



Canterbury City Council

LOCAL PLAN 2040 HABITATS REGULATIONS ASSESSMENT

HRA Supporting Information for Regulation 18
Consultation





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1 INTRODUCTION

1.1 THE CANTERBURY CITY COUNCIL (CCC) LOCAL PLAN

- 1.1.1. Canterbury City Council (the Council) adopted the Canterbury District Local Plan 2011-2031 in July 2017. The Council is currently preparing a new Local Plan to cover the period 2020 to 2040. The Council has decided to prepare a new Local Plan to ensure it remains fit for purpose, reflects national planning guidance, delivers local priorities, and meets future needs whilst restoring a five-year supply of deliverable housing sites.
- 1.1.2. Several of the initial non-statutory stages of plan making have already been completed including an ‘issues’ consultation in Summer 2020 and a Draft District Vision and Local Plan Options consultation in Summer 2021, alongside the ongoing development of a detailed evidence base to guide decision making. The Council consulted on Draft Canterbury District Local Plan (2020-2045) (Regulation 18) in October 2022. Following consideration of consultation feedback and further evidence base gathering, the Council has now prepared a Draft Canterbury District Local Plan (2020-2040) (Regulation 18 consultation, referred to as the Preferred Options (Regulation 18) plan in this document) as part of the ongoing preparation of the Local Plan.
- 1.1.3. The Council is completing the plan preparation process on the following broad timeline:
- Consultation on Draft Canterbury District Local Plan (Regulation 18 consultation) – Spring-Summer 2024;
 - Preparation and publication of Pre-Submission Draft Local Plan (Regulation 19) - Summer 2024-Spring 2025;
 - Submission (Regulation 22) and Examination – Summer 2025-Winter 2025/26;
 - Adoption – Spring 2026.

1.2 HABITATS REGULATIONS ASSESSMENT

- 1.2.1. Regulations 105 and 107 of The Conservation of Habitats and Species Regulations 2017 (as amended) (the ‘Habitats Regulations’)¹ transpose the provisions of Articles 6(3) and 6(4) of Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the ‘Habitats Directive’) as they relate to land-use plans in England and Wales. Regulation 105 states that if a

¹ The 2017 Regulations have been amended by the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019* to reflect the UK’s exit from the EU, although these largely carried forward the provisions and terminology of the 2017 Regulations and do not fundamentally alter their interpretation. This report therefore primarily refers to the 2017 Regulations and (where appropriate for clarity) the relevant provisions of the Habitats Directive.

land-use plan is “(a) is likely to have a significant effect on a European site² or a European offshore marine site³ (either alone or in combination with other plans or projects); and (b) is not directly connected with or necessary to the management of the site” then the plan-making authority must “...make an appropriate assessment of the implications for the site in view of that site’s conservation objectives” before the plan is given effect.

- 1.2.2. The plan can only be given effect if it can be concluded (following an ‘appropriate assessment’) that the plan “...will not adversely affect the integrity” of a site, unless the provisions of Regulation 107 are met.
- 1.2.3. The process by which Regulation 105 is met is known as Habitats Regulations Assessment (HRA)⁴. An HRA determines whether there will be any ‘likely significant effects’ (LSE) on any European site as a result of a plan’s implementation (either on its own or ‘in combination’ with other plans or projects)⁵ and, if so, whether there will be any ‘adverse effects on site integrity’⁶. The Council has a statutory duty to prepare the Local Plan and is therefore the Competent Authority for an HRA.

1.3 THIS REPORT

- 1.3.1. Regulation 105 essentially provides a test that the final plan must pass; there is no statutory requirement for HRA to be undertaken on draft plans or similar developmental stages (e.g. issues and options; preferred options). However, it is accepted best-practice for the HRA of strategic planning documents to be run as an iterative process alongside plan development, with the emerging policies or options reviewed during development to ensure that potentially adverse effects

² As noted, the 2019 amendment to the Habitats Regulations largely carried forward the provisions and terminology of the 2017 Regulations, and so the term ‘European site’ is currently retained and for all practical purposes the definition is essentially unchanged. European sites are therefore: any Special Area of Conservation (SAC) from the point at which the European Commission and the UK Government agreed the site as a ‘Site of Community Importance’ (SCI) (if this was before 31 Jan 2020); any classified Special Protection Area (SPA); and any candidate SAC (cSAC). However, the term is also commonly used when referring to potential SPAs (pSPAs), to which the provisions of Article 4(4) of Directive 2009/147/EC (the ‘new wild birds directive’) are applied; and to possible SACs (pSACs) and listed Ramsar Sites, to which the provisions of the Habitats Regulations are applied a matter of Government policy (NPPF para. 187) when considering development proposals that may affect them. “European site” is therefore used in this document in its broadest sense, as an umbrella term for all of the above designated sites. Note, it is likely that this term will be supplanted at some point in the future although an appropriate UK-wide alternative has not yet been established (e.g. the NPPF in England has adopted the term ‘Habitats sites’ to refer collectively to those sites defined by Regulation 8; the *Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019* replaces ‘Natura 2000’ with the ‘National Site Network’).

³ ‘European offshore marine sites’ are defined by Regulation 18 of *The Conservation of Offshore Marine Habitats and Species Regulations 2017* (as amended); these regulations cover waters (and hence sites) over 12 nautical miles from the coast.

⁴ The term ‘Appropriate Assessment’ has been historically used to describe the process of assessment; however, the process is more accurately termed ‘Habitats Regulations Assessment’ (HRA), with the term ‘Appropriate Assessment’ limited to the specific stage within the process.

⁵ Also referred to as the ‘test of significance’.

⁶ Also referred to as the ‘integrity test’.

on European sites can be identified at an early stage, and avoided or mitigated through the plan development process. This is undertaken in consultation with Natural England (NE) and other appropriate consultees.

- 1.3.2. WSP (formerly Wood Environment and Infrastructure UK Ltd) is supporting CCC with its HRA of the Local Plan. CCC consulted on the Regulation 18 draft Local Plan in October 2022; this was accompanied by an HRA baseline report (*“Habitats Regulations Assessment – Information to support an initial assessment of the Draft Canterbury District Local Plan (Regulation 18 Consultation) against Regulation 105 of the Conservation of Habitats and Species Regulations 2017”* report) that provided
- an outline of the proposed approach and scope of the Local Plan HRA;
 - a summary of the environmental and European site baseline and any known data gaps or environmental aspects subject to future studies; and
 - informal guidance for CCC on any HRA-related issues or risks that may be relevant to the Options selection process, and/or which may need to be considered when developing the Local Plan.
- 1.3.3. WSP has subsequently undertaken ‘critical friend’ reviews of potential allocation sites⁷ and the emerging Local Plan policies, prior to the publication of the Preferred Options (Regulation 18) plan.
- 1.3.4. This report accompanies the Preferred Options (Regulation 18) plan that is being published for consultation between 11 March 2024 and 3 June 2024. As with the previous HRA report **it does not constitute a formal ‘HRA screening’ or ‘Appropriate Assessment’** as the plan is still in development and so any screening or appropriate assessment conclusions would be premature; however, the principles of HRA are applied to Preferred Options to (a) provide an initial assessment of the likely HRA conclusions, were the plan adopted as currently drafted and (b) identify additional data requirements and/or additional measures that may be required to ensure that the Submission Draft Plan (Regulation 19) has no adverse effects on any European sites.
- 1.3.5. This report therefore adopts the broad layout and anticipated content of the final (Submission Draft) HRA report and so replicates some data and content from the previous HRA report (with these data reviewed and updated as required). The report includes the following aspects:
- Details of the approach to the HRA of the Local Plan (Section 2).
 - A summary of the baseline condition of the European sites and features that are potentially vulnerable (i.e. both exposed and sensitive) to the likely effects of the Local Plan, and the impact pathways (Section 3).
 - A summary of the initial screening assessments undertaken as part of the HRA of the emerging policies and proposals of the Local Plan, identifying those European sites and features that will

⁷ Note, the review of the potential allocation sites did not determine whether sites should or should not be allocated, but rather identified potential HRA-related risks and the measures (e.g. policy controls or additional data collection) that may be required to ensure that these risks are avoided.

not be affected by plan proposals, and those plan aspects (policies or allocations) which will not significantly affect any European sites (Section 4).

