HABITATS REGULATIONS ASSESSMENT (SCREENING) REPORT

Rochford District Council
Pre-Submission Allocations Development Plan Document

January 2013

enfusion

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Prepared for: Rochford District Council

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CONTENTS **PAGE**

1 INTRODUCTION 1
Background 1
Consultation 1
Purpose and Structure of Report 1

2 HABITATS REGULATIONS ASSESSMENT (HRA) & THE PLAN 2
Requirement for Habitats Regulations Assessment (HRA) 2
Guidance and Good Practice 2

3 HRA STAGE 1: SCREENING 5
Task 1: Identification of European sites & Characterisation 5
Task 2: Strategy Review, Policy Screening and Identification of Likely Impacts 5
Task 3: Consideration of other plans and programmes 6
Task 4: Screening Assessment of the Allocations DPD 7

4 HRA CONCLUSIONS 10
HRA Summary 10

TABLES & FIGURES
Table 2.1: Habitats Regulations Assessment: Key Stages 3
Table 3.1: European Site within HRA Scope 5

APPENDICES
I European Site Characterisations
II Plans, Programmes and Projects Review
III Screening Matrix

1.0 INTRODUCTION

1.1 Rochford District Council is in the process of preparing a Local Development Plan (LDP), which is a collection of Development Plan Documents (DPDs) that set out how the District will develop in the future. The adopted Core Strategy DPD (Dec 2011) is the overarching planning policy document of the LDP and sets out the main issues for the future and the policies that will shape the future development of the District. The Allocations DPD sits below the Core Strategy in the LDP and sets out how land will be allocated across the District for a range of uses.

1.2 Enfusion Ltd has been commissioned to carry out Habitats Regulations Assessment (HRA) of the Allocations DPD on behalf of the Council in their role as the competent authority.

Background

1.3 The HRA process for the Allocations DPD began in early 2012 with the preparation of an HRA Advice Note. The note sought to provide an initial assessment of site allocations presented in the Discussion and Consultation Document (February 2010). The note considered if any of the options put forward in the Discussion and Consultation Document were preferred from an HRA perspective. This helped to inform the subsequent HRA stages and the selection of preferred options/ site allocations.

Consultation

1.4 The Habitats Regulations require the plan making/ competent authority [Rochford District Council] to consult the appropriate nature conservation statutory body [Natural England (NE)]. This HRA (Screening) Report will be sent to NE for consideration alongside the Pre-Submission Allocations DPD.

Purpose and Structure of Report

1.5 This report builds on the HRA Advice Note (February 2012) as well as HRA work undertaken for the Rochford District Core Strategy. Following this introductory section the report is organised into three further sections:

- **Section 2** summarises the requirement for HRA and the background to the Allocations DPD
- **Section 3** outlines the Screening process and the findings of the screening assessment.
- **Section 4** summarises the findings of the HRA and sets out the next steps, including consultation arrangements.

2.0 HABITATS REGULATIONS ASSESSMENT (HRA) & THE PLAN

Requirement for Habitats Regulations Assessment

2.1 The Conservation of Habitats and Species Regulations (as amended) 2010 [the Habitats Regulations] require that HRA is applied to all statutory land use plans in England and Wales. The aim of the HRA process is to assess the potential effects arising from a plan against the conservation objectives of any site designated for its nature conservation importance.

2.2 The Habitats Regulations transpose the requirements of the European Directive (92/43/EEC) on the Conservation of Natural Habitats and Wild Flora and Fauna [the Habitats Directive] which aims to protect habitats and species of European nature conservation importance. The Directive establishes a network of internationally important sites designated for their ecological status. These are referred to as Natura 2000 sites or European Sites, and comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) which are designated under European Directive (2009/147/EC) on the conservation of wild birds [the Birds Directive]. In addition, Government guidance also requires that Ramsar sites (which support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance [Ramsar Convention]) are included within the HRA process as required by the Regulations.

2.2 The process of HRA is based on the precautionary principle and evidence should be presented to allow a determination of whether the impacts of a land-use plan, when considered in combination with the effects of other plans and projects against the conservation objectives of a European Site; would adversely affect the integrity of that site. Where effects are considered uncertain, the potential for adverse impacts should be assumed.

Guidance and Good Practice

2.3 The application of HRA to Local Development Documents is an emerging field and has been informed by a number of key guidance and practice documents. Draft guidance for HRA 'Planning for the Protection of European Sites: Appropriate Assessment', was published by the Government (DCLG, 2006) and is based on the European Commission's (2001) guidance for the Appropriate Assessment of Plans. The DCLG guidance recommends three main stages to the HRA process:

- **Stage 1**: Screening for Likely Significant Effect
- **Stage 2:** Appropriate Assessment, Ascertaining Effects on Integrity
- **Stage 3**: Mitigations Measures and Alternatives Assessment.

2.4 If alternative solutions or avoidance/ mitigation measures to remove adverse effects on site integrity cannot be delivered then current guidance recommends an additional stage to consider Imperative Reasons of Overriding Public Interest (IROPI) for why the plan should proceed. For the HRA of land use plans IROPI is only likely to be justified in a very limited set of circumstances and must be accompanied by agreed, deliverable compensation measures for the habitats and species affected. For this reason the IROPI stage is not detailed further in this report.

2.5 More recently Natural England has produced additional, detailed guidance on the HRA of Local Development Documents (Tyldesley, 2009) that complements the DCLG guidance, and builds on assessment experience and relevant court rulings. The guidance: sets out criteria to assist with the screening process; addresses the management of uncertainty in the assessment process; and importantly outlines that for the HRA of plans; ' … what is expected is as rigorous an assessment as can reasonably be undertaken in accordance with the requirements of the Regulations …'.

2.6 The approach taken for the HRA of the Allocations DPD follows the method set out in formal guidance documents and has additionally been informed by recent good practice examples. The key stages of the HRA process overall, and the specific tasks undertaken for each stage are set out in **Table 1**.

Table 2.1: Habitats Regulations Assessment: Key Stages

Stages	Habitats Regulations Assessment
Stage 1: Screening for Likely significant Effects	1. Identify European sites in and around the plan area.
	2. Examine the conservation objectives of each interest feature of the European site(s) potentially affected.
	3. Analyse the policy/ plan and the changes to environmental conditions that may occur as a result of the plan. Consider the extent of the effects on European sites (magnitude, duration, location) based on best available information.
	4. Examine other plans and programmes that could contribute (cumulatively) to identified impacts/ effects.
	5. Produce screening assessment based on evidence gathered and consult statutory nature conservation body on findings.
	6. If effects are judged likely or uncertainty exists – the precautionary principle applies proceed to **Stage 2.**
Stage 2: Appropriate Assessment	1. Agree scope and method of Appropriate Assessment with statutory nature conservation body.
	2. Collate all relevant information and evaluate potential impacts on site(s) in light of conservation objectives.
Stage 3: Mitigation Measures and Alternatives Assessment	1. Consider how effect on integrity of site(s) could be avoided by changes to plan and the consideration of alternatives (e.g. an alternative policy/ spatial location). Develop mitigation measures (including timescale and mechanisms for delivery).
	2. Prepare HRA/ AA report and consult statutory body.
	3. Finalise HRA/AA report in line with statutory advice to

Table 2.1: Habitats Regulations Assessment: Key Stages	
Stages	**Habitats Regulations Assessment**
	accompany plan for wider consultation.

3.0 HRA STAGE 1: SCREENING

3.1 As detailed in Section 2, Table 2.1, HRA typically involves a number of stages. This Report sets out our approach and findings for Stage 1, HRA Screening for the Pre-Submission Allocations DPD. The aim of the screening stage is to assess in broad terms whether the policies and proposals set out in the plan are likely to have a significant effect on a European site(s), and whether in the light of available avoidance and mitigation measures, an Appropriate Assessment (AA) is necessary.

Task 1: Identification of European sites & characterisation

3.2 The HRA (Screening) report for the adopted Core Strategy scoped fifteen European sites into the screening assessment, five within and ten outside the Rochford District administrative boundary. This scope is also considered appropriate for the HRA Screening of the Site Allocations. These sites are listed in Table 3.1 below. Characterisations, including conservation objectives and vulnerabilities, for each of the European sites are presented in Appendix I.

Table 3.1: European Sites within HRA Scope	
European Site	**Designation**
European Sites within Plan Area	
Crouch and Roach Estuaries	SPA/ Ramsar
Essex Estuaries	SAC
Foulness	SPA/ Ramsar
European Sites outside Plan Area	
Beenfleet and Southend Marshes	SPA/ Ramsar
Blackwater Estuary	SPA/ Ramsar
Dengie	SPA/ Ramsar
Medway Estuary and Marshes	SPA/ Ramsar
Thames Estuary and Marshes	SPA/ Ramsar

Task 2: Strategy Review, Policy Screening and Identification of Likely Impacts

3.3 The screening matrix (Appendix III) considered the potential for the policies/ allocations contained in the Pre-Submission Allocations DPD to have likely significant effects on the identified European sites. A range of information sources were used to carry out the screening, including information from the European site characterisations and any available information on the allocations themselves. The capacity and location of the sites was taken into consideration alongside the potential pathways for impact and known sensitivities of European sites.

3.4 The screening matrix did not identify any policies/ allocations proposed in the Pre-Submission Allocations DPD that are likely to have a significant effect alone on European sites.

Task 3: Consideration of other plans and programmes

3.5 The Habitats Regulations requires that the effects of the Plan are considered in-combination with the effects of other plans and programmes. Appendix II provides a summary of each plan/programmeand describes potential impacts that could cause in-combination effects for each document. The findings of this review were used to inform the Strategy Review, Policy Screening and Identification of Likely Impacts (Task 2) and screening assessment (Task 4). The following Plans and Programmes were considered:

Regional

1. Draft East of England Plan East of England Regional Assembly 2004

Sub-Regional/ County

2. Essex Transport Strategy: the Local Transport Plan for Essex (June 2011)
3. Essex County Council Minerals Development Document: Preferred Approach Paper 2010
4. Essex County Council Waste Development Document: Preferred Approach Paper 2011
5. Essex Thames Gateway Water Cycle Study - Scoping Study Final Report March 2009
6. Anglian River Basin Management Plan, September 2009
7. Essex and Suffolk Water Updated Draft Water Resources Management Plan January 2009
8. The Combined Essex Catchment Abstraction Management Study (CAMS) Feb 2007
9. The Combined Essex Catchment Abstraction Management Study (CAMS) update March 2008
10. Exceeding Expectations Tourism Growth Strategy for Essex March 2007

Local

11. Basildon District Council Core Strategy Preferred Options 2012
12. Castle Point Borough Council Core Strategy, 2009[1]
13. Chelmsford Borough Council Core Strategy, 2008
14. Maldon District Council Core Strategy, 2009
15. Rochford Core Strategy, Adopted December 2011
16. Southend-on-Sea Borough Council Core Strategy, Adopted September 2009
17. Southend-on-Sea Local Transport Plan 2006-2011
18. London Southend Airport Runway Extension and Associated Development, October 2009
19. London Southend Airport & Environs Joint Area Action Plan Preferred Options, 2009

[1] On 27 September 2011, Castle Point Borough Council formally resolved to withdraw the Core Strategy. An issues consultation on a new Local Plan took place in January/March 2012. Options consultation is due to take place in 2013.

3.6 The screening matrix did not identify any policies/ allocations proposed in the Pre-Submission Allocations DPD that are likely to have a significant in-combination effect on European sites.

Task 4: Screening Assessment of the Allocations DPD

Effects alone

3.7 The screening matrix identified that the majority of policies/ allocations are unlikely to have a significant effect on European sites alone given the location and capacity of proposed development.

3.8 Given the distance of the larger allocations from European sites and their situation, adjacent to existing towns (such as Rochford, Rayleigh and Hockley), it was assessed that there would be no direct impacts as a result of proposed development.

3.9 The screening matrix did not identify any environmental pathways for impacts as a result of increased short-range atmospheric pollution. Proposed development could potentially increase levels of diffuse pollution but this is considered unlikely to have a significant effect when taking into account the sensitivity of Estuarine European sites. Given the distance of the larger allocations from European sites and the requirement for the provision of publicly accessible natural/ seminatural greenspace it was also considered unlikely that any of the policies/allocations would result in a significant increase alone in the current level of recreational activity at the European sites.

3.10 There is the potential for indirect impacts as a result of increased abstraction and increased pressure on sewerage capacity; however, given the capacity of the allocations it is unlikely that the proposed development alone will result in an impact that would lead to significant effects on European sites. It is also considered that appropriate site level mitigation would be available and could be required at the planning application stage to address any unforeseen impacts of individual developments on European sites.

3.11 Policy BFR3 proposes the development of a minimum of 41 dwellings at Stambridge Mills, Rochford. It is a disused industrial site to the east of Rochford and is approximately 350m upstream from the Essex Estuaries SAC and Crouch and Roach Estuaries SPA and Ramsar. Given the proximity of the site to the River Roach the screening identified the potential for impacts on the identified European sites. However, given the capacity of the site and the mitigation provided by Policy BFR3 it was considered unlikely that the impacts would be significant. Policy BFR3 requires any development coming forward to be designed so as to avoid harm to the international nature conservation designations, specifically through discouraging human activity within the areas designated for their ecological value along the banks of the Roach.

3.12 In response to the Allocations Discussion and Consultation Document, NE stated that development at South West Hullbridge (Policy SER6) has the potential to increase recreational pressure (particularly dog walkers), given its proximity to the Crouch and Roach Estuary SPA and Ramsar. Studies in North Kent[2] and the Solent[3] have shown that dog walking can be a particular issue for protected bird species.

3.13 Policy SER6 proposes the development of a minimum of 500 dwellings at the site. Part of the site (SER6a) will be allocated for residential development from adoption of the Allocations Document and the other (SER6b) will be safeguarded from development until 2021, unless required in order to maintain a five-year supply of deliverable housing land. The site extends northwards from Lower Road to West Avenue/ Windermere Avenue and is adjacent to the existing residential area which is designated to the north and east. The site consists of agricultural land with several large agricultural buildings and three dwellings on site. The northern most boundary of the site (SER6b) is approximately 430m from Essex Estuaries SAC and the Crouch and Roach Estuaries SPA & Ramsar.

3.14 Policy SER6 requires a minimum of 3.6 hectares of publicly accessible natural/ seminatural greenspace on the site, which will be well-integrated into the development, and accessible for residents of both phases of development. This should help to mitigate the potential increase in recreational activity, particularly dog walkers, as a result of proposed development. Taking this into account, as well as the phasing of development, the screening assessed that it is unlikely that proposed development at South West Hullbridge would result in a significant effect on the European sites through increased recreation.

3.15 **It is assessed that none of the policies/allocations in the Pre-Submission Allocations DPD are likely to have a significant effect alone on the identified European sites.**

Effects in-combination

3.16 The HRA (Screening) Report for the adopted Core Strategy considered the potential for development proposed in Rochford District, which includes development proposed in the Allocations DPD, and the surrounding areas to have likely significant in-combination effects on European sites through increased disturbance, reduced water quality and reduced water levels. The HRA concluded that subject to the inclusion of a number of recommendations, the Core Strategy would not have likely significant in-combination effects on European sites. These recommendations were subsequently incorporated into the Core Strategy before adoption in December 2011.

[2] http://gtgkm.org.uk/rspb-bird-disturbance-survey/
[3] http://www.solentforum.org/forum/sub_groups/Natural_Environment_Group/Disturbance_and_Mitigation_Project/

3.17 The Allocations DPD sits below the Core Strategy in the Local Development Plan and provides further detail on how land will be allocated for development across the District. The further detail on the location, type and capacity of development does not indicate that there are likely to be any significant in-combination effects outwith those already addressed through the HRA of the Core Strategy.

3.18 The assessment is based on an updated plans and programmes review (Appendix II) and any new or updated evidence, which includes the South Essex Outline Water Cycle Study Technical Report (September 2011). The Water Cycle Study Technical Report assessed that the proposed growth locations within Rochford District will not have impacts on designated ecology through increased abstraction and wastewater discharge.

3.19 The mitigation provided by policies in the Allocations DPD and Core Strategy as well as current regulatory processes (EA Review of Consents) will ensure that impacts of proposed development through increased abstraction, increased pressure on sewerage capacity and increased disturbance will be minimised and will not result in likely significant effects on European sites.

3.20 **It is assessed that none of the policies/allocations in the Pre-Submission Allocations DPD are likely to act in-combination with other plans, programmes and projects to have a significant effect on the identified European sites.**

4.0 HRA CONCLUSIONS

HRA Summary

4.1 This report outlines the methods used and the findings arising from the Screening Stage of the HRA for the Allocations DPD. The HRA of the Allocations DPD has been undertaken in accordance with available guidance and good practice and has been informed by the HRA (Screening) Report (January 2010) for the adopted Core Strategy.

4.2 The screening considered the likely significant effects on fifteen European sites within the influence of the plan. It was assessed that the majority of policies/ allocations were unlikely to have a significant effect on European sites alone given the location and capacity of proposed development. Given the distance of the larger allocations from European sites and their situation, adjacent to existing towns (such as Rochford, Rayleigh and Hockley), it was assessed that there would be no direct impacts as a result of proposed development.

4.3 The screening identified the potential for indirect impacts as a result of increased abstraction and increased pressure on sewerage capacity; however, given the capacity of the allocations it is unlikely that the proposed development alone will result in an impact that would lead to significant effects on European sites. It is also considered that appropriate site level mitigation would be available and could be required at the planning application stage to address any unforeseen impacts of individual developments on European sites.

