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Habitat Regulations Assessment of Thurrock Local Plan

Scoping and Discussion Report

Prepared by LUC
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1 Introduction

- 1.1 Since February 2014, Thurrock Council has been preparing a new Local Plan, which will set the strategic framework for planning in the Borough over the next 20 to 30 years. It will guide decisions on planning applications and define the strategic direction in terms of social, economic and environmental matters. The Local Plan will include details of how much residential and employment development is needed in the area, where this will be delivered (via site allocations) and how this will be delivered (via development management policies).
- 1.2 The Local Plan will replace the current Core Strategy, which was adopted in 2011. The Council has since recognised a need to replace the Core Strategy, as some of the key strategic planning policies are considered out of date or inconsistent with the revised National Planning Policy Framework (NPPF), which was published in July 2018, after the Core Strategy was adopted. The Local Plan is to be a completely new document, with a development strategy that is tailored to the current and future needs of the Borough, rather than simply updating previous development plan work.
- 1.3 Thurrock Council has carried out a series of consultations on evidence to inform preparation of the Local Plan. Formal consultation on the first of the Council's new Local Plan documents, the Issues and Options (Stage 1), took place between February and April 2016. This encouraged local people to input their views on issues in the Borough, enabling the Council to identify priorities for the plan.
- 1.4 In December 2016, LUC was appointed by Thurrock Council to prepare a Habitat Regulations Assessment (HRA) Scoping and Discussion document for the Issues and Options (Stage 2) Local Plan. The purpose of this document will be to provide guidance and parameters for developing the Local Plan in the context of the sensitivities of relevant European sites, as well as a reference point for stakeholders wishing to comment on the Issues and Options (Stage 2) Local Plan document.

The requirement to undertake Habitats Regulations Assessment of Development Plans

- 1.5 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in 2007¹; the currently applicable version of the Habitats Regulations came into force in November 2017². When preparing its Local Plan, Thurrock Council is therefore required by law to carry out an HRA although consultants can undertake the HRA on its behalf. The requirement for authorities to comply with the Habitats Regulations when preparing a Local Plan is also noted in the Government's online planning practice guidance.
- 1.6 HRA refers to the assessment of the potential effects of a development plan on one or more European sites, including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs):
 - SACs are designated under the European Habitats Directive and target particular habitat types (Annex 1) and species (Annex II). The listed habitat types and species (excluding birds) are those considered to be most in need of conservation at a European level.

¹ *The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007* (2007) SI No. 2007/1843. TSO (The Stationery Office), London.

² *The Conservation of Habitats and Species Regulations 2017* (2017) SI No. 2017/1012, TSO (The Stationery Office), London.

- SPAs are classified in accordance with Article 4(1) of the European Union Birds Directive³ for rare and vulnerable birds (as listed in Annex I of the Directive), and under Article 4(2) for regularly occurring migratory species not listed in Annex I.
- 1.7 Potential SPAs (pSPAs)⁴, candidate SACs (cSACs)⁵, Sites of Community Importance (SCIs)⁶ and Ramsar sites should also be included in the assessment.
- Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).
- 1.8 For ease of reference during HRA, these designations can be collectively referred to as European sites⁷ despite Ramsar designations being at the international level.
- 1.9 The overall purpose of the HRA is to conclude whether or not a proposal or policy, or the whole development plan, would adversely affect the integrity of the European site in question either alone or in combination with other plans and projects. This is judged in terms of the implications of the plan for the 'qualifying features' for which the European site was designated, i.e.:
- SACs – Annex I habitat types and Annex II species⁸;
 - SPAs – Annex I birds and regularly occurring migratory species not listed in Annex I⁹;
 - Ramsar sites – the reasons for listing the site under the Convention¹⁰.
- 1.10 Significantly, HRA is based on the precautionary principle meaning that where uncertainty or doubt remains, an adverse impact should be assumed.

Stages of HRA

- 1.11 The HRA of development plans is undertaken in stages (as described below) and should conclude whether or not a proposal would adversely affect the integrity of the European site in question.
- 1.12 The HRA should be undertaken by the 'competent authority', in this case Thurrock Council, and LUC has been commissioned to do this on the Council's behalf. The HRA also requires close working with Natural England as the statutory nature conservation body¹¹ in order to obtain the necessary information, agree the process, outcomes and mitigation proposals. The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences and future licensing of activities.

Requirements of the Habitats Regulations

- 1.13 In assessing the effects of a Local Plan in accordance with Regulation 105 of the Conservation of Habitats and Species Regulations 2017, there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary by an Appropriate Assessment which would inform the 'Integrity Test'. The relevant sequence of questions is as follows:

³ Council Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds (the codified version of Council Directive 79/409/EEC, as amended).

⁴ Potential SPAs are sites that have been approved by the Minister for formal consultation but not yet proposed to the European Commission, as listed on the [GOV.UK website](#).

⁵ Candidate SACs are sites that have been submitted to the European Commission, but not yet formally adopted, as listed on the JNCC's [SAC list](#).

⁶ SCIs are sites that have been adopted by the European Commission but not yet formally designated as SACs by the UK Government.

⁷ The term 'Natura 2000 sites' can also be used interchangeably with 'European sites' in the context of HRA, although the latter term is used throughout this report.

⁸ As listed in the site's citation on the JNCC website (all features of European importance, both primary and non-primary, need to be considered).

⁹ As identified in sections 3.1, 3.2 and 4.2 of the SPA's standard data form on the JNCC website; at sites where there remain differences between species listed in the [2001 SPA Review](#) and the extant site citation in the standard data form, the relevant country agency (Natural England or Natural Resources Wales) should be contacted for further guidance.

¹⁰ As set out in section 14 of the relevant 'Information Sheet on Ramsar Wetlands' available on the JNCC website.

¹¹ Regulation 5 of the Habitats Regulations 2017.

- Step 1: Under Reg. 105(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not, as is the case for the Forest Heath SIR and SALP, proceed to Step 2.
- Step 2: Under Reg. 105(1)(a) consider whether the plan is likely to have a significant effect on a European site, either alone or in combination with other plans or projects (the 'Significance Test'). If yes, proceed to Step 3.
- Step 3: Under Reg. 105(1), make an Appropriate Assessment of the implications for the European site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 105(2) to consult Natural England, and optional under Reg. 105(3) to take the opinion of the general public.
- Step 4: In accordance with Reg. 105(4), but subject to Reg. 107, give effect to the land use plan only after having ascertained that the plan would not adversely affect the integrity of a European site.
- Step 5: Under Reg. 107, if Step 4 is unable to rule out adverse effects on the integrity of a European site and no alternative solutions exist then the competent authority may nevertheless agree to the plan or project if it must be carried out for 'imperative reasons of overriding public interest' (IROPI).

Typical stages

1.14 **Table 1.1** summarises the stages and associated tasks and outcomes typically involved in carrying out a full HRA, based on various guidance documents^{12 13 14}.

¹² European Commission (2001) Assessment of plans and projects significantly affecting European Sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

¹³ DCLG (2006) Planning for the Protection of European Sites: Appropriate Assessment

¹⁴ RSPB (2007) The Appropriate Assessment of Spatial Plans in England. A guide to why, when and how to do it.

Table 1.1 Stages of HRA

Stage	Task	Outcome
Stage 1: HRA Screening	Description of the development plan. Identification of potentially affected European sites and factors contributing to their integrity. Review of other plans and projects. Assessment of likely significant effects of the development plan alone or in combination with other plans and projects.	Where effects are unlikely, prepare a 'finding of no significant effect report'. Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.
Stage 2: Appropriate Assessment (where Stage 1 does not rule out likely significant effects)	Information gathering (development plan and European Sites). Impact prediction. Evaluation of development plan impacts in view of conservation objectives. Where impacts are considered to affect qualifying features, identify how these effects will be avoided or reduced.	Appropriate assessment report describing the plan, European site baseline conditions, the adverse effects of the plan on the European site, how these effects will be avoided or reduced, including the mechanisms and timescale for these mitigation measures. If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.
Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation	Identify 'imperative reasons of overriding public interest' (IROPI). Demonstrate no alternatives exist. Identify potential compensatory measures.	This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous.

1.15 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help ensure that potential adverse effects are identified and eliminated through the inclusion of mitigation measures designed to avoid, reduce or abate effects. The need to consider alternatives could imply more onerous changes to a plan document. It is generally understood that so called 'imperative reasons of overriding public interest' (IROPI) are likely to be justified only very occasionally and would involve engagement with both the Government and European Commission.

HRA work carried out previously

- 1.16 The Local Plan is currently at an early stage in its development and as such, no HRA work has previously been undertaken. A HRA has however been undertaken for the Core Strategy, which was adopted in 2011 and subsequently updated in 2015.
- 1.17 The HRA of the Core Strategy identified 15 policies at the screening stage with potential for likely significant effects on the Thames Estuary and Marshes SPA and Ramsar; Mid-Essex Estuaries SAC, SPA and Ramsar sites; and North Kent Estuaries SAC, SPA and Ramsar site in relation to coastal squeeze, recreational pressure and disturbance, reduced air quality and reduced water quality.
- 1.18 Following an Appropriate Assessment, it was concluded that the Core Strategy provided sufficient policy framework to ensure no adverse effects occurred to European sites as a result of proposed development within the plan.
- 1.19 This HRA work will be drawn on to inform the HRA of the emerging Local Plan.

Structure of this report

- 1.20 This chapter (**Chapter 1**) has described the background to the production of the Thurrock Local Plan and the requirement to undertake HRA. The remainder of the report is structured into the following sections:
- **Chapter 2** describes the European sites in and around Thurrock that could be affected by the Local Plan and summaries the key issues that will need to be considered during the HRA.
 - **Chapter 3** describes the approach that will be taken to the HRA of the Local Plan including the specific tasks that will be undertaken and the assumptions that will underpin the HRA judgements made.
 - **Chapter 4** describes the next steps that will be carried out in the HRA of the Local Plans.
- 1.21 The information in the main body of the report is supported by the following appendices:
- **Appendix 1** sets out detailed information about the European sites that will be the focus of the HRA.
 - **Appendix 2** presents an initial review of other plans and projects that could have significant effects on European sites in combination with the Local Plan.

2 European Sites

- 2.1 This chapter identifies European sites in Thurrock and the surrounding area, which have potential to be affected by proposed development within the Local Plan and will be considered as part of the HRA process.

Identification of European sites which may be affected by the Local Plan

- 2.2 In order to initiate the search of European sites that could potentially be affected by a Local Plan, it is established practice in HRAs to consider European sites within the local planning authority area covered by the Local Plan, and also within a buffer distance from the boundary of the Local Plan area.
- 2.3 A distance of 15km was used to identify European sites likely to be affected by impacts relating to development in Thurrock. In addition to this, consideration was also given to European sites connected to the plan area beyond this distance, for example through hydrological pathways or recreational visits by Borough residents.
- 2.4 European sites identified for inclusion in the HRA are listed below, and shown in **Figure 2.1**. Detailed information about each site is provided in **Appendix 1**:
- Thames Estuary and Marshes SPA and Ramsar;
 - Benfleet and Southend Marshes SPA and Ramsar;
 - Medway Estuary and Marshes SPA and Ramsar;
 - North Downs Woodlands SAC;
 - Outer Thames Estuary pSPA;
 - Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA and Ramsar;
 - Essex Estuaries SAC;
 - Peters Pit SAC;
 - Foulness (Mid-Essex Coast Phase 5) SPA and Ramsar;
 - Epping Forest SAC;
 - The Swale SPA and Ramsar.

