of the populations present were not considered significant, the HRA of the Section 1 plan requires mitigation for cumulative impacts for Lapwing (and Golden Plover). The mitigation measures recommended in the HRA of the Section 1 Plan are considered precautionary, appropriate and effective. Given its size, the Tendring and Colchester Borders Garden Community would likely be capable of mitigating for its own impact on-site if necessary, and therefore the above measures have been recommended to provide certainty that the cumulative effect of habitat loss would not result in significant adverse effects. As a result, the potential for the loss of functionally linked land to adversely affect these species	Yes

Nature of potential impact	Which Habitats Site(s) could the Tendring Colchester Borders Garden Community DPD affect (alone or in combination with other plans and project)?	How the Tendring Colchester Borders Garden Community DPD (alone or in combination with other plans and projects) could affect a Habitats site?	Likely to result in Significant Effect and therefore require further assessment?
		related primarily to the cumulative effect of reducing the extent of feeding areas. The likelihood of this occurring is considered low given the quality of the habitat affected and the small amount of habitat affected as a proportion of that available around each of the European sites. Nevertheless, despite the above, uncertainty remains under the precautionary principle as to whether the loss of feeding sites will cumulatively adversely affect the integrity of the SPA/Ramsar sites in relation to Lapwing and Wigeon. Given the dependency of wintering birds on offsite arable fields and grasslands, inclusion and implementation of appropriate safeguards and mitigation has been recommended for inclusion in the DPD. Therefore, Likely Significant Effects cannot be ruled out from cumulative parcels of land coming forward.	
Recreational disturbance	Stour and Orwell Estuaries SPA and Ramsar Colne Estuary SPA and Ramsar	Predicted impacts in combination on coastal Habitats sites listed in Essex Coast RAMS and SPD.	Yes

Nature of potential impact	Which Habitats Site(s) could the Tendring Colchester Borders Garden Community DPD affect (alone or in combination with other plans and project)?	How the Tendring Colchester Borders Garden Community DPD (alone or in combination with other plans and projects) could affect a Habitats site?	Likely to result in Significant Effect and therefore require further assessment?
	Hamford Water SPA, SAC and Ramsar site Essex Estuaries SAC Blackwater Estuary SPA and Ramsar site Dengie SPA & Ramsar		
Other Disturbance	None	N/A	No
Water quality (pollution)	Colne Estuary SPA and Ramsar	Changes in water quality from waste water. It is a Local Plan policy requirement (SP9 paragraph F.17) that provision of improvements to waste water treatment including an upgrade to the Colchester Waste Water Treatment Plan and offsite drainage improvements aligned with the phasing of the development will be necessary. A Stage 2 Integrated Water Management Strategy is in preparation to support the DPD and ensure additional capacity is available ahead of occupation of dwellings.	Yes
Water Quantity	None	N/A	No
Air Quality	None (the Garden Community site is not within 200m of any Habitats sites.)	Potential impacts from the development alone and in combination with other plans	Yes

Nature of potential impact	Which Habitats Site(s) could the Tendring Colchester Borders Garden Community DPD affect (alone or in combination with other plans and project)?	How the Tendring Colchester Borders Garden Community DPD (alone or in combination with other plans and projects) could affect a Habitats site?	Likely to result in Significant Effect and therefore require further assessment?
		and project due to increased vehicle emissions and other construction activities.	

3.3.2 Potential effects listed for the above Habitats sites cannot be ruled out from being likely to be significant and the pathways require further consideration. The Table summarises the main ways in which the DPD could cause Likely Significant Effects. Some of the potential Likely Significant Effects could be mitigated through the implementation of other policies in the DPD itself and the adopted Section 1 Local Plan.

3.4 HRA Screening Conclusion and Considering the Next Stage

3.4.1 The range of potential impacts on Habitats sites has been considered and assessed. In line with the *recent Court judgment (CJEU People Over Wind v Coillte Teoranta C-323/17)*, mitigation measures can no longer be taken into account when carrying out a HRA screening assessment to decide whether a plan or project is likely to result in Likely Significant Effects on a Habitats site. Consequently, HRA screening has concluded that it is not possible to rule out the potential for Likely Significant Effects without further assessment and possible mitigation for the indicated polices.