4.4 The HRA (Screening) Report for the adopted Core Strategy considered the potential for development proposed in Rochford District, which includes development proposed in the Allocations DPD, and the surrounding areas to have likely significant in-combination effects on European sites through increased disturbance, reduced water quality and reduced water levels. The Allocations DPD sits below the Core Strategy in the Local Development Plan and provides further detail on how land will be allocated for development across the District. The screening assessed that the further detail on the location, type and capacity of development does not indicate that there are likely to be any significant in-combination effects outwith those already addressed through the HRA of the Core Strategy.

4.5 The mitigation provided by policies in the Core Strategy and Allocations DPD as well as current regulatory processes (EA Review of Consents) will ensure that the potential impacts of proposed development on the environment are minimised. It was concluded that none of the policies/allocations in the Pre-Submission Allocations DPD are likely to have significant effects on identified European sites either alone or in-combination.

4.6 These findings will subject to consultation comments and advice from NE and wider stakeholders.

Appendix I: European Site Characterisations

Special Areas of Conservation

1. Essex Estuaries SAC

Special Protection Areas

2. Benfleet and Southend Marshes SPA
3. Blackwater Estuary SPA
4. Crouch and Roach Estuaries SPA
5. Dengie SPA
6. Foulness SPA
7. Medway Estuary and Marshes SPA
8. Thames Estuary and Marshes SPA

Ramsar Sites

9. Benfleet and Southend Marshes Ramsar
10. Blackwater Estuary Ramsar
11. Crouch and Roach Estuaries Ramsar
12. Dengie Ramsar
13. Foulness Ramsar
14. Medway Estuary and Marshes Ramsar
15. Thames Estuary and Marshes Ramsar

Special Areas of Conservation (SAC)

Site Name: Essex Estuaries **Location Grid Ref: TM103048** **JNCC Site Code: UK0013690** **Size (ha): 46140.82** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
Site Description	This is a large estuarine site in south-east England, and is a typical, undeveloped, coastal plain estuarine system with associated open coast mudflats and sandbanks. The site comprises the major estuaries of the Colne, Blackwater, Crouch and Roach rivers and is important as an extensive area of contiguous estuarine habitat. Essex Estuaries contains a very wide range of characteristic marine and estuarine sediment communities and some diverse and unusual marine communities in the lower reaches, including rich sponge communities on mixed, tide-swept substrates. Sublittoral areas have a very rich invertebrate fauna, including the reef-building worm *Sabellaria spinulosa*, the brittlestar *Ophiothrix fragilis*, crustaceans and ascidians. The site also has large areas of saltmarsh and other important coastal habitats.
Qualifying Features	**Annex I habitats that are a primary reason for selection of this site:** ▪ Estuaries ▪ Mudflats and sandflats not covered by seawater at low tide ▪ Salicornia and other annuals colonising mud and sand ▪ Spartina swards (*Spartinion maritimae*) ▪ Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) ▪ Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*) **Annex I habitats present as a qualifying feature:** ▪ Sandbanks which are slightly covered by sea water all the time
Conservation Objectives	With regard to the natural habitats and/or species for which the site has been designated (the Qualifying Features);

Site Name: Essex Estuaries **Location Grid Ref: TM103048** **JNCC Site Code: UK0013690** **Size (ha): 46140.82** **Designation: SAC**	**Habitats Regulations Assessment: Data Proforma**
	Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore: ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species; ▪ The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species; ▪ The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; ▪ The populations of qualifying species; ▪ The distribution of qualifying species within the site.
Component SSSIs	▪ Blackwater Estuary ▪ Crouch and Roach Estuaries ▪ Colne Estuary ▪ Foulness ▪ Dengie
Vulnerabilities (includes existing pressures and trends)	**Habitat Loss and Fragmentation** ▪ The saltmarshes and mudflats are under threat from 'coastal squeeze' - man-made sea defences prevent landward migration of these habitats in response to sea-level rise. ▪ Smothering by sediments driven by storm tides and siltation. **Increased Water Pollution** ▪ Sources of potential water quality pressures include inputs from sewage effluent, agricultural (and urban)

Site Name: Essex Estuaries Location Grid Ref: TM103048 JNCC Site Code: UK0013690 Size (ha): 46140.82 Designation: SAC	Habitats Regulations Assessment: Data Proforma
	run-off, landfill leachates and the atmosphere. Shipping and recreational boating and other offshore activities add to these land-based sources. **Physical Disturbance** ▪ Siltation exacerbated by disruption to equilibrium between deposition and erosion by coastal defences (sea wall) management/ mowing and channel dredging. ▪ Disturbance from water-based and terrestrial recreational activities, such as, abrasion by the action of moored boats and trampling by walkers. ▪ Selective Extraction of minerals (e.g. aggregate dredging) ▪ Low water levels as a result of increased abstraction. **Non-physical Disturbance** ▪ Noise (e.g. boat and plane activity). ▪ Visual presence (e.g. recreational activity). **Biological Disturbance** ▪ Introduction of microbial pathogens. ▪ Introduction of non-native species and translocation. ▪ Selective extraction of species (e.g. bait digging, wildfowl, commercial and recreational fishing).

Special Protection Areas (SPA)

Site Name: Benfleet and Southend Marshes **Location (Lat & Long):** **51 31 42 N** **00 41 00 E** **JNCC Site Code: UK9009171** **Size (ha): 2251.31** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Benfleet and Southend Marshes are located on the north shore of the outer Thames Estuary in southern England. The site comprises an extensive series of saltmarshes, cockle shell banks, mud-flats, and grassland that supports a diverse flora and fauna. The productive mud-flats, cockle shell banks and diverse saltmarsh communities provide a wide range of feeding and roosting opportunities for internationally important numbers of wintering wildfowl and waders.
Qualifying Features	**Article 4.2 Qualification (79/409/EEC)** Over winter the area regularly supports: ▪ Dark-bellied Brent Goose (*Branta bernicla bernicla*) 1.3% of the population ▪ Dunlin (*Calidris alpina alpine)* 2.1% of the population in Great Britain ▪ Knot (*Calidris canutus)* 2.6% of the population ▪ Ringed Plover (*Charadrius hiaticula)* 1.3% of the population in Great Britain ▪ Grey Plover (*Pluvialis squatarola*) 2.3% of the population **Article 4.2 Qualification (79/409/EEC): An Internationally Important Assemblage Of Birds** Over winter the area regularly supports: ▪ 34789 waterfowl (5 year peak mean 30/06/1999) Including: *Branta bernicla bernicla*, *Charadrius hiaticula*, *Pluvialis squatarola*, *Calidris canutus*, *Calidris alpine alpina*.

Site Name: Benfleet and Southend Marshes **Location (Lat & Long):** **51 31 42 N** **00 41 00 E** **JNCC Site Code: UK9009171** **Size (ha): 2251.31** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Conservation Objectives	With regard to the individual species and/or assemblage of species for which the site has been classified (the Qualifying Features); **Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.** Subject to natural change, to maintain or restore: ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The populations of the qualifying features; ▪ The distribution of the qualifying features within the site.
Component SSSIs	▪ Beenfleet and Southend Marshes
Vulnerabilities (includes existing pressures and trends)	**Habitat Loss and Fragmentation** ▪ The saltmarshes and mudflats designated under the Essex Estuaries SAC and used by birds are under threat from 'coastal squeeze' - man-made sea defences prevent landward migration of these habitats in response to sea-level rise. ▪ Smothering by sediments driven by storm tides and siltation.

Site Name: Benfleet and Southend Marshes Location (Lat & Long): 51 31 42 N 00 41 00 E JNCC Site Code: UK9009171 Size (ha): 2251.31 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	Increased Water Pollution ▪ Sources of potential water quality pressures include inputs from sewage effluent, agricultural (and urban) run-off, landfill leachates and the atmosphere. Shipping and recreational boating and other offshore activities add to these land-based sources. **Physical Disturbance** ▪ Siltation exacerbated by disruption to equilibrium between deposition and erosion by coastal defences (sea wall) management/ mowing and channel dredging. ▪ Disturbance from water-based and terrestrial recreational activities, such as, abrasion by the action of moored boats and trampling by walkers. ▪ Selective Extraction of minerals (e.g. aggregate dredging) ▪ Low water levels as a result of increased abstraction. **Non-physical Disturbance** ▪ Noise (e.g. boat and plane activity). ▪ The Natura 2000 data form states that recreational activity is not a problem, however infrastructure works to facilitate visitor attractions are leading to piecemeal development which is dealt with under the planning control provisions of the Habitat Regulations. **Biological Disturbance** ▪ Introduction of microbial pathogens. ▪ Introduction of non-native species and translocation. ▪ Selective extraction of species (e.g. bait digging, wildfowl, commercial and recreational fishing).

Site Name: Blackwater Estuary **Location (Lat & Long):** **51 45 13 N** **00 51 59 E** **JNCC Site Code: UK9009245** **Size (ha): 4395.15** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The Blackwater Estuary is located on the coast of Essex in eastern England. It is the largest estuary in Essex and is one of the largest estuarine complexes in East Anglia. Its mud-flats are fringed by saltmarsh on the upper shores, with shingle, shell banks and offshore islands 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 of high conservation interest. The diversity of estuarine habitats results in the sites being of importance for a wide range of overwintering waterbirds, including raptors, geese, ducks and waders. The site is also important in summer for breeding terns.
Qualifying Features	**ARTICLE 4.1 QUALIFICATION (79/409/EEC)** **During the breeding season the area regularly supports:** ▪ Little Tern *(Sterna albifrons)* (Eastern Atlantic - breeding) at least 0.9% of the GB breeding population 5 year mean, 1992-1996 **Over winter the area regularly supports:** ▪ Hen Harrier *(Circus cyaneus)* up to 2.5% of the GB population 5 year mean, 1987/8-1991/2 **ARTICLE 4.2 QUALIFICATION (79/409/EEC)** **During the breeding season the area regularly supports:**

Site Name: Blackwater Estuary Location (Lat & Long): 51 45 13 N 00 51 59 E JNCC Site Code: UK9009245 Size (ha): 4395.15 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	▪ Common Pochard *(Aythya ferina)* (North-western/North-eastern Europe) up to 6% of the population in Great Britain 5 year mean, 1987-1991 ▪ Ringed Plover *(Charadrius hiaticula)* (Europe/Northern Africa - wintering) up to 1.6% of the population in Great Britain 5 year mean, 1987-1991 **Over winter the area regularly supports:** ▪ Brant Goose (*Branta bernicla bernicla)* (Western Siberia/Western Europe) 5.1% of the population 5 year peak mean 1991/92-1995/96 ▪ *Dunlin (Calidris alpina alpine)* (Northern Siberia/Europe/Western Africa) 2.4% of the population 5 year peak mean 1991/92-1995/96 ▪ Ringed Plover *(Charadrius hiaticula)* 0.7% of the population 5 year peak mean 1991/92-1995/96 ▪ Black-tailed Godwit *(Limosa limosa islandica)* (Iceland - breeding) 2% of the population 5 year peak mean 1991/92-1995/96 ▪ Grey Plover *Pluvialis squatarola* (Eastern Atlantic - wintering) 3% of the population 5 year peak mean 1991/92-1995/96 **ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS** **Over winter the area regularly supports:** ▪ 109964 waterfowl (5 year peak mean 01/04/1998) ▪ Including: *Branta bernicla bernicla , Charadrius hiaticula , Pluvialis squatarola , Calidris alpina alpina , Limosa limosa islandica* .

Site Name: Blackwater Estuary **Location (Lat & Long):** **51 45 13 N** **00 51 59 E** **JNCC Site Code: UK9009245** **Size (ha): 4395.15** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Conservation Objectives	With regard to the individual species and/or assemblage of species for which the site has been classified (the Qualifying Features); **Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.** Subject to natural change, to maintain or restore: ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The populations of the qualifying features; ▪ The distribution of the qualifying features within the site.
Component SSSIs	▪ Blackwater Estuary SSSI
Vulnerabilities (includes existing pressures and trends)	**Coastal erosion** ▪ The main threat to the site is erosion of intertidal habitats due to a combination of sea level rise and isostatic forces operating on the land mass of Great Britain. The situation is worsened with increasing winter storm events, whilst the hard sea walls along this coastline are preventing the saltmarsh and intertidal areas from migrating inland. This situation is starting to be addressed by alternative flood defence techniques. A shoreline management plan has been prepared for the Essex coast, which seeks to provide a blueprint for managing the coastline sustainably.

Site Name: Blackwater Estuary Location (Lat & Long): 51 45 13 N 00 51 59 E JNCC Site Code: UK9009245 Size (ha): 4395.15 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	Nutrient enrichment ▪ Nutrient enrichment occurs from agricultural run-off and treated sewage effluent. This problem will be addressed through the Essex Estuaries candidate SAC scheme of management as well as review of discharge consents under the Habitats Regulations. **Water-based recreation** ▪ The control of motorised craft (with particular reference to jet-skis) is being addressed through the Blackwater Estuary Management Plan. Enforcement of speed limits should ensure that roosting birds are not subjected to disturbance and saltmarsh habitats are protected from damage by jet-skis. **Drought** ▪ The droughts over the last five years have resulted in lowered water tables in grazing marshes. Attempts are being made to restore this by pumping water from adjacent ditches and use of tertiary treated sewage effluent.

Site Name: Crouch and Roach Estuaries SPA **Location (Lat & Long):** **51 38 23 N** **00 43 06 E** **JNCC Site Code: UK9009244** **Size (ha): 1735.58** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The Crouch and Roach Estuaries are located on the coast of south Essex in eastern England. The River Crouch occupies a shallow valley between two ridges of London Clay, whilst the River Roach is set predominantly between areas of brick earth and loams with patches of sand and gravel. The intertidal zone along the Rivers Crouch and Roach is 'squeezed' between the sea walls along both banks and the river channel. Unlike more extensive estuaries elsewhere in Essex, this leaves a relatively narrow strip of tidal mud which, nonetheless, is used by significant numbers of birds. The site is of importance for wintering waterbirds, especially Dark-bellied Brent Goose. The Crouch and Roach Estuary is an integral component of the phased Mid-Essex Coast SPA.
Qualifying Features	**Article 4.1 Qualification (79/409/EEC)** Over winter the area regularly supports: ▪ Hen Harrier (*Circus cyaneus)* up to 2.5% of the GB population 5 year mean, 1987-1991 **Article 4.2 Qualification (79/409/EEC)** Over winter the area regularly supports: ▪ Dark-bellied brent goose (*Branta bernicla bernicla*) 1% of the population 5 year peak mean 1991/92-1995/96 (Western Siberia/Western Europe) **Article 4.2 Qualification (79/409/EEC): An Internationally Important Assemblage Of Birds** Over winter the area regularly supports: ▪ 18607 waterfowl (5 year peak mean 30/06/1999) Including: Brent Goose (*Branta bernicla bernicla*)

Site Name: Crouch and Roach Estuaries SPA **Location (Lat & Long):** **51 38 23 N** **00 43 06 E** **JNCC Site Code: UK9009244** **Size (ha): 1735.58** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Conservation Objectives	With regard to the individual species and/or assemblage of species for which the site has been classified (the Qualifying Features); **Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.** Subject to natural change, to maintain or restore: ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The populations of the qualifying features; ▪ The distribution of the qualifying features within the site.
Component SSSIs	▪ Crouch and Roach Estuaries
Vulnerabilities (includes existing pressures and trends)	**Habitat Loss and Fragmentation** ▪ The saltmarshes and mudflats designated under the Essex Estuaries SAC and used by birds are under threat from 'coastal squeeze' - man-made sea defences prevent landward migration of these habitats in response to sea-level rise. ▪ Smothering by sediments driven by storm tides and siltation. **Increased Water Pollution**

Site Name: Crouch and Roach Estuaries SPA Location (Lat & Long): 51 38 23 N 00 43 06 E JNCC Site Code: UK9009244 Size (ha): 1735.58 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	▪ Sources of potential water quality pressures include inputs from sewage effluent, agricultural (and urban) run-off, landfill leachates and the atmosphere. Shipping and recreational boating and other offshore activities add to these land-based sources. **Physical Disturbance** ▪ Siltation exacerbated by disruption to equilibrium between deposition and erosion by coastal defences (sea wall) management/ mowing and channel dredging. ▪ Disturbance from water-based and terrestrial recreational activities, such as, abrasion by the action of moored boats and trampling by walkers. ▪ Selective Extraction of minerals (e.g. aggregate dredging) ▪ Low water levels as a result of increased abstraction. **Non-physical Disturbance** ▪ Noise (e.g. boat and plane activity). ▪ Visual presence (e.g. recreational activity). ▪ Some disturbance of feeding and roosting waterfowl is likely through recreational use of sea wall footpaths by dog walkers, bird watchers etc. **Biological Disturbance** ▪ Introduction of microbial pathogens. ▪ Introduction of non-native species and translocation. ▪ Selective extraction of species (e.g. bait digging, wildfowl, commercial and recreational fishing).