Ecological attributes of the European sites

- 2.5 The designated features and conservation objectives of the European sites, together with current pressures on and potential threats, was established using the Standard Data Forms for SACs and SPAs and the Information Sheets for Ramsar Wetlands published on the JNCC website¹⁵ as well as Natural England's Site Improvement Plans¹⁶ and the most recent conservation objectives published on the Natural England website (most were published in 2014)¹⁷.

¹⁵ www.jncc.defra.gov.uk

¹⁶ <http://publications.naturalengland.org.uk/category/5458594975711232>

¹⁷ <http://publications.naturalengland.org.uk/category/6490068894089216>

- 2.6 An understanding of the designated features of each European site and the factors contributing to its integrity has informed the assessment of the potential likely significant effects of the Local Plan.

Figure 2.1: European Sites within 15km of Thurrock

3 Approach to the HRA

- 3.1 This chapter describes the approach that will be taken to the HRA of the Thurrock Local Plan throughout its development including the specific tasks that will be undertaken and the assumptions that will underpin the HRA judgements made.

Stage 1: Screening Methodology

- 3.2 As required under Regulation 105 of The Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'), an assessment will be undertaken of the 'likely significant effects' of the Local Plan. The assessment will be prepared in order to identify which policies or site allocations would be likely to have a significant effect on European sites in Thurrock. The screening assessment will be conducted without taking mitigation into account, in accordance with the 'People over Wind' judgment.
- 3.3 Consideration will be given to the potential for the development proposed to result in significant effects associated with:
- Physical loss of/damage to habitat;
 - Non-physical disturbance (noise, vibration and light);
 - Non-toxic contamination;
 - Air pollution;
 - Recreation pressure;
 - Changes to hydrological regimes.
- 3.4 This approach will also allow for consideration to be given to the cumulative effects of the site allocations rather than focussing exclusively on individual developments provided for by the Local Plan.
- 3.5 A risk-based approach involving the application of the precautionary principle will be adopted in the assessment, such that a conclusion of 'no significant effect' will only be reached where it is considered very unlikely, based on current knowledge and the information available, that a proposal in the Local Plan would have a significant effect on the integrity of a European site.

Screening assumptions

- 3.1 The screening stage of the HRA will initially take the approach of screening each policy or site allocation individually. For many of the types of impacts, screening for likely significant effects will be determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the European sites that are the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, during the screening stage a number of assumptions will be applied in relation to assessing the likely significant effects on European sites that may result from the Local Plan.

Physical damage and loss

- 3.2 Any development resulting from the Local Plan would take place within Thurrock Borough; therefore only European sites within the Borough boundary could be affected through physical damage or loss of habitat from within the site boundaries. Thames Estuary and Marshes SPA and Ramsar site lies within the Borough and therefore has the potential to be affected by physical damage and/or loss from development.

- 3.3 Habitat loss from development in areas outside of the European site boundaries may also result in likely significant effects where that habitat contributes towards maintaining the interest feature for which the European site is designated. This includes land which may provide offsite foraging and roosting habitat for birds. Natural England has advised that their recognised distance for the consideration of offsite functionally linked land is generally 2km, but for certain species, including most notably golden plover and lapwing, a much greater distance of up to 15km may be appropriate.
- 3.4 In light of these guidelines, the Thames Estuary and Marshes SPA and Ramsar site, which lies within the Borough and supports wetland bird species is considered to be the only European site with potential to be affected by indirect physical damage and/or loss to offsite habitat.
- 3.5 Benfleet and Southend Marshes SPA and Ramsar site, Medway Estuary and Marshes SPA and Ramsar site, Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA and Ramsar site, Foulness (Mid-Essex Coast Phase 5) SPA and Ramsar site and The Swale SPA and Ramsar site are situated over 2km from the Borough. As these European sites do not support species such as golden plover and lapwing, they were not considered to be affected by impacts from associated with damage/loss of offsite habitat as a result of development within the Borough.
- 3.6 In addition to this, the qualifying bird species of the Outer Thames Estuary SPA are not considered susceptible to impacts associated with loss of terrestrial habitat within Thurrock because during the non-breeding period (for which the SPA is designated) they are predominantly marine species and are not reliant upon terrestrial habitat within Thurrock at any stage of the year.
- 3.7 Other sites screened out of the assessment included North Downs Woodlands SAC, Essex Estuaries SAC, Peters Pit SAC, and Epping Forest SAC, because they are situated outside of the Borough boundary and do not support qualifying features susceptible to offsite habitat loss.
- 3.8 **Likely significant effects from the Local Plan as a result of physical loss of, or damage to, habitat need to be considered in relation to Thames Estuary and Marshes SPA and Ramsar site.**

Non-physical disturbance (noise, vibration and light)

- 3.9 Noise and vibration effects, e.g. during the construction of new housing or employment development, are most likely to disturb bird species and are thus a key consideration with respect to European sites where birds are the qualifying features. Artificial lighting at night (e.g. from street lamps, flood lighting and security lights) has the potential to affect species where it occurs in close proximity to key habitat areas, such as key roosting sites of SPA birds.
- 3.10 It has been assumed that the effects of noise, vibration and light are most likely to be significant within a distance of 500 metres. There is also evidence of 300 metres being used as a distance up to which certain bird species can be disturbed by the effects of noise¹⁸; however, it has been assumed (on a precautionary basis) that the effects of noise, vibration and light pollution are capable of causing an adverse effect if development takes place within 500 metres of a European site with qualifying features sensitive to these disturbances. Scoped in European sites that support qualifying species which are therefore vulnerable to non-physical disturbance are limited to the Thames Estuary and Marshes SPA and Ramsar site.
- 3.11 All other European sites were screened out of the assessment because they occur over 500 metres from the Borough boundary.
- 3.12 **Therefore, the potential for likely significant effects as a result of non-physical disturbance needs to be considered in relation to Thames Estuary and Marshes SPA and Ramsar site only.**

Non-toxic contamination

- 3.13 Habitats can be subject to non-toxic contamination, such as nutrient enrichment, changes in salinity and smothering from dust, due to industrial action, agriculture, construction and water abstraction and discharge. European sites with potential to be affected by non-toxic contamination are likely to be sites that lie within close proximity, or those that are hydrologically

¹⁸ British Wildlife Magazine. October 2007

connected to areas of development provided for by the plan but potential changes to water quantity and quality are separately considered below. The Thames Estuary and Marshes SPA and Ramsar site is the only European site situated within close proximity to development locations and therefore should be considered for impacts as a result of non-toxic contamination.

3.14 Due to the distance, other European sites have been screened out of the assessment.

3.15 **Therefore, the potential for likely significant effects of non-toxic contamination needs to be considered in relation to Thames Estuary and Marshes SPA and Ramsar only.**

Air pollution

3.16 Air pollution is most likely to affect European sites where plant, soil and water habitats are the qualifying features, but some qualifying animal species may also be affected, either directly or indirectly, by deterioration in habitat as a result of air pollution. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting the pH and nitrogen levels, which can then affect plant health, productivity and species composition.

3.17 In terms of vehicle traffic, nitrogen oxides (NO_x, i.e. NO and NO₂) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NO_x can cause eutrophication of soils and water.

3.18 Based on the Highways Agency Design Manual for Road and Bridges (DMRB) Manual Volume 11, Section 3, Part 114 (which was produced to provide advice regarding the design, assessment and operation of trunk roads including motorways), it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Where increases in traffic volumes are forecast, this 200m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.

3.19 The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied at the Screening Stage of an assessment of a plan or project, to ascertain whether there are likely to be significant impacts associated with routes or corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:

- Daily traffic flows will change by 1,000 AADT (Annual Average Daily Traffic) or more; or
- Heavy duty vehicle (HDV) flows will change by 200 AADT or more; or
- Daily average speed will change by 10 km/hr or more; or
- Peak hour speed will change by 20 km/hr or more; or
- Road alignment will change by 5 m or more.

3.20 Where significant increases in traffic are possible on roads within 200m of European sites, traffic forecast data may be needed to determine if increases in vehicle traffic are likely to be significant. In line with the Wealden judgment¹⁹, the traffic growth considered by the HRA should be based on the effects of development provided for by the Local Plan in combination with other drivers of growth such as development proposed in neighbouring districts and demographic change.

3.21 It has been assumed that only those roads forming part of the primary road network (motorways and 'A' roads) are likely to experience any significant increases in vehicle traffic as a result of development (i.e. greater than 1,000 AADT). As such, where a site is within 200m of only minor roads, no significant effect from traffic-related air pollution is considered to be the likely outcome.

3.22 The key commuting corridor for new housing and employment development will be the A13, A1089, A282 and M25. In addition to this, there are proposals to develop a Lower Thames Crossing (LTC) to the east of Tilbury and Gravesend, which will provide an alternative route to the existing Dartford Crossing. As a Nationally Significant Infrastructure Project (NSIP), the LTC will be subject to its own environmental assessment, including HRA. Nevertheless, consideration will be given in the HRA of the Thurrock Local Plan for traffic pollution associated with the Local Plan to act in combination with that associated with the LTC, provided that plans for the LTC are sufficiently advanced to allow such an assessment. If the Local Plan is submitted before the NSIP

¹⁹ Wealden v SSCLG [2017] EWHC 351 (Admin)

and accompanying HRA is submitted, it is assumed that the HRA of the LTC will assess its effects in combination with those of the Local Plan.

- 3.23 The Thames Estuary and Marshes SPA and Ramsar is situated over 200m from a strategic road and therefore the Local Plan would not be expected to result in likely significant effects as a result of air pollution. However, there is potential for this to change depending on the location of the proposed Lower Thames Crossing and as a result likely significant effects as a result of development within the plan in combination with this project cannot be screened out of the assessment at this stage.
- 3.24 Other European sites with potential to be affected by increased air pollution from Thurrock Borough include Epping Forest SAC, which lies adjacent to the M25 to the north-west of the Borough.
- 3.25 The following European sites are located over 200m from a strategic road and were therefore screened out:
- Benfleet and Southend Marshes SPA and Ramsar site;
 - Medway Estuary and Marshes SPA and Ramsar site;
 - North Downs Woodlands SAC;
 - Outer Thames Estuary pSPA;
 - Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA and Ramsar site;
 - Essex Estuaries SAC;
 - Peters Pit SAC;
 - Foulness (Mid-Essex Coast Phase 5) SPA and Ramsar site;
 - The Swale SPA and Ramsar site.