- Appropriate assessments for those European sites and features that are vulnerable to aspects of the Local Plan, taking account of avoidance or mitigation measures included in the Preferred Options (Reg. 18) plan (Sections 5 – 11).
- Identification of additional data requirements and/or additional measures that may be required to ensure that the Submission Draft (Reg. 19) plan avoids adverse effects on integrity (Sections 5 – 11).

1.3.6. An indication of the anticipated conclusion for the HRA of the Local Plan, assuming a submission consistent with the Preferred Options (Reg. 18) plan (Section 12).

2 APPROACH TO HRA OF THE LOCAL PLAN

2.1 OVERVIEW

- 2.1.1. European Commission guidance⁸ and established case-practice suggests a four-stage process for addressing Articles 6(3) and 6(4), and hence Regulations 105 and 107 (see Box 1), although not all stages will necessarily be required:

Box 1 – Stages of HRA

Stage 1 – Screening or ‘Test of significance’

This stage identifies the likely effects of a project or plan on a European site, either alone or ‘in combination’ with other projects or plans, and considers whether these effects are likely to be significant. The ‘screening’ test or ‘test of significance’ is a low bar, intended as a trigger rather than a threshold test: a plan should be considered ‘likely’ to have an effect if the competent authority is unable (on the basis of objective information) to exclude the possibility that the plan or project could have significant effects on any European site, either alone or in combination with other plans or projects; an effect will be ‘significant’ simply if it could undermine the site’s conservation objectives. Note that mitigation measures should not be taken into account at the ‘screening’ stage, in accordance with the People over Wind (Court of Justice of the European Union (ECJ) Case C-323/17); this reinforces the idea of screening as a ‘low bar’ and makes ‘appropriate assessments’ more common.

Stage 2 – Appropriate Assessment (including the ‘Integrity test’)

An ‘appropriate assessment’ (if required) involves a closer examination of the plan or project where the effects on relevant European sites are significant or uncertain, to determine whether any sites will be subject to ‘adverse effects on integrity’ if the plan or project is given effect. The scope of any ‘appropriate assessment’ stage is not set, and the assessments will not be extremely detailed in every case (particularly if mitigation is clearly available, achievable, and likely to be effective). The assessments must be ‘appropriate’ to the effects and proposal being considered, and sufficient to ensure that there is no reasonable doubt that adverse effects on site integrity will not occur (or sufficient for those effects to be appropriately quantified should Stages 3 and 4 be required).

Stage 3 – Assessment of Alternative Solutions

Where adverse effects remain after the inclusion of mitigation, Stage 3 examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of European sites. A plan or project that has adverse effects on the integrity of a European site cannot be permitted if alternative solutions are available, except for imperative reasons of overriding public interest (IROPI; see Stage 4).

Stage 4 – Assessment Where No Alternative Solutions Exist and Where Adverse Impacts Remain

This stage assesses compensatory measures where it is deemed that there are no alternatives that have no or lesser adverse effects on European sites, and the project or plan should proceed for imperative reasons of overriding public interest (IROPI). The EC guidance does not deal with the assessment of IROPI, although the IROPI need to be sufficient to override the adverse effects on European site integrity, taking into account the compensatory measures that can be secured (which must ensure the overall coherence of the ‘national site network’).

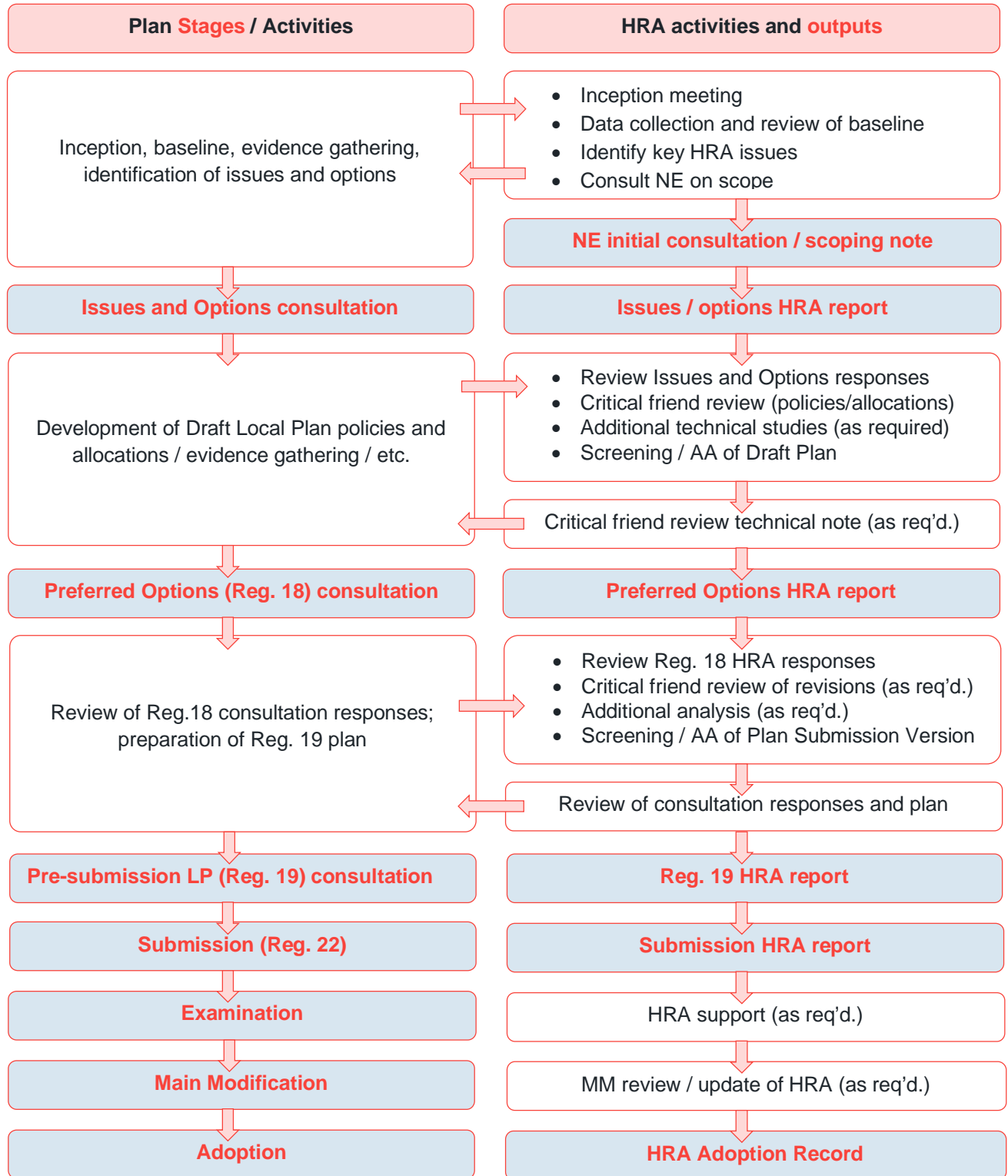
⁸ *Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (EC 2002).