Site Name: Dengie **Location Grid Ref (Lat & Long):** **51 41 26 N** **00 57 34 E** **JNCC Site Code: UK9009242** **Size: 3127.23** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Dengie is located on the coast of Essex in eastern England. It is a large and remote area of tidal mud-flats and saltmarshes at the eastern end of the Dengie peninsula, between the adjacent 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 is of importance for wintering populations of Hen Harrier *Circus cyaneus*, wildfowl and waders.
Qualifying Features	**ARTICLE 4.1 QUALIFICATION (79/409/EEC)** **Over winter the area regularly supports:** ▪ Hen Harrier *(Circus cyaneus)* up to 2.5% of the GB population 5 year mean, 1987-1991 **ARTICLE 4.2 QUALIFICATION (79/409/EEC)** **Over winter the area regularly supports:** ▪ Brant Goose (*Branta bernicla bernicla)* (Western Siberia/Western Europe) 0.8% of the population 5 year peak mean 1991/92-1995/96 ▪ Red Knot *(Calidris canutus)* (North-eastern Canada/Greenland/Iceland/Northwestern Europe) ▪ Grey Plover *Pluvialis squatarola* (Eastern Atlantic - wintering) 1.4% of the population 5 year peak mean 1991/92-1995/96 **ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS**

Site Name: Dengie **Location Grid Ref (Lat & Long):** **51 41 26 N** **00 57 34 E** **JNCC Site Code: UK9009242** **Size: 3127.23** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
	Over winter the area regularly supports: ▪ 31454 waterfowl (5 year peak mean 01/04/1998) ▪ Including: *Branta bernicla bernicla, Pluvialis squatarola, Calidris canutus.*
Conservation Objectives	With regard to the individual species and/or assemblage of species for which the site has been classified (the Qualifying Features); **Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.** Subject to natural change, to maintain or restore: ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The populations of the qualifying features; ▪ The distribution of the qualifying features within the site.
Component SSSIs	▪ Dengie SSSI
Vulnerabilities (includes existing pressures and trends)	**Habitat Loss** ▪ The main threat to the site is erosion of intertidal habitats due to a combination of sea level rise and

Site Name: Dengie Location Grid Ref (Lat & Long): 51 41 26 N 00 57 34 E JNCC Site Code: UK9009242 Size: 3127.23 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	isostatic forces operating on the land mass of Great Britain. The situation is worsened with increasing winter storm events, whilst the hard sea walls along this coastline are preventing the saltmarsh and intertidal areas from migrating inland. This situation is starting to be addressed by alternative flood defence techniques. A shoreline management plan has been prepared for the Essex coast which seeks to provide a blueprint for managing the coastline sustainably. **Disturbance** ▪ The Thames Fishery is coming under increased pressure from boats that previously fished the Wash for cockles. Controls over the fishery have been put in place by Kent and Essex Sea Fisheries Committee. ▪ A management plan for English Nature details a policy of non-intervention to prevent damage to the site from human intervention. This and other management issues will be addressed through the European marine site management scheme.

Site Name: Foulness **Location (Lat & Long):** **51 34 26 N** **00 55 17 E** **JNCC Site Code: UK9009246** **Size (ha) : 10968.9** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Foulness is located on the coast of Essex, on the east coast of England north of the mouth of the Thames estuary. The site is part of an open coast estuarine system comprising grazing marsh, saltmarsh, intertidal mud-flats, cockle-shell banks and sand-flats. It includes one of the three largest continuous sand-silt flats in the UK. The diversity of high quality coastal habitats present support important populations of breeding, migratory and wintering waterbirds, notably very important concentrations of Dark-bellied Brent Goose *Branta bernicla bernicla.*
Qualifying Features	**ARTICLE 4.1 QUALIFICATION (79/409/EEC)** During the breeding season the area regularly supports: ▪ Avocet (*Recurvirostra avosetta)* up to 5.8% of the GB breeding population 5 year mean, 1987-1991 ▪ Little Tern *(Sterna albifrons)*at least 1% of the GB breeding population 5 year mean, 1992-1996 ▪ Common Tern *(Sterna hirundo)*up to 1.8% of the GB breeding population Count, as at 1996 ▪ Sandwich Tern *(Sandwich Tern)* up to 2.3% of the GB breeding population 5 year mean, 1992-1996 Over winter the area regularly supports: ▪ Hen Harrier *(Circus cyaneus)* up to 2.5% of the GB population 5 year mean, 1987/8-1991/2 ▪ Bar-tailed Godwit *(Limosa lapponica)* 14.6% of the GB population 5 year peak mean 1991/92-1995/96 ▪ Avocet (*Recurvirostra avosetta)* 7.9% of the GB population 5 year peak mean 1991/92-1995/96 **ARTICLE 4.2 QUALIFICATION (79/409/EEC)** During the breeding season the area regularly supports: ▪ Ringed Plover *(Charadrius hiaticula)* up to 1.6% of the population in Great Britain 5 year mean, 1987/8-

Site Name: Foulness **Location (Lat & Long):** **51 34 26 N** **00 55 17 E** **JNCC Site Code: UK9009246** **Size (ha) : 10968.9** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
	1991/2 Over winter the area regularly supports: ▪ Brant Goose *(Branta bernicla bernicla) 4.4% of the population 5 year peak mean 1991/92-1995/96* ▪ Red Knot (*Calidris canutus)* 11.7% of the population 5 year peak mean 1991/92-1995/96 ▪ Eurasian Oystercatcher *(Haematopus ostralegus)*1.3% of the population 5 year peak mean 1991/92-1995/96 ▪ Grey Plover *(Pluvialis squatarola)* 2.5% of the population 5 year peak mean 1991/92-1995/96 ▪ Common Redshank *(Tringa totanus)* 0.8% of the population 5 year peak mean 1991/92-1995/96 **ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS** Over winter the area regularly supports: ▪ 107999 waterfowl (5 year peak mean 01/04/1998) ▪ Including: Brant Goose *(Branta bernicla bernicla)* , Eurasian Oystercatcher *(Haematopus ostralegus),* Avocet *(Recurvirostra avosetta)* , Grey Plover *(Pluvialis squatarola)* , Red Knot *(Calidris Canutus)* , Bar-tailed Godwit *(Limosa lapponica)* , Common Redshank *(Tringa totanus)*.
Conservation Objectives	With regard to the individual species and/or assemblage of species for which the site has been classified (the Qualifying Features); **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.**

Site Name: Foulness **Location (Lat & Long):** **51 34 26 N** **00 55 17 E** **JNCC Site Code: UK9009246** **Size (ha) : 10968.9** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
	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.
Component SSSIs	▪ Foulness SSSI
Vulnerabilities (includes existing pressures and trends)	Much of the area is owned by the Ministry of Defence and is not, therefore, subject to development pressures or public disturbance. **Habitat Loss and Fragmentation** ▪ Natural processes are adversely affecting the south-east coastline and saltmarshes are being eroded. ▪ Maintenance of the integrity of the intertidal and saltmarsh habitats of the Mid-Essex Coast Ramsar sites as a whole is being addressed by soft sea defence measures, managed retreat and foreshore recharge. ▪ The saltmarshes and mudflats are under threat from 'coastal squeeze' - man-made sea defences prevent landward migration of these habitats in response to sea-level rise. ▪ Smothering by sediments driven by storm tides and siltation. **Disturbance** ▪ The cockel beds on the Maplin Sands support internationally important numbers of wading birds: the

Site Name: Foulness Location (Lat & Long): 51 34 26 N 00 55 17 E JNCC Site Code: UK9009246 Size (ha) : 10968.9 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	Kent and Essex Sea Fisheries Committee control the cockle fishery through regulatory orders. **Physical Disturbance** ▪ Lower levels of rainfall and changes in drainage for agriculture have led to aridification, although this is compensated for by the addition of sea water. ▪ Offshore aggregate dredging and seismic surveys could possibly adversely affect the Maplin sands, will be addressed through the Essex Estuaries marine Special Area of Conservation (SAC) management scheme, of which Foulness is part.

Site Name: Medway Estuary & Marshes **Location Grid Ref (Lat & Long):** **51 24 02 N** **00 40 38 E** **JNCC Site Code: UK9012031** **Size: 4684.36** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The Medway Estuary feeds into and lies on the south side of the outer Thames Estuary in Kent, south-east England. It forms a single tidal system with the Swale and joins the Thames Estuary between the Isle of Grain and Sheerness. It has a complex arrangement of tidal channels, which drain around large islands of saltmarsh and peninsulas of grazing marsh. The mud-flats are rich in invertebrates and also support beds of E*nteromorpha* and some Eelgrass *Zostera* spp. Small shell beaches occur, particularly in the outer part of the estuary. Grazing marshes are present inside the sea walls around the estuary. The complex and diverse mixes of coastal habitats support important numbers of waterbirds throughout the year. In summer, the estuary supports breeding waders and terns, whilst in winter it holds important numbers of geese, ducks, grebes and waders. The site is also of importance during spring and autumn migration periods, especially for waders.
Qualifying Features	**ARTICLE 4.1 QUALIFICATION (79/409/EEC)** **During the breeding season the area regularly supports:** ▪ Avocet *(Recurvirostra avosetta)* (Western Europe/Western Mediterranean - breeding) 6.2% of the GB breeding population 5 year mean, 1988-1992 ▪ Little Tern *(Sterna albifrons)* (Eastern Atlantic - breeding) *1.2% of the GB breeding population 5 year mean, 1991-1995* ▪ *Sterna hirundo* (Northern/Eastern Europe - breeding) 0.6% of the GB breeding population Count, as at 1994 **Over winter the area regularly supports:** ▪ Bewick's swan *(Cygnus columbianus bewickii)* (Western Siberia/North-eastern & North-western Europe) 0.2%

Site Name: Medway Estuary & Marshes Location Grid Ref (Lat & Long): 51 24 02 N 00 40 38 E JNCC Site Code: UK9012031 Size: 4684.36 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	of the GB population 5 year peak mean 1991/92-1995/96 ▪ *Avocet (Recurvirostra avosetta)* (Western Europe/Western Mediterranean - breeding) 24.7% of the GB population 5 year peak mean 1991/92-1995/96 **ARTICLE 4.2 QUALIFICATION (79/409/EEC)** **Over winter the area regularly supports:** ▪ Northern Pintail ***(****Anas acuta)* (North-western Europe) 1.2% of the population 5 year peak mean 1991/92-1995/96 ▪ Northern Shoveler *(Anas clypeata)* (North-western/Central Europe) 0.8% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ Common Teal *(Anas crecca)* (North-western Europe) 1.3% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ Eurasian Wigeon *(Anas Penelope)* (Western Siberia/North-western/North-eastern Europe) 1.6% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ Ruddy Turnstone *(Arenaria interpres)* (Western Palearctic - wintering) 0.9% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ Brant Goose *(Branta bernicla bernicla)* (Western Siberia/Western Europe) 1.1% of the population 5 year peak mean 1991/92-1995/96 ▪ Dunlin *(Calidris alpina alpine)* (Northern Siberia/Europe/Western Africa) 1.9% of the population 5 year peak mean 1991/92-1995/96 ▪ Red Knot *(Calidris canutus)* (North-eastern Canada/Greenland/Iceland/Northwestern Europe) 0.2% of the

Site Name: Medway Estuary & Marshes Location Grid Ref (Lat & Long): 51 24 02 N 00 40 38 E JNCC Site Code: UK9012031 Size: 4684.36 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	population 5 year peak mean 1991/92-1995/96 ▪ Ringed Plover *(Charadrius hiaticula)* (Europe/Northern Africa - wintering) 1.6% of the population 5 year peak mean 1991/92-1995/96 ▪ Eurasian Oystercatcher *(Haematopus ostralegus)* (Europe & Northern/Western Africa) 1% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ Black-tailed Godwit *(Limosa limosa islandica)* (Iceland – breeding) 12.9% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ Eurasian Curlew *(Numenius arquata)* (Europe - breeding) 1.7% of the population in Great Britain 5 year peak mean 1991/92-1995/96 ▪ Grey Plover *(Pluvialis squatarola)* (Eastern Atlantic - wintering) 2% of the population 5 year peak mean 1991/92-1995/96 ▪ Common Shelduck *(Tadorna tadorna)* (North-western Europe) 1.5% of the population 5 year peak mean 1991/92-1995/96 ▪ Greenshank *(Tringa nebularia)* (Europe/Western Africa) 2.6% of the population in Great Britain No count period specified. ▪ Common Redshank *(Tringa totanus)* (Eastern Atlantic - wintering) 2.1% of the population 5 year peak mean 1991/92-1995/96 **ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS** **During the breeding season the area regularly supports:**

Site Name: Medway Estuary & Marshes **Location Grid Ref (Lat & Long): 51 24 02 N 00 40 38 E** **JNCC Site Code: UK9012031** **Size: 4684.36** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
	▪ *Alcedo atthis, Anas platyrhynchos , Asio flammeus, Aythya ferina , Circus cyaneus, Falco columbarius, Gavia stellata , Phalacrocorax carbo , Vanellus vanellus .* **Over winter the area regularly supports:** ▪ 65496 waterfowl (5 year peak mean 01/04/1998) ▪ Including: *Gavia stellata , Podiceps cristatus , Phalacrocorax carbo , Cygnus columbianus bewickii , Branta bernicla bernicla , Tadorna tadorna , Anas penelope , Anas crecca , Anas platyrhynchos , Anas acuta , Anas clypeata , Aythya ferina , Haematopus ostralegus , Recurvirostra avosetta , Charadrius hiaticula , Pluvialis squatarola , Vanellus vanellus , Calidris canutus , Calidris alpina alpina , Limosa limosa islandica , Numenius arquata , Tringa totanus , Tringa nebularia , Arenaria interpres.*
Conservation Objectives	With regard to the individual species and/or assemblage of species for which the site has been classified (the Qualifying Features); **Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive.** Subject to natural change, to maintain or restore: ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely;

Site Name: Medway Estuary & Marshes Location Grid Ref (Lat & Long): 51 24 02 N 00 40 38 E JNCC Site Code: UK9012031 Size: 4684.36 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	▪ The populations of the qualifying features; ▪ The distribution of the qualifying features within the site.
Component SSSIs	▪ Medway and Estuary Marshes SSSI
Vulnerabilities (includes existing pressures and trends)	**Habitat fragmentation/Loss** ▪ There is evidence of rapid erosion of intertidal habitat within the site due to natural processes. Research on mudflat recharge using dredging spoil is being investigated as a means of countering the erosion. ▪ Also a threat of erosion from the effects of sea defences development and clay extraction **Physical Disturbance** ▪ The intertidal area is vulnerable to disturbance from water borne recreation. This is being addressed as part of an estuary management plan. ▪ Pressures from proposed transport and industrial developments are being addressed through the planning system and under the provisions of the Habitat Regulations. ▪ The effects of abstraction on the availability of water through abstraction for other land uses and drainage for arable cultivation will be addressed through the consent review process under the Habitats Regulations. ▪ The terrestrial ecosystem is reliant on grazing practices and water management and changes to these may pose a threat.

Site Name: Thames Estuary & Marshes **Location Grid Ref (Lat & Long): 51 29 08 N 00 35 47 E** **JNCC Site Code: UK9012021** **Size: 4838.94** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The Thames Estuary and Marshes SPA is located on the south side of the Thames Estuary in southern England. The marshes extend for about 15 km along the south side of the estuary and also include intertidal areas on the north side of the estuary. To the south of the river, much of the area is brackish grazing marsh, although some of this has been converted to arable use. At Cliffe, there are flooded clay and chalk pits, some of which have been infilled with dredgings. Outside the sea wall, there is a small extent of saltmarsh and broad intertidal mud-flats. The estuary and adjacent grazing marsh areas support an important assemblage of wintering waterbirds including grebes, geese, ducks and waders. The site is also important in spring and autumn migration periods.
Qualifying Features	**ARTICLE 4.1 QUALIFICATION (79/409/EEC)** **Over winter the area regularly supports:** ▪ Hen Harrier *(Circus cyaneus)* 1% of the population in Great Britain Five year peak mean for 1993/94 to 1997/98 ▪ Avocet *(Recurvirostra avosetta)* (Western Europe/Western Mediterranean - breeding) **ARTICLE 4.2 QUALIFICATION (79/409/EEC)** **Over winter the area regularly supports:** ▪ Dunlin *(Calidris alpina alpina)* (Northern Siberia/Europe/Western Africa) 2.1% of the population Five year peak mean for 1993/94 to 1997/98 ▪ Red Knot *(Calidris canutus)* (North-eastern Canada/Greenland/Iceland/Northwestern Europe) 1.4% of the

Site Name: Thames Estuary & Marshes **Location Grid Ref (Lat & Long): 51 29 08 N 00 35 47 E** **JNCC Site Code: UK9012021** **Size: 4838.94** **Designation: SPA**	**Habitats Regulations Assessment: Data Proforma**
	population Five year peak mean for 1993/94 to 1997/98 ▪ Black-tailed Godwit *(Limosa limosa islandica)* (Iceland - breeding) 2.4% of the population Five year peak mean for 1993/94 to 1997/98 ▪ Grey Plover *(Pluvialis squatarola)* (Eastern Atlantic - wintering) 1.7% of the population Five year peak mean for 1993/94 to 1997/98 ▪ Common Redshank *(Tringa totanus)* (Eastern Atlantic - wintering) 2.2% of the population Five year peak mean for 1993/94 to 1997/98 **On passage the area regularly supports:** ▪ Ringed Plover *(Charadrius hiaticula)* (Europe/Northern Africa - wintering) 2.6% of the population Five year peak mean for 1993/94 to 1997/98 **ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS** **Over winter the area regularly supports:** ▪ 75019 waterfowl (5 year peak mean 21/03/2000) ▪ Including: *Recurvirostra avosetta , Pluvialis squatarola , Calidris canutus , Calidris alpina alpina , Limosa limosa islandica , Tringa totanus* .
Conservation Objectives	With regard to the individual species and/or assemblage of species for which the site has been classified (the Qualifying Features); **Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the**

Site Name: Thames Estuary & Marshes Location Grid Ref (Lat & Long): 51 29 08 N 00 35 47 E JNCC Site Code: UK9012021 Size: 4838.94 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore: ▪ The extent and distribution of the habitats of the qualifying features; ▪ The structure and function of the habitats of the qualifying features; ▪ The supporting processes on which the habitats of the qualifying features rely; ▪ The populations of the qualifying features; ▪ The distribution of the qualifying features within the site.
Component SSSIs	▪ South Thames Estuary And Marshes SSSI ▪ Medway Estuary & Marshes SSSI ▪ Foulness SSSI ▪ Benfleet & Southend Marshes SSSI ▪ Mucking Flats and Marshes SSSI
Vulnerabilities (includes existing pressures and trends)	**Habitat fragmentation/ loss** ▪ There is evidence of coastal squeeze and erosion of intertidal habitat within the site. English Nature is in discussion with the port authority on the role of port dredging in intertidal habitat loss. ▪ The terrestrial part of the site depends on appropriate grazing and management of water. The availability of livestock may be affected by changes in agricultural markets. Evidence suggests that the water supply to grazing marsh has decreased. A water level management plan may address this.