3.4.2 An Appropriate Assessment is therefore required under the UK Conservation of Habitats and Species Regulations 2017 (as amended). The Tendring Colchester Borders Garden Community DPD Preferred Options may only be adopted after having ascertained that it will not result in adverse effect on integrity of the Habitats sites within scope of this assessment.

3.4.3 This stage is an iterative process as measures can be incorporated in order to be able to ascertain that there is no significant adverse effect on the integrity, before re-screening and making a final assessment.

4. Conclusion

4.1.1 This Habitats Regulations Assessment Screening Report considers the impacts arising from the Tendring Colchester Borders Garden Community: Development Plan Document Preferred Options.

4.1.2 The range of potential impacts on nine Habitats Sites has been considered and assessed. In line with the recent Court judgment (CJEU People Over Wind v Coillte Teoranta C-323/17), mitigation measures can no longer be taken into account when carrying out a HRA screening assessment to decide whether a plan or project is likely to result in Likely Significant Effects on a Habitats Site. Consequently, HRA screening has concluded that it is not possible to rule out the potential for Likely Significant Effects without further assessment and possible mitigation for the polices set out in Table 7 and 8 above.

4.1.3 Stage 2 Appropriate Assessment is therefore required under the Conservation of Habitats and Species Regulations 2017 (as amended). The Tendring Colchester Borders Garden Community: Development Plan Document Preferred Options may only be adopted after having ascertained that it will not result in adverse effect on integrity of the Habitats Sites within scope of this assessment.

4.1.4 **Appropriate Assessment is an iterative process as measures can be incorporated in order to be able to ascertain that there is no significant adverse effect on the integrity, before re-screening and making a final assessment.**

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6. Appendices

Appendix 1. HRA Screening of Individual Policies

Where mitigation is necessary to avoid Likely Significant Effects (LSE), then in line with CJEU *People over Wind* court ruling, this cannot be taken into consideration at HRA Screening Stage 1. Any policies providing mitigation are therefore also carried forward to Stage 2 Appropriate Assessment.

Policy/Option	Stour and Orwell SPA & Ramsar	Colne Estuary SPA & Ramsar	Blackwater Estuary SPA & Ramsar Site	Dengie SPA & Ramsar Site	Hamford Water SPA & Ramsar site	Abberton Reservoir SPA & Ramsar Site	Essex Estaurties SAC	Will Policy have Likely Significant Effect (LSE) on Habitats Sites?
Policy 1: Land uses and Spatial Approach	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes. Screen in. The HRA for the Section 1 Plan predicts impacts on changes in water quality/quantity and recreational disturbance and potentially also on protected species outside designated sites. Mitigation is necessary and must be considered at Stage 2 Appropriate Assessment.
Policy 2: Requirements for all new development	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes. Screen in. The HRA for the Section 1 Plan predicts impacts on changes in water quality/quantity and potentially also on protected species outside designated sites. Mitigation is necessary and must be

Policy/Option	Stour and Orwell SPA & Ramsar	Colne Estuary SPA & Ramsar	Blackwater Estuary SPA & Ramsar Site	Dengie SPA & Ramsar Site	Hamford Water SPA & Ramsar site	Abberton Reservoir SPA & Ramsar Site	Essex Estaurties SAC	Will Policy have Likely Significant Effect (LSE) on Habitats Sites?
								considered at Stage 2 Appropriate Assessment. Embedded mitigation of SANG provision needs to be guaranteed to avoid LSE from recreational disturbance from the DPD alone
Policy 3: Nature	No	No	No	No	No	No	No	No. Screen out. This policy outlines measures to protected and enhance biodiversity, geology, heritage assets, archaeology and landscape character. Measures are included to ensure green infrastructure network will provide Suitable Accessible Natural Greenspace (SANG) to reduce recreational impacts upon coastal Habitats sites, in line with the Essex RAMS.
Policy 4: Buildings, Place and Character	Yes	Yes	Yes	Yes	No	No	Yes	Yes. Screen in. Triggers in combination impacts from all residential development including student accommodation and gypsy and travellers' pitches.
Policy 5:	Yes	Yes	No	No	No	Yes	Yes	Yes. Screen in. The HRA for the Section 1 Plan predicts impacts on changes in water quality/quantity and air quality and potentially also on protected species