3.26 **Therefore, likely significant effects relating to increased air pollution need to be considered in relation to Thames Estuary and Marshes SPA and Ramsar site and Epping Forest SAC.**

Recreation pressure

- 3.27 Recreational activities and human presence can result in significant effects on European sites as a result of erosion and trampling, associated impacts such as fire and vandalism or disturbance to sensitive features, such as birds through both terrestrial and water based forms of recreation.
- 3.28 The Local Plan will result in housing growth, and associated population increase within the Borough. Where increases in population are likely to result in significant increases in recreation at a European site, either alone or in-combination, the potential for likely significant effects requires assessment. At this stage, there is no definitive figure of how many houses the plan will make provision for over the plan period. However, indicative figures have been provided for each housing growth options and major urban extensions, based on evidence available to the Council at the time of the assessment. These figures are detailed below in **Table 3.1 and Table 3.2** below.

Table 3.1 Summary of housing growth options²⁰

Option	Scale of development (per site)
Option 1: Urban Intensification	Small (no figures given).
Option 2: Duty to Cooperate	This option proposes meeting at least part of Thurrock’s development need outside of the Borough, rather than proposing a way of meeting need within the Borough.

²⁰ The numbers presented in Table 3.1 are based on sites and information submitted by landowners, and at this stage their appropriateness for development has yet to be assessed by the Council.

Option	Scale of development (per site)
Option 3: Green Belt Development New Settlement	At least 10,000 homes.
Major Urban Extensions*	At least 1,500 homes.
Small Urban Extensions	50 to 1,500 homes.
Village Expansions	Bulphan – up to 1,500 homes. Horndon on the Hill – up to 400 homes. Orsett – up to 1,000 homes.
Isolated Site Allocations	Under 500 homes.

*The Issues and Options 2 provides further detail on areas being considered for Major Urban Extensions. These are listed below in **Table 3.2**.

Table 3.2 Summary of Major Urban Extension options²¹

Option	Scale of development
South Ockendon	10,000 – 12,000 homes.
Lakeside	2,500 homes.
Aveley	Over 2,100 homes.
Chadwell St Marys	3,000 – 5,000 homes.
East Tilbury	3,000 – 5,000 homes.
Corringham	Over 1,500 homes.
North Grays	1,500 homes.

- 3.29 European sites with qualifying bird species are likely to be particularly susceptible to recreational disturbances from walking, dog walking, angling, illegal use of off-road vehicles and motorbikes, wildfowling, and water sports. An increase in recreational pressure from development therefore has the potential to disturb bird populations of SPA and Ramsar sites as a result of both terrestrial and water-based recreation.
- 3.30 In addition, recreation can physically damage habitat as a result of trampling and also through erosion associated with boat wash and terrestrial activities such as use of vehicles.
- 3.31 Each European site will typically have a 'Zone of Influence' (ZOI) within which increases in population would be expected to result in likely significant effects. ZOIs are usually established following targeted visitor surveys and the findings are therefore typically specific to each European site (and often to specific areas within a European site). The findings are likely to be influenced by a number of complex and interacting factors and therefore it is not always appropriate to apply a generic or non-specific ZOI to a European Site.
- 3.32 As part of the Essex Coast Recreational Avoidance and Mitigation Strategy (RAMS)²² initiative, visitor surveys were undertaken during the winter of 2017/18 to determine the ZOI for all

²¹ The numbers presented in Table 3.2 are based on sites and information submitted by landowners, and at this stage their appropriateness for development has yet to be assessed by the Council.

European sites along the Essex coast. The ZOI have been calculated for the following European sites and will be applied in this assessment:

- Thames Estuary and Marshes SPA and Ramsar site – 8.1km
- Benfleet and Southend Marshes SPA and Ramsar site – 4.1km
- Crouch and Roach Estuaries SPA and Ramsar site – 4.5km
- Foulness (Mid-Essex Coast Phase 5) SPA and Ramsar – 13km.

- 3.33 All sites with exception to the Thames Estuary and Marshes SPA and Ramsar site and Benfleet and Southend Marshes SPA and Ramsar site have ZOI's which do not extend into Thurrock, and as result will not be affected by proposed development within the borough. In addition to this, only a small portion of Benfleet and Southend Marshes ZOI will extend in to the borough. As there are no residential developments proposed in this area, this European site has been screened out of the assessment.
- 3.34 In relation Essex Estuaries SAC, as this European site is comprised of several European sites, including Colne Estuary SPA and Ramsar (9.7km), Blackwater Estuary SPA and Ramsar (22km), Dengie SPA and Ramsar (20km), Crouch and Roach Estuaries SPA and Ramsar (4.1km) and Foulness Estuary SPA and Ramsar (13km), the respective ZOI identified for these sites has been applied.
- 3.35 In addition to the above, it was agreed during the RAMS Steering Group that all European sites, which lie across estuaries will be excluded, given the distance to travel to the site would be greater than the ZOI established. This applies to the Medway Estuary and Marshes SPA and Ramsar and The Swale SPA and Ramsar, which lie along the south side of the outer Thames Estuary in Kent. These sites are therefore screened out of the assessment.
- 3.36 Based on the ZOI provided by Essex Coast RAMS, only Thames Estuary and Marshes SPA and Ramsar site is considered likely to be susceptible to the effects of increased recreational pressure from development in Thurrock.
- 3.37 The Outer Thames Estuary is located approximately 9km from Thurrock. Following discussion with Natural England²³, a precautionary approach using a ZOI of 13km has been applied for this European site. As a result, there is potential for this European site to be affected by increased recreational disturbance from development proposed within Thurrock.
- 3.38 Similarly to the Essex Coast RAMS²⁴, a mitigation strategy is being produced to establish the ZOI for Epping Forest SAC. Following visitor surveys to inform this mitigation strategy, a ZOI of 6.2km was calculated for this site. Given that Thurrock lies beyond the ZOI for Epping Forest SAC, this European site can therefore be screened from the assessment.
- 3.39 Whilst for North Downs and Peter's Pits SAC, due to the separation of these designations from Thurrock Borough by the River Thames the distance to travel to these sites would be a considerable. It was therefore considered unlikely that increased development in Thurrock would result in increased recreational pressure at these sites and as a result was screened out the assessment.
- 3.40 **Therefore, likely significant effects relating to recreational pressure need to be considered in relation to Thames Estuary and Marshes SPA and Ramsar site; and Ramsar site; and Outer Thames Estuary SPA and Ramsar site.**

Water quantity and quality

- 3.41 An increase in demand for water abstraction and treatment resulting from the growth proposed in the Local Plan could result in changes in hydrology at European sites. Depending on the qualifying features and particular vulnerabilities of the European sites, this could result in likely significant effects; for example due to changes in environmental or biotic conditions, water chemistry and the extent and distribution of preferred habitat conditions. To fully understand the potential impacts of proposed development on European sites a review of relevant Water Cycle

²² Interim advice note from Natural England on 16th October 2018

²³ As per correspondence with Sarah Fraser from Natural England on 23rd October 2017

²⁴ Interim advice note from Natural England on 20th September 2018

Studies (WCS) and liaison with the Environment Agency and relevant water companies will be required.

- 3.42 Thames Estuary and Marshes SPA and Ramsar site lies in Thurrock and is directly linked to waterbodies in the Borough. Changes in water quantity and quality through increased demand for water supply and increased wastewater discharges is therefore considered likely to be a key issue for this site.
- 3.43 In addition to this, there is also potential for significant effects to occur in relation to European sites outside of the Borough boundary, which are hydrologically connected to water sources, which may be affected by the Borough. This includes the following European sites, Benfleet and Southend Marshes SPA and Ramsar site; Medway Estuary and Marshes SPA and Ramsar site; Essex Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA and Ramsar site; Estuaries SAC; Foulness (Mid-Essex Coast Phase 5) SPA and Ramsar site; and The Swale SPA and Ramsar site.
- 3.44 The Outer Thames Estuary SPA is located offshore in the Borough. However, this site is located away from the coastline, extends for over 12 nautical miles into the North Sea, and comprises an extensive area of 3,924km². As a result, the potential for changes in water quality and quantity to result in likely significant effects on the sites wintering bird species is negligible. This site was therefore screened out of the assessment.
- 3.45 North Downs Woodlands SAC, Peters Pit SAC, and Epping Forest SAC were screened out because their qualifying features are not susceptible to changes in water quantity and quality, or because they lack hydrological connectivity with water resources which could be affected as a result of the Local Plan.
- 3.46 **Therefore, the potential for the Local Plan to result in likely significant effects as a result of changes in water quality and quantity need to be considered in relation to Thames Estuary and Marshes SPA and Ramsar site; Benfleet and Southend Marshes SPA and Ramsar site; Medway Estuary and Marshes SPA and Ramsar site; Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA and Ramsar site; Essex Estuaries SAC; Foulness (Mid-Essex Coast Phase 5) SPA and Ramsar site; and The Swale SPA and Ramsar site.**

Summary of Screening Assumptions

- 3.47 **Table 3.1** below summarises the Screening assumptions that are being applied to the HRA of the Thurrock Local Plan. Where certain types of effects are screened out in **Table 3.1** they do not need to be considered further.

Table 3.3 Summary of Screening Assumptions

	Physical damage/ loss of habitat	Non-physical disturbance	Non-toxic contamination	Air pollution	Recreation pressure	Water quantity and quality
Thames Estuary and Marshes SPA and Ramsar	Screened in	Screened in	Screened In	Screened in	Screened in	Screened in
Benfleet and Southend Marshes SPA and	Screened out	Screened out	Screened out	Screened out	Screened out	Screened in

	Physical damage/ loss of habitat	Non-physical disturbance	Non-toxic contamination	Air pollution	Recreation pressure	Water quantity and quality
Ramsar						
Medway Estuary and Marshes SPA and Ramsar	Screened out	Screened out	Screened out	Screened out	Screened out	Screened in
North Downs Woodlands SAC	Screened out	Screened out	Screened out	Screened out	Screened out	Screened out
Outer Thames Estuary pSPA	Screened out	Screened out	Screened out	Screened out	Screened in	Screened out
Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA and Ramsar	Screened out	Screened out	Screened out	Screened out	Screened out	Screened in
Essex Estuaries SAC	Screened out	Screened out	Screened out	Screened out	Screened out	Screened in
Peters Pit SAC	Screened out	Screened out	Screened out	Screened out	Screened out	Screened out
Foulness (Mid-Essex Coast Phase 5) SPA and Ramsar	Screened out	Screened out	Screened out	Screened out	Screened out	Screened in
Epping Forest SAC	Screened out	Screened out	Screened out	Screened in	Screened out	Screened out
Queendown Warren SAC	Screened out	Screened out	Screened out	Screened out	Screened out	Screened out
The Swale SPA and Ramsar	Screened out	Screened out	Screened out	Screened out	Screened out	Screened in

Interpretation of 'likely significant effect'

- 3.48 Relevant case law helps to interpret when effects should be considered as being likely to result in a significant effect, when carrying out a HRA of a plan.
- 3.49 In the Waddenzee case²⁵, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into Reg. 102 in the Habitats Regulations), including that:
- An effect should be considered 'likely', "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site" (para 44).
 - An effect should be considered 'significant', "if it undermines the conservation objectives" (para 48).
 - Where a plan or project has an effect on a site "but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned" (para 47).
- 3.50 An opinion delivered to the Court of Justice of the European Union²⁶ commented that:
- "The requirement that an effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill."
- 3.51 This opinion (the 'Sweetman' case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or de minimis; referring to such cases as those "which have no appreciable effect on the site". In practice such effects could be screened out as having no likely significant effect; they would be 'insignificant'.