- 2.1.2. HRAs of local planning documents rarely proceed beyond Stage 2, as alternatives to policies or allocations that adversely affect the integrity of a European site⁹ are almost always available.
- 2.1.3. The stages in Box 1 (if required) are used to ensure compliance with the Habitats Regulations and so principally reflect the stepwise legislative tests applied to the final, submitted project or plan; there is no statutory requirement for HRA (or its specific stages) to be completed for draft plans or similar developmental stages. Attempting to rigidly apply these steps to the emerging or interim stages of strategic plans is not always appropriate, and often reduces the clarity and usefulness of the HRA as a plan-shaping process for both plan-makers and consultees.
- 2.1.4. Consequently there is inherent flexibility for the HRA process to be run in a manner that provides maximum benefit for plan-development and sound decision-making, whilst still ultimately meeting the legislative tests.
- 2.1.5. The HRA of this plan therefore employs an iterative and consultative approach to HRA, with outputs tailored to each stage of the plan development and consultation process, and the requirements of the key stakeholders, rather than trying to force the guideline HRA stages on to the emerging plan. The HRA therefore contributes to the plan evidence-base, so assisting with the development of sustainable policies from the beginning of the plan-making process rather than being a purely retrospective ‘test’ applied towards the end.
- 2.1.6. Figure 2.1 below provides an overview of our preferred approach to the HRA of Local Plans, identifying the relationships between the HRA process / key outputs and the plan development / consultation points (Reg. 18 etc.). Note, this is indicative and additional outputs may be appropriate as the plan evolves.
- 2.1.7. In summary, the early stages of the process are relatively iterative and do not look like a ‘formal’ HRA – so, for example, the Issues and Options HRA report did not attempt to ‘screen’ the Issues and Options (partly as these will be too broad for any such assessment to be meaningful, although guidance would be provided to CCC if any options would clearly risk unavoidable adverse effects if pursued), but rather set out the local baseline and intended HRA scope, discuss potential data gaps, and identify the key HRA-related issues for the Local Plan to address in its development.
- 2.1.8. The HRA reporting aligns more closely with the guideline stages as the Local Plan develops, with the Preferred Options typically being accompanied by a ‘Draft Local Plan HRA’ report that includes a detailed ‘screening’ and ‘appropriate assessment’ of the Preferred Options Draft Plan, setting out the

⁹ Note, the UK European sites are no longer legally part of the ‘Natura 2000’ network of protected sites, with this being replaced in the UK by the ‘national site network’ which comprises all existing SACs and SPAs and any new SACs and SPAs designated under the 2019 Regulations (Ramsar sites do not form part of the network). This also has relevance if compensation measures are required for an adverse effect, as the relevant metric is the overall coherence of the ‘national site network’. The 2019 Regulations establish management objectives for the ‘national site network’ which contribute to the conservation of UK habitats and species that are also of pan-European importance, and to the achievement of their favourable conservation status within the UK.

HRA-related evidence and the anticipated conclusion (if the plan were to be adopted as drafted, recognising that the HRA can only be completed for the final, adopted plan). This report would then be updated for subsequent consultation stages to reflect consultation responses and plan amendments.

Figure 2-1 - Indicative HRA process for Local Plans



2.2 GUIDANCE

2.2.1. The following guidance has been used during the review and assessment of the draft Local Plan:

- UK Government (2019). *Appropriate assessment: Guidance on the use of Habitats Regulations Assessment* [online]. Available at: <https://www.gov.uk/guidance/appropriate-assessment> [Accessed October 2023].
- Tyldesley, D. & Chapman, C. (2023). *The Habitats Regulations Assessment Handbook* [online]. DTA Publications Limited. Available at: <https://www.dtapublications.co.uk/handbook/>. [Accessed October 2023].
- EC (2018). *Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*. Commission Notice C(2018) 7621 final, Brussels, 21.11.2018.
- Natural England (2020). *Guidance on how to use Natural England's Conservation Advice Packages in Environmental Assessments*. Natural England, Peterborough.
- European Commission (2018). *Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*. European Union, 1-86.
- Defra (2012). *The Habitats and Wild Birds Directives in England and its seas: Core guidance for developers, regulators & land/marine managers* [online]. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/82706/habitats-simplify-guide-draft-20121211.pdf. [Accessed October 2023].
- PINS Note 05/2018: *Consideration of avoidance and reduction measures in Habitats Regulations Assessment: People over Wind, Peter Sweetman v Coillte Teoranta*. [withdrawn].
- SNH (2019). SNH Guidance Note: *The handling of mitigation in Habitats Regulations Appraisal – the People Over Wind CJEU judgement* [online]. Scottish Natural Heritage. Available at: <https://www.nature.scot/sites/default/files/2019-08/Guidance%20Note%20-%20The%20handling%20of%20mitigation%20in%20Habitats%20Regulations%20Appraisal%20-%20the%20People%20Over%20Wind%20CJEU%20judgement.pdf>. [Accessed October 2023].

2.2.2. Additional topic-specific guidance (for example, in relation to the assessment of air quality effects) is identified within the relevant assessment sections.

2.3 CONSULTATION AND PLAN EVOLUTION

2.3.1. The HRA process is completed alongside the development of the Plan, and the HRA reports issued at each stage of the plan development reflect the assessment and process at that point in time.

2.3.2. The consultations to date are as follows:

- initial consultation on the intended approach to HRA with Natural England (June 2021);
- the 'Preferred Options' Reg. 18 consultation HRA document (24 October 2022 – 16 January 2023);
- revised 'Preferred Options' Reg. 18 consultation HRA document (this report).

2.3.3. Appropriate HRA reports will be produced to accompany the future plan consultation stages; additional consultations on specific technical aspects are undertaken and documented as required.

2.4 STUDY AREA

- 2.4.1. The zone of influence of a Local Plan varies according to the aspect being considered (for example, noise effects would rarely extend more than a few hundred metres from the source), and so it is not usually appropriate to employ 'arbitrary' spatial buffers to determine those European sites that should be considered within an HRA.
- 2.4.2. However, as distance is a strong determinant of the scale and likelihood of most effects, the considered use of a suitably precautionary search area as a starting point for the assessment (based on an understanding of both the likely plan outcomes and European site interest features) has some important advantages. Using buffers allows the systematic identification of European sites using GIS, so minimising the risk of sites or features being overlooked, and ensures that sites for which there are no reasonable impact pathways can be quickly and transparently excluded from any further screening or assessment. It also has the significant advantage of providing a consistent point of reference for consultees following the assessment process, allowing the screening to focus on the potential effects, rather than on explaining why certain sites may or may not have been considered in relation to a particular aspect of the plan.
- 2.4.3. Most Local Plan HRAs adopt a 15 – 20km buffer for the identification of European sites that may be exposed to significant effects, with sites beyond this distance considered as required. The HRA of this plan therefore considers:
- all European sites within 20km of the Council's administrative area (see **Table 3.2**);
 - any additional sites that may be hydrologically linked to the Local Plan's zone of influence; and
 - any additional sites identified by Natural England following the SA Scoping Consultation (particularly in relation to air or water quality, see below).
- 2.4.4. This is considered to be a suitably precautionary starting point for the assessment of the Local Plan. Note, at the screening stage the assessment essentially assumes that there will be 'no effect' (and hence no possibility of 'in combination' effects) on European sites not included within the scope.

2.5 DATA COLLECTION

- 2.5.1. The screening and appropriate assessment stages take account of the baseline condition of the European sites and their interest features¹⁰, including (where reported) data on
- the site boundaries and the boundaries of the component SSSIs;
 - the conservation objectives;
 - information on the attributes of the European sites that contribute to and define their integrity;
 - the condition, vulnerabilities and sensitivities of the sites and their interest features, including known pressures and threats;

¹⁰ The interest features are taken to be the qualifying features; and other site features that may be relevant to site integrity, particularly 'typical species' (for SACs) and within-site supporting habitats for SPAs.

- the approximate locations of the interest features within each site (if reported); and
- designated or non-designated 'functional habitats' (if identified).

2.5.2. These data are derived from (where available / relevant):

- the most recent JNCC-hosted GIS datasets;
- the Standard Data forms for SACs and SPAs and Information Sheets for Ramsar sites;
- Article 12 and 17 reporting;
- the published site Conservation Objectives;
- Supplementary Advice to the conservation objectives (SACO) where available¹¹;
- Site Improvement Plans (SIPs);
- Core Management Plans (Wales only); and
- the supporting Site of Special Scientific Interest's favourable condition tables where relevant and where no SACOs applicable to the features are available.