Site Name: Thames Estuary & Marshes Location Grid Ref (Lat & Long): 51 29 08 N 00 35 47 E JNCC Site Code: UK9012021 Size: 4838.94 Designation: SPA	Habitats Regulations Assessment: Data Proforma
	Disturbance ▪ The intertidal area is also vulnerable to disturbance from water borne recreation. This is being addressed by information dissemination as part of an estuary management plan. ▪ Development pressure can lead to both direct landtake from the site and indirect disturbance and hydrological effects. These effects will be addressed through the Habitats Regulations 1994. **Water Pollution** ▪ Studies by the Environment Agency indicate that the waters in the Thames estuary are hyper-nutrified for nitrogen and phosphorus.

Ramsar Sites

Site Name: Benfleet and Southend Marshes **Location (Lat & Long):** **51 31 42 N** **00 41 00 E** **JNCC Site Code: UK11006** **Size (ha): 2251.31** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Benfleet and Southend Marshes are located on the north shore of the outer Thames Estuary in southern England. The site comprises an extensive series of saltmarshes, cockle shell banks, mud-flats, and grassland that supports a diverse flora and fauna. The productive mud-flats, cockle shell banks and diverse saltmarsh communities provide a wide range of feeding and roosting opportunities for internationally important numbers of wintering wildfowl and waders.
Qualifying Features	**Ramsar criterion 5** **Assemblages of international importance:** **Species with peak counts in winter:** ▪ 32867 waterfowl (5 year peak mean 1998/99-2002/2003) **Ramsar criterion 6 - species/populations occurring at levels of international importance.** **Qualifying Species/populations (as identified at designation):** **Species with peak counts in spring/autumn:** ▪ Dark-bellied brent goose (*Branta bernicla bernicla*) 4532 individuals, representing an average of 2.1% of the population (5 year peak mean 1998/9-2002/3)

Site Name: Benfleet and Southend Marshes **Location (Lat & Long):** **51 31 42 N** **00 41 00 E** **JNCC Site Code: UK11006** **Size (ha): 2251.31** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
	Species with peak counts in winter: ▪ Grey plover (*Pluvialis squatarola*) E Atlantic/W Africa - wintering 1710 individuals, representing an average of 3.2% of the GB population (5 year peak mean 1998/9-2002/3) ▪ Red knot (*Calidris canutus islandica*) W & Southern Africa (wintering) 6307 individuals, representing an average of 1.4% of the population (5 year peak mean 1998/9-2002/3) **Species/populations identified subsequent to designation for possible future consideration under criterion 6.** **Species with peak counts in winter:** ▪ Dunlin (*Calidris alpina alpine*) W Siberia/W Europe 17591 individuals, representing an average of 1.3% of the population (5 year peak mean 1998/9-2002/3)
Conservation Objectives	▪ None available, however, please refer to the conservation objectives for the Benfleet and Southend Marshes SPA.
Component SSSIs	▪ Beenfleet and Southend Marshes
Vulnerabilities (includes existing pressures and trends)	**Habitat Loss and Fragmentation** ▪ The saltmarshes and mudflats designated under the Essex Estuaries SAC and used by birds are under threat from 'coastal squeeze' - man-made sea defences prevent landward migration of these habitats in response to sea-level rise. ▪ Smothering by sediments driven by storm tides and siltation.

Site Name: Benfleet and Southend Marshes Location (Lat & Long): 51 31 42 N 00 41 00 E JNCC Site Code: UK11006 Size (ha): 2251.31 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	Increased Water Pollution ▪ Sources of potential water quality pressures include inputs from sewage effluent, agricultural (and urban) run-off, landfill leachates and the atmosphere. Shipping and recreational boating and other offshore activities add to these land-based sources. **Physical Disturbance** ▪ Siltation exacerbated by disruption to equilibrium between deposition and erosion by coastal defences (sea wall) management/ mowing and channel dredging. ▪ Disturbance from water-based and terrestrial recreational activities, such as, abrasion by the action of moored boats and trampling by walkers. ▪ Selective Extraction of minerals (e.g. aggregate dredging) ▪ Low water levels as a result of increased abstraction. **Non-physical Disturbance** ▪ Noise (e.g. boat and plane activity). ▪ The SPA Natura 2000 data form states that recreational activity is not a problem, however infrastructure works to facilitate visitor attractions are leading to piecemeal development which is dealt with under the planning control provisions of the Habitat Regulations. ▪ The information sheet for the Ramsar identifies **Biological Disturbance** ▪ Introduction of microbial pathogens.

Site Name: Benfleet and Southend Marshes Location (Lat & Long): 51 31 42 N 00 41 00 E JNCC Site Code: UK11006 Size (ha): 2251.31 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	▪ Introduction of non-native species and translocation. ▪ Selective extraction of species (e.g. bait digging, wildfowl, commercial and recreational fishing).

Site Name: Blackwater Estuary Location (Lat and Long): 51 45 13 N 00 51 59 E JNCC Site Code: UK11007 Size: 4395.15 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
Site Description	The Blackwater Estuary is a large estuary between the Dengie peninsula and Mersea Island on the Essex coast. It stretches from immediately adjacent to Maldon and about 8 km south of Colchester. 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.
Qualifying Features	**Ramsar criterion 1** Qualifies by virtue of the extent and diversity of saltmarsh habitat present. This site, and the four others in the

Site Name: Blackwater Estuary Location (Lat and Long): 51 45 13 N 00 51 59 E JNCC Site Code: UK11007 Size: 4395.15 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	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 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 waterfowl (5 year peak mean 1998/99-2002/2003) **Ramsar criterion 6 – species/populations occurring at levels of international importance.** **Qualifying Species/populations (as identified at designation):**

Site Name: Blackwater Estuary **Location (Lat and Long):** **51 45 13 N** **00 51 59 E** **JNCC Site Code: UK11007** **Size: 4395.15** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
	Species with peak counts in winter: ▪ Dark-bellied brent goose (*Branta bernicla bernicla*) 8689 individuals, representing an average of 4% of the population (5 year peak mean 1998/9- 2002/3) ▪ Grey plover (*Pluvialis squatarola*) E Atlantic/W Africa –wintering 4215 individuals, representing an average of 1.7% of the population (5 year peak mean 1998/9-2002/3) ▪ Dunlin (*Calidris alpina alpine)* W Siberia/W Europe 27655 individuals, representing an average of 2% of the population (5 year peak mean 1998/9- 2002/3) ▪ Black-tailed godwit (*Limosa limosa islandica)* Iceland/W Europe 2174 individuals, representing an average of 6.2% of the population (5 year peak mean 1998/9-2002/3) **Species/populations identified subsequent to designation for possible future consideration under criterion 6.** **Species with peak counts in winter:** ▪ Common shelduck (*Tadorna tadorna)* NW 3141 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)Europe ▪ European golden plover (*Pluvialis apricaria apricaria)* P. a. altifrons Iceland & Faroes/E 16083 individuals, representing an average of 1.7% of the population (5 year peak mean 1998/9-2002/3)Atlantic ▪ Common redshank (*Tringa totanus totanus)* 4169 individuals, representing an average of 1.6% of the population (5 year peak mean 1998/9-2002/3)
Conservation Objectives	▪ None available, however, please refer to the conservation objectives for the Blackwater Estuary SPA and SAC.
Component SSSIs	▪ Blackwater Estuary SSSI

Site Name: Blackwater Estuary Location (Lat and Long): 51 45 13 N 00 51 59 E JNCC Site Code: UK11007 Size: 4395.15 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	Blackwater Estuary SSSI
Vulnerabilities (includes existing pressures and trends)	**Habitat Loss** ▪ Erosion of intertidal habitats due to a combination of sea level rise and isostatic forces operating on the land mass of Great Britain. ▪ The situation is worsened with increasing winter storm events, ▪ Hard sea walls along this coastline are preventing the saltmarsh and intertidal areas from migrating inland. **Nutrient enrichment** ▪ Arable agriculture surrounds the coastal wetland and runoff from fields enters the site, leading to nutrient enrichment. This problem will be addressed through the Essex Estuaries candidate SAC scheme of management as well as review of discharge consents under the Habitats Regulations. **Disturbance** ▪ Disturbance through recreational activities is being minimised through restrictions on jet ski use. **Drought** ▪ The droughts over the last five years have resulted in lowered water tables in grazing marshes leading to aridification. Water is being added from alternative sources to raise the water table.

Site Name: Crouch and Roach Estuaries **Location (Lat & Long):** **51 38 16 N** **00 40 10 E** **JNCC Site Code: UK11058** **Size (ha): 1735.58** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
Site Description	The Rivers Crouch and Roach are situated in South Essex. The River Crouch occupies a shallow valley between two ridges of London Clay, whilst the River Roach is set predominantly between areas of brick earth and loams with patches of sand and gravel. The intertidal zone along the Rivers Crouch and Roach is 'squeezed' between the sea walls of both banks and the river channel. This leaves a relatively narrow strip of tidal mud unlike other estuaries in the county, which, nonetheless, is used by significant numbers of birds. One species is present in internationally important numbers, and three other species of wader and wildfowl occur in nationally important numbers. Additional interest is provided by the aquatic and terrestrial invertebrates and by an outstanding assemblage of nationally scarce plants.
Qualifying Features	**Ramsar criterion 2** Supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plant and animal including 13 nationally scarce plant species: slender hare's ear *Bupleurum tenuissimum*, divided sedge *Carex divisa*, sea barley *Hordeum marinum*, golden-samphire *Inula crithmoides*, laxflowered sea-lavender *Limonium humile*, curved hard-grass *Parapholis incurva*, Borrer's saltmarsh grass *Puccinellia fasciculata*, stiff saltmarsh grass *Puccinellia rupestris*, spiral tasselweed *Ruppia cirrhosa*, one-flowered glasswort *Salicornia pusilla*, small cord-grass *Spartina maritima*, shrubby seablite *Suaeda vera* and sea clover *Trifolium squamosum*. Several important invertebrate species are also present on the site, including scarce emerald damselfly *Lestes dryas*, the shorefly *Parydroptera discomyzina*, the rare soldier fly *Stratiomys singularior*, the large horsefly *Hybomitra expollicata*, the beetles *Graptodytes bilineatus* and *Malachius vulneratus*, the ground lackey moth *Malacosoma castrensis* and *Eucosoma catoprana*. **Ramsar criterion 5**

Site Name: Crouch and Roach Estuaries **Location (Lat & Long):** **51 38 16 N** **00 40 10 E** **JNCC Site Code: UK11058** **Size (ha): 1735.58** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
	Assemblages of international importance: **Species with peak counts in winter:** ▪ 16970 waterfowl (5 year peak mean 1998/99-2002/2003) **Ramsar criterion 6 - species/populations occurring at levels of international importance.** Qualifying Species/populations (as identified at designation): Species with peak counts in winter: ▪ Dark-bellied brent goose (*Branta bernicla bernicla*) 2103 individuals, representing an average of 2.1% of the GB population (5 year peak mean 1998/9-2002/3)
Conservation Objectives	▪ None available, however, please refer to the conservation objectives for the Crouch and Roach Estuaries SPA.
Component SSSIs	▪ Crouch and Roach Estuaries
SAC Condition Assessment	No condition assessment is currently available for the Crouch and Roach Estuaries Ramsar site, therefore, the condition status of the component SSSI is provided below.
Vulnerabilities (includes existing pressures and trends)	**Habitat Loss and Fragmentation** ▪ The saltmarshes and mudflats designated under the Essex Estuaries SAC and used by birds are under threat from 'coastal squeeze' - man-made sea defences prevent landward migration of these habitats in response to sea-level rise.

Site Name: Crouch and Roach Estuaries Location (Lat & Long): 51 38 16 N 00 40 10 E JNCC Site Code: UK11058 Size (ha): 1735.58 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	▪ Smothering by sediments driven by storm tides and siltation. **Increased Water Pollution** ▪ Sources of potential water quality pressures include inputs from sewage effluent, agricultural (and urban) run-off, landfill leachates and the atmosphere. Shipping and recreational boating and other offshore activities add to these land-based sources. **Physical Disturbance** ▪ Siltation exacerbated by disruption to equilibrium between deposition and erosion by coastal defences (sea wall) management/ mowing and channel dredging. ▪ Disturbance from water-based and terrestrial recreational activities, such as, abrasion by the action of moored boats and trampling by walkers. ▪ Selective Extraction of minerals (e.g. aggregate dredging) ▪ Low water levels as a result of increased abstraction. **Non-physical Disturbance** ▪ Noise (e.g. boat and plane activity). ▪ Visual presence (e.g. recreational activity). ▪ Some disturbance of feeding and roosting waterfowl is likely through recreational use of sea wall footpaths by dog walkers, bird watchers etc. **Biological Disturbance** ▪ Introduction of microbial pathogens.

Site Name: Crouch and Roach Estuaries Location (Lat & Long): 51 38 16 N 00 40 10 E JNCC Site Code: UK11058 Size (ha): 1735.58 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	▪ Introduction of non-native species and translocation. ▪ Selective extraction of species (e.g. bait digging, wildfowl, commercial and recreational fishing).

Site Name: Dengie Location Grid Ref: 51 41 26 N 00 57 34 E JNCC Site Code: UK11018 Size: 3127.23 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
Site Description	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 in Essex. 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.
Qualifying Features	**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.

Site Name: Dengie Location Grid Ref: 51 41 26 N 00 57 34 E JNCC Site Code: UK11018 Size: 3127.23 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	Ramsar criterion 2 ▪ 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 covering the range of variation in Britain. **Ramsar criterion 5** **Assemblages of international importance:** **Species with peak counts in winter:** ▪ 43828 waterfowl (5 year peak mean 1998/99-2002/2003) **Ramsar criterion 6 – species/populations occurring at levels of international importance.** **Qualifying Species/populations (as identified at designation):** **Species with peak counts in winter:**

Site Name: Dengie **Location Grid Ref:** **51 41 26 N** **00 57 34 E** **JNCC Site Code: UK11018** **Size: 3127.23** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
	▪ Dark-bellied brent goose (*Branta bernicla bernicla*) 2000 individuals, representing an average of 2% of the GB population (5 year peak mean 1998/9-2002/3) ▪ Grey plover (*Pluvialis squatarola*) E Atlantic/W Africa – wintering 4582 individuals, representing an average of 1.8% of the population (5 year peak mean 1998/9-2002/3) ▪ Red knot (*Calidris canutus islandica*) W & Southern Africa1998/9-2002/3) 14528 individuals, representing an average of 3.2% of the population (5 year peak mean 1998/9-2002/3) **Species/populations identified subsequent to designation for possible future consideration under criterion 6.** **Species with peak counts in winter:** ▪ Bar-tailed godwit (*Limosa lapponica lapponica*) W Palearctic 2593 individuals, representing an average of 2.1% of the population (5 year peak mean 1998/9-2002/3)
Conservation Objectives	None available, however, please refer to the conservation objectives for the Dengie SPA
Component SSSIs	▪ Dengie SSSI
Vulnerabilities (includes existing pressures and trends)	**Habitat Fragmentation/Loss** ▪ The main threat to the site is erosion of intertidal habitats due to a combination of sea level rise and isostatic forces operating on the land mass of Great Britain. ▪ The situation is worsened with increasing winter storm events. ▪ Hard sea walls along this coastline are preventing the saltmarsh and intertidal areas from migrating inland, leading to a loss of habitats.

Site Name: Dengie Location Grid Ref: 51 41 26 N 00 57 34 E JNCC Site Code: UK11018 Size: 3127.23 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	▪ This situation is starting to be addressed by alternative flood defence techniques. A shoreline management plan has been prepared for the Essex coast which seeks to provide a blueprint for managing the coastline sustainably. **Disturbance** ▪ Increased pressure from boats that previously fished the Wash for cockles. Controls over the fishery have been put in place by Kent and Essex Sea Fisheries Committee. ▪ A management plan for English Nature details a policy of non-intervention to prevent damage to the site from human intervention. This and other management issues will be addressed through the European marine site management scheme. ▪ Bradwell Power Station has a visitor centre that uses the Dengie for guided tours. This could lead to increased recreational pressure.