Policy/Option	Stour and Orwell SPA & Ramsar	Colne Estuary SPA & Ramsar	Blackwater Estuary SPA & Ramsar Site	Dengie SPA & Ramsar Site	Hamford Water SPA & Ramsar site	Abberton Reservoir SPA & Ramsar Site	Essex Estaurties SAC	Will Policy have Likely Significant Effect (LSE) on Habitats Sites?
Economic Activity and Employment								outside designated sites. Mitigation is necessary and must be considered at Stage 2 Appropriate Assessment.
Policy 6: Community and Social Infrastructure	Yes	Yes	No	No	No	Yes	Yes	Yes. Screen in. The HRA for the Section 1 Plan predicts impacts on changes in water quality/quantity and air quality and potentially also on protected species outside designated sites. Mitigation is necessary and must be considered at Stage 2 Appropriate Assessment.
Policy 7: Movement and Connections	Yes	Yes	No	No	No	Yes	Yes	Yes. Screen in. The HRA for the Section 1 Plan predicts impacts on changes in water quality/quantity and air quality and potentially also on protected species outside designated sites. Mitigation is necessary and must be considered at Stage 2 Appropriate Assessment.
Policy 8:	No	No	No	No	No	No	No	No. Screen out. This policy outlines measures to ensure that the development demonstrates the very highest standards of energy efficiency, water

Policy/Option	Stour and Orwell SPA & Ramsar	Colne Estuary SPA & Ramsar	Blackwater Estuary SPA & Ramsar Site	Dengie SPA & Ramsar Site	Hamford Water SPA & Ramsar site	Abberton Reservoir SPA & Ramsar Site	Essex Estaurties SAC	Will Policy have Likely Significant Effect (LSE) on Habitats Sites?
Sustainable infrastructure								efficiency and renewable energy generation to set the design quality, transition to a low carbon future and ensure that buildings are future-proofed and will not require retrofitting in the future.
Policy 9: Infrastructure delivery and impact mitigation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes. Screen In. The policy outlines measures to secure additional infrastructure capacity, if deemed to be acceptable, with the mitigation measures must be agreed with the Councils and the appropriate infrastructure provider. However, the provision of additional infrastructure, could result in increased recreational disturbance, changes in water quality/quantity and air quality and potentially also protected species outside of the designated sites.
Masterplan Option 1	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes. Screen in. Triggers in combination impacts from all residential development including student accommodation and gypsy and travellers pitches.

Policy/Option	Stour and Orwell SPA & Ramsar	Colne Estuary SPA & Ramsar	Blackwater Estuary SPA & Ramsar Site	Dengie SPA & Ramsar Site	Hamford Water SPA & Ramsar site	Abberton Reservoir SPA & Ramsar Site	Essex Estaurties SAC	Will Policy have Likely Significant Effect (LSE) on Habitats Sites?
Masterplan Option 2	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes. Screen in. Triggers in combination impacts from all residential development including student accommodation and gypsy and travellers pitches.
Masterplan Option 3	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes. Screen in. Triggers in combination impacts from all residential development including student accommodation and gypsy and travellers pitches.