2.5.3. Note:

- For SPAs, the qualifying features are taken as those identified on the most recent JNCC datasets and citations or NE conservation objectives sheets, where these post-date the 2nd SPA Review (i.e. it will be assumed that any amendments suggested by the SPA review have been made) unless otherwise identified to us by NE; any site-specific issues relating to the SPA Review can be addressed in the screening and appropriate assessment of the preferred options (see below).
- The conservation objectives for Ramsar sites are taken to be the same as for the corresponding SACs / SPAs (where sites overlap); SSSI Definition of Favourable Condition (FCTs) are used for those Ramsar features not covered by SAC/SPA designations.

2.5.4. Where possible the site data is used to identify other features that may be relevant to site integrity, particularly '**typical species**' (for SACs), within-site **supporting habitats**, and designated or non-designated '**functional habitats**'.

2.5.5. A '**typical species**' is broadly described by EC guidance as being any species (or community of species) which is particularly characteristic of, confined to, and/or dependent upon the qualifying Annex I habitat feature at a particular site. This may include those species which:

- are critical to the composition or structure of an Annex I habitat (e.g. constant species identified by the National Vegetation Classification (NVC) community classification);

¹¹ NE has published 'Supplementary advice on conserving and restoring site features' for most European sites in England which describe in more detail the range of ecological attributes which are most likely to contribute to a site's overall integrity, and the targets each qualifying feature needs to achieve in order for the site's conservation objectives to be met.

- exert a critical positive influence on the Annex I habitat's structure or function (e.g. a bioturbator (mixer of soil/sediment), grazer, surface borer or predator);
- are consistently associated with, and dependent upon, the Annex I habitat feature for specific ecological needs (e.g. feeding, sheltering), completion of life-cycle stages (e.g. egg-laying) and/or during certain seasons/times; or
- are particularly distinctive or representative of the Annex I habitat feature at a particular site.

2.5.6. Within-site **supporting habitats** are those which support the population(s) of the qualifying species and which are therefore critical to the integrity of the feature.

2.5.7. '**Functional habitats**' are generally taken to be habitats or features outside a European site boundary that are important or critical to the functional integrity of the site habitats and / or its interest features. These might include, for example:

- 'buffer' areas around a site (e.g. dense scrub areas preventing public access; areas of land that reduce the effects of agricultural run-off; etc.);
- specific features or habitats relied on by mobile species during their lifecycle (e.g. high-tide roosts for waders; significant maternity colonies for bats known to hibernate within an SAC; areas that are critical for foraging or migration; etc. Note, this is not intended as a speculative catch-all covering any habitat that might be occasionally used by, or suitable for, a particular species¹²).

2.5.8. Note, many SPAs and Ramsar sites are largely coincident, both spatially and in terms of features; within this document SPA and Ramsar site names may therefore sometimes be combined with the suffix "SPA/Ramsar" for simplicity where this is not material to the assessment of specific sites or features.

2.6 REVIEWING THE EMERGING PLAN

2.6.1. The principles¹³ of 'screening' are applied to the emerging plan and its components (i.e. the policies and allocations) as part of an iterative review process, to ensure that:

- any necessary technical assessments focus on those plan aspects that are likely to result in significant effects on European sites; and
- that the policies of the adopted plan are drafted to provide appropriate overarching safeguards that help (alongside any subsequently identified mitigation) to ensure that the adopted plan will have no significant effects or no significant adverse effects.

¹² Case law notes that such land should be necessary to the conservation of the protected habitat types and species (*Holohan v An Bord Pleanala C-461/17*) or play an important role in maintaining or restoring the population of qualifying species at favourable conservation status.

¹³ i.e. exploring whether significant effects on European sites are possible; note, from a strict procedural perspective the tests in Regulation 105 (including the 'test of significance') can only be formally applied to the plan intended for adoption and not to its various phases or iterations; therefore the term 'screening' is used advisedly when applied to assessments completed at earlier stages of the plan development.

- 2.6.2. The outcomes of the HRA reviews are reported as appropriate at each consultation stage; this reporting may outline anticipated conclusions in relation to specific plan aspects. The outcomes of these reviews are re-visited throughout plan evolution to ensure that they remain robust, and that the overall performance of the plan in relation to the safeguarding of European sites meets expectations.
- 2.6.3. The reviews are intended to be a coarse filter for identifying potential effect pathways that cannot be self-evidently discounted, and hence those aspects where further investigation ('appropriate assessment') is required to determine the scale or nature of any effects and / or any bespoke mitigation that is necessary, rather than detailed assessments in their own right.

2.7 SCREENING / ASSESSMENT OF THE DRAFT PLANS

- 2.7.1. The Preferred Options (Reg. 18) and Submission (Reg. 19) draft plans are accompanied by HRA documents that include a 'screening' and 'appropriate assessment', setting out the HRA-related evidence and the anticipated conclusion (if the plan were to be adopted as drafted, recognising that the HRA can only be completed for the final, adopted plan).
- 2.7.2. The 'screening' in these HRAs identifies the following aspects and excludes them from the scope of the appropriate assessment:
- those European sites that are **not** vulnerable (i.e. both exposed and sensitive) to the outcomes of the plan); and
 - the policies and allocations that cannot have significant effects, alone or in combination, or which cannot be assessed at the plan level (e.g. policies that support development or other changes) but which are too general to allow any specific assessments of effects (i.e. the locations, scale, quantum etc. are not specified below the geographical level of the plan, assuming that the type of development proposed is not such that significant effects would be unavoidable regardless of these aspects).
- 2.7.3. The 'screening' does not take into account 'mitigation', in accordance with 'People over Wind' (see below).
- 2.7.4. The '**appropriate assessment**' determines whether any aspect of the plan will have 'adverse effects on integrity' for any European sites, taking into account the sites' conservation objectives and conservation status. Site integrity (in HRA terms) is "*the coherent sum of the site's ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated*" (EC Guidance '*Managing Natura 2000*' (2018)).
- 2.7.5. Where a site or interest feature has a 'favourable' conservation status then a 'no adverse effects on integrity' conclusion can be reached provided that this status will not be undermined by the plan or project at hand; if the conservation status is 'unfavourable' then the plan or project must not reduce the conservation status further or create conditions that would make it more difficult for the site or feature to reach 'favourable' conservation status. It should be noted that this is not simply a test of whether there are negative effects; an effect may be negative but not undermine the site's conservation objectives. The integrity test incorporates the precautionary principle, whereby plans

or projects should not be approved unless there is no reasonable scientific doubt that adverse effects on site integrity will not occur¹⁴.

- 2.7.6. Appropriate assessments are therefore used to provide a more detailed examination of those plan aspects where significant effects are likely, or (commonly) where there is a residual uncertainty which the assessment is intended to resolve or a mitigation measure requires examination. The 'appropriate assessment' stage may therefore conclude that the proposals are likely to have an adverse effect on the integrity of a site (in which case they should be abandoned or modified); or that the effects will be 'significant' in HRA terms but not adverse (i.e. an effect pathway exists, but those effects will not undermine site integrity, perhaps due to mitigation proposed for inclusion within the plan); or that the effects would, if screening were re-visited, be 'not significant' (i.e. the anticipated effect is subsequently shown to be nugatory or *de minimis*¹⁵).
- 2.7.7. The approaches used for appropriate assessments vary according to the sites affected and the effect-pathways.

IN COMBINATION EFFECTS

- 2.7.8. Consideration of 'in combination' effects is not a separate assessment but is integral to both the screening and appropriate assessment stages.
- 2.7.9. At the screening stage the 'in combination' assessment focuses on those Local Plan effects that are 'not significant', aiming to identify whether these effects might interact with other plans or projects to result in significant effects on a European site in combination (recognising that Local Plan effects that are effectively nil and indistinguishable from background variations cannot operate 'in combination' and so can be excluded from the in combination assessment at the screening stage). Any significant 'in combination' effects identified are then considered at the appropriate assessment stage, where the assessment aims to determine whether the residual effects of the Local Plan (after mitigation is accounted for) could nevertheless interact with aspects of other plans and projects to adversely affect the integrity of a European site.
- 2.7.10. There is limited guidance available on the scope of the 'in combination' element, particularly with regard to which plans or projects should be considered.
- 2.7.11. The assessment of in combination effects arising within the Local Plan itself, or between Local Plans (e.g. of allocations cumulatively or the overall quantum of development regionally) are fundamentally

¹⁴ It should be noted that 'no reasonable scientific doubt' does not mean 'absolute certainty' (which is rarely achievable in any case, particularly at the plan level where detail on specific future developments is often unavailable); sufficient certainty may be achieved through the use of suitably conservative assumptions (e.g. in modelling) or evidence from best-practice elsewhere, taking into account any advice from the relevant statutory bodies. The plan-making authority can then put in place a legally enforceable framework that provides certainty by ensuring that the potential adverse effects identified using the best-available information will not be realised.