In-combination effects

- 3.52 Regulation 102 of the Amended Habitats Regulations 2017 requires an Appropriate Assessment where "a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site". Therefore, it will be necessary to consider whether any impacts identified from the Thurrock Local Plan may combine with other plans or projects to give rise to significant effects in combination.
- 3.53 This exercise will be carried out as part of the screening stage of the HRA. The potential for in-combination effects will only be considered for those Local Plan components identified as unlikely to have a significant effect alone, but which could act in combination with other plans and projects to produce a significant effect. This approach accords with recent guidance on HRA.
- 3.54 The first stage in identifying 'in-combination' effects involves identifying which other plans and projects in addition to the Thurrock Local Plan may affect the European sites that will be the focus of this assessment. This exercise will seek to identify those components of nearby plans that could have an impact on the European sites within the Thurrock boundary, e.g. areas or towns where additional housing or employment development is proposed near to the European sites (as there could be effects from the transport, water use, infrastructure and recreation pressures associated with the new developments).
- 3.55 There are a large number of potentially relevant plans; therefore the review will focus on planned spatial growth within authorities adjacent to Thurrock. The findings of any associated HRA work for those plans will be reviewed where available. With help from the Council, any strategic projects in the area that could have in-combination effects with the Local Plan will also be identified and reviewed, if applicable.
- 3.56 Should any other plans or projects be identified throughout the HRA process that could lead to in-combination effects on European sites with either Local Plan, they will be included in the review.

²⁵ European Court of Justice in Case C-127/02 Landelijke Vereniging tot Behoud van de Waddenzee

²⁶ Advocate General's Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012.

3.57 **Appendix 2** presents the initial review of other plans and projects, outlining the components of each plan or project that could have an impact on nearby European sites and considering the findings of the accompanying HRA work (where available). This information will be updated as the HRA work for the Local Plans progresses. The following authorities' plans and HRA work have been included:

- Basildon Borough Council;
- Brentwood Borough Council;
- London Borough of Havering;
- London Borough of Bexley;
- Dartford Borough Council;
- Gravesham District Council;
- Medway Borough Council;
- Castle Point Borough Council.

3.58 The Government's National Infrastructure Planning website²⁷ was also reviewed for major projects that could have significant effects in combination with those of the Thurrock Local Plan.

Stage 2: Appropriate Assessment Methodology

3.59 Should it not be possible at the screening stage to conclude that there will be no significant effects on European sites as a result of the Local Plan, it will be necessary to undertake an Appropriate Assessment.

3.60 The Appropriate Assessment stage of the HRA focuses on those impacts judged likely at the screening stage to have a significant effect, and seeks to conclude whether they would result in an adverse effect on the on the integrity of the qualifying features of a European site(s), or where insufficient certainty regarding this remains. The integrity of a site depends on the site being able to sustain its 'qualifying features' across the whole of the site and ensure their continued viability.

3.61 An Appropriate Assessment will be prepared for each of those European sites where significant effects from the Local Plan could not be ruled out. The Appropriate Assessment would set out each European site's qualifying features and conservation objectives, standards and factors which are needed to maintain the site's integrity, existing trends and pressures at the site including the use of areas of off-site functional land (where data are available), as well as the conservation objectives, and the site vulnerabilities identified during the screening stage. For each European site and likely significant effect identified we would aim to distinguish between direct and indirect effects, short or long term effects, construction, operational or decommissioning effects, isolated, interactive or cumulative effects and permanent, intermittent or temporary effects. The impacts will vary, depending on the habitat or species in question for each site.

3.62 As stated in HRA Guidance²⁸, assessing the effects on the site(s) integrity involves considering whether the predicted impacts of the Local Plan policies and site allocations (either alone or in combination) have the potential to:

- Cause delays to achieving the conservation objectives of the site.
- Interrupt progress towards achieving the conservation objectives of the site.
- Disrupt those factors that help to maintain favourable condition of the site.
- Interfere with the balance, distribution and density of key species that are the indicators of favourable condition of the site.

²⁷ <https://infrastructure.planninginspectorate.gov.uk/projects/south-east/>

²⁸ *Assessment of plans and projects significantly affecting European sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.* European Commission Environment DG, November 2001.

- Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem.
- Change the dynamics of relationships that define the structure or function of the site (e.g. relationships between soil and water, or animals and plants).
- Interfere with anticipated natural changes to the site.
- Reduce the extent of key habitats or the population of key species.
- Reduce the diversity of the site.
- Result in disturbance that could affect the population, density or balance between key species.
- Result in fragmentation.
- Result in the loss of key features

3.63 The latest available data sources will be drawn on to inform the Appropriate Assessment. The results of this analysis should enable a conclusion to be reached regarding whether the integrity of any European site would be affected. If this were the case, an assessment of alternative solutions or the provision of avoidance and mitigation measures which would avoid adverse effects on integrity would be undertaken. In the context of the Local Plan, such measures may include the clarification of policies to remove areas of uncertainty leading to predicted impacts or to include avoidance and mitigation measures such as conditions or restrictions relating to their implementation, the modification of policies to include alternative solutions or locations for particular developments or the omission of policies where no alternatives exist.

Stage 3: Assessment where no alternatives exist

3.64 If adverse effects on the integrity of a European site cannot be ruled out the plan would not be able to proceed in its current form unless IROPI could be demonstrated. At this stage, we consider it unlikely that the Local Plan would need to demonstrate IROPI because the plan should, as part of the iterative process of HRA, seek to avoid or mitigate potential adverse effects in the first instance, and therefore this has not been discussed in this document.

4 Consultation and Next Steps

- 4.1 At this early stage in the plan development, this Scoping and Discussion document has been prepared alongside Thurrock's Local Plan Issues and Options (Stage 2) to provide officers with guidance and parameters for developing the Local Plan in the context of European sites and as a reference point for stakeholders wishing to comment on the document.
- 4.2 Following consultation of the Issues and Options (Stage 2) document, a draft Local Plan outlining preferred options will be prepared by Thurrock Council. On completion of the first iteration of this Local Plan, an HRA in line with the methodology presented in this report will be required.
- 4.3 The HRA report will be updated as required throughout the preparation of the Local Plan, with the HRA report relating to each iteration of the Plan being published during consultation periods. Specific consultation will be undertaken with Natural England as the statutory consultation body for HRA.

Appendix 1

Attributes of European Sites

This appendix contains information about the European sites scoped into the HRA. Information about each site's area, the site descriptions, qualifying features and pressures and threats are drawn from Natural England's Site Improvement Plans (SIPs)²⁹ and the Standard Data Forms or Ramsar Information Sheets available from the JNCC website³⁰. Site conservation objectives are drawn from Natural England's website and are only available for SACs and SPAs.³¹

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
<p>The Thames Estuary and Marshes SPA is located on both sides of the Thames Estuary in South East 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.</p>				
Thames Estuary and Marshes SPA	4838.94	<p><i>Recurvirostra avosetta</i>: Pied avocet</p> <p><i>Circus cyaneus</i>: Hen harrier</p> <p><i>Charadrius hiaticula</i>: Ringed plover</p> <p><i>Pluvialis squatarola</i>: Grey plover</p> <p><i>Limosa limosa islandica</i>: Black-tailed godwit</p> <p><i>Calidris canutus</i>: Red knot</p> <p><i>Calidris alpina alpina</i>: Dunlin</p> <p><i>Tringa totanus</i>: Common redshank</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> The extent and distribution of the habitats of the qualifying features The structure and function of the habitats of the qualifying features The supporting processes on which the habitats of the qualifying features rely The population of each of the qualifying features, and, The distribution of the qualifying features within the site. 	<p>Public Access/Disturbance – Breeding and overwintering waterbirds are susceptible to human disturbance from a range of land- and water-based activities, including: boating and watersports; walking; bait-digging; fishing, and wildfowling. Some activities such as powerboating, may produce physical disturbance to habitats. Public access, (especially dog walking and recreational boating) was identified as a medium risk during the 2009 EMS risk review project and this activity is still occurring. Moderate levels of disturbance in less sensitive locations may have no significant effect on the numbers of birds using the SIP area but the types, levels and locations of potentially disturbing activities are constantly changing. Managing the changes to minimise the risk of disturbance impacts will require a better understanding of which species and habitats are most susceptible, which types of activity are most disturbing, and which locations and times of year are most sensitive. There is inadequate information to provide appropriate management.</p> <p>Invasive species – Freshwater non-native invasive species such as pennywort, crassula, parrots feather etc. can engulf ditches, leading to loss of habitat for diving ducks. Although there are some mechanisms in</p>

²⁹ Site Improvement Plans: East of England, Natural England, <http://publications.naturalengland.org.uk/category/4873023563759616>

³⁰ JNCC Data Forms <http://jncc.defra.gov.uk/default.aspx?page=4>

³¹ European Site Conservation Objectives, Natural England, <http://www.naturalengland.org.uk/ourwork/conservation/designations/sac/conservationobjectives.aspx>

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
				<p>place to ensure ditch management, more baseline information is needed, particularly on those species for which ditch management is not the solution.</p> <p>Changes in species distributions – There is a decline in population size for some of the bird species on some of the SPAs (Cook et al. 2013*). A greater understanding of the relative importance of site-based and wider influences is required in order to identify the potential for further actions that might halt declines, restore populations or identify scenarios where it is thought unlikely that site-based measures will reverse population declines.</p> <p>Fisheries: Commercial marine and estuarine – The extent and impacts of fisheries on private grounds, particularly in the Swale Estuary, needs to be better understood. There are particular concerns regarding the dredging of shellfish within the SPAs which are a food source for the protected birds.</p> <p>Commercial fishing activities categorised as ‘amber or green’ under Defra’s revised approach to commercial fisheries in European Marine Sites require assessment and (where appropriate) management. This assessment will be undertaken by Kent & Essex IFCA. For activities categorised as ‘green’, these assessments should take account of any in-combination effects of amber activities, and/or appropriate plans or projects, in the site.</p> <p>Vehicles: illicit – The illicit use of motor vehicles (often bikes) occurs across the area. This can cause disturbance to SPA birds. This activity was identified as a medium risk during the 2009 EMS risk review project and is still occurring. Whilst various mechanisms are in place to prevent the use of vehicles they are clearly not entirely effective.</p> <p>Air pollution: risk of atmospheric nitrogen deposition – Nitrogen deposition exceeds site-relevant critical loads</p>

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
Thames Estuary and Marshes Ramsar site	5588.59	<p>Ramsar criterion 2</p> <p>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.</p> <p>Ramsar criterion 5</p> <p>Assemblages of international importance:</p> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> • 45118 waterfowl (5 year peak mean 1998/99-2002/2003) <p>Ramsar criterion 6 – species/populations occurring at levels of international importance</p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species with peak counts in spring/autumn:</p> <ul style="list-style-type: none"> • Ringed plover <i>Charadrius hiaticula</i> • Black-tailed godwit <i>Limosa limosa islandica</i> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> • Grey plover <i>Pluvialis squatarola</i> • Red knot <i>Calidris canutus islandica</i> • Dunlin <i>Calidris alpina alpina</i> • Common redshank <i>Tringa</i> 	None available.	Similar to Thames Estuary and Marshes SPA above.