Appendix 2. Characteristics of Habitats Sites

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
The Stour and Orwell estuaries These estuaries straddle the eastern part of the Essex/Suffolk border in eastern England. The estuaries include extensive mud-lats, low cliffs, saltmarsh and small areas of vegetated shingle on the lower reaches. The mud-lats 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 water birds, 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.				
Stour and Orwell Estuaries SPA EU Code: UK9009121	3676.92	Qualifying Features potentially affected: 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 European importance of the following migratory species: Over winter:	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.	**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;

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		• 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*	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.	fishing; wildfowling; and military overflight training. These activities are likely to impact Habitats supporting breeding and overwintering water birds. A better understanding of which species and Habitats are most susceptible; which types of activity are most disturbing; and which locations and times of year are most sensitive is required to ensure the Estuaries are appropriately managed. Changes in species distribution – Declines in the number of bird species present at Orwell coastline have occurred. This is likely to be the result of changes in population and distribution on an international scale, due to climate change. **Invasive species –** An increase in Spartina anglica may be affecting the growth of Spartina maritime, a key habitat feature for qualifying bird roosting and feeding areas of saltmarsh and mudflat. **Planning permission: General –** The issue of development in combination with

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		• Ringed Plover *Charadrius hiaticula* • Grey Plover *Pluvialis squatarola* • Dunlin *Calidris alpina alpine* • Black-tailed Godwit *Limosa limosa islandica* • Redshank *Tringa totanus* • Shelduck *Tadorna tadorna* • Great Crested Grebe *Podiceps cristatus* • Curlew *Numenius arquata* • Dark-bellied Brent Goose *Branta bernicla bernicla* • Wigeon *Mareca penelope* • Goldeneye *Bucephala clangula* • Oystercatcher *Haematopus ostralegus* • Lapwing *Vanellus vanellus*		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

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		• Knot *Calidris canutus* • Turnstone *Arenaria interpres*		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.
Stour and Orwell Estuaries Ramsar site	3676.92	Ramsar criterion 2 Contains seven nationally scarce plants:	There are no Conservation Objectives set for Ramsar sites.	Similar to Stour and Orwell Estuaries SPA (See above). A key threat identified by RIS was erosion.

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
EU Code: UK11067		• Stiff Saltmarsh-grass *Puccinellia rupestris* • Small Cord-grass *Spartina maritime* • Perennial Glasswort *Sarcocornia perennis* • Lax-flowered Sea Lavender *Limonium humile* • *Eelgrasses Zostera angustifolia, Z. marina* and *Z. noltei.* Ramsar criterion 5 Assemblages of international importance; species with peak counts in winter; 63,017 waterfowl. Ramsar criterion 6 Species/ populations occurring at levels of international importance:		**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. The notes in the RIS for Ramsar sites of factors affecting site's ecological character are not considered as necessary for HRA screening purposes. The assessment under the provisions of the Habitats Regulations is strictly limited to the qualifying features which meet the Ramsar criteria. Where the qualifying features of a Ramsar site would or could be adversely affected by a plan or project, the tests at Appropriate Assessment would need to be based on Article 4 of the Ramsar

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		Species with peak counts in spring/autumn: • Redshank, *Tringa totanus totanus* • Species with peak counts in winter: • Dark-bellied Brent Goose, *Branta bernicla bernicla* • Northern Pintail, *Anas acuta* • Grey Plover, *Pluvialis squatarola* • Red Knot, *Calidris canutus islandica* • Dunlin, *Calidris alpina alpina* • Black-tailed Godwit, *Limosa limosa islandica* • Redshank , *Tringa totanus totanus*		Convention, which allows a Contracting Party (in this case the UK government) to delete or restrict the boundaries of sites only " in its urgent national interest".