¹⁵ In the absence of avoidance or mitigation measures, as per 'People over Wind'.

integrated into the assessments, as most effect pathways (e.g. increased recreational pressure) are inherently cumulative.

- 2.7.12. However, the assessment should not be limited to plans at the same level in the planning hierarchy and there is consequently a wide range of strategic plans that could have potential ‘in combination’ effects with the Local Plan. The plans identified by the SA provide the basis for the assessment of ‘in combination’ effects with strategic plans; these plans are reviewed to identify any potential effects (see **Appendix C**) and then considered (as necessary) within the screening and appropriate assessment stages. The assessment does not generally include national strategies, national policy or legislation since the Local Plan must be compliant with these. The assessment takes account of any HRAs completed for those plans, where these are freely available for review¹⁶. It is considered that ‘in combination’ effects are most likely in respect of other regional and sub-regional development plans and strategies.
- 2.7.13. With regard to projects, The Planning Inspectorate’s National Infrastructure Projects database¹⁷ is used to identify major projects with the potential to affect the European sites in the HRA scope, along with any other major projects that CCC are advised of during the plan development process. However, it should be noted that the in combination assessment can be greatly limited by the information available for other plans and projects, particularly where these are at an early stage of development.
- 2.7.14. It is not generally possible to produce a definitive list of existing minor planning applications near each European site, and generating a list of these is typically of little value since many will be consented and delivered prior to the plan being adopted, and/or before developments supported by the plan are bought forward (i.e. they will form part of the baseline for future project-level HRAs); they typically must meet the policy requirements of the Local Plan also.

2.8 NOTES ON MITIGATION AND AVOIDANCE

- 2.8.1. The development of avoidance or mitigation measures is important to the HRA and plan development process. ‘Avoidance measures’ are those that are implemented during the iterative plan development process (for example, abandoning a policy or allocation that is likely to have unavoidable adverse effects if implemented)¹⁸; mitigation measures are used where significant effects are identified in order to prevent adverse effects on a site’s integrity¹⁹.

¹⁶ There is no statutory requirement to issue HRAs for public comment, and so many HRAs are not available or are only made available publicly for short consultation periods. In these instances it is assumed that the HRA of the plan was able to conclude ‘no adverse effects’ if the relevant plan has been adopted.

¹⁷ <https://infrastructure.planninginspectorate.gov.uk/projects/>

¹⁸ Note, the term ‘avoidance measures’ in this context is not synonymous with the representation of ‘mitigation’ used in the People over Wind judgment.

¹⁹ Although it should be noted that not all ‘likely significant effects’ will require mitigation measures: the effect may be considered to be likely to be significant (i.e. has the potential to undermine the conservation objectives) but may be shown on further examination to be too limited to have any risk of adversely affecting site integrity.

- 2.8.2. Avoidance or mitigation measures should aim to reduce the probability or magnitude of impacts on a European site until ‘no likely significant effects’ or ‘no adverse effects on integrity’ are anticipated, and they will generally involve the development and adoption of (for example) wording changes to policies, or additional safeguarding policies. Measures must be specific and targeted, and likely to work; it is not appropriate to re-state existing legislation or policy, for example by adding “*and must have no significant effect on any European site*” (or similar) to every policy. The avoidance or mitigation measures should also reflect the limited influence that the Council can exert on non-planning issues and should not generally exceed requirements set by national planning policy or guidance.
- 2.8.3. The ‘People Over Wind’ judgment creates some issues for the application of avoidance and mitigation measures in the HRA process, stating that “...*it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects [mitigation] of the plan or project on that site*”; as noted, this contrasts with established practice in this area (based on the ‘Dilly Lane’ judgment)
- 2.8.4. There is limited guidance on the practical implementation of the ‘People over Wind’ judgment, particularly for plan-level HRAs where the assessment process is usually concurrent with plan development and where measures are invariably incorporated into the plan before the formal ‘screening’ of the final version takes place. Indeed, many ‘recommendations’ derived from an iterative policy review process might be interpreted as ‘avoidance’ or ‘mitigation’ measures if viewed solely in terms of their implications for European sites, making it difficult to distinguish between basic good policy practice and ‘mitigation’.
- 2.8.5. For example, generic policies promoting the use of Sustainable Drainage Systems (SuDS); or safeguarding designated sites (including European sites); or requiring that developers ensure utility provision in advance of occupation, are fairly standard inclusions in virtually all land-use plans but will all act to moderate potential environmental changes that could affect European sites. However, it would clearly be illogical to attempt to screen a hypothetical version of the plan that did not include such policies, particularly if these are included independently of the HRA results.
- 2.8.6. The broader context of the ‘People over Wind’ case suggests that the judgment is principally focusing on those instances where specific measures are included or relied on to avoid or mitigate a specific effect that has been identified, and which would otherwise be significant; the judgment argues that the effectiveness of any such measures should be examined through an appropriate assessment stage. It is therefore arguable that an exhaustive examination of a plan’s genesis to see if any aspects might count as ‘mitigation’ for screening purposes is not necessary, or (arguably) consistent with the intent of the Habitats Directive or the ‘People over Wind’ judgment.
- 2.8.7. Therefore, the screening **does not** take account of specific measures that are included in response to a specific identified effect on a European site, and which are intended to avoid or reduce that effect. However, generic policy safeguards that would be included regardless of the presence of European sites are essentially just ‘the plan’ and are not considered to be ‘mitigation’ unless there is a specific effect or pathway that they are intended or relied on to obviate. Aspects requiring specific investigations to understand the problem (and hence the mitigation requirements), or which rely on established mitigation to avoid an effect, are subject to AA.

2.9 UNCERTAINTY AND ‘DOWN THE LINE’ ASSESSMENT

- 2.9.1. For most policies, even at the strategic level, it will be clear if adverse effects are likely at an early stage, and in these instances the policy should not be included within the plan since plans should not include proposals which would be likely to fail the Habitats Regulations tests at the project application stage. For other options, however, the effects may be uncertain and it is therefore important that this uncertainty is addressed either through additional investigation or (if this is not possible) appropriate mitigation measures that provide certainty that the predicted effect will not occur or will not adversely affect site integrity.
- 2.9.2. It is usually possible to incorporate caveats or measures within policy text that are sufficient to ensure that adverse effects will not occur. However, for other policies this may not be possible because there is insufficient available information about the nature of the development that is being proposed through the policy to enable a robust conclusion to be reached. In these instances, it may be appropriate and acceptable for assessment to be undertaken ‘down-the-line’ at a lower tier in the planning hierarchy. For this to be acceptable, the following conditions must be met:
- the higher tier plan appraisal cannot reasonably predict the effects on a European site in a meaningful way; whereas;
 - the lower tier plan, which will identify more precisely the nature, scale or location of development, and thus its potential effects, retains enough flexibility within the terms of the higher tier plan over the exact location, scale or nature of the proposal to enable an adverse effect on site integrity to be avoided; and
 - HRA of the plan at the lower tier is required as a matter of law or Government policy.
- 2.9.3. This approach is applied as appropriate to the screening and appropriate assessment stages.