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		<i>totanus totanus</i>		
Benfleet and Southend Marshes are located on the north shore of the outer Thames Estuary in South-East England. The site comprises an extensive series of saltmarshes, cockle shell banks, mud-flats, and grassland that supports a diverse flora and fauna.				
Benfleet and Southend Marshes SPA	2251.31	<p><i>Calidris canutus</i>: Red knot</p> <p><i>Charadrius hiaticula</i>: Ringed plover</p> <p><i>Calidris alpina alpina</i>: Dunlin</p> <p><i>Pluvialis squatarola</i>: Grey plover</p> <p><i>Branta bernicla bernicla</i>: Dark-bellied brent goose</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site 	<p>Similar to Thames Estuary and Marshes SPA above.</p> <p>Invasive species – <i>Spartina anglica</i> may be increasing at the expense of other saltmarsh habitats with adverse implications for SPA bird roost areas in Benfleet & Southend Marshes.</p>
Benfleet and Southend Marshes Ramsar site	2251.31	<p>Ramsar criterion 5</p> <p>Assemblages of international importance:</p> <ul style="list-style-type: none"> • Species with peak counts in winter: 32867 waterfowl <p>Ramsar criterion 6 – species/populations occurring at levels of international importance.</p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species with peak counts in spring/autumn:</p> <p>Dark-bellied brent goose <i>Branta</i></p>	None available.	Similar to Thames Estuary and Marshes SPA and Benfleet and Southend Marshes SPA above.

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		<p><i>bernicle bernicle</i></p> <p>Species with peak counts in winter:</p> <p>Grey plover <i>Pluvialis squatarola</i></p> <p>Red knot <i>Calidris canutus islandica</i></p> <p>Species/populations identified subsequent to designation for possible future consideration under criterion 6.</p> <p>Species with peak counts in winter:</p> <p>Dunlin <i>Calidris alpina alpina</i></p>		
<p>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</p>				
Medway Estuary and Marshes SPA	4684.36	<p><i>Recurvirostra avosetta</i>: Pied avocet</p> <p><i>Pluvialis squatarola</i>: Grey plover</p> <p><i>Branta bernicla bernicla</i>: Dark-bellied brent goose</p> <p><i>Tadorna tadorna</i>: Common shelduck</p> <p><i>Anas acuta</i>: Northern pintail</p> <p><i>Anas clypeata</i>: Norther shoveler</p> <p><i>Anas crecca</i>: Eurasian teal</p> <p><i>Anas Penelope</i>: Eurasian widgeon</p> <p><i>Anas platyrhynchos</i>: Mallard</p> <p><i>Arenaria interpres</i>: Ruddy turnstone</p> <p><i>Aythya farina</i>: Common pochard</p> <p><i>Calidris canutus</i>: Red knot</p> <p><i>Charadrius hiaticula</i>: Ringed plover</p> <p><i>Calidris alpina alpina</i>: Dunlin</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site. 	Similar to Thames Estuary and Marshes SPA above.

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		<p><i>Tringa totanus</i>: Common redshank</p> <p><i>Circus cyaneus</i>: Hen Harrier</p> <p><i>Cygnus columbianus bewickii</i>: Bewick's swan</p> <p><i>Falco columbarius</i>: Merlin</p> <p><i>Gavia stellate</i>: Red throated loon</p> <p><i>Haematopus ostralegus</i>: Eurasian oystercatcher</p> <p><i>Limosa limosa islandica</i>: Black-tailed godwit</p> <p><i>Numenius arquata</i>: Common curlew</p> <p><i>Phalacrocorax carbo</i>: Great cormorant</p> <p><i>Podiceps cristatus</i>: Great crested grebe</p> <p><i>Sterna albifrons</i>: Little tern</p> <p><i>Sterna hirundo</i>: Common tern</p> <p><i>Tringa nebularia</i>: Common greenshank</p>		
Medway Estuary and Marshes Ramsar site	4696.74	<p>Ramsar criterion 2</p> <p>The site supports a number of species of rare plants and animals. The site holds several nationally scarce plants, including sea barley <i>Hordeum marinum</i>, curved hard-grass <i>Parapholis incurva</i>, annual beard-grass <i>Polypogon monspeliensis</i>, Borrer's saltmarsh-grass <i>Puccinellia fasciculata</i>, slender hare`s-ear <i>Bupleurum tenuissimum</i>, sea clover <i>Trifolium squamosum</i>, saltmarsh goose-foot <i>Chenopodium chenopodioides</i>, golden samphire <i>Inula crithmoides</i>, perennial glasswort <i>Sarcocornia perennis</i> and one-flowered glasswort <i>Salicornia</i></p>	None available.	Similar to Thames Estuary and Marshes SPA above.

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		<p><i>pusilla</i>. A total of at least twelve British Red Data</p> <p>Book species of wetland invertebrates have been recorded on the site. These include a ground beetle <i>Polistichus connexus</i>, a fly <i>Cephalops perspicuus</i>, a dancefly <i>Poecilobothrus ducalis</i>, a fly <i>Anagnota collini</i>, a weevil <i>Baris scolopacea</i>, a water beetle <i>Berosus spinosus</i>, a beetle <i>Malachius vulneratus</i>, a rove beetle <i>Philonthus punctus</i>, the ground lackey moth <i>Malacosoma castrensis</i>, a horsefly <i>Atylotus latistriatus</i>, a fly <i>Campsicnemus magius</i>, a soldier beetle, <i>Cantharis fusca</i>, and a cranefly <i>Limonia danica</i>. A significant number of non-wetland British Red Data Book species also occur.</p> <p>Ramsar criterion 5</p> <p>Assemblages of international importance:</p> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> • 47637 waterfowl (5 year peak mean 1998/99-2002/2003) <p>Ramsar criterion 6 – species/populations occurring at levels of international importance.</p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species with peak counts in spring/autumn:</p> <ul style="list-style-type: none"> • Grey plover <i>Pluvialis squatarola</i> 		

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		<ul style="list-style-type: none"> Common redshank <i>Tringa totanus tetanus</i> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> Dark-bellied brent goose <i>Branta bernicla bernicla</i> Common shelduck <i>Tadorna tadorna</i> Northern pintail <i>Anas acuta</i> Ringed plover <i>Charadrius hiaticula</i> Red knot <i>Calidris canutus islandica</i> Dunlin <i>Calidris alpina alpina</i> <p>Species/populations identified subsequent to designation for possible future consideration under criterion 6.</p> <p>Species with peak counts in spring/autumn:</p> <ul style="list-style-type: none"> Black-tailed godwit <i>Limosa limosa islandica</i> 		
<p>This site consists of mature Beech forests and Yew woods on steep slopes. The stands lie within a mosaic of scrub and other woodland types and are the most easterly of the Beech woodland sites selected. Parts of the woods were affected by the storm of 1987. Small areas of unimproved chalk grassland are also present</p>				
North Downs Woodland SAC	287.58	<p>Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)</p> <p><i>Asperulo-Fagetum</i> beech forests</p> <p><i>Taxus baccata</i> woods of the British Isles</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> The extent and distribution of the qualifying natural habitats The structure and function (including typical species) of the 	<p>Public Access/Disturbance - Off-road vehicles as well as all-terrain bikes are having an impact on parts of the woodland. Vehicle damage is associated with vehicles coming off the Public Rights of Way (PRoW) into the woodland. All-terrain bikes favour Yew woodland where there is no understorey and the creation of tracks by bikes is eroding soil around the roots of Yews.</p> <p>Forestry and woodland management – Beech regeneration is insufficient to retain canopy cover in</p>

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
			<p>qualifying natural habitats, and,</p> <ul style="list-style-type: none"> The supporting processes on which the qualifying natural habitats rely. 	<p>the long term. In addition, Beech saplings are susceptible to squirrel damage.</p> <p>Invasive Species – Invasive Sycamore has the potential to regenerate in woodland gaps reducing overall extent of SAC feature. This is more of an issue in Beech stands than in Yew woodland where Yew tends to eventually succeed in dominating the canopy.</p> <p>Air Pollution: impact of atmospheric nitrogen deposition – Nitrogen deposition exceeds site relevant critical loads.</p>
<p>This SPA crosses the 12 nautical mile boundary and therefore lies partly in territorial and partly in offshore waters; hence it is a site for which both Natural England and JNCC have responsibility to provide statutory advice. The SPA lies along the east coast of England in the southern North Sea and extends northward from the Thames Estuary to the sea area off Great Yarmouth on the East Norfolk Coast.</p>				
Outer Thames Estuary SPA	379268.14	<i>Gavia stellata</i> : Red-throated Diver	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> 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 	<p>Fisheries: Commercial marine and estuarine – The gear types being assessed are towed demersal gear and dredges, and suction dredges for cockles as well as static/passive fishing gear methods such as set gillnets and drift netting represent potentially the most serious direct risk from fishing activity to the birds themselves. Disturbance and displacement effects may arise from boat movements associated with fishing activities. Removal of fish and larger molluscs can have a significant impact on the structure and functioning of benthic communities. Entanglement in static fishing nets is an important cause of death for red-throated divers in the UK waters. Netting is widespread across the sandbanks but is seasonal and occurs primarily when the Red-throated diver population is not at its peak. The scale of by-catch within the site has been assessed by the Kent & Essex IFCA, and was not found to be problematic and so can be deemed to be low-risk.</p>
<p>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.</p>				
Crouch and	1735.58	<i>Branta bernicla bernicla</i> : Dark-bellied	Ensure that the integrity of the site is	Coastal squeeze – Coastal defences along much of