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
Colne Estuary **Colne Estuary is a comparatively short and branching estuary, with five tidal arms which flow into the main river channel. The estuary has a narrow intertidal zone predominantly composed of flats of fine silt with mudflat communities typical of south-eastern estuaries. The estuary is of European / international importance for wintering Brent Geese and Black-tailed Godwit and of national importance for breeding Little Terns and five other species of wintering waders and wildfowl. The variety of habitats which include mudflat, saltmarsh, grazing marsh, sand and shingle spits, disused gravel pits and reedbeds, support outstanding assemblages of invertebrates and plants**				
Colne Estuary (Mid-Essex Coast Phase 2) SPA UK9009243	2,719.93	• Dark-bellied brent goose (Branta bernicla bernicla), Non-breeding • Hen harrier (Circus cyaneus), Non-breeding • Little tern (Sternula albifrons), Breeding • Pochard (Aythya ferina), Breeding • Redshank (Tringa totanus), Non-breeding • Ringed plover (Charadrius hiaticula), Breeding	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	

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		• Waterbird assemblage, Non-breeding		
Colne Estuary Ramsar UK11015	2,719.93	**Ramsar criterion 1** The site is important due to the extent and diversity of saltmarsh present. This site, and the four other sites in the Mid-Essex Coast complex, includes a total of 3,237 ha, that represent 70% of the saltmarsh habitat in Essex and 7% of the total saltmarsh in Britain **Ramsar criterion 2** The site supports 12 species of nationally scarce plants and at least 38 British Red Data Book invertebrate species.	None available.	

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		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: Species with peak counts in winter: • *Branta bernicla bernicla*; Dark-bellied Brent Goose - 3165 individuals, representing an average of 1.4% of the population (5 year peak mean 1998/9-2002/3) • *Tringa totanus tetanus*; Common redshank - 1624 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)		

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		Species/populations identified subsequent to designation for possible future consideration under criterion 6. Species with peak counts in winter: *Limosa limosa islandica*; Black-tailed godwit - 402 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9- 2002/3)		
Blackwater Estuary (Mid-Essex Coast Phase 4) **The Blackwater Estuary is the largest estuary in Essex north of the Thames and, is one of the largest estuarine complexes in East Anglia. Its mudflats, fringed by saltmarsh on the upper shores, support internationally and nationally important numbers of overwintering waterfowl. Shingle and shell banks and offshore islands are also a feature of the tidal flats. The surrounding terrestrial habitats; the sea wall, ancient grazing marsh and its associated fleet and ditch systems, plus semi-improved grassland are also of high conservation interest. This rich mosaic of habitats supports an outstanding assemblage of nationally scarce plants and a nationally important assemblage of rare invertebrates. There are 16 British Red Data Book species and 94 notable and local species.**				
Blackwater Estuary SPA (Mid-Essex Coast Phase 4)	4395.15	• A046a Branta bernicla bernicla; Dark-bellied brent goose (Non-breeding)	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:	Same as Essex Estuaries SAC

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
UK9009245		• A059 Aythya ferina; Common pochard (Breeding) • A082 Circus cyaneus; Hen harrier (Non-breeding) • A137 Charadrius hiaticula; Ringed plover (Breeding) • A141 Pluvialis squatarola; Grey plover (Non-breeding) • A149 Calidris alpina alpina; Dunlin (Non-breeding) • A156 Limosa limosa islandica; Black-tailed godwit (Non-breeding) • A195 Sterna albifrons; Little tern (Breeding) • Waterbird assemblage	• 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.	

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		Further information can be found via Natural England's Supplementary Advice.		
Blackwater Estuary Ramsar site (Mid-Essex Coast Phase 4) UK11007	4395.15	Ramsar criterion 1 Qualifies by virtue of the extent and diversity of saltmarsh habitat present. This site, and the four others in the Mid-Essex Coast complex, includes a total of 3,237 ha that represent 70% of the saltmarsh habitat in Essex and 7% of the total area of saltmarsh in Britain. Ramsar criterion 2 The invertebrate fauna is well represented and includes at least 16 British Red Data Book species. In descending order of rarity these are: Endangered: a water beetle *Paracymus aeneus*; Vulnerable: a damselfly *Lestes dryas*, the flies *Aedes flavescens*, *Erioptera bivittata*, *Hybomitra*	None available.	None available.