Site Name: Foulness **Location Grid Ref:** **51 34 25 N** **00 55 17 E** **JNCC Site Code: UK11026** **Size (ha): 10932.95** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Foulness is located on the coast of Essex, on the east coast of England north of the mouth of the Thames estuary. The site is part of an open coast estuarine system comprising grazing marsh, saltmarsh, intertidal mudflats and sandflats which support nationally rare and nationally scarce plants, and nationally and internationally important populations of breeding, migratory and wintering waterfowl. Foulness Ramsar includes one of the three largest continuous sand-silt flats in the UK.
Qualifying Features	**Ramsar criterion 1** This site qualifies by virtue of the extent and diversity of saltmarsh habitat present. This and four other sites in the Mid-Essex Coast Ramsar site complex, include 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 site supports a number of nationally-rare and nationally-scarce plant species, and British Red Data Book invertebrates. **Ramsar criterion 3** The site contains extensive saltmarsh habitat, with areas supporting 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:** ▪ 82148 waterfowl (5 year peak mean 1998/99-2002/2003)

Site Name: Foulness **Location Grid Ref:** **51 34 25 N** **00 55 17 E** **JNCC Site Code: UK11026** **Size (ha): 10932.95** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
	Ramsar criterion 6 – species/populations occurring at levels of international importance. **Qualifying Species/populations (as identified at designation):** **Species with peak counts in spring/autumn:** ▪ Common redshank (*Tringa totanus totanus) 2586 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)* **Species with peak counts in winter:** ▪ Dark-bellied brent goose (*Branta bernicla bernicla) 6475 individuals, representing an average of 3% of the population (5 year peak mean 1998/9- 2002/3)* ▪ Eurasian oystercatcher (*Haematopus ostralegus ostralegus)* Europe & NW Africa –wintering 14674 individuals, representing an average of 1.4% of the population (5 year peak mean 1998/9-2002/3) ▪ Grey plover *(Pluvialis squatarola)* E Atlantic/W Africa -wintering 4343 individuals, representing an average of 1.7% of the population (5 year peak mean 1998/9-2002/3) ▪ Red knot *(Calidris canutus islandica)* W & Southern Africa (wintering) 22439 individuals, representing an average of 4.9% of the population (5 year peak mean 1998/9-2002/3) ▪ Bar-tailed godwit *(Limosa lapponica lapponica)* W Palearctic 4095 individuals, representing an average of 3.4% of the population (5 year peak mean 1998/9-2002/3)
Conservation Objectives	None available, however, please refer to the conservation objectives for the Foulness SPA.
Component SSSIs	▪ Foulness

Site Name: Foulness **Location Grid Ref:** **51 34 25 N** **00 55 17 E** **JNCC Site Code: UK11026** **Size (ha): 10932.95** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
Vulnerabilities (includes existing pressures and trends)	Much of the area is owned by the Ministry of Defence and is not, therefore, subject to development pressures or public disturbance. **Habitat Loss and Fragmentation** ▪ Natural processes are adversely affecting the south-east coastline and saltmarshes are being eroded. ▪ Maintenance of the integrity of the intertidal and saltmarsh habitats of the Mid-Essex Coast Ramsar sites as a whole is being addressed by soft sea defence measures, managed retreat and foreshore recharge. ▪ The saltmarshes and mudflats are under threat from 'coastal squeeze' - man-made sea defences prevent landward migration of these habitats in response to sea-level rise. ▪ Smothering by sediments driven by storm tides and siltation. **Disturbance** ▪ The cockel beds on the Maplin Sands support internationally important numbers of wading birds: the Kent and Essex Sea Fisheries Committee control the cockle fishery through regulatory orders. **Physical Disturbance** ▪ Lower levels of rainfall and changes in drainage for agriculture have led to aridification, although this is compensated for by the addition of sea water. ▪ Offshore aggregate dredging and seismic surveys could possibly adversely affect the Maplin sands, will be addressed through the Essex Estuaries marine Special Area of Conservation (SAC) management scheme, of which Foulness is part.

Site Name: Medway Estuary & Marshes **Location Grid Ref (Lat & Long):** **51 24 02 N** **00 40 38 E** **JNCC Site Code: UK11040** **Size: 4684.36** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Medway Estuary and Marshes is located on the north coast of Kent, within the Greater Thames estuary. It is a complex of rain-fed, brackish, floodplain grazing marsh with ditches, and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. Rare wetland birds breed in important numbers. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates.
Qualifying Features	**Ramsar criterion 2** ▪ The site supports a number of species of rare plants and animals. The site holds several nationally scarce plants, including sea barley *Hordeum marinum*, curved hard-grass *Parapholis incurva*, annual beard-grass *Polypogon monspeliensis*, Borrer's saltmarsh-grass *Puccinellia fasciculata*, slender hare`s-ear *Bupleurum tenuissimum*, sea clover *Trifolium squamosum*, saltmarsh goose-foot *Chenopodium chenopodioides*, golden samphire *Inula crithmoides*, perennial glasswort *Sarcocornia perennis* and one-flowered glasswort *Salicornia pusilla*. ▪ A total of at least twelve British Red Data Book species of wetland invertebrates have been recorded on the site. These include a ground beetle *Polistichus connexus*, a fly *Cephalops perspicuus*, a dancefly *Poecilobothrus ducalis*, a fly *Anagnota collini*, a weevil *Baris scolopacea*, a water beetle *Berosus spinosus*, a beetle *Malachius vulneratus*, a rove beetle *Philonthus punctus*, the ground lackey moth *Malacosoma castrensis*, a horsefly *Atylotus latistriatuus*, a fly *Campsicnemus magius*, a solider beetle, *Cantharis fusca*, and a cranefly *Limonia danica*. A significant number of non-wetland British Red Data Book species also occur. **Ramsar criterion 5**

Site Name: Medway Estuary & Marshes Location Grid Ref (Lat & Long): 51 24 02 N 00 40 38 E JNCC Site Code: UK11040 Size: 4684.36 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	Assemblages of international importance: **Species with peak counts in winter:** ▪ 47637 waterfowl (5 year peak mean 1998/99-2002/2003) **Ramsar criterion 6 – species/populations occurring at levels of international importance:** **Qualifying Species/populations (as identified at designation):** **Species with peak counts in spring/autumn:** ▪ Grey plover , *Pluvialis squatarola*, E Atlantic/W Africa – wintering 3103 individuals, representing an average of 1.2% of the population (5 year peak mean 1998/9-2002/3) ▪ Common redshank (*Tringa totanus totanus)* 3709 individuals, representing an average of 1.4% of the population (5 year peak mean 1998/9-2002/3) **Species with peak counts in winter:** ▪ Dark-bellied brent goose (*Branta bernicla bernicla*) 2575 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3) ▪ Common shelduck (*Tadorna tadorna*) NW Europe 2627 individuals, representing an average of 3.3% of the GB population (5 year peak mean 1998/9-2002/3) ▪ Northern pintail (*Anas acuta)* NW Europe 1118 individuals, representing an average of 1.8% of the

Site Name: Medway Estuary & Marshes Location Grid Ref (Lat & Long): 51 24 02 N 00 40 38 E JNCC Site Code: UK11040 Size: 4684.36 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
	population (5 year peak mean 1998/9-2002/3) ▪ Ringed plover (*Charadrius hiaticula*) Europe/Northwest Africa 540 individuals, representing an average of 1.6% of the GB population (5 year peak mean 1998/9-2002/3) ▪ Red knot (*Calidris canutus islandica)* W & Southern Africa (wintering) 3021 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3) ▪ Dunlin , *Calidris alpina alpina*, W Siberia/W Europe 8263 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9-2002/3) **Species/populations identified subsequent to designation for possible future consideration under criterion 6.** **Species with peak counts in spring/autumn:** Black-tailed godwit (*Limosa limosa islandica)* Iceland/W Europe 721 individuals, representing an average of 2% of the population (5 year peak mean 1998/9-2002/3)
Conservation Objectives	The Conservation Objectives for this site are, subject to natural change, to maintain the following habitats and geological features in favourable condition (*), with particular reference to any dependent component special interest features (habitats, vegetation types, species, species assemblages etc.) for which the land is designated (SSSI, cSAC, SPA, Ramsar). **Habitat Types represented (Biodiversity Action Plan categories)** ▪ Improved Grassland ▪ Fen, Marsh and Swamp ▪ Littoral Sediment

Site Name: Medway Estuary & Marshes **Location Grid Ref (Lat & Long):** **51 24 02 N** **00 40 38 E** **JNCC Site Code: UK11040** **Size: 4684.36** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
	▪ Coastal Lagoon **Geological features (Geological SiteTypes)** N/A (*) or restored to favourable condition if features are judged to be unfavourable.
Component SSSIs	▪ Medway and Estuary Marshes SSSI
Vulnerabilities (includes existing pressures and trends)	**Habitat fragmentation/Loss** ▪ There is evidence of rapid erosion of intertidal habitat within the site due to natural processes. Research on mudflat recharge using dredging spoil is being investigated as a means of countering the erosion. ▪ Also a threat of erosion from the effects of sea defences development and clay extraction **Physical Disturbance** ▪ The intertidal area is vulnerable to disturbance from water borne recreation. This is being addressed as part of an estuary management plan. ▪ Pressures from proposed transport and industrial developments are being addressed through the planning system and under the provisions of the Habitat Regulations. ▪ The effects of abstraction on the availability of water through abstraction for other land uses and drainage for arable cultivation will be addressed through the consent review process under the Habitats Regulations. ▪ The terrestrial ecosystem is reliant on grazing practices and water management and changes to these may pose a threat.

Site Name: Thames Estuary & Marshes **Location Grid Ref (Lat & Long):** **51 29 08 N** **00 35 47 E** **JNCC Site Code: UK11069** **Size: 4838.94** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
Site Description	Thames Estuary and Marshes straddles the Thames Estuary containing part of the north coast of Kent and part of the southern coast of Essex. The site is a complex of brackish, floodplain grazing marsh ditches, saline lagoons and intertidal saltmarsh and mudflat. These habitats together support internationally important numbers of wintering waterfowl. The saltmarsh and grazing marsh are of international importance for their diverse assemblages of wetland plants and invertebrates.
Qualifying Features	**Ramsar criterion 2** ▪ The site supports one endangered plant species and at least 14 nationally scarce plants of wetland habitats. The site also supports more than 20 British Red Data Book invertebrates. **Ramsar criterion 5** **Assemblages of international importance:** **Species with peak counts in winter:** ▪ 45118 waterfowl (5 year peak mean 1998/99-2002/2003) **Ramsar criterion 6 - species/populations occurring at levels of international importance.** **Qualifying Species/populations (as identified at designation):** **Species with peak counts in spring/autumn:**

Site Name: Thames Estuary & Marshes **Location Grid Ref (Lat & Long):** **51 29 08 N** **00 35 47 E** **JNCC Site Code: UK11069** **Size: 4838.94** **Designation: Ramsar**	**Habitats Regulations Assessment: Data Proforma**
	▪ Ringed plover (*Charadrius hiaticula*) Europe/Northwest Africa 595 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3) ▪ Black-tailed godwit (*Limosa limosa islandica)* Iceland/W Europe 1640 individuals, representing an average of 4.6% of the population (5 year peak mean 1998/9-2002/3) **Species with peak counts in winter:** ▪ Grey plover (*Pluvialis squatarola)* E Atlantic/W Africa –wintering 1643 individuals, representing an average of 3.1% of the GB population (5 year peak mean 1998/9-2002/3) ▪ Red knot (*Calidris canutus islandica)* W & Southern Africa (wintering) 7279 individuals, representing an average of 1.6% of the population (5 year peak mean 1998/9-2002/3) ▪ Dunlin (*Calidris alpina alpine)* W Siberia/W Europe 15171 individuals, representing an average of 1.1% of the population (5 year peak mean 1998/9-2002/3) ▪ Common redshank (*Tringa totanus totanus)* 1178 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9- 2002/3)
Conservation Objectives	None available, however, please refer to the conservation objectives for the Thames Estuary & Marshes SPA
Component SSSIs	▪ South Thames Estuary And Marshes SSSI ▪ Medway Estuary & Marshes SSSI ▪ Foulness SSSI ▪ Benfleet & Southend Marshes SSSI ▪ Mucking Flats and Marshes SSSI

Site Name: Thames Estuary & Marshes Location Grid Ref (Lat & Long): 51 29 08 N 00 35 47 E JNCC Site Code: UK11069 Size: 4838.94 Designation: Ramsar	Habitats Regulations Assessment: Data Proforma
Vulnerabilities (includes existing pressures and trends)	**Habitat fragmentation/ loss** ▪ There is evidence of coastal squeeze and erosion of intertidal habitat within the site. English Nature is in discussion with the port authority on the role of port dredging in intertidal habitat loss. ▪ The terrestrial part of the site depends on appropriate grazing and management of water. The availability of livestock may be affected by changes in agricultural markets. Evidence suggests that the water supply to grazing marsh has decreased. A water level management plan may address this. **Disturbance** ▪ The intertidal area is also vulnerable to disturbance from water borne recreation. This is being addressed by information dissemination as part of an estuary management plan. ▪ Development pressure can lead to both direct landtake from the site and indirect disturbance and hydrological effects. These effects will be addressed through the Habitats Regulations 1994. **Water Pollution** ▪ Studies by the Environment Agency indicate that the waters in the Thames estuary are hyper-nutrified for nitrogen and phosphorus.

Appendix II: Plans and Programmes Review

Regional

1. East of England Plan - The Revision to the Regional Spatial Strategy for the East of England 2008[1]

Sub-Regional/ County

2. Essex Transport Strategy: the Local Transport Plan for Essex (June 2011)
3. Essex County Council Minerals Development Document: Preferred Approach Paper 2010
4. Essex County Council Waste Development Document: Preferred Approach Paper 2011
5. Essex Thames Gateway Water Cycle Study - Scoping Study Final Report March 2009
6. Anglian River Basin Management Plan, September 2009
7. Essex and Suffolk Water Updated Draft Water Resources Management Plan January 2009
8. The Combined Essex Catchment Abstraction Management Study (CAMS) Feb 2007
9. The Combined Essex Catchment Abstraction Management Study (CAMS) update March 2008
10. Exceeding Expectations Tourism Growth Strategy for Essex March 2007

Local

11. Basildon District Council Core Strategy Preferred Options 2012
12. Castle Point Borough Council Core Strategy, 2009[2]
13. Chelmsford Borough Council Core Strategy, 2008
14. Maldon District Council Core Strategy, 2009
15. Rochford Core Strategy, Adopted December 2011
16. Southend-on-Sea Borough Council Core Strategy, Adopted December 2007
17. Southend-on-Sea Local Transport Plan 2006-2011
18. London Southend Airport Runway Extension and Associated Development, October 2009
19. London Southend Airport & Environs Joint Area Action Plan Preferred Options, 2009

[1] The East of England Plan was revoked on 3 January 2013.
[2] On 27 September 2011, Castle Point Borough Council formally resolved to withdraw the Core Strategy. Issues and Options consultation on a new Local Plan is being scheduled in August 2012.

Regional

East of England Plan - The Revision to the Regional Spatial Strategy for the East of England 2008	
Plan Type	**Regional Spatial Strategy**
Plan Owner/ Competent Authority	**East of England Regional Assembly**
Currency	**2001 - 2021**
Region/Geographic Coverage	**Government Office for the East of England**
Sector	**Planning**
Related work HRA/AA	**Habitats Regulations Assessment in response to the Further Proposed Changes consultation May 2008**
Document Details	**Potential impacts that could cause 'in-combination' effects**

Draft spatial strategy to guide development in the East of England for at least the next 20 years to sustain and improve the quality of life for all people who live in, work in, or visit the region, by developing a more sustainable, prosperous and outward-looking region, while respecting its diversity and enhancing its assets.
 	
▪ 60% of development to be on previously developed land.
▪ regeneration, extension and diversification of the region's tourist industry.
▪ support is given to the expansion of Southend Airport to meet local demand and contribute to local economic development.
▪ facilitate the delivery of at least 508,000 net additional dwellings over the period 2001 to 2021. Taking account of completions of 105,550 between 2001 and 2006 the minimum regional housing target 2006 to 2021 is 402,540.
▪ provide a minimum of 127,000 dwellings in Essex, Thurrock and Southend between 2001 and 2021.
	▪ **Disturbance** - as a result of development near/ adjacent to European sites, including:
	  ○ Recreation
	  ○ Light Pollution
	  ○ Noise Pollution
	▪ **Atmospheric Pollution** - generated as a result of housing, employment and transport growth.
	▪ **Water Pollution** - increased pressure on sewerage capacity and an increase in non-permeable surfaces.
	▪ **Water Abstraction** - as a result of proposed development, potential for reduced water levels.
	▪ **Land Take** - as a result of proposed development.
	  ▪ Coastal Squeeze
	▪ **Modified Drainage** - as a result of proposed development altering surface and groundwater flow.
	The HRA concluded that water levels and water quality of the Essex Estuaries SAC, and the Crouch and Roach Estuaries SPA/Ramsar Site will not be adversely affected as a result of the growth proposed for the

East of England Plan - The Revision to the Regional Spatial Strategy for the East of England 2008	
▪ improvements to the strategic road network including the A130 and A127. ▪ access to the region's airports should be managed and enhanced to support development and enable them to contribute to national and regional objectives for economic growth and regeneration ▪ Essex and Southend should plan for the following quantity of waste during the life of the plan - 9,120 annual tonnages of waste (thousand tonnes). ▪ Essex, Southend and Thurrock should maintain 4.55 million tonnes pa of sand and gravel during the life of the plan.	catchment area of the Essex Estuaries SAC, the Crouch and Roach Estuaries SPA/Ramsar, and that policies SS3, H1, WAT2, ETG1, ETG4, ETG5 and CH1 of the draft East of England RSS will have no effect on the integrity of the Essex Estuaries SAC, the Crouch and Roach Estuaries SPA/Ramsar.