3 BASELINE SUMMARY AND IMPACT PATHWAYS

3.1 EFFECT PATHWAYS AND KEY REGIONAL PRESSURES

- 3.1.1. The provisions of the Habitats Regulations ensure that ‘direct’ (encroachment) effects on European sites as a result of land use change (i.e. the partial or complete destruction of a European site) are extremely unlikely under normal circumstances, and this will not occur as a result of the Local Plan. Indeed, local plans will generally assist the safeguarding of European sites through their protective policies. However, there will be a number of areas where the direction, controls or influence provided by a plan can result in outcomes that can affect European site interest features.
- 3.1.2. Most potential effect pathways are associated with broad ‘quantum of development’ or population growth aspects, and whilst a local plan is not necessarily the main driver of these effects, they do have a key role in managing them locally through the site allocation process. In this context, the main aspects through which the Local Plan could affect European sites in the study area are:
- through individual allocations or supported developments that are ‘directed’ to a specific location or area; or
 - through ‘in combination’ effects resulting from the cumulative impacts of development associated with the Local Plan and with the plans and programmes of external authorities (such as neighbouring LPAs).
- 3.1.3. These aspects could affect European sites on their own, through typical development-related mechanisms operating at the local scale in relation to specific allocations (e.g. noise, lighting, etc.; see **Table 3.1**); or collectively by exacerbating regional pressures (e.g. pressures on water supply).

Table 3-1 - Typical effect pathways and environmental changes associated with terrestrial development

Pressure / Threat	Common environmental changes
Hydrological changes	Temperature changes Salinity changes Water flow changes Flood regime changes
Pollution and other chemical changes	Non-synthetic and synthetic compound contamination Radionuclide contamination Introduction of other substances (solid, liquid or gas) De-oxygenation Nutrient enrichment Organic enrichment
Physical loss	Physical loss of habitat Physical change to another habitat
Physical damage	Habitat structure changes Changes in suspended solids Siltation rate changes

Pressure / Threat	Common environmental changes
Other physical pressures	Litter Electromagnetic changes Noise changes Introduction of light Barrier to species movement Death or injury by collision
Biological pressures	Visual disturbance Genetic modification and translocation of indigenous species Introduction or spread of non-indigenous species Introduction of microbial pathogens Exploitation / harvesting of species Removal of non-target species during exploitation / harvesting

- 3.1.4. Significant effects or significant adverse effects as a result of individual allocations ‘alone’ are typically unlikely as most environmental changes have a limited ‘zone of influence’ (for example, noise effects on species will rarely be significant over 500m from the source based on natural rates of attenuation alone), and most allocations will not be located particularly close to a European site. However, the Local Plan HRA must also consider the potential for development supported by the plan to operate ‘in combination’ both internally (e.g. between allocations) or with external plans and programmes (e.g. cumulative housing growth regionally). ‘In combination’ changes are often of an inherently larger scale or operate over larger areas.
- 3.1.5. There is obviously a wide range of potential mechanisms and pathways for ‘in combination’ effects depending on the European sites and features. However, there are a few key mechanisms by which local plans (etc.) most commonly operate cumulatively to affect European sites; these are noted below, and provide the broad framework for assessing potential ‘in combination’ effects associated with the Local Plan:
- **Recreational pressure:** Many European sites will be vulnerable to some degree of impact as a result of recreational pressure, although the effects of recreational pressure are complex and very much dependent on the specific conditions and interest features at each site. Local plans can influence recreational pressure through their allocations and associated controls.
 - **Urbanisation:** Urbanisation is generally used as a collective term covering a suite of often disparate risks and impacts that occur due to increases in human populations near protected sites. This would include varied aspects such as fly-tipping or vandalism, predation by cats, or the dispersal of invasive species, although the effects of these aspects depend on proximity, accessibility and the interest features of the sites. This is generally only realised where allocations are close to a designated site.
 - **Atmospheric pollution:** The most relevant air pollutants to habitats and species (particularly plant species) are the primary pollutants sulphur dioxide (SO₂, typically from combustion of coal and heavy fuel oils), nitrogen oxides (NO_x, mainly from vehicles) and ammonia (NH₃, typically from agriculture). These pollutants affect habitats and species mainly through acidification and eutrophication. Local Plans will generally have few specific point-sources for air emissions and

such emissions would typically be controlled through project-level permissions; the main issue for local plans is the assessment of ‘in combination’ effects due to air quality changes that might be associated with the quantum of development growth proposed / supported by a Local Plan, particularly in relation to traffic and N-deposition.

- **Water resources and flow regulation:** The exploitation and management of water resources is connected to a range of activities, most of which are not directly controlled or influenced by local plans; for example, agriculture, flood defence, recreation, power generation, fisheries and nature conservation. Much of the water supply to water-resource sensitive European sites is therefore managed through specific consenting regimes that are independent of local plans. Increased housing growth (which is likely to be supported by a local plan) increases demand on public water supply abstractions, some of which are associated with European sites; however, the consenting regimes are subject to HRA and, importantly, water companies are required to produce 25-year Water Resource Management Plans (WRMPs) that take into account predicted population growth and protected sites when considering future water resource provision. It is therefore very unlikely that development within one local planning authority area could have direct and consequential effects on a European site if growth is in line with water company predictions, particularly as most water companies operate conjunctive-use systems that do not rely on single-source provision. This aspect is most typically managed through policy.
- **Water quality:** Most waterbodies and watercourses are affected to some extent by point or diffuse sources of pollutants, notably nitrates and phosphates. Point sources are usually discrete discharge points, such as wastewater treatment works (WTW) outfalls, which are generally managed through specific consenting regimes that are independent of local plans. In contrast, diffuse pollution is derived from a range of sources (e.g. agricultural run-off; road run-off) that cannot always be easily traced or quantified. Development promoted or supported by local plans is likely to increase demand on wastewater treatment works, and potentially increase run-off which could indirectly affect downstream European sites – although there will inevitably be attenuation as distance from the source increases.

3.1.6. In addition, many European interest features (particularly more mobile animal species) may use or be reliant on non-designated habitats outside of a European site during their life-cycle. All of the above aspects (recreation, water resources, etc.) can therefore also affect European site integrity indirectly through effects on ‘functional habitats’ beyond the designated site boundary.

3.1.7. It should be noted that CCC is completing various reports and studies to update the environmental baseline for the Local Plan, some of which will be relevant to the HRA, including:

- Strategic Flood Risk Assessment (2024)
- Draft Open Space Strategy (2024)
- Canterbury Riverside Strategy 2023 - 2028
- Tree, Woodland and Hedgerow Strategy
- Canterbury District Pollinator Action Plan (2023)
- Draft Canterbury District Nutrient Mitigation Strategy (2024)
- Natural Environment and Open Space Topic Paper (2024)
- Climate Change Topic Paper (2024)

3.2 EUROPEAN SITE SUMMARIES

3.2.1. As noted, the HRA of the Local Plan will consider potential effects on:

- all European sites within 20km of the Council's administrative area (see Table 3.2);
- any additional sites that may be hydrologically linked to the Local Plan's zone of influence; and
- any additional sites identified by Natural England following the Issues and Options consultation.

3.2.2. This is considered to be a suitably precautionary starting point for the assessment of the Local Plan. This area includes the following European sites.

Table 3-2 - European sites within scope

Site	Location relative to the CCC boundary
Blean Complex SAC	Woodland site within Canterbury City Council (CCC) area.
Stodmarsh Ramsar	Wetland site within CCC area.
Stodmarsh SAC	Wetland site within CCC area.
Stodmarsh SPA	Wetland site within CCC area.
Tankerton Slopes and Swalecliffe SAC	Grassland site supporting moth species within CCC area.
Thanet Coast and Sandwich Bay Ramsar	Large coastal site partly within the CCC area at Swalecliffe and Herne Bay.
Thanet Coast and Sandwich Bay SPA	Large coastal site partly within the CCC area at Swalecliffe and Herne Bay.
The Swale Ramsar	Coastal and estuarine site partly within the CCC area at Whitstable.
The Swale SPA	Coastal and estuarine site partly within the CCC area at Whitstable.
Outer Thames Estuary SPA	Offshore site below MLW; partly within the CCC area at Whitstable Harbour.
Wye and Crundale Downs SAC	Grassland site ~0.7km outside the south-western boundary of the CCC area.
Margate and Long Sands SAC	Marine SAC ~1.1km offshore from the northern CCC boundary.
Parkgate Down SAC	Grassland site ~1.9km outside the southern boundary of the CCC area.
Thanet Coast SAC	Coastal site ~2.6km from the north-eastern boundary of the CCC area.
Lydden and Temple Ewell Downs SAC	Grassland site ~3.3km from the south-eastern boundary of the CCC area.
Sandwich Bay SAC	Coastal embankment ~7.3km east of the CCC area.