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		expollicata and the spiders *Heliophanus auratus* and *Trichopterna cito*; Rare: the beetles *Baris scolopacea*, *Philonthus punctus*, *Graptodytes bilineatus* and *Malachius vulneratus*, the flies *Campsicemus magius* and *Myopites eximia*, the moths *Idaea ochrata* and *Malacosoma castrensis* and the spider *Euophrys*. Ramsar criterion 3 This site supports a full and representative sequences of saltmarsh plant communities covering the range of variation in Britain. Ramsar criterion 5 Assemblages of international importance; species with peak counts in winter; 105061		

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		waterfowl (5 year peak mean 1998/99-2002/2003) Ramsar criterion 6 Species/populations occurring at levels of international importance: Species with peak counts in winter: • *Pluvialis squatarola*; Grey plover • *Calidris alpina alpina*; Dunlin • *Limosa limosa islandica;* Black-tailed godwit Species/populations identified subsequent to designation for possible future consideration under criterion 6. Species with peak counts in winter:		

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		• *Tadorna tadorna*; Common shelduck • *Pluvialis apricaria apricaria; European golden plover* • *Tringa totanus tetanus; Common redshank*		
Dengie Dengie is a large and remote area of tidal mudflat and saltmarsh at the eastern end of the Dengie peninsula, between the Blackwater and Crouch Estuaries. The saltmarsh is the largest continuous example of its type in Essex. Foreshore, saltmarsh and beaches support an outstanding assemblage of rare coastal flora. It hosts internationally and nationally important wintering populations of wildfowl and waders, and in summer supports a range of breeding coastal birds including rarities. The formation of cockleshell spits and beaches is of geomorphological interest				
<u>Dengie SPA</u> (Mid-Essex Coast Phase 1) UK9009242	3127.23	• *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding) • *Pluvialis squatarola;* Grey plover (Non-breeding)	The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:	Same as Essex Estuaries SAC

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		• *Circus cyaneus* Hen harrier (Non-breeding) • *Calidris canutus;* Knot (Non-breeding) • Waterbird assemblage (Non-breeding) Further information can be found via Natural England's Supplementary Advice.	• 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 qualifying features the distribution of qualifying features within the site	
Dengie Ramsar site (Mid-Essex Coast Phase 1) UK9009242	3127.23	Ramsar criterion 1 Qualifies by virtue of the extent and diversity of saltmarsh habitat present. Dengie, and the four other sites in the Mid-Essex Coast Ramsar site complex, includes a total of 3,237 ha, that represent 70% of the saltmarsh habitat in Essex and 7% of the total area of saltmarsh in Britain. Ramsar criterion 2	None available.	None available.

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		Dengie supports a number of rare plant and animal species. The Dengie has 11 species of nationally scarce plants: sea kale *Crambe maritima*, sea barley *Hordeum marinum*, golden samphire *Inula crithmoides*, lax flowered sea lavender *Limonium humile*, the glassworts *Sarcocornia perennis* and *Salicornia pusilla*, small cord-grass *Spartina maritima*, shrubby sea-blite *Suaeda vera*, and the eelgrasses *Zostera angustifolia*, *Z. marina* and *Z. noltei*. The invertebrate fauna includes the following Red Data Book species: a weevil *Baris scolopacea*, a horsefly *Atylotus latistriatus* and a jumping spider *Euophrys browningi*. Ramsar criterion 3 This site supports a full and representative sequences of saltmarsh plant communities		

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		covering the range of variation in Britain. <u>Ramsar criterion 5</u> Assemblages of international importance; species with peak counts in winter; 43828 waterfowl (5 year peak mean 1998/99-2002/2003) <u>Ramsar criterion 6</u> Species/populations occurring at levels of international importance: Species with peak counts in winter: • *Tringa totanus tetanus; Common redshank* Species/populations identified subsequent to designation for possible future consideration under criterion 6. Species with peak counts in winter:		