Sub-Regional/ County

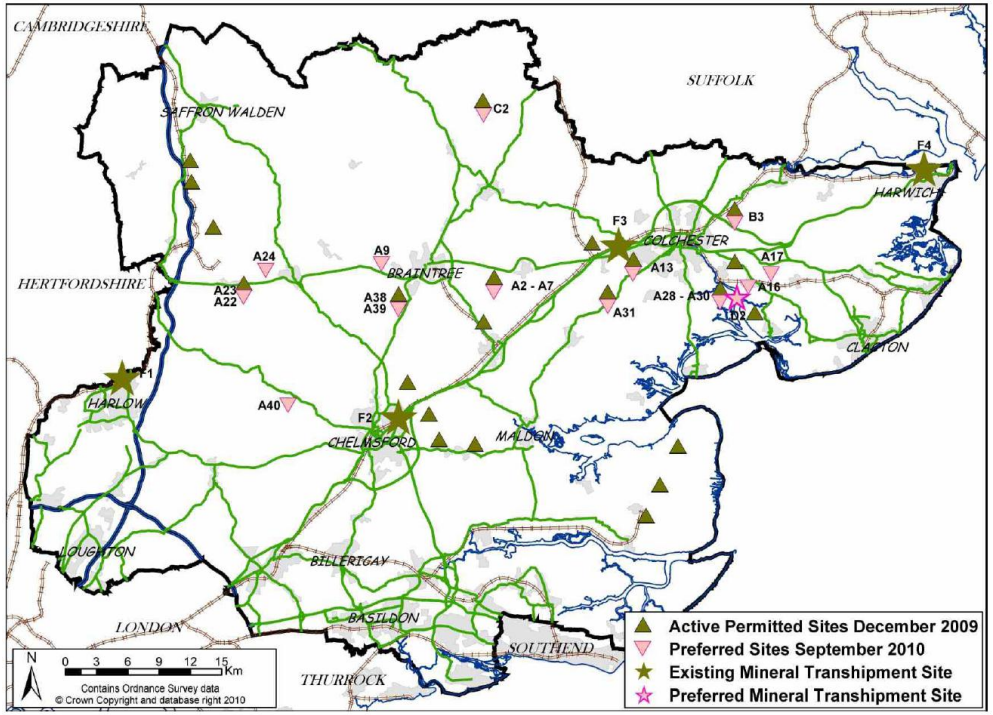
Essex Transport Strategy: the Local Transport Plan for Essex (June 2011)	
Plan Type	**Local Transport Plan**
Plan Owner/ Competent Authority	**Essex County Council**
Currency	**2011- 2026**
Region/Geographic Coverage	**Essex County Council's administrative boundary**
Sector	**Transport**
Related work HRA/AA	**None**
Document Details	**Potential impacts that could cause 'in-combination' effects**

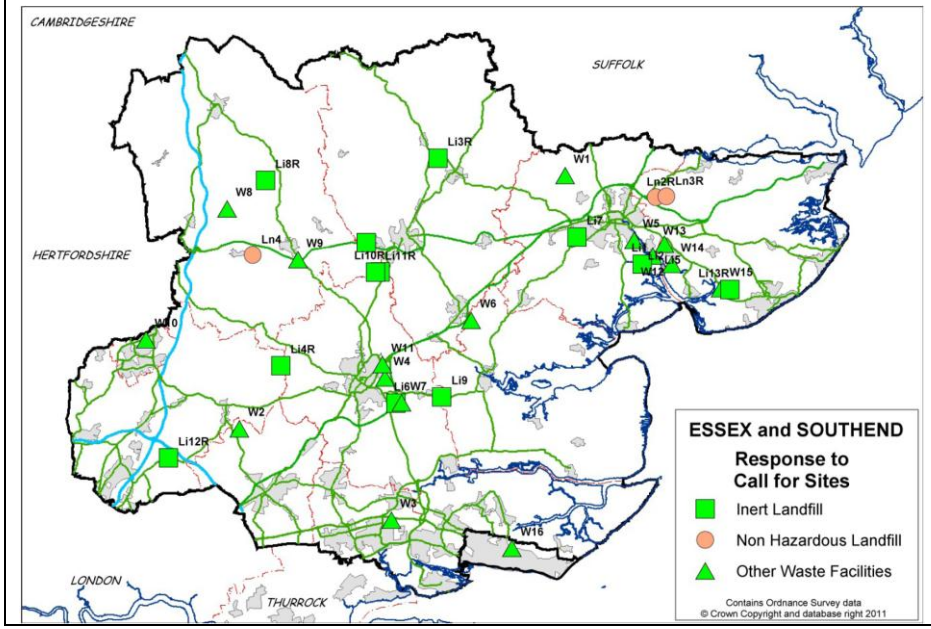
The Strategy sets out the Council's vision for transport the outcomes they aim to achieve over a fifteen year period, policies for transport and the broad approach to implementing these.
 	
Transport priorities:
 	
Strategic transport priorities
▪ Identifying an agreed and deliverable solution to address congestion at the Thames Crossing and adjacent M25 junction 30/31;
▪ Lobbying Government for enhancements to the A12;
▪ Lobbying Government for enhancements to the A120 to access Harwich port and between the A12 and Braintree;
▪ Lobbying Government for additional capacity on the Great Eastern Main Line and West Anglia mainline to accommodate growing commuter demand, the provision of competitive journey times for Essex Thameside services, and an enhanced local role in the rail franchise process.
	▪ **Disturbance** - as a result of development near/ adjacent to European sites, including:
	  ○ Recreation
	  ○ Light Pollution
	  ○ Noise Pollution
	▪ **Atmospheric Pollution** - generated as a result of increased traffic.
	▪ **Water Pollution** - through increased atmospheric pollution.
	▪ **Land Take** - as a result of proposed development.
	  ▪ Coastal Squeeze
	▪ **Modified Drainage** - as a result of proposed development altering surface and groundwater flow.

Essex Transport Strategy: the Local Transport Plan for Essex (June 2011)	
Countywide priorities ▪ Reducing the number of people killed or seriously injured on Essex roads; ▪ Continuing to work with the Essex Casualty and Congestion Board; ▪ Working with partners to promote a safe and secure travelling environment; ▪ Maintaining the Essex highway network and other transport assets; ▪ Keeping the transport network safe and operational; ▪ Managing the impact of planned works on the highway network. **Priorities for Thames Gateway** ▪ Providing for and promoting access by sustainable modes of travel to new development areas; ▪ Improving public transport links within and between the Thames Gateway towns (including the A13 Passenger Transport Corridor and sert schemes); ▪ Improving the availability of sustainable travel choices and raising public awareness of these through travel planning; ▪ Addressing maintenance, signing and broken links in the cycle network to improve conditions for cyclists and create a safer atmosphere for cycling. ▪ Improving the attractiveness and ease of use of public spaces to support regeneration; ▪ Improving journey time reliability on strategic inter-urban routes including the A127, A129, A130 and the A13; ▪ Improving access to London Gateway port and Southend Airport.	

Essex County Council Minerals Development Document: Preferred Approach Paper 2010	
Plan Type	**Minerals Development Document**
Plan Owner/ Competent Authority	**Essex County Council**
Currency	**2028**
Region/Geographic Coverage	**Essex County Council administrative boundaries**
Sector	**Minerals**
Related work HRA/AA	**HRA Appropriate Assessment Report Oct 2010**
Document Details	**Potential impacts that could cause 'in-combination' effects**
Essex County Council is required to produce a Development Plan Document for minerals, which plans for the future provision of minerals setting out how the demand for minerals will be met between now and 2028. **Strategic Objectives** 1: That reliance on primary mineral resources in Essex will be reduced, firstly through the more efficient use of the primary resource and reducing the amount of mineral waste; then the use of recycled aggregates. 2: To identify and safeguard the following resources in Essex: ▪ Sand and gravel, chalk, silica sand, brickearth and brick clay which have potential future economic and/ or conservation value i.e., unnecessary sterilisation should be avoided; ▪ Existing and potential secondary processing and aggregate recycling facilities that are of strategic importance for future mineral supply, to ensure these are not compromised by new development. 3: To identify sites and policy criteria for a steady and adequate supply of minerals to assist in the economic growth of Essex and to meet the agreed sub-regional aggregate apportionment.	The AA concluded that the MDD Preferred Approach has established a sufficient policy framework to enable the delivery of measures to either avoid or adequately mitigate adverse effects on the integrity of European sites.

Essex County Council Minerals Development Document: Preferred Approach Paper 2010	
4: To afford protection to designated sites of landscape, wildlife, geodiversity, cultural and heritage importance, commensurate with their importance, from mineral operators; 5: To achieve more sustainable minerals transportation by giving preference to local sources of aggregate, optimise how sites access the strategic highway network and enable the long haul movement of minerals by rail and water. 6: To secure high quality restoration of extraction sites with appropriate aftercare to achieve appropriate and beneficial after-uses. 7: To maintain and/ or enhance landscape, biodiversity and residential amenity for people living in proximity to minerals development. Restoration of mineral workings will deliver tangible benefits to affected local communities.	

Essex County Council Minerals Development Document: Preferred Approach Paper 2010	
	

Essex County Council Waste Development Document: Preferred Approach Paper 2011	
Plan Type	**Waste Development Document**
Plan Owner/ Competent Authority	**Essex County Council and Southend-on-Sea Borough Council**
Currency	**2031**
Region/Geographic Coverage	**Essex County Council and Southend-on-Sea Borough Council boundaries**
Sector	**Waste**
Related work HRA/AA	**HRA Screening Report September 2011**
Document Details	**Potential impacts that could cause 'in-combination' effects**
The purpose of this WDD: Preferred Approach is to outline the Authorities' preferred policy approach for managing waste within the Plan area.  	The HRA concluded that no Preferred Policy Approaches are likely to have significant effects on any European sites.

Essex Thames Gateway Water Cycle Study - Scoping Study Final Report March 2009	
Plan Type	**Water Cycle Study**
Plan Owner/ Competent Authority	**Basildon District Council;** **Castle Point Borough Council;** **Rochford District Council;** **Southend-on-Sea Borough Council; and** **Essex County Council.**
Currency	**2009**
Region/Geographic Coverage	**South Essex**
Sector	**Water**
Related work HRA/AA	**None**
Document Details	**Potential impacts that could cause 'in-combination' effects**
The overall objective is to provide an integrated approach to managing flood risk, water supply, and wastewater infrastructure in the study area, while being mindful of the environmental constraints. This is to ensure that all the elements of the water cycle and water infrastructure can be addressed as part of the delivery of the long term planning provision for growth in the area. ▪ The Essex Thames Gateway area does not have sufficient raw water resources to supply existing development; ▪ This means that there is limited water is available for further abstraction from surface or groundwater sources and therefore further transfer of water resources will be required to supply water to new developments within the Essex Thames Gateway area; ▪ Increased storage at Abberton Reservoir is expected to meet future water demand and the commensurate	The Water Cycle Study identifies that there is "***unlikely to be any increase in existing abstractions from surface or groundwater sources and as such it is possible to screen out impacts to the sites within the study area as a result of water resources.***" However, there is still the **potential for discharges of wastewater to have an impact** on European sites.

Essex Thames Gateway Water Cycle Study - Scoping Study Final Report March 2009	
increase in abstraction and transfer from the Ely-Ouse transfer scheme, which if approved will come online in 2014. Until the scheme is in place and operational, there will be a deficit in available water resources during drought years in Essex Thames Gateway area; ▪ There are no immediate limitations on supply infrastructure pipelines, reservoirs, water treatment works or pumping stations. ▪ In the majority of cases there is sufficient treatment capacity and capacity in the network to allow planned development in the study area up to 2015. Development beyond this in most cases will require upgrades to the treatment capacity of several of the WWTW and the construction of new strategic sewer mains to service new development; this will need to be defined and assessed in the next stage of the WCS.	

Anglian River Basin Management Plan September 2009	
Plan Type	**River Basin Management Plan**
Plan Owner/ Competent Authority	**Environment Agency**
Currency	**2009 - 2015**
Region/Geographic Coverage	**Anglian River Basin District**
Sector	**Water**
Related work HRA/AA	**Habitats Regulations Assessment will be available in December 2009[3]**
Document Details	**Potential impacts that could cause 'in-combination' effects**
The draft River Basin Management Plan describes the main issues for the Anglian river basin district and highlights some key actions proposed for dealing with them set out in brief the actions the EA propose should be taken. The document sets out detailed proposals for the next six years and beyond. Some key actions for the Combined Essex Catchment: ▪ Installation of elver passes to provide habitat improvement in river channel and eel migration. Schemes located at :Kings Mill, Stonham Back Cut, Cuton Back Cut, Barnes Mill, Broomfield Mill, Langleys Weir, Howe ST. Mill, Wickham Place, Blue Mills, Greys Mill, Easterford Mill, Blackwater Mill, Bradwell, Stisted Mill, Convent Lane Wiers, Cooks Mill, Ford ST. Mill, Chappel Mill, Chalkney Mill, Earls Colne Mill, Townsford Mill, Hulls Mill, Alderford Mill. ▪ In response to increasing pesticide concentrations in the Rivers Stour, Chelmer and Blackwater Essex & Suffolk Water has appointed two catchment Officers to work with farmers,	The HRA concluded that the River Basin Management Plan is unlikely to have any significant negative effects on any Natura 2000 sites and therefore does not require further assessment under the Habitats Regulations. This conclusion relied upon the fact that before any measures in the plan are implemented they must be subject to the requirements of the Habitats Regulations. Any plans, project or permissions required to implement the measures must undergo an appropriate assessment if they are likely to a have a significant effect.

[3] EA Website: Anglian River Basin Management Plan documents submitted to Ministers for approval: http://wfdconsultation.environment-agency.gov.uk/wfdcms/en/anglian/Intro.aspx

Anglian River Basin Management Plan September 2009	
growers, landowners and agronomists and other pesticide users in the catchments with the aim of reducing pesticides entering watercourses. ▪ Floating pennywort removal projects.	

Essex and Suffolk Water Final Water Resources Management Plan 2010 - 2035	
Plan Type	**Water Resource Management Plan**
Plan Owner/ Competent Authority	**Essex and Suffolk Water**
Currency	**2010 - 2035**
Region/Geographic Coverage	**Essex and Suffolk Resource Zones**
Sector	**Water**
Related work HRA/AA	**Available as part of the Final WRMP**
Document Details	**Potential impacts that could cause 'in-combination' effects**
The Water Resources Management Plan sets out how Essex and Suffolk Water propose to ensure that there is sufficient security of water supplies to meet the anticipated demands of its customers over the 25-year planning period from 2010 to 2035. **Essex Resource Zone Strategy** <u>Abberton Scheme</u> The Company will continue its strategy for implementing the Abberton Scheme. Currently all the necessary planning consents have been obtained and a number of the environmental enhancements around the western section have been completed. ESW will continue to work closely with the Environment Agency and other groups to deliver the scheme. <u>Baseline Metering</u> ESW is committed to achieving universal metering in Essex by 2020. To do this it intends to apply for powers to compulsory meter from 2015 onwards.	In terms of Essex & Suffolk Water's WRMP Final Planning Solution, only the Abberton Scheme was identified as having the potential to have effects on European sites, namely the Ouse Washes, The Wash, the Stour Estuary and Abberton Reservoir. The HRA concluded that the scheme would not significantly adversely effect the Ouse Washes, The Wash and the Stour Estuary. However, further studies were undertaken to inform an Appropriate Assessment for Abberton Reservoir. Following liaison with Natural England, these studies were also able to conclude that the scheme would not have significant adverse effects on the integrity of the site and so an appropriate assessment was not required. Indeed, Natural England stated that, "In our view, the Abberton Reservoir Scheme is likely to have a significant positive effect on the conservation status of the migratory and wintering waterfowl assemblages in the short-, medium- and long-term future of the statutorily designated site."

Combined Essex Catchment Abstraction Management Strategy (CAMS) Feb 2007 Combined Essex Catchment Abstraction Management Strategy Update March 2008	
Plan Type	**Catchment Abstraction Management Plan**
Plan Owner/ Competent Authority	**Environment Agency**
Currency	**2014**
Region/Geographic Coverage	**Combined Essex Catchment, which includes the South Essex Catchment**
Sector	**Water**
Related work HRA/AA	**HRA of the Review of Consents Process**
Document Details	**Potential impacts that could cause 'in-combination' effects**
The document sets out how the Environment Agency Wales will manage water abstraction from the Combined Essex Catchment until 2009. The strategy provides the framework for any decision on an abstraction license application. The South Essex Catchment has been split into 5 Water Resource Management Units (WRMU). The CAMS update assesses: ▪ WRMU 1 as 'water available' ▪ WRMU 2 as 'water available' ▪ WRMU 3 as 'water available' ▪ WRMU 4 as 'no water available' ▪ WRMU 5 as 'no water available'	Under the Habitats Regulations the Environment Agency has a duty to assess the effects of existing abstraction licences and any new applications to make sure they are not impacting on internationally important nature conservation sites. Water efficiency is also tested by the EA before a new license is granted. If the assessment of a new application shows that it could have an impact on a SAC/SPA the EA will have to follow strict rules in setting a time limit for that license.

Exceeding Expectations Tourism Growth Strategy for Essex, March 2007	
Plan Type	**Tourism Growth Strategy**
Plan Owner/ Competent Authority	**The Tourism Network**
Currency	**N/A**
Region/Geographic Coverage	**Essex**
Sector	
Related work HRA/AA	
Document Details	**Potential impacts that could cause 'in-combination' effects**
VISION The vision for this Strategy is that over the next five years increased visitor spend within Essex will support a vibrant economy and that an improving and expanding visitor offer will not only make Essex a great place to visit, but also a great place to live and work. Essex will become: ▪ An area where people visit rather just travel through; ▪ A destination of choice for people in London and the South East for a high quality short break or weekend away; ▪ Known for its cultural offering, activity and special interest tourism; ▪ Known as an accessible and affordable destination for conferences and meetings and an alternative to London. **THE STRATEGIC AIMS** 1. Increase the value of tourism to Essex by 4% per annum to over £2,000,000,000 within 5 years. 2. To create an additional 7,000 jobs within 5 years	The HRA found that the vision and the strategic aims of the document have the potential for significant effects on the county of Essex. Tourism can lead to a number of in-combination effects which may adversely effect the Natura 2000 sites located in Essex. The increased volume of traffic can decrease air quality, increase light and noise pollution and cause disturbance in the surrounding area. Further disturbance can be caused from visitors entering into protected sites for leisure activities. Tourism can also lead to an increase in development which in turn would lead to habitat loss for species living in settlement peripheries.