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
Roach Estuaries (Mid-Essex Coast Phase 3) SPA		<p>brent goose</p> <p><i>Circus cyaneus</i>: Hen Harrier</p>	<p>maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site. 	<p>the Essex coastline prevent intertidal habitats from shifting landward in response to rising sea levels. As a result, these habitats are being gradually degraded and reduced in extent, with knock-on effects on the waterbirds and other species they support. 'Managed realignment' schemes and additional intervention measures to create new areas of intertidal habitat and reduce erosion rates are being implemented but more will be needed to offset future losses. Grazing marshes in the SIP area are important for waterbirds and are also threatened by sea level rise because most are near or below mean high tide level, currently protected behind seawalls.</p> <p>Public Access/Disturbance – Breeding and overwintering waterbirds are susceptible to human disturbance from a range of land- and water-based activities - including boating and watersports, walking, bait-digging, fishing and wildfowling - as well as low-flying aircraft. Some activities, such as powerboating, may produce physical disturbance to habitats. Moderate levels of disturbance in less sensitive locations may have no significant effect on the numbers of birds using the SIP area but the types, levels and locations of potentially disturbing activities are constantly changing. Managing the changes to minimise the risk of disturbance impacts will require a better understanding of which species and habitats are most susceptible, which types of activity are most disturbing, and which locations and times of year are most sensitive.</p> <p>Planning Permission: General – Several of the issues affecting the Essex Estuaries and the management of disturbance effects on the sites are related to each other, and addressing them is likely to require an improved overview of the relative sensitivities of different habitats, species and locations to different types of development (perhaps summarised as sensitivity maps and matrices for the SIP area).</p>

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
				<p>Difficult issues include:</p> <ul style="list-style-type: none"> (a) Assessing the cumulative effects of numerous, small and often 'non-standard' developments (b) Development outside the SPA/SAC boundaries can have negative impacts, particularly on the estuaries' birds (c) Assessing the indirect, 'knock-on' effects of proposals (d) Pressure to relax planning conditions on existing developments. <p>Changes in species distribution – Declines in the numbers of some of the waterbird species using the Essex Estuaries SIP area may be due to changes in their distributions or population levels at a national or continental scale, possibly linked to climate change. For example, milder winters may be allowing birds to overwinter closer to their northern breeding grounds, or changes on the breeding grounds may be reducing breeding success.</p> <p>Invasive species – An increase in Pacific oyster <i>Crassostrea gigas</i> settlement and colonisation within the European Marine Site (EMS) may result in areas of foreshore being covered in such numbers as to make them difficult to access and utilise as feeding grounds for overwintering birds. The importance of Pacific oysters for the local shellfish industry is recognised, however we would not like to see an overall increase in the extent of foreshore across the EMS populated by Pacific oysters. Other non-native invasive species such as the American whelk tingle <i>Urosalpinx cinerea</i> and Slipper limpet <i>Crepidula fornicata</i> are known to occupy subtidal muddy habitats, potentially impacting native communities through competition for resources and predation.</p> <p>The invasive Common cord-grass <i>Spartina anglica</i> occurs widely within this site, as well as native Small</p>

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
				<p>cord-grass <i>Spartina maritima</i> in certain locations, and the site is designated for H1320 <i>Spartina</i> swards. There is a need to improve understanding of the dynamics of <i>S.anglica</i> on the site in order to determine if changes in the species' distribution adversely affect other species and habitats, including feeding and roosting areas of SPA bird species.</p> <p>Fisheries: Recreational marine and estuarine – Recreational bait digging may impact waterbirds by reducing prey availability and creating disturbance in intertidal feeding areas. It could also damage the intertidal mudflats and sandflats and associated sub-features and communities, such as eelgrass beds. The extent of the activity and potential impacts on site features are not currently well understood</p> <p>Fisheries: Commercial marine and estuarine - Commercial fishing activities categorised as Amber or Green under Defra's revised approach to commercial fisheries in EMSs are being assessed by Kent and Essex Inshore Fisheries and Conservation Authority (KEIFCA) to determine whether management is required. For activities categorised as Amber and Green these assessments should take account of any relevant in combination effects with other fishing activities. Shellfish dredging over subtidal habitats has been identified as an Amber activity and is considered a high priority for assessment and development of possible management for the site.</p> <p>Marine fisheries carried out under private rights, or under management defined in Several or Hybrid Orders, fall outside Defra's revised approach to commercial fisheries management in EMSs. A variety of fishing gears are used in these fisheries (e.g. Hydraulic and non hydraulic dredging and shore based activities (e.g. shellfish collection)) which may be applying pressure to site features, including abrasion of the seabed, visual disturbance, and habitat structure changes. Potential impacts need to be better</p>

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
				understood and assessed with potential management introduced if required. Air Pollution: risk of atmospheric nitrogen deposition – Atmospheric nitrogen deposition exceeds the relevant critical loads for coastal dune habitats used by breeding terns and hence there is a risk of harmful effects.
Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) Ramsar site	1735.58	<p>Ramsar criterion 2</p> <p>Supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plant and animal including 13 nationally scarce plant species.</p> <p>Ramsar criterion 5</p> <p>Assemblages of international importance:</p> <ul style="list-style-type: none"> Species with peak counts in winter: 16970 waterfowl <p>Ramsar criterion 6 – species/populations occurring at levels of international importance.</p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> Dark-bellied brent goose, <i>Branta bernicla bernicla</i> 	None available.	Similar to Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA above.
Large estuarine site in south-east England. The site comprises the major estuaries of the Colne, Blackwater, Crouch and Roach river.				
Essex Estuaries SAC	46140.82	<p>H1130 Estuaries</p> <p>H1140 Mudflats and sandflats not covered by seawater at low tide</p>	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its	Coastal squeeze – Coastal defences along much of the Essex coastline prevent intertidal habitats from shifting landward in response to rising sea levels. As a result, these habitats are being gradually degraded and

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		<p>Sandbanks which are slightly covered by sea water all the time</p> <p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</p> <p>Salicornia and other annuals colonising mud and sand</p> <p>Spartina swards (<i>Spartinion maritimae</i>)</p> <p>Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>)</p>	<p>Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats • The structure and function (including typical species) of qualifying natural habitats, and • The supporting processes on which qualifying natural habitats rely 	<p>reduced in extent, 'Managed realignment' schemes and additional intervention measures to create new areas of intertidal habitat and reduce erosion rates are being implemented but more will be needed to offset future losses.</p> <p>Fisheries: Commercial marine and estuarine – Shellfish dredging over subtidal habitats has been identified as an Amber activity and is considered a high priority for assessment and development of possible management for the site.</p> <p>Bottom towed fishing gear has been categorised as a 'Red' for the interest features listed, specifically the seagrass beds <i>Zostera</i> spp, a sub-feature of the SAC.</p> <p>Planning Permission: general – Several of the issues affecting the Essex Estuaries and the management of disturbance effects on the sites are related to each other, and addressing them is likely to require an improved overview of the relative sensitivities of different habitats, species and locations to different types of development.</p> <p>Invasive species – Non-native invasive species such as the American whelk tingle <i>Urosalpinx cinerea</i> and Slipper limpet <i>Crepidula fornicata</i> are known to occupy subtidal muddy habitats, potentially impacting native communities through competition for resources and predation. Invasive common cord grass may adversely affect plant species for which the Essex Estuaries SAC is designated.</p> <p>Fisheries: Recreational marine and estuarine – Recreational bait digging may damage the intertidal mudflats and sandflats and associated sub-features and communities, such as eelgrass beds. The extent of the activity and potential impacts on site features are not currently well understood.</p> <p>Air Pollution: risk of atmospheric nitrogen deposition - Atmospheric nitrogen deposition exceeds the relevant critical loads for coastal dune habitats</p>

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
				used by breeding terns and hence there is a risk of harmful effects. However, on the Essex estuaries declines in the numbers of breeding terns appear to be due mainly to erosion of a man-made cockle-shingle bank (at Foulness) and to disturbance (elsewhere), rather than to over-vegetation of breeding areas caused by nitrogen deposition.
Peter's Pit is an old chalk quarry situated in the North Downs in north Kent, with large ponds situated amongst grassland, scrub and woodland. The ponds have widely fluctuating water levels and large great crested newt <i>Triturus cristatus</i> populations have been recorded breeding here.				
Peters Pit SAC	28.3	<i>Triturus cristatus</i> : Great crested newt	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of qualifying species • The structure and function of the habitats of qualifying species • The supporting processes on which the habitats of qualifying species rely • The populations of qualifying species, and, • The distribution of qualifying species within the site. 	No current issues affecting the European site's feature(s) have been identified on this site
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 <i>Branta bernicla bernicla</i> .				
Foulness is an integral component of the phased Mid-Essex Coast SPA				
Foulness (Mid-	10968.9	<i>Charadrius hiaticula</i> : Ringed plover	Ensure that the integrity of the site is	Similar to Crouch and Roach Estuaries (Mid-Essex

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
Essex Coast Phase 5) SPA		<p><i>Pluvialis squatarola</i>: Grey plover</p> <p><i>Calidris canutus</i>: Red knot</p> <p><i>Sterna sandvicensis</i>: Sandwich tern</p> <p><i>Sterna albifrons</i>: Little tern</p> <p><i>Sterna hirundo</i>: Common tern</p> <p><i>Limosa lapponica</i>: Bar-tailed godwit</p> <p><i>Tringa totanus</i>: Common redshank</p> <p><i>Circus cyaneus</i>: Hen harrier</p> <p><i>Haematopus ostralegus</i>: Eurasian oystercatcher</p> <p><i>Recurvirostra avosetta</i>: Pied avocet</p> <p><i>Branta bernicla bernicla</i>: Dark-bellied brent goose</p>	<p>maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site. 	Coast Phase 3) SPA above.
Foulness (Mid-Essex Coast Phase 5) Ramsar site	10932.95	<p>Ramsar criterion 1</p> <p>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.</p> <p>Ramsar criterion 2</p> <p>The site supports a number of nationally-rare and nationally-scarce plant species, and British Red Data Book invertebrates.</p> <p>Ramsar criterion 3</p> <p>The site contains extensive saltmarsh habitat, with areas supporting full and</p>	None available.	Similar to Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA above.