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		• *Branta bernicla bernicla*; Dark-bellied brent goose • *Haematopus ostralegus ostralegus*; Eurasian oystercatcher • *Pluvialis squatarola;* Grey plover • *Limosa lapponica lapponica*; Bar-tailed godwit • *Calidris canutus*; Red knot		
Essex Estuaries The Mid-Essex Coast comprises an extensive complex of estuaries and intertidal sand and silt flats, including several islands, shingle and shell beaches and extensive areas of saltmarsh.				
Essex Estuaries SAC UK0013690	46109.95	• H1110 Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its	1. 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

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		• H1130 Estuaries • H1140 Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats. • H1310 Salicornia and other annuals colonizing mud and sand; Glasswort and other annuals colonising mud and sand • H1320 Spartina swards (*Spartinion maritimae*); Cord-grass swards • H1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) • H1420 Mediterranean and thermo-Atlantic	Qualifying Features, by maintaining or restoring: • The extent and distribution of qualifying natural habitats • The structure and function (including typical species) of qualifying natural habitats, and The supporting processes on which qualifying natural habitats rely	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 SIP area are important for waterbirds and are also threatened by sea level rise because most are near or below mean high tide level, currently protected behind seawalls. • Public Access/Disturbance: Breeding and overwintering waterbirds are susceptible to human disturbance from a range of land- and water-based activities - including boating and watersports, walking, bait-digging, fishing and wildfowling - as well as low-flying aircraft. Some activities, such as powerboating, may produce physical disturbance to habitats. Moderate levels of disturbance in less sensitive locations may have no significant effect on the numbers of birds using the SIP area but the types, levels and locations of potentially disturbing activities are constantly changing. Managing the changes to minimise the risk of disturbance impacts will require a better

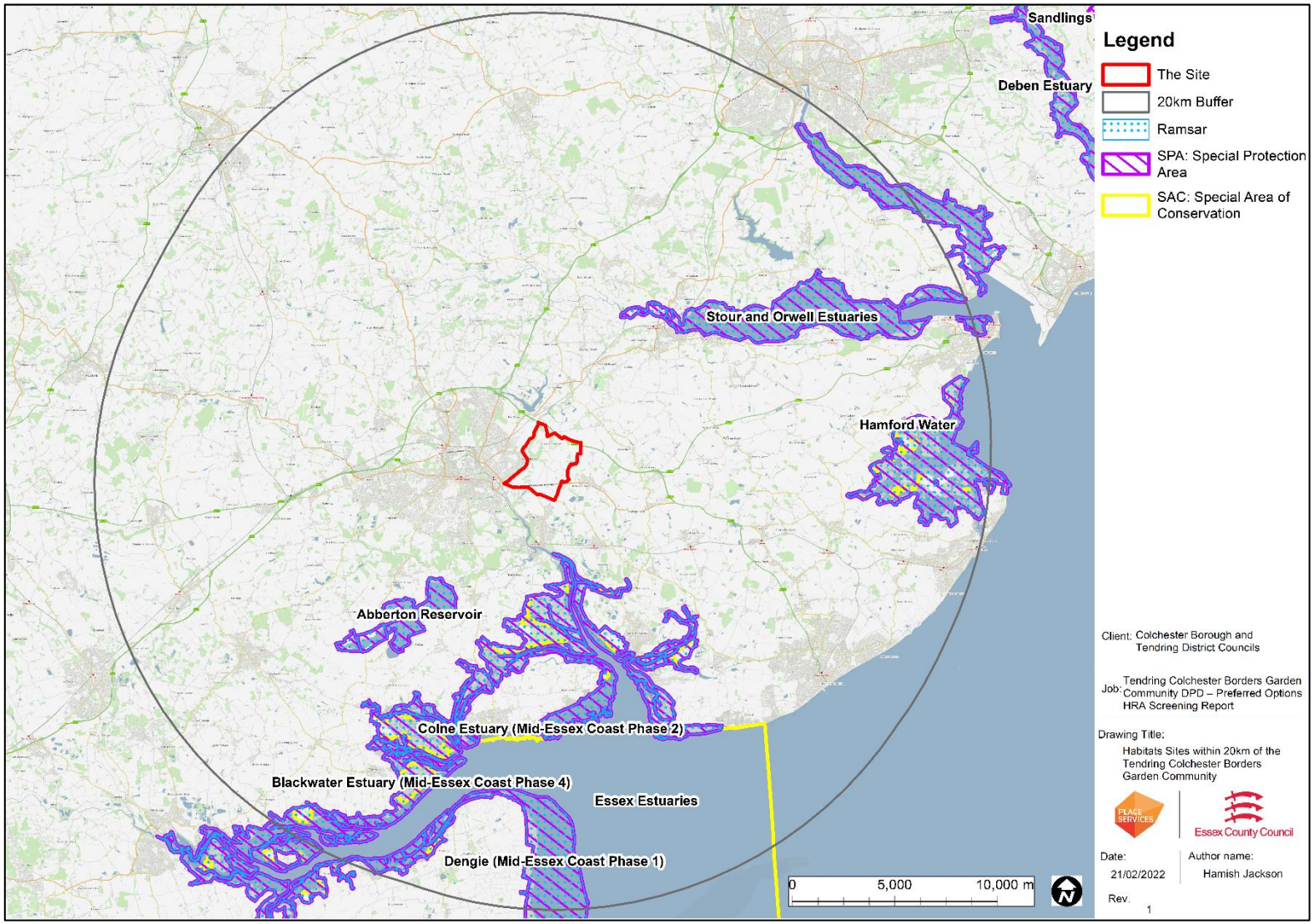
Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		halophilous scrubs (*Sarcocornetea fruticosi*)		understanding of which species and habitats are most susceptible, which types of activity are most disturbing, and which locations and times of year are most sensitive. • Fisheries: Commercial marine and estuarine Commercial fishing activities categorised as Amber or Green under Defra's revised approach to commercial fisheries in EMSs are being assessed by Kent and Essex Inshore Fisheries and Conservation Authority (KEIFCA) to determine whether management is required. For activities categorised as Amber and Green these assessments should take account of any relevant in combination effects with other fishing activities. 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. • 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