Site	Location relative to the CCC boundary
Folkestone to Etchinghill Escarpment SAC	Grassland site ~8.1km south of the CCC area.
Dover to Kingsdown Cliffs SAC	Grassland site ~11.1km south-east of the CCC area.
Dungeness, Romney Marsh and Rye Bay SPA	Coastal / offshore site ~13.9km south of the CCC area.
Medway Estuary and Marshes Ramsar	Coastal/estuarine site ~14.2km north-west of the CCC area.
Medway Estuary and Marshes SPA	Coastal/estuarine site ~14.2km north-west of the CCC area.
Dungeness, Romney Marsh and Rye Bay Ramsar	Coastal and wetland site ~17.2km south-west of the CCC area.
Essex Estuaries SAC	Coastal/estuarine site ~17.8km from the CCC area across the Kent/Essex strait.
Foulness (Mid-Essex Coast Phase 5) Ramsar	Coastal/estuarine site ~18.7km from the CCC area across the Kent/Essex strait.
Foulness (Mid-Essex Coast Phase 5) SPA	Coastal/estuarine site ~18.7km from the CCC area across the Kent/Essex strait.
Thames Estuary and Marshes Ramsar	Coastal/estuarine site ~19.2km north-west of the CCC area.
Thames Estuary and Marshes SPA	Coastal/estuarine site ~19.2km north-west of the CCC area.

3.2.3. Consultations with Natural England have not identified any additional sites that are likely to require assessment.

3.2.4. With regard to downstream receptors, all of the European sites downstream of the CCC area are identified in **Table 3.2**. Note that the coastal and estuarine European sites that are down-catchment from the CCC area²⁰ have not been identified as sites that are in unfavourable condition due to

²⁰ i.e. Thanet Coast and Sandwich Bay SPA / Ramsar, The Swale SPA / Ramsar, Outer Thames Estuary SPA, Thanet Coast SAC, Sandwich Bay SAC.

excessive nutrients in recent NE advice to LPAs²¹ (such that ‘nutrient neutrality’²² is being deployed or considered as mitigation).

3.2.5. **The key data for these sites are set out in Appendix A.** This provides a summary of the European sites within the scope, including:

a contextual overview of each site;
their interest features;
their condition; and
the current pressures and threats identified for each site²³.

3.2.6. These are based on the citations, the Site Improvement Plans (SIPs), information on the condition of the underlying SSSIs, and any supplementary advice provided by Natural England²⁴.

CONSERVATION OBJECTIVES

3.2.7. The Conservation Objectives and Supplementary advice documents for the SACs and SPAs benchmark Favourable Conservation Status (FCS) for each feature. Guidance²⁵ from the UK Statutory Nature Conservation Bodies (SNCBs) provides a broad characterisation of FCS, stating that it “*relates to the long-term distribution and abundance of the populations of species in their natural range, and for habitats to the long-term natural distribution, structure and functions as well as the long-term survival of its typical species in their natural range. It describes a situation in which individual habitats and species are maintaining themselves at all relevant geographical scales and with good prospects to continue to do so in the future*”.

3.2.8. The conservation objectives for the sites noted above have been revised by Natural England in recent years to improve the consistency of assessment and reporting. As a result, the high-level conservation objectives for all sites are effectively the same:

²¹ Letter from NE to LPA Chief Executives and Heads of Planning, 16 March 2022; Re. Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites.

²² Poor water quality due to nutrient enrichment from elevated nitrogen and phosphorus levels is one of the primary reasons for European sites being in unfavourable condition, and substantial reductions are needed to achieve favourable conservation status. ‘Nutrient neutrality’ is a mitigation approach that potentially allows new developments to be approved provided that there is no net increase in nutrient loading within the catchments of the affected European site.

²³ The Natural England Site Improvement Plans identify ‘pressures’, which are factors that are known to be currently affecting a site, and ‘threats’ which are factors that may not be exerting a pressure at the moment but which have the potential to do so based on local site knowledge.

²⁴ NE has published ‘*Supplementary advice on conserving and restoring site features*’ for Baston Fen SAC, Rutland Water SPA/Ramsar, Grimsthorpe SAC, and Barnack Hills and Holes SAC, which describe in more detail the range of ecological attributes which are most likely to contribute to a site’s overall integrity, and the targets each qualifying feature needs to achieve in order for the site’s conservation objectives to be met.

²⁵ JNCC (2018). *Favourable Conservation Status: UK Statutory Nature Conservation Bodies Common Statement* [online]. Available at: <https://data.jncc.gov.uk/data/b9c7f55f-ed9d-4d3c-b484-c21758cec4fe/FCS18-InterAgency-Statement.pdf>. [Accessed March 2022].

3.2.9. For SACs:

- *With regard to the SAC and the natural habitats and/or species for which the site has been designated (the ‘Qualifying Features’...), and subject to natural change; ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring [as applicable to each site];*
 - *The extent and distribution of the qualifying natural habitats;*
 - *The extent and distribution of the habitats of qualifying species;*
 - *The structure and function (including typical species) of the qualifying natural habitats;*
 - *The structure and function of the habitats of qualifying species;*
 - *The supporting processes on which the qualifying natural habitats rely;*
 - *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.*

3.2.10. For SPAs:

- *With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the ‘Qualifying Features’...), and subject to natural change; ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:*
 - *The extent and distribution of the habitats of the qualifying features;*
 - *The structure and function of the habitats of the qualifying features;*
 - *The supporting processes on which the habitats of the qualifying features rely;*
 - *The population of each of the qualifying features; and*
 - *The distribution of the qualifying features within the site.*

3.2.11. The conservation objectives for Ramsar sites are taken to be the same as for the corresponding SACs / SPAs (where sites overlap). The conservation objectives are considered when assessing the potential effects of plans and policies on the sites; information on the sensitivities of the interest features also informs the assessment. Links to the conservation objectives are provided in **Appendix A**.

3.2.12. As noted, NE has published ‘Supplementary advice on conserving and restoring site features’ for some European sites, which describe in more detail the range of ecological attributes which are most likely to contribute to a site’s overall integrity, and the minimum targets each qualifying feature needs to achieve in order to meet the site’s conservation objectives. These are considered at the screening and appropriate assessment stages, as necessary.

3.3 IN COMBINATION PLANS AND PROJECTS

PLANS

3.3.1. The plans identified by the SA provide the basis for the assessment of ‘in combination’ effects with strategic plans (see Appendix B).