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		<p>representative sequences of saltmarsh plant communities covering the range of variation in Britain.</p> <p>Ramsar criterion 5</p> <p>Assemblages of international importance:</p> <ul style="list-style-type: none"> Species with peak counts in winter: 82148 waterfowl <p>Ramsar criterion 6 – species/populations occurring at levels of international importance.</p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species with peak counts in spring/autumn:</p> <ul style="list-style-type: none"> Dark-bellied brent goose, <i>Branta bernicla bernicla</i>; Eurasian oystercatcher, <i>Haematopus ostralegus ostralegus</i>; Grey plover, <i>Pluvialis squatarola</i>; Red knot, <i>Calidris canutus islandica</i>; Bar-tailed godwit, <i>Limosa lapponica lapponica</i> 		
<p>Epping Forest is a large ancient wood-pasture with habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains, wet and dry heathland and scattered wetland. The semi-natural woodland is particularly extensive but the forest plains are also a major feature and contain a variety of unimproved acid grasslands.</p>				
Epping Forest SAC	1604.95	Northern Atlantic wet heaths with <i>Erica tetralix</i>	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving	Air Pollution: impact of atmospheric nitrogen deposition – Nitrogen deposition exceeds site-relevant critical loads for ecosystem protection. Some parts of

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		<p>European dry heaths</p> <p>Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (<i>Quercion roboripetraeae</i> or <i>Ilici-Fagenion</i>)</p> <p><i>Lucanus cervus</i>: Stag beetle</p>	<p>the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats and habitats of qualifying species • The structure and function (including typical species) of qualifying natural habitats • The structure and function of the habitats of qualifying species • The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely • The populations of qualifying species, and, • The distribution of qualifying species within the site. 	<p>the site are assessed as in unfavourable condition for reasons linked to air pollution impacts.</p> <p>Undergrazing - The quality and diversity of the SAC features requires targeted management best achieved through grazing to: minimise scrub invasion; minimise robust grass domination, and maximise the species diversity of heathland plant communities.</p> <p>Public Access/Disturbance – Epping Forest is subject to high recreational pressure. There is a high general level of footfall in Epping Forest throughout the year, including periods of significant use, and resulting in a diverse range of impacts which include mountain biking and unmanaged fires. Population and visitor numbers are likely to continue to increase.</p> <p>Changes in species distributions – Beech tree health and recruitment may not be coping sufficiently with environmental conditions to sustain its presence and representation within the SAC feature. This may be linked to climate change as well as other factors such as air quality, recreational pressure and water availability.</p> <p>Inappropriate water levels – Wet heath is dependent on suitable ground water levels. There is a threat of prolonged drying out through climate change.</p> <p>Water Pollution – Surface run-off of poor quality water from roads with elevated levels of pollutants, nutrients and salinity may be affecting wet heath, probably mostly around the edges.</p> <p>Invasive species – Heather beetle has locally impacted on some heathland areas. Vigilance is required to survey it and increase awareness of its likely effects and signs of impact.</p> <p>Grey squirrel is not currently known to be significantly affecting tree health or regeneration, but there is a need to retain vigilance and perhaps consider increased</p>

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
				<p>awareness of the likely effects and signs of impact.</p> <p>Disease – Tree diseases such as Phytophthora present a real threat to Beech.</p>
<p>The Swale is located on the south side of the outer part of the Thames Estuary in south-eastern England. The Swale is an estuarine area that separates the Isle of Sheppey from the Kent mainland. To the west it adjoins the Medway Estuary. It is a complex of brackish and freshwater, floodplain grazing marsh with ditches, and intertidal saltmarshes and mud-flats.</p>				
The Swale SPA	6514.71	<p><i>Pluvialis squatarola</i>: Grey plover</p> <p><i>Branta bernicla bernicla</i>: Dark-bellied brent goose</p> <p><i>Charadrius hiaticula</i>: Ringed plover</p> <p><i>Tringa totanus</i>: Common redshank</p> <p><i>Calidris alpina alpina</i>: Dunlin</p> <p><i>Anas crecca</i>: Eurasian teal</p> <p><i>Anas strepera</i>: Gadwall</p> <p><i>Haematopus ostralegus</i>: Eurasian oystercatcher</p> <p><i>Numenius arquata</i>: Common curlew</p>	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> The extent and distribution of the habitats of the qualifying features The structure and function of the habitats of the qualifying features The supporting processes on which the habitats of the qualifying features rely The population of each of the qualifying features, and, The distribution of the qualifying features within the site. 	<p>Similar to Thames Estuary and Marshes SPA above.</p> <p>Invasive species – Non-native invasive species such as sea squirt and pacific oyster are spreading along the Kent coast and could begin to impact on the Swale. Sea squirt has been found in the Medway, and Pacific oysters are regarded as increasing in the Essex-Southend area. These species threaten habitats due to their ability to smother substrate and other sessile organisms. There is no good understanding of the overall distribution of these species in this site. Assessment is needed in key areas of ports and marinas, where introductions tend to first occur.</p>
The Swale Ramsar site	6514.71	<p>Ramsar criterion 2</p> <p>The site supports nationally scarce plants and at least seven British Red data book invertebrates.</p> <p>Ramsar criterion 5</p> <p>Assemblages of international importance:</p> <ul style="list-style-type: none"> Species with peak counts in winter: 77501 waterfowl <p>Ramsar criterion 6 –</p>	None available.	Similar to Thames Estuary and Marshes SPA and The Swale SPA above.

Site Name	Area (ha)	Qualifying Features	Conservation objectives (only available for SACs & SPAs)	Key vulnerabilities / factors affecting site integrity
		<p>species/populations occurring at levels of international importance.</p> <p>Qualifying Species/populations (as identified at designation):</p> <p>Species with peak counts in spring/autumn:</p> <ul style="list-style-type: none"> • Common redshank <i>Tringa totanus tetanus</i> <p>Species with peak counts in winter:</p> <ul style="list-style-type: none"> • Dark-bellied brent goose <i>Branta bernicla bernicla</i> • Grey plover <i>Pluvialis squatarola</i> <p>Species/populations identified subsequent to designation for possible future consideration under criterion 6.</p> <p>Species with peak counts in spring/autumn:</p> <p>Ringed plover <i>Charadrius hiaticula</i></p> <p>Species with peak counts in winter:</p> <p>Eurasian wigeon <i>Anas Penelope</i></p> <p>Northern pintail <i>Anas acuta</i></p> <p>Northern shoveler <i>Anas clypeata</i></p> <p>Black-tailed godwit <i>Limosa limosa islandica</i></p>		

Appendix 2

Review of other plans and policies

District level Local Plans (strategic issues / 'core strategies') providing for development

Basildon Borough Draft Local Plan³²	
Plan Owner/ Competent Authority:	Basildon Borough Council
Related work HRA/AA:	HRA of Basildon Borough Draft Local Plan ³³
Notes on Plan documents:	<p>The Draft Local Plan was subject to consultation from January and March 2016. A Statement of Consultation was approved by the Council's Cabinet on the 29 September 2016, setting out how Basildon Borough Council undertook the consultation. It also summarises the results of the consultation, identifying the key issues that arose. It sets out 52 key actions that could be taken to ensure that the next version of the Local Plan addresses those issues raised by consultees before the plan is finalised for submission to the Government.</p> <p>The Draft Local Plan provides for at least 15,260 homes and 49ha of employment land within Basildon Borough in the period 2014 to 2034.</p>
Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan	
<p>The initial screening identified the potential for likely significant effects in relation to increased recreation pressure, reduced water quality and increased downstream flood risk. After taking into account mitigation that is already available, the HRA Screening concluded that likely significant effects from the Draft Local Plan alone, or in-combination with other plans and projects, could be ruled out. It was therefore not necessary to proceed to the Appropriate Assessment stage of HRA.</p>	

Brentwood Draft Local Plan³⁴	
Plan Owner/ Competent Authority:	Brentwood Borough Council
Related work HRA/AA:	<p>HRA of Brentwood Draft Local Plan (2018)³⁵</p> <p>Previous Local Plan published in 2005 was not subject to HRA.</p>
Notes on Plan documents:	<p>The Council is currently preparing a new Local Plan for the Borough which, once adopted, will supersede saved policies in the current Replacement Local Plan (2005).</p> <p>The Brentwood Draft Local Plan public consultation took place between February and March 2016. A further public consultation took place on Preferred Site Allocations in January 2018.</p> <p>The Draft Local Plan as updated by the Preferred Site Allocations consultation now provides for 380 new homes per year and 47.4 hectares of new employment land within Brentwood Borough between the period of 2013 and 2033.</p>
Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan	
<p>The HRA concluded the identified potential impacts for the following European sites:</p> <ul style="list-style-type: none"> Epping Forest – it is anticipated that the contribution to traffic flows at Epping Forest SAC as a result of increased traffic from the Brentwood Plan will be minimal. It is however recommended that both traffic modelling and air quality modelling are undertaken to confirm Brentwood's contribution to traffic flows. Potential impacts will be reviewed as data becomes available. Essex Coastal Sites – there are potential impacts identified as a result of increased recreational pressure. To ensure that proposed development does not result in impacts to the integrity of the European sites, it is 	

³² <http://www.basildon.gov.uk/article/6309/Documentation---Draft-Local-Plan-Consultation-2016>

³³ <http://www.basildon.gov.uk/CHttpHandler.ashx?id=6600&p=0>

³⁴ <http://www.brentwood.gov.uk/pdf/08022016165904u.pdf>

³⁵ <http://www.brentwood.gov.uk/pdf/30012018135031000000.pdf>

Brentwood Draft Local Plan³⁴

recommended that sites, which fall within the 10km ZOI follow the avoidance and mitigation measures outlined in the Essex RAMS.

- Essex Coastal sites – the HRA identified potential water quality issues. To ensure that proposed development is delivered in locations that can accommodate increased sewage input, it is recommended that the Plan is prepared with Thames Water and Anglian Water. At this stage, it is known that Ingatestone and Doddinghurst WwTW are at capacity and if they are unable to accommodate additional growth, development will need to be located in alternative WwTW.

Hadvering Local Plan³⁶

Plan Owner/ Competent Authority:	London Borough of Havering
Related work HRA/AA:	HRA of Havering Local Plan ³⁷
Notes on Plan documents:	The new Local Plan is subject to Examination at the time of the preparation of this scoping report. The submitted Local Plan of March 2018 provides for at least 17,550 dwellings during period 2016-31.

Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan

The two main development pressures identified within the HRA on Epping Forest SAC were recreational pressure and atmospheric pollution.

Following the screening assessment, it was concluded that both pressures will not result in likely significant effects on the SAC. The HRA provided the following statements to support this conclusion:

- Recreational pressure - due to the distance between Epping Forest SAC and the nearest settlement within the London Borough of Havering, it is considered that the increase in population in Havering is unlikely to significantly increase recreational pressure upon the SAC as the borough lies outside the core catchment of that SAC and has ample alternative semi-natural publically accessible woodlands. In addition policies in the Havering Local Plan promote the provision of local green infrastructure and open spaces, providing locals with much closer recreational alternatives to Epping Forest SAC.
- Air pollution - Considering the very small proportion of journeys to work that might involve traversing Epping Forest SAC, the initiatives Havering is introducing to either reduce the need to travel outside the borough to work or improve sustainable transport links and the context of expected improvements in background air quality over the Local Plan period, it is considered that the contribution of growth in Havering to vehicle flows (and thus changing air quality) through Epping Forest SAC will be negligible and thus would not contribute materially to any adverse effect in combination.

Bexley Local Plan³⁸ and Bexley Core Strategy³⁹

Plan Owner/ Competent Authority:	London Borough of Bexley
Related work HRA/AA:	HRA of Bexley Local Plan (not available) HRA of Bexley Core Strategy ⁴⁰
Notes on	A new Local Plan is being prepared for the London Borough of Bexley for the next 20 years, until 2040.