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
				improved overview of the relative sensitivities of different habitats, species and locations to different types of development (perhaps summarised as sensitivity maps and matrices for the SIP area). Difficult issues include: (a) Assessing the cumulative effects of numerous, small and often 'non-standard' developments (b) Development outside the SPA/SAC boundaries 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. • Changes in species distributions Declines in the numbers of some of the waterbird species using the Essex Estuaries SIP area may be due to changes in their distributions or population levels at a national or continental scale, possibly linked to climate change. For example, milder winters may be allowing birds to overwinter closer to their northern breeding grounds, or changes on the breeding grounds may be reducing breeding success. When assessing SPA condition, distinguishing these types of large-scale effect

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
				from effects produced by changes within the site itself is important. • Invasive Species: An increase in Pacific oyster Crassostrea gigas settlement and colonisation within the European Marine Site (EMS) 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. The importance of Pacific oysters for the local shellfish industry is recognised, however Natural England would not like to see an overall increase in the extent of foreshore across the EMS populated by Pacific oysters. Other 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. • Fisheries: Recreational marine and estuarine Recreational bait digging may impact waterbirds by reducing prey availability and creating disturbance in intertidal feeding areas.

Site name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
				It could also 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. • Fisheries: Recreational marine and estuarine Bottom towed fishing gear (i.e. any fishing instrument designed to take sea fisheries resources from the seabed) has been categorised as a 'Red' for the interest features listed, specifically the seagrass beds Zostera spp, a sub-feature of the SAC, as part of Defra's revised approach to commercial fisheries management in European Marine Sites (EMS). Appropriate management measures will be implemented and enforced by Kent and Essex Inshore Fisheries and Conservation Authority (IFCA) who have put in place the 'Bottom Towed Fishing Gear Byelaw' within the SAC to prohibit the above fishing gear being used over the majority of known seagrass beds.

Appendix 3. Habitats Sites within 20km of the Tendring Colchester Borders Garden Community



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February 2022