PROJECTS

- 3.3.2. The assessment currently takes into account the following major projects identified by PINS or otherwise identified within approximately 20km of the relevant European sites (Table 3.3):

Table 3-3 – Major Projects considered for potential in combination effects

Project	Summary	Status	European sites in LP HRA scope potentially exposed to i/c effects*
Manston Airport	Plans to reopen and develop Manston Airport into a dedicated air freight facility able to handle at least 10,000 air cargo movements.	Determined (2022), however an appeal will be heard in the Court of Appeal later in 2024.	<ul style="list-style-type: none"> ■ Blean Complex SAC ■ Stodmarsh Ramsar ■ Stodmarsh SAC ■ Stodmarsh SPA ■ Thanet Coast and Sandwich Bay Ramsar ■ Thanet Coast and Sandwich Bay SPA ■ Outer Thames Estuary SPA ■ Margate and Long Sands SAC ■ Thanet Coast SAC ■ Sandwich Bay SAC ■ Note, project HRA identified no LSE or no adverse effects for any European sites.
Sea Link	High Voltage Direct Current (HVDC) offshore cables from Suffolk to Pegwell Bay	Pre-application	<ul style="list-style-type: none"> ■ Thanet Coast and Sandwich Bay Ramsar ■ Thanet Coast and Sandwich Bay SPA ■ Outer Thames Estuary SPA ■ Margate and Long Sands SAC ■ Thanet Coast SAC ■ Sandwich Bay SAC ■ Essex Estuaries SAC ■ Foulness (Mid-Essex Coast Phase 5) Ramsar ■ Foulness (Mid-Essex Coast Phase 5) SPA
Tilbury2	A new port facility acting alongside the existing Port of Tilbury. Extension of existing jetty facilities and the dredging of berth pockets in the River Thames.	Decided (2020)	<ul style="list-style-type: none"> ■ Thames Estuary and Marshes Ramsar ■ Thames Estuary and Marshes SPA ■ Note, project HRA identified no adverse effects for any European sites

Project	Summary	Status	European sites in LP HRA scope potentially exposed to i/c effects*
Wheelabrator Kemsley Generating Station (K3) and Wheelabrator Kemsley North (WKN) Waste to Energy Facility (Decided)	Power upgrade and increase in tonnage throughput to the existing Kemsley Generating Station (K3) to allow for generation of up to 75MW; and a new Wheelabrator Kemsley North (WKN) waste to energy facility	Decided (2021)	<ul style="list-style-type: none"> ■ The Swale Ramsar ■ The Swale SPA ■ Outer Thames Estuary SPA ■ Medway Estuary and Marshes Ramsar ■ Medway Estuary and Marshes SPA ■ Thames Estuary and Marshes Ramsar ■ Thames Estuary and Marshes SPA ■ Note, project HRA identified no significant effects for any European sites
Lower Thames Crossing (Recommendation)	New road crossing connecting Kent and Essex between Gravesham and East Tilbury.	Recommendation	<ul style="list-style-type: none"> ■ Thames Estuary and Marshes Ramsar ■ Thames Estuary and Marshes SPA ■ Note, the project HRA identified no effect pathways for any other sites in the CCC LP HRA scope, including The Swale SPA/Ramsar or the Medway Estuary and Marshes SPA/Ramsar.
Cleve Hill Solar Park (Decided)	Solar photovoltaic array, and electrical storage and connection infrastructure at Graveney Marshes, Faversham.	Decided (2020)	<ul style="list-style-type: none"> ■ Blean Complex SAC ■ Thanet Coast and Sandwich Bay Ramsar ■ Thanet Coast and Sandwich Bay SPA ■ The Swale Ramsar ■ The Swale SPA ■ Outer Thames Estuary SPA ■ Note, the project HRA identified no LSE for all sites except The Swale SPA/Ramsar (no adverse effect for these sites concluded).

* Note, this draws on any HRAs for these schemes that are publicly available; it is assumed that if a European site is not considered by the project-level screening then that project has ‘no effect’ on that site (and no possibility of ‘in combination’ effects with the Local Plan).

4 PREFERRED OPTIONS 'SCREENING'

4.1 PREFERRED OPTIONS PLAN SUMMARY

- 4.1.1. The draft Canterbury District Local Plan to 2040²⁶ (Local Plan), together with the adopted Kent Minerals and Waste Local Plan, and any made (adopted) Neighbourhood Plans, will form the Development Plan for the area²⁷.
- 4.1.2. The Local Plan outlines the long-term vision for the district and 12 strategic objectives setting out how the vision will be achieved. The Local Plan identifies locations for delivering housing and other strategic development needs such as employment, retail, leisure, community and transport development. It contains a Spatial Strategy to deliver this vision. The Local Plan sets out the amount and location of new development, and how places will change and be shaped throughout the Local Plan period and beyond.
- 4.1.3. The Draft Canterbury District Local Plan to 2040 (Regulation 18) (Draft Local Plan) includes:
- a housing requirement that will deliver 1,149 houses per annum, equivalent to 24,129 dwellings between 2020 and 2040;
 - a requirement for 141,100 sqm of employment floorspace, 414 sqm floorspace for convenience retail use, and 5,290 sqm floorspace for comparison retail use;
- policies that provide geographical direction for development (typically specific site allocations, but also policies that set out implicit locational preferences for certain activities or development types prescribed through (for example) opportunity areas);
- various district wide strategic policies and development management policies that set out the Council's tests or expectations when considering proposals, such as safeguarding policies, environmental protection policies or policies relating to design or other qualitative criteria.
- 4.1.4. These aspects could affect European sites on their own, through typical development-related mechanisms operating at the local scale in relation to specific allocations (e.g. noise, lighting, etc.; see Table 3.1); or collectively by exacerbating regional pressures (e.g. pressures on water supply or sewerage treatment).

²⁶ The plan period formally covers 1 April 2020 to 31 March 2041, covering a 21 year plan period in total. References to 2020-2040 in this report should be taken as references to the full plan period.

²⁷ Note, HRAs for these plans have been completed (where required) by the relevant competent authorities, and are accounted for as necessary by the HRA of the Preferred Options. These plans are also considered for their 'in combination' effects with the Local Plan, although it should be noted that the Local Plan is designed to operate

4.2 REVIEW / INITIAL ‘SCREENING’ OF PLAN COMPONENTS: POLICIES AND ALLOCATIONS

REVIEW OF PREFERRED OPTIONS POLICIES

- 4.2.1. When considering the likely effects of a policy, it is recognised that some policy ‘types’ cannot usually result in impacts on any European sites. Different guidance documents suggest various classification and referencing systems to help identify those policies that can be ‘screened out’ on that basis; the general characteristics of these policy types are summarised in **Table 4.1**.

Table 4-1 - Policy ‘types’ that can usually be screened out

Broad Policy Type	Notes
General statements of policy / aspiration	The European Commission recognises* that plans or plan components that are general statements of policy or political aspirations cannot have significant effects; for example, general commitments to sustainable development. This may include policies that support development or other changes but which are too general (e.g. locations, scale, quantum etc. not specified below the geographical level of the plan) to allow any specific assessments of effects, provided that the type of development proposed is not such that significant effects would be unavoidable regardless of location etc.
General design / guidance criteria or policies that cannot lead to or trigger development	A general ‘criteria based’ policy expresses the tests or expectations of the plan-making body when it comes to consider proposals, or relates to design or other qualitative criteria which do not themselves lead to development (e.g. controls on building design; requirements for affordable homes; etc); however, policies with criteria relating to specific proposals or allocations should not be screened out.
External plans / projects	Plans or projects that are proposed by other plans or permissions regimes and which are referred to in the plan being assessed for completeness (for example, Highways Agency road schemes; specific waste development proposals promoted by a County Minerals and Waste Plan; DCO applications being advanced separately from the plan at hand); however, these would be considered as part of the plan-level ‘in combination’ assessment.
Environmental protection policies	Policies designed to protect the natural or built environment will not usually have significant or adverse effects (although they may often require modification if relied on to provide sufficient safeguards for other policies).
Policies which make provision for change but which could have no conceivable effect	Policies or proposals that cannot affect a European site (due to there being no impact pathways and hence no effect; for example, proposals for new cycle path several kilometres from the nearest European site; criteria for a development’s appearance; etc.) or which cannot undermine the conservation objectives, either alone or in combination, if impact pathways exist.

* EC (2000). Managing Natura 2000 sites: the provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC

- 4.2.2. It must be noted that it is inappropriate to uncritically apply a policy classification tool (as in **Table 4.1**) to all policies of a certain type. There will be some occasions when a policy or similar may have

potentially significant effects, despite being of a ‘type’ that would normally be screened out. Moreover, many policies will have a number of elements to them which may meet different criteria.

- 4.2.3. The criteria in **Table 4.1** have been applied to a review of the Preferred Options policies within the Local Plan to identify the following broad policy groups:
- **‘No effect’