³⁶ https://www.havering.gov.uk/download/downloads/id/2345/lbhlp12_submission_local_plan_with_proposed_amendments_tracked_changes.pdf

³⁷ https://www.havering.gov.uk/download/downloads/id/1914/lbhlp9_habitats_regulations_assessment_2017.pdf

³⁸ <https://www.bexley.gov.uk/services/planning-and-building-control/planning-policy/local-plan-review>

³⁹ <https://www.bexley.gov.uk/sites/bexley-cms/files/Bexley-Core-Strategy.pdf>

⁴⁰ <https://www.bexley.gov.uk/sites/bexley-cms/files/CS-HRA-report.pdf>

Bexley Local Plan³⁸ and Bexley Core Strategy³⁹

Plan documents: The Local Plan is currently unavailable, however the Growth Strategy suggests 31,500 new homes and the creation of 17,500 new jobs could be accommodated for in the borough in the long term.

Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan

No HRA work is available for the new Local Plan.

The HRA of Bexley Core Strategy identified five European sites with potential to be affected by the Core Strategy. This included Thames Estuary and Marshes SPA/Ramsar, Epping Forest SAC and Lee Valley SPA/Ramsar.

Air pollution and water quality were identified as two key factors with potential to result in significant effects on European sites, as a result of proposed development with the Core Strategy. To ensure no adverse impacts on the integrity of the European sites, an over-arching policy statement to Policy CS18– Biodiversity and geology was included. The Proposed Submission Core Strategy is not considered to lead to likely significant effects on European sites.

Dartford Core Strategy Local Plan⁴¹ and Development Policies Plan⁴²

Plan Owner/ Competent Authority: Dartford Borough Council

Related work HRA/AA: There is no new HRA available at this stage for the new Local Plan.
HRA of Core Strategy (not available).
HRA of Local Plan Development Policies⁴³

Notes on Plan documents: Dartford's existing Core Strategy continues to be effective, and the Development Policies Local Plan was adopted in 2017. The Council has begun the first step of a new local plan with a strategic issues consultation in June 2018; with potential to review existing planning policy provisions, including the 2011 Core Strategy.

The Core Strategy provides for 17,300 dwellings and 26,500 jobs in the period of 20 years until 2026.

Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan

The HRA if the Local Plan Development Policies states:

In conclusion the Dartford Local Plan Development Policies Document outlines policy for development control and management. It contains policies that detail how development should take place within the Dartford Borough and contains no allocations for development. As such it is considered that it will not have a likely significant effect alone or in combination with any other plans and therefore further Appropriate Assessment is not required with regard to the potential significant impacts arising from individual policies in the plan.

However if the plan is considered in combination with the other part of the Borough Development Plan - the Dartford Core Strategy - recent research findings indicate likely significant effects arising from recreational use of residents at large sites within 10km of the European Sites. The Dartford Local Plan Development Policies Document has taken forward the uncertainty (at that time) regarding the potential for adverse effects of the scale and spatial distribution of planned development highlighted in the Core Strategy, in the light of subsequent research findings on recreational impact. Policy DP25 addresses the potential for significant impacts on the North Kent European Sites arising from large developments within 10km and requires proposals for such developments to undertake a Habitats Regulation Assessment. In addition the Council, with the help of consultants, is seeking to identify a strategic mitigation strategy which such proposals can apply in mitigating identified impacts. Therefore it is considered that the Development Policies Plan DP25 policy will prevent likely significant effects occurring as a result of increased recreational pressure from new development in Dartford Borough.

Gravesham District Local Plan Core Strategy⁴⁴

Plan Owner: Gravesham Borough Council

⁴¹ <http://windmz.dartford.gov.uk/media/Inspector%20Approved%20Core%20Strategy.pdf>

⁴² http://windmz.dartford.gov.uk/media/DP_Plan_Final_Version_for_Adoption_for_web.pdf

⁴³ http://www.dartford.gov.uk/_data/assets/pdf_file/0016/211228/Dartford-HRA-Report-DBC-January-2016TR.pdf

⁴⁴ <http://www.gravesham.gov.uk/home/planning-and-building/local-plan/gravesham-local-plan-core-strategy>

Gravesham District Local Plan Core Strategy⁴⁴

Competent Authority:

Related work HRA/AA:

HRA of Proposed Submission Core Strategy December 2012
HRA Addendum Report December 2013

Notes on Plan documents:

The Local Plan Core Strategy and Policies Map were adopted on 30 September 2014 Development provided for includes at least 6,170 new dwellings during 2011-2028.
The Council has begun a review of the Local Plan and published consultation documents in April 2018 that identifies a new need of 7,905 dwellings between 2011-2038. Issues and Options consultation was undertaken on Site Allocations and Development Management Policies documents as part of this consultation. The review is at an early stage and no new HRA has been published.

Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan

The following types of potential likely significant effect were identified:

- **Recreational disturbance:** the HRA screening identified potential likely significant effects on Medway Estuary and Marshes SPA and Ramsar site and Thames Estuary and Marshes SPA and Ramsar site in-combination with development in surrounding districts. Significant effects on integrity were ruled out by reliance on existing Core Strategy policies requiring provision of alternative recreation space and on recommended additions to the Core Strategy, including commitments to implement the findings of the bird population and visitor studies commissioned by the North Kent Environmental Planning Group and to adopt a flexible approach that enables development plan documents to be reviewed in the light of emerging evidence.
- **Water levels and quality:** the HRA screening identified potential likely significant effects on Medway Estuary and Marshes SPA and Ramsar site due to cumulative increases in water abstraction, consented discharges and surface water run-off in-combination with development in surrounding districts. Significant effects on integrity were ruled out by reliance on existing Core Strategy policies to minimise the impact of drainage from new development and reduce the impact of new development on water resources as well as regulatory processes operated by the Environment Agency.

Medway Local Plan⁴⁵

Plan Owner/ Competent Authority:

Medway Borough Council

Related work HRA/AA:

HRA Screening Assessment of Medway Local Plan

Notes on Plan documents:

The council is working on a new Local Plan, which will replace the 2003 Medway Local Plan. The plan will cover the period up to 2035 and is likely and is likely to be adopted in 2020. So far consultation on the Future Local Plan has been carried out in early 2016 and again in early 2017.
Previous to this, Medway Core Strategy was withdrawn from examination in November 2013 following Natural England's designation of one of the Plan's strategic allocations as a SSSI.

Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan

This HRA has been prepared to assess the potential impacts of the emerging plan. However, as there are no allocations or policy contents confirmed, further assessment will be required to assess the impact of more detailed proposals.

Following the precautionary approach, the HRA has identified some areas of potential concern relating to habitat fragmentation and loss, disturbance, water resourcing and quality and air pollution that should be subject to further assessment and where policy could be strengthened to ensure that the European sites are not damaged through the outcomes of the Local Plan, either alone, or in combination with other relevant plans and programmes.

Castle Point Borough Council Local Plan⁴⁶

⁴⁵ <http://www.medway.gov.uk/planningandbuilding/planningpolicy/localplan-futuremedway.aspx>

⁴⁶

Castle Point Borough Council Local Plan⁴⁶	
Plan Owner/ Competent Authority:	Castle Point Borough Council
Related work HRA/AA:	N/A
Notes on Plan documents:	Castle Point Borough Council have withdrawn their New Local Plan 2016 on 29th March 2017, the Council will continue to use the 1998 Adopted Local Plan as amended and saved by the Secretary of State for Communities and Local Government in 2007, together with numerous non-statutory Supplementary Planning Documents.
Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan	
N/A	

County level plans providing for development

Minerals local plan, waste local plan, local transport plans for

Essex and Southend Replacement Local Plan⁴⁷	
Plan Owner/ Competent Authority:	Essex County Council
Related HRA/AA:	HRA of Essex Minerals Local Plan (not available)
Notes on Plan documents:	Adopted July 2014.
Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan	
N/A	

Essex and Southend Waste Local Plan and Replacement Waste Local Plan⁴⁸	
Plan Owner/ Competent Authority:	Essex County Council
Related HRA/AA:	Essex and Southend Waste Local Plan and Replacement Waste Local Plan is not available. Essex Waste Local Plan- Habitats Regulations Assessment for Revised Preferred Approach ⁴⁹
Notes on Plan documents:	Adopted July 2017.
Conclusions on potential effects of relevance to European sites within scope of HRA of Thurrock Local Plan	
Key impacts identified within the HRA with potential to result in adverse effects caused by Preferred Sites included, air pollution, water pollution or disturbance.	
Air pollution	
A number of preferred sites were identified within 10km of Europeans sites. Although, there is potential for air pollution, due to the operations being predominantly anaerobic and being undertaken in enclosed areas, the effect is considered to be low and localised. No likely significant effects are considered.	
Water pollution	

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⁴⁸ <http://www.essex.gov.uk/Environment%20Planning/Planning/Minerals-Waste-Planning-Team/Planning-Policy/Pages/Current-Waste-Local-Plan.aspx>

⁴⁹ https://www.essex.gov.uk/Environment%20Planning/Planning/Minerals-Waste-Planning-Team/Planning-Policy/Documents/Habitats%20Regulation%20Assessment_Screening%20Report%20for%20RPA_June%202015.pdf

Essex and Southend Waste Local Plan and Replacement Waste Local Plan⁴⁸

The assessment deemed it possible to mitigate for impacts in relation to water pollution through the provision of strict controls places on facilities through the planning process and the Environment Agency. In addition to this, enclosed operations significantly reduce risk of pollution by preventing water coming into to contact with waste.

Overall, the HRA was able to screen out all Preferred Site options from have significant adverse effects on European sites. Due to the limited level of detail, further assessment was recommended in relation to certain Preferred Site options, including 5 Little Bullocks Farm Site A23, Morses Lane, Brightlingsea and Bradwell Nuclear Power station to ensure appropriate protection measures are in place.

Major infrastructure projects

Lower Thames Crossing

Plan Owner/ Competent Authority:	Planning Inspectorate
Related work HRA/AA:	Not yet carried out
Notes on project:	Proposals to construct a new connecting road system within the counties of Kent and Essex. The new road system includes a new crossing of the River Thames to the east of London and the existing Dartford Crossing and Queen Elizabeth II Bridge. The Proposed Development will connect the A2 east of Gravesend to the M25 in Essex.

Conclusions on potential effects of relevance to European sites will be considered in subsequent HRA of the Local Plan.

Thurrock Flexible Generation Plant

Plan Owner/ Competent Authority:	Planning Inspectorate
Related work HRA/AA:	Not yet carried out
Notes on project:	Proposals to develop a flexible generation plant on land north of Tilbury Substation in Thurrock.

Conclusions on potential effects of relevance to European sites will be considered in subsequent HRA of the Local Plan.

Tilbury Energy Centre

Plan Owner/ Competent Authority:	Planning Inspectorate
Related work HRA/AA:	Not yet carried out
Notes on project:	Proposals to make the main plant a Combined Cycle Gas Turbine (CCGT) power station.

Conclusions on potential effects of relevance to European sites will be considered in subsequent HRA of the Local Plan.

Tilbury2

Plan Owner/ Competent Authority:	Planning Inspectorate
Related work HRA/AA:	Not yet carried out. A Report on the Implications for European Sites has been published in 2018.
Notes on project:	Proposals for a port terminal at the former Tilbury Power Station

Conclusions on potential effects of relevance to European sites will be considered in subsequent HRA of the Local Plan.