Local

<table>
<tr><th colspan="4">Rochford District Council Core Strategy (adopted) Dec 2011</th></tr>
<tr><td colspan="3">Plan Type</td><td>Core Strategy, Development Plan Document</td></tr>
<tr><td colspan="3">Plan Owner/ Competent Authority</td><td>Rochford District Council</td></tr>
<tr><td colspan="3">Currency</td><td>N/A</td></tr>
<tr><td colspan="3">Region/Geographic Coverage</td><td>Rochford District Council administrative boundaries</td></tr>
<tr><td colspan="3">Sector</td><td>Planning</td></tr>
<tr><td colspan="3">Related work HRA/AA</td><td></td></tr>
<tr><td colspan="3">Document Details</td><td>Potential impacts that could cause ‘in-combination’ effects</td></tr>
<tr><td colspan="3">The residential envelope of existing settlements will be extended in the areas set out below, to contribute to a five year supply of housing land in the period to 2015, and between 2015 and 2021.
Area | Dwellings by 2015 | Dwellings 2015-2021
North of London Road, Rayleigh | | 550
West Rochford | 450 | 150
West Hockley | 50 |
South Hawkwell | 175 |
East Ashingdon | 100 |
South West Hullbridge | | 250
South Canewdon | | 60
Total | 775 | 1010</td><td>The HRA Screening report found that the majority of Development proposed in the Core Strategy is focused on previously developed land in and around existing settlements in the west of the District, thereby minimising the potential for direct effects on European sites in the east of the District, including those along the Essex coastline and Thames Estuaries.

The assessment found that the Core Strategy had the potential for likely significant effects both alone and in-combination on European sites through; increased disturbance, increased atmospheric pollution and reduced water levels and quality.

The assessment considered that the mitigation provided by the Core Strategy through the provision for new open space and alternative recreational opportunities - in the west of the District away from the European sites - would be sufficient to avoid likely significant effects as a result of increased disturbance. Similarly, it was considered that the Core Strategy contained sufficient policy mitigation and monitoring measures to avoid likely significant effects on European sites either alone or in-combination through increased atmospheric pollution. However the assessment could not conclude with certainty that the level of development proposed in the Core Strategy and surrounding</td></tr>
</table>

<table>
<tr><th colspan="2">Rochford District Council Core Strategy (adopted) Dec 2011</th></tr>
<tr><td colspan="2">Post-2021, the residential envelope of existing settlements will be extended in the following areas (as indicated on the Key Diagram) to deliver the following approximate number of units post-2021.</td><td rowspan="5">areas will not have likely significant in-combination effects on European sites via reduced water quality and increased water resource demand. This is due to a number of uncertainties, including data limitations and the implementation uncertainty of the proposed development.

The assessment makes a number of recommendations to address these uncertainties and mitigate the potential likely significant effects outlined above. The RHA Screening concluded that if the recommendations are incorporated into the Core Strategy and a review of HRA findings is carried out upon completion of the Essex Thames Gateway WCS, the Core Strategy will not have likely significant effects either alone or in-combination on European sites.</td></tr>
<tr><td>Area</td><td>Dwellings post-2021</td></tr>
<tr><td>South East Ashingdon</td><td>500</td></tr>
<tr><td>South West Hullbridge</td><td>250</td></tr>
<tr><td>West Great Wakering</td><td>250</td></tr>
<tr><td>Total</td><td>1000</td></tr>
<tr><td colspan="2">The Council will support:
the development of Cherry Orchard Jubilee County Park;
the development of Wallasea Island Wild Coast Project;
the enhancement of the District's commercial centres;
the development of an Eco-Enterprise Centre;
the development of a skills training academy;
the enhancement of London Southend Airport;
the development and growth of the voluntary sector;
the development and growth of home-working; and
the protection and enhancement of the role of small and medium sized businesses.</td></tr>
</table>

Basildon District Council Core Strategy Preferred Options Feb 2012	
Plan Type	**Core Strategy, Development Plan Document**
Plan Owner/ Competent Authority	**Basildon District Council**
Currency	**N/A**
Region/Geographic Coverage	**Basildon District Council administrative boundaries**
Sector	**Planning**
Related work HRA/AA	
Document Details	**Potential impacts that could cause 'in-combination' effects**
At least 6,500 new homes would be provided between 2011 and 2031, split between the Major Urban Area of Basildon (80%) and the Towns of Billericay (1.5%) and Wickford (15.5%) in accordance with the Borough's Settlement Hierarchy.	▪ **Disturbance** - as a result of development near/ adjacent to European sites, including: ○ Recreation ○ Light Pollution ○ Noise Pollution ▪ **Atmospheric Pollution** - generated as a result of housing, employment and transport growth. ▪ **Water Pollution** - increased pressure on sewerage capacity and an increase in non-permeable surfaces. ▪ **Water Abstraction** - as a result of proposed development, potential for reduced water levels. ▪ **Modified Drainage** - as a result of proposed development altering surface and groundwater flow.

Basildon District Council Core Strategy Preferred Options Feb 2012	
	▪ **Land Take** - as a result of proposed development. ▪ Coastal Squeeze The HRA Screening report (Jan 2012) for the Core Strategy Preferred Options found that the Plan contains suitable mitigation and concluded that there are no likely significant effects.

Castle Point Borough Council Core Strategy, 2009	
Plan Type	**Core Strategy, Development Plan Document**
Plan Owner/ Competent Authority	**Castle Point Borough Council**
Currency	**N/A**
Region/Geographic Coverage	**Castle Point Borough Council administrative boundaries**
Sector	**Planning**
Related work HRA/AA	
Document Details	**Potential impacts that could cause 'in-combination' effects**

Housing
▪ 5,000 new homes in Castle Point between 2001 and 2026 that are well integrated with community service locations.
▪ At least 70% of new homes on previously developed land
▪ Canvey Town Centre – 400 homes
▪ Canvey seafront – 150 homes
▪ Hadleigh Town Centre – 500 homes
▪ Manor Trading Estate – 200 homes
▪ The Point Industrial Estate – 150 homes
▪ Land to the East of Canvey Road – 400 homes
▪ Castle View School will be redeveloped – 50 homes
	▪ **Disturbance** - as a result of development near/ adjacent to European sites, including:
	  ○ Recreation
	  ○ Light Pollution
	  ○ Noise Pollution
	▪ **Atmospheric Pollution** - generated as a result of housing, employment and transport growth.
	▪ **Water Pollution** - increased pressure on sewerage capacity and an increase in non-permeable surfaces.
	▪ **Water Abstraction** - as a result of proposed development, potential for reduced water levels.

Castle Point Borough Council Core Strategy, 2009	
▪ Land to the north of Kiln Road – 250 homes ▪ 650 new homes on PDL in Canvey Island between 2008-2006 ▪ 800 new homes on PDL in Benfleet, Hadleigh and Thundersley between 2008-2006 **Employment** ▪ At least 2,500 additional jobs in Castle Point between 2001 and 2026. ▪ South West Canvey – 18ha of employment land ▪ Manor Trading Estate – 4ha of employment land ▪ Rayleigh Weir – 3ha of employment land **Transport** Improvements to public transport provision in Castle Point including: ▪ Delivery of the A13 Passenger Transport corridor through Castle Point by 2011; ▪ Extension of similar Passenger Transport corridor features from the A13 to Canvey Island by 2016; ▪ The delivery of the South Essex Rapid Transit project with connections to the Borough by 2021. Improvements to opportunities for walking and cycling in Castle Point including: ▪ Delivery National Cycle Network Routes, and Greenways identified in the Green Grid Strategy; and ▪ Work with ECC to identify and deliver, or improve existing footpaths and cycle routes, and make roads safer for pedestrians and cyclists.	▪ **Modified Drainage** - as a result of proposed development altering surface and groundwater flow. ▪ **Land Take** - as a result of proposed development. ▪ Coastal Squeeze

Chelmsford Borough Council Core Strategy, 2008	
Plan Type	**Core Strategy, Development Plan Document**
Plan Owner/ Competent Authority	**Chelmsford Borough Council**
Currency	**N/A**
Region/Geographic Coverage	**Chelmsford Borough Council administrative boundaries**
Sector	**Planning**
Related work HRA/AA	
Document Details	**Potential impacts that could cause 'in-combination' effects**
Housing ▪ 700 new homes per annum during the period 2001-2021 ▪ Provision is made for a minimum increase of 14,000 dwellings (net) in the Borough in the period 2001-2021 ▪ Borough Council's Housing Trajectory, indicates that a total of 16,170 new dwellings will be delivered in the Plan period **Economic** ▪ 9,600 new jobs in the period 2001-2021 ▪ extend the primary shopping area to accommodate the identified need for retail growth of up to 100,000 sq. m. **Transport** ▪ Chelmsford North-East By-pass and Cross Valley Link Road ▪ New Railway Station north-east of Chelmsford ▪ Capacity improvements at Chelmsford Railway Station ▪ Transport links between new neighbourhoods and Chelmsford Town Centre	▪ **Disturbance** - as a result of development near/ adjacent to European sites, including: ○ Recreation ○ Light Pollution ○ Noise Pollution ▪ **Atmospheric Pollution** - generated as a result of housing, employment and transport growth. ▪ **Water Pollution** - increased pressure on sewerage capacity and an increase in non-permeable surfaces. ▪ **Water Abstraction** - as a result of proposed development, potential for reduced water levels. ▪ **Modified Drainage** - as a result of proposed development altering surface and groundwater flow. ▪ **Land Take** - as a result of proposed development. ▪ Coastal Squeeze

Chelmsford Borough Council Core Strategy, 2008	
▪ The encouragement of public transport use and sustainable ▪ Additional Park and Ride sites to serve Chelmsford ▪ Bus Priority and rapid transit measures	

Maldon District Council Core Strategy, 2009	
Plan Type	**Core Strategy, Development Plan Document**
Plan Owner/ Competent Authority	**Malden District Council**
Currency	**N/A**
Region/Geographic Coverage	**Malden District**
Sector	**Planning**
Related work HRA/AA	
Document Details	**Potential impacts that could cause 'in-combination' effects**
Housing ▪ The Council will allocate deliverable housing sites to supply 2,400 new dwellings between 2001 and 2021 as required by the East of England Plan (GO-East, 2008). ▪ An additional 600 new units between 2021-2026 (a total of 3,000 units 2001 – 2026) ▪ New housing development will be focused within the Strategic Housing Locations of Maldon, Heybridge, Burnham-on-Crouch and Southminster. ▪ If located within villages, housing must be within the development boundary.	The Malden District Core Strategy, at this stage of its development, is yet to allocate specific amounts of employment growth but has allocated the proposed housing development. The proposed housing development will have a number of different effects: ▪ **Disturbance** - as a result of development near/ adjacent to European sites, including: ○ Recreation ○ Light Pollution ○ Noise Pollution ▪ **Atmospheric Pollution** - generated as a result of housing, employment and transport growth. ▪ **Water Pollution** - increased pressure on sewerage capacity and an

Maldon District Council Core Strategy, 2009	
Economic Employment Allocations will be maintained for the following sites up to 2026: ▪ The Causeway, Maldon ▪ Wycke Hill, Maldon ▪ West station Industrial Park, Maldon ▪ Burnham Business Park, Burnham-on-Crouch ▪ Springfield Industrial Estate, Burnham-on-Crouch ▪ Station Approach Industrial Area, Burnham-on-Crouch ▪ Oval Park, Langford ▪ Water Works, Langford ▪ Bard wells Yard, Cold Norton ▪ Maple dean Industrial Estate, Latchingdon ▪ Mayfair Industrial Estate, Latchingdon ▪ Mayland Industrial Estate, Mayland ▪ Hall Road Estate, Southminster ▪ Scott's Hill, Southminster ▪ Beckingham Business Park, Tolleshunt Major ▪ Wood rolfe Road, Tollesbury Developments within Employment Allocations will be limited to office, industrial, warehousing and other B-class uses as stated in the Use Class Order. Any proposal for new office development exceeding 2,500 m^2 of net floorspace within employment allocations will be in or around Maldon and Heybridge employment areas. **Accessibility**	increase in non-permeable surfaces. ▪ **Water Abstraction** - as a result of proposed development, potential for reduced water levels. ▪ **Modified Drainage** - as a result of proposed development altering surface and groundwater flow. ▪ **Land Take** - as a result of proposed development. ▪ Coastal Squeeze Development in Malden town in particular has the potential for a negative effect due to its proximity to Blackwater estuary SPA/Ramsar. With increase housing development, economic expansion and tourism promotion there is a great potential for disturbance, pollution and land take on the SPA/Ramsar site.

Maldon District Council Core Strategy, 2009	
All new development must: ▪ be located close to and have ready access to areas with an established transport network and public transport services so as to reduce reliance to travel by private car; ▪ not have a detrimental impact on the existing main road networks; ▪ seek to assist and contribute to the provision and maintenance of infrastructures, transport facilities and resources to support public transport services; ▪ Provide and/or enhance safe and convenient dedicated footpaths for pedestrians, including those with mobility difficulties and cyclists that enhance connectivity and can be used by all; ▪ Improve accessibility to buildings, streets and public spaces for all users especially for those with mobility impairments; ▪ Where appropriate, provide green travel plans together with implementation and monitoring strategies that aim to minimise the need to travel and show a preference for more environmental friendly choices; ▪ Provide adequate parking facilities, especially for mobility equipment and bicycles, in accordance with Parking Standards to be agreed by the Council; and, ▪ Take into account the cumulative impact they would have and where appropriate be accompanied by a Transport Statement. ▪ Major developments should be supported by a Transport Assessment, which will take into account any potential impacts of transport and assess measures to improve access by public transport, walking and cycling.	

Southend-on-Sea Borough Council Core Strategy Adopted, December 2007	
Plan Type	**Local Development Framework**
Plan Owner/ Competent Authority	**Southend-on-Sea Borough Council**
Currency	**2021**
Region/Geographic Coverage	**Southend-on-Sea Borough Council administrative boundaries**
Sector	**Planning**
Related work HRA/AA	**The HRA (including AA) of proposed changes to Southend-on-Sea Core Strategy DPD July 2007**
Document Details	**Potential impacts that could cause 'in-combination' effects**

The Core Strategy forms part of the Southend-on-Sea Local Development Framework and provides the vision, objectives and planning strategy for the spatial development of the whole Borough of Southend-on-Sea until 2021, including the distribution of growth and the policy context for a 10 year housing supply.
 	
Housing and Employment Growth
The primary focus of regeneration and growth will be in Southend Town Centre and Central Area - to provide for 6,500 new jobs and providing for at least 2,000 additional homes in conjunction with the upgrading of strategic and local passenger transport accessibility, including development of Southend Central and Southend Victoria Stations as strategic transport interchanges and related travel centres.
 	
In addition, appropriate regeneration and growth will be focussed in the following locations:
▪ Seafront - to enhance the Seafront's role as a successful
	▪ **Disturbance** - as a result of development near/ adjacent to European sites, including:
	  ○ Recreation
	  ○ Light Pollution
	  ○ Noise Pollution
	▪ **Atmospheric Pollution** - generated as a result of housing, employment and transport growth.
	▪ **Water Pollution** - increased pressure on sewerage capacity and an increase in non-permeable surfaces.
	▪ **Water Abstraction** - as a result of proposed development, potential for reduced water levels.
	▪ **Land Take** - as a result of proposed development.
	  ▪ Coastal Squeeze
	▪ **Modified Drainage** - as a result of proposed development altering surface and groundwater flow.
	
	The HRA found that two Core Strategy Policies have the potential for likely significant effects and would benefit from strengthening. Amendments to

Southend-on-Sea Borough Council Core Strategy Adopted, December 2007	
leisure and tourist attraction and place to live, and make the best use of the River Thames, subject to the safeguarding of the biodiversity importance of the foreshore. ▪ Shoeburyness - to provide an additional 1,500 jobs and 1,400 additional dwellings. ▪ Priority Urban Areas – these comprise: a. The District Centres of Westcliff (Hamlet Court Road) and Leigh (Leigh Broadway, Elm Road and Rectory Grove), the Southchurch Road shopping area, and the West Road/Ness Road shopping area of Shoebury; b. The main Industrial/employment areas as identified on the Key Diagram, and c. The Cluny Square Renewal Area. Provision is made for 3,350 net additional dwellings between 2001 and 2011 and for 3,150 net additional dwellings between 2011 and 2021. Provision is made for not less than 6,500 net additional jobs by 2011, and not less than 13,000 net additional jobs by 2021, distributed as follows: Town Centre and Central Area 6,500 Shoeburyness 1,500 Seafront 750 Priority Urban Areas 2,750 Intensification 1,500 **TOTAL** **13,000** **Transport**	policy wording were proposed and considered to be sufficient to address the identified likely significant effects. These revised policies have been reassessed and it is considered that if the recommended changes to the Core Strategy Policies are adopted within the Core Strategy DPD then no further Appropriate Assessment of this document is required. The assessment concluded that if the recommendations were incorporated then the Core Strategy will not have adverse effects on the integrity of the following European sites either alone or in-combination: ▪ Benfleet and Southend Marshes SPA ▪ Foulness SPA and ▪ Essex Estuaries SAC ▪ Crouch and Roach Estuaries SPA ▪ Thames Estuary & Marshes SPA

Southend-on-Sea Borough Council Core Strategy Adopted, December 2007	
▪ Improvements to the A127/A1159 east-west strategic transport and freight corridor including junction improvements at Progress Road, Kent Elms, The Bell, Cuckoo Corner, Sutton Road, Fairfax Drive, East/West Street and Victoria Circus; ▪ Improving accessibility to key development opportunity sites, including improved access to Shoeburyness and London Southend Airport to support the potential of the Airport to function as a catalyst for economic growth; ▪ Providing for the development of high quality transport interchanges at Southend and the key urban interchanges at Leigh Railway Station, Shoeburyness Railway Station, Southend Hospital and London Southend Airport;	

Southend Local Transport Plan 2006-2011	
Plan Type	**Transport Plan**
Plan Owner/ Competent Authority	**Southend Borough Council**
Currency	**N/A**
Region/Geographic Coverage	**Southend Borough**
Sector	**Planning**
Related work HRA/AA	
Document Details	**Potential impacts that could cause 'in-combination' effects**

Southend Local Transport Plan 2006-2011	
Shared Objectives ▪ Tackling congestion by the more efficient use of road capacity; providing for quality public transport; placing greater emphasis on travel plans and 'smarter choices' of travel; and improving conditions for motorists, cyclists, pedestrians and motorists. Both in the Borough and cross boundary with Essex. ▪ Delivering Accessibility by working with local groups to improve and encourage access to places of work, learning, health care, shopping and leisure services; and encourage sustainable modes of transport, especially for people from disadvantaged groups and areas in the town. ▪ Providing for Safer Roads by taking forward the Southend Road Safety Strategy in partnership, improving road and bridge maintenance; slower speeds within Environmental Rooms and near schools; road safety measures; improved safety for cyclists and pedestrians; and safety awareness, particularly amongst children. ▪ Achieving Better Air Quality by reducing congestion, driver distances travelled and number of vehicle trips made. ▪ Achieving a Better Quality of Life by addressing wider quality of life issues including a quality public realm, landscaping, safer communities, health and reduction in traffic noise **Local Objectives** ▪ Regeneration of Southend by Improving the Economy by promoting and supporting sustainable economic growth in appropriate locations ▪ Achieving an Efficient Transport System by ensuring that land use and transport (all modes) planning are integrated.	

Southend Local Transport Plan 2006-2011	
▪ Raising Community Awareness by publicising the effects of continuing traffic growth and the benefits and availability of alternative transport modes. ▪ Improving the Highway by pursuing effective maintenance procedures that achieve value for money solutions whilst keeping the quality of life and urban renaissance objectives by improving the street scene.	

London Southend Airport Runway Extension and Associated Development Oct 2009	
Plan Type	**Planning Application**
Plan Owner/ Competent Authority	**London Southend Airport Company Ltd**
Currency	**N/A**
Region/Geographic Coverage	**London Southend Airport Boundary**
Sector	**Planning**
Related work HRA/AA	**Stage 1 Screening Report - Habitats Regulation Assessment August 2009**
Document Details	**Potential impacts that could cause 'in-combination' effects**
The planning application seeks permission for the following: ▪ Runway extension (approx 300m plus 80m starter strip) and repositioning of landing lights; ▪ Diversion of Eastwoodbury Lane as this currently crosses the site of the proposed runway extension; ▪ Alterations to the pedestrian and vehicular access to St Laurence and ▪ All Saints Church, and removal and reinstatement of part of the churchyard wall ▪ Drainage facilities for the extended runway and road	The HRA Screening identified that the project has the potential to increase disturbance of the qualifying bird species and assemblages of the Crouch and Roach Estuaries SPA/ Ramsar. It concluded that this impact however, is likely to be temporary as typical altitude of flights would remain unchanged from that currently employed, and taking into account the ability of most birds to become habituated to regularly-occurring noise disturbance the increased frequency of these flights would pose little disturbance to the bird species and assemblages. This conclusion was supported by Natural England in their consultation response to the JAAP.

London Southend Airport Runway Extension and Associated Development Oct 2009	
diversion; ▪ Demolition of four cottages on the south side of the runway extension area, and an additional two on the north side.	

London Southend Airport & Environs Joint Area Action Plan Preferred Options, February 2009	
Plan Type	**Area Action Plan**
Plan Owner/ Competent Authority	**Rochford District Council** **Southend-on-Sea Borough Council**
Currency	**N/A**
Region/Geographic Coverage	**London Southend Airport Boundary**
Sector	**Planning**
Related work HRA/AA	
Document Details	**Potential impacts that could cause 'in-combination' effects**
The shared Vision for the future development of London Southend Airport and its environs (i.e. the JAAP) is: *'An area that realises its potential as a driver for the sub-regional economy, providing significant employment opportunities and ensuring the quality of life for its residents and workers. To achieve this, the area's assets and opportunities for employment need to be supported and developed'* The objectives are: ▪ Creation of sustainable and high value employment and other land uses within the study area; ▪ Maximising the economic benefits of a thriving airport and related activity;	Airports can increase disturbance to wildlife in the surrounding area. Considering that Southend airport is in close proximity to the Crouch and Roach estuaries SPA/Ramsar there is the potential for a negative impact from disturbance and also bird strikes. However, the Area Action Plan objectives do not specifically aim to expand the airport, meaning that the impact upon the surrounding wildlife is likely to remain at a similar level to at present.

London Southend Airport & Environs Joint Area Action Plan Preferred Options, February 2009	
▪ Ensuring appropriate improvements in sustainable transport ▪ accessibility and facilities; ▪ Ensuring a high quality environment for residents whether expressed through noise pollution management or protection of green space; ▪ Maximum return on public investment through attracting inward investment; and ▪ Efficient use of existing employment land resources.	

Appendix III: Screening Matrix

Policy/ Allocation	Potential of Likely Significant Effect (LSE)	Avoidance/ Mitigation Measures	Residual Effect?
Policy BFR1 - Star Lane Industrial Estate, Great Wakering Minimum of 87 dwellings.	The site is approximately 1.4 km from the nearest European site and is an existing Industrial Estate and disused brickworks. Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.	N/A	No
Policy BFR2 - Eldon Way/Foundry Industrial Estate, Hockley Approx 100 dwellings and employment land (based on the emerging Hockley AAP)	The site is approximately 2.2 km from the nearest European site and is an existing industrial estate, which is within the centre of Hockley. Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.	N/A	No
Policy BFR3 - Stambridge Mills, Rochford Minimum of 41 dwellings.	Stambridge Mills is a disused site formally in industrial use located to the east of Rochford. The site is adjacent to the River Roach and approximately 350m upstream from the Essex Estuaries SAC and Crouch and Roach Estuaries SPA and Ramsar. Given the proximity of the site to the River Roach there is the potential for impacts arising from proposed development to affect the European sites identified above, however, given the capacity of the site this is unlikely to be significant. The Policy requires any development coming forward to be designed so as to avoid harm to the international nature conservation designations, specifically through discouraging human activity within the areas designated for their ecological value along the banks of the Roach. Given the capacity of the site and mitigation provided by the Policy, it is considered unlikely that any impacts would significant affect the European	N/A	No

Policy/ Allocation	Potential of Likely Significant Effect (LSE)	Avoidance/ Mitigation Measures	Residual Effect?
	sites.		
Policy BFR4 - Rawreth Industrial Estate, Rayleigh Minimum of 89 dwellings.	The site is approximately 2.4 km from the nearest European site and is an existing industrial estate. Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.	N/A	No
Policy SER1 - North of London Road, Rayleigh Minimum of 550 dwellings.	The site is located on agricultural land to the west of Rayleigh and is approximately 1.8 km from the nearest European site. It extends from London Road northwards to Rawreth Lane, and is adjacent to the existing residential area and Rawreth Industrial Estate to the east. Given the distance from European sites it is unlikely that there will be any direct impacts as a result of proposed development. There are no identified environmental pathways for impacts as a result of short-range atmospheric pollution. Proposed development could potentially increase levels of diffuse pollution but this is considered unlikely to have a significant effect when taking into account the sensitivity of Estuarine European sites. Given the distance of the allocation from European sites it is also unlikely that development will result in a significant increase in the level of recreation at the European sites. There is the potential for indirect impacts as a result of increased abstraction and increased pressure on sewerage capacity; however, proposed development alone is unlikely to result in an impact that would lead to significant effects on European sites. The potential for in-combination effects are discussed in Section 3 of the HRA (Screening) Report.	N/A	No
Policy SER2 - West Rochford Minimum of 600 dwellings.	The site is located on agricultural land between Hall Road and Ironwell Lane to the west of Oak Road. The site is adjacent to the existing residential area to the east and is approximately 2.2 km from the nearest European	N/A	No

Policy/ Allocation	Potential of Likely Significant Effect (LSE)	Avoidance/ Mitigation Measures	Residual Effect?
	site. Please refer to the assessment for Policy SER1.		
Policy SER3 - West Hockley Minimum of 50 dwellings.	The site is approximately 2 km from the nearest European site and predominantly comprises previously developed land with a small proportion of greenfield. Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.	N/A	No
Policy SER4 - South Hawkwell Minimum of 175 dwellings.	The site is approximately 4 km from the nearest European site and comprises a wooded area, a tree nursery, open land in use for grazing, paddocks, a horticultural nursery, open land, a tennis court and a group of buildings in use for business/industrial purposes. Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.	N/A	No
Policy SER5 - East Ashingdon Minimum of 100 dwellings.	The site is approximately 2.6 km from the nearest European site comprises grazing land, which occupies the central and western section of the site, and stables, hardstanding and outbuildings are located towards the eastern section. The site is adjacent to the existing residential area to the west and King Edmund School borders the site to the south. Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.	N/A	No
Policy SER6 - South West Hullbridge Minimum of 500 dwellings in two phases. Part of the site (SER6a) will be allocated for residential development from adoption of the Allocations Document and the other (SER6b) will be safeguarded from development until 2021, unless required in order to maintain a five-year supply of	The site extends northwards from Lower Road to West Avenue/Windermere Avenue and is adjacent to the existing residential area which is designated to the north and east. It is agricultural land with several large agricultural buildings and three dwellings on site. The site is approximately 430m from Essex Estuaries SAC and the Crouch and Roach Estuaries SPA & Ramsar. In response to the Allocations Discussion and Consultation Document, NE stated that development at South West Hullbridge may require an HRA in relation to the potential increase in recreational pressure (particularly dog walkers), given its proximity to the Crouch and Roach Estuary SPA and Ramsar. Studies in North Kent and the Solent have shown that dog walking can be a particular issue for protected bird species.	N/A	No

Policy/ Allocation	Potential of Likely Significant Effect (LSE)	Avoidance/ Mitigation Measures	Residual Effect?
deliverable housing land.	The average number of people per household in the UK is 2.4 (Office for National Statistics - Statistical bulletin: Families and households, 2012). Therefore, the proposed development at this site is likely to increase the population of Hullbridge by 1,200 people to 7,645[1], if all 500 homes are built. Research indicates that approximately 23% of UK households own at least one dog[2]. Therefore, the development of 500 new dwellings could result in an increase of approximately 115 households with a dog. When taking into account the phasing of the proposed development, this is not considered to be a significant increase in the number of dog walkers on the Crouch and Roach Estuary SPA and Ramsar. The policy already requires a minimum of 3.6 hectares of publicly accessible natural/ seminatural greenspace on the site, which will be well-integrated into the development, and accessible for residents of both phases of development. This should help to mitigate the potential increase in dog walkers as a result of proposed development. Given the requirement for publicly accessible natural/ seminatural greenspace on the site and the phasing of development as well as the small increase in the number of dog walkers, it is assessed that the policy will not have LSEs on European sites. There are no identified environmental pathways for impacts as a result of short-range atmospheric pollution. Proposed development could potentially increase levels of diffuse pollution but this is considered unlikely to have a significant effect when taking into account the sensitivity of		

[1] Based on the Office for National Statistics 2001 Census data.
[2] Pet Food Manufacturers' Association: http://www.pfma.org.uk/statistics/

Policy/ Allocation	Potential of Likely Significant Effect (LSE)	Avoidance/ Mitigation Measures	Residual Effect?
	Estuarine European sites. There is the potential for indirect impacts as a result of increased abstraction and increased pressure on sewerage capacity; however, proposed development alone is unlikely to result in an impact that would lead to significant effects on European sites. The potential for in-combination effects are discussed in Section 3 of the HRA (Screening) Report.		
Policy SER7 - South Canewdon Approx 60 dwellings.	The site is approximately 1.5 km from the nearest European site and is predominantly greenfield land with some previously developed land to the north of Anchor Lane and Lark Hill Road. It is located adjacent to the existing residential area along its eastern boundary. Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.	N/A	No
Policy SER8 - South East Ashingdon Minimum of 500 dwellings.	The site is approximately 1.9 km from the nearest European site and is located on agricultural land between Oxford Road to the north, Ashingdon Road to the west and minor residential roads to the south. It is adjacent to the existing residential area to the north, west and south. Please refer to the assessment for Policy SER1.	N/A	No
Policy SER9 - West Great Wakering Minimum of 250 dwellings.	Two sites have been identified on agricultural land to the south of the High Street and to the west of Little Wakering Road. The site to the west of Little Wakering Road (Policy SER9a) is approximately 950m from the nearest European site and adjacent to existing residential development along its northern, eastern and southern boundaries. The site to the south of the High Street (Policy SER9b) is approximately 1.3 km from the nearest European site and adjacent to existing residential development to the north, with Star Lane Industrial Estate to the west and the Star Lane Pits Local Wildlife Site (R35) to the south. Please refer to the assessment for Policy SER1.	N/A	No

Policy/ Allocation	Potential of Likely Significant Effect (LSE)	Avoidance/ Mitigation Measures	Residual Effect?
Policy GT1 - Gypsy and Traveller Accommodation Capacity for 15 pitches.	The site is degraded greenfield land adjacent to an employment land allocation to the west of Rayleigh (see Policy NEL2). There are no identified environmental pathways for impacts arising as result of proposed development.	N/A	No
Policy EEL1 - Existing Employment Land around Rochford	The policy seeks to protect existing employment land around Rochford from alternative uses. No impacts will arise as a result of this policy that could have likely significant effects on European sites.	N/A	No
Policy EEL2 - Existing Employment Land around Rayleigh	The policy seeks to protect existing employment land around Rayleigh from alternative uses. No impacts will arise as a result of this policy that could have likely significant effects on European sites.	N/A	No
Policy EEL3 - Existing Employment Land on Wallasea Island	The policy seeks to protect existing employment land on Wallasea Island from alternative uses. No impacts will arise as a result of this policy that could have likely significant effects on European sites.	N/A	No
Policy NEL1 - South of London Road, Rayleigh Accommodate light industrial and office uses displaced from development identified in Policy BFR4.	The site is approximately 2.5 km from the nearest European site and encompasses brownfield land which is predominantly in commercial use and agricultural land. Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.	N/A	No
Policy NEL2 - West of the A1245, Rayleigh Alongside heavier industrial uses, it is envisaged that this site will also accommodate a recycling centre.	A larger site on degraded greenfield land to the west of Rayleigh, at the junction of the A1245 and the A127, has been identified. The site is approximately 3.5 km from the nearest European site. Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.	N/A	No
Policy NEL3 - South of Great Wakering	The site is approximately 1.8 km from the nearest European site and is located on agricultural land to the east of Star Lane, south of proposed residential development of the former Star Lane Brickworks in Great	N/A	No

Policy/ Allocation	Potential of Likely Significant Effect (LSE)	Avoidance/ Mitigation Measures	Residual Effect?
The site is 2.5 hectares in size. Businesses displaced from Star Lane Industrial Estate, which excludes the part of the site encompassing the disused brickworks (Policy BFR1), will be accommodated on this site.	Wakering (Site BFR1). Given the location of the allocation and capacity of the site it is considered unlikely that there will be LSEs.		
Policy NEL4 - North of London Southend Airport	It is not the role of the Allocations Document to allocate land or set detailed policies for London Southend Airport - this will be done through the London Southend Airport and Environs Joint Area Action Plan.	N/A	No
Policy ELA1 - Local Wildlife Sites	Policy identifies areas suitable for designation as Local Wildlife Sites; therefore no LSE.	N/A	No
Policy ELA2 - Coastal Protection Belt	No LSE as the policy identifies the area to be designated as the Coastal Protection Belt.	N/A	No
Policy ELA3 - Upper Roach Valley	No LSE as the policy identifies the area to be protected as part of the Upper Roach Valley.	N/A	No
Policy EDU1 - North of London Road, Rayleigh New primary school.	The number of dwellings proposed in this location (Policy SER1) result in the need for a new single form entry primary school. At least 1.1 hectares would be required to accommodate this school. There are no identified environmental pathways for impacts arising as result of proposed development.	N/A	No
Policy EDU2 - West Rochford New primary school.	The number of dwellings proposed in this location (Policy SER2) result in the need for a new single form entry primary school. At least 1.1 hectares would be required to accommodate this school. There are no identified environmental pathways for impacts arising as result of proposed development.	N/A	No
Policy EDU3 - King Edmund School	New residential development to the east of Ashingdon (Policy SER5) will be required to deliver, aside from improved access to King Edmund School, an additional 3 hectares of land in order to accommodate the required expansion of this secondary school to meet the additional need. An additional 2 hectares of land is located to the east of Oxford Road to the	N/A	No

Policy/ Allocation	Potential of Likely Significant Effect (LSE)	Avoidance/ Mitigation Measures	Residual Effect?
	rear of the existing school playing field to enable the expansion of the school. There are no identified environmental pathways for impacts arising as result of proposed development.		
Policy EDU4 - Existing Primary and Secondary Schools	No LSE as the policy seeks to protect existing primary and secondary schools and allow their expansion if needed.	N/A	No
Policy OSL1 - Existing Open Space	No LSE as the policy identifies sites to be allocated as open space.	N/A	No
Policy OS2 - New Open Space	No LSE as the policy seeks the provision of new open space with new residential development.	N/A	No
Policy OSL3 - Existing Leisure Facilities	No LSE as the policy seeks to protect leisure facilities from other competing uses.	N/A	No
Policy TCB1 - Rayleigh	No LSE as the policy identifies the primary and secondary shopping frontages in Rayleigh as well as the town centre boundary.	N/A	No
Policy TCB2 - Rochford	No LSE as the policy identifies the primary and secondary shopping frontages in Rochford as well as the town centre boundary..	N/A	No
Policy TCB3 - Hockley	No LSE as the policy identifies the primary and secondary shopping frontages in Hockley as well as the town centre boundary..	N/A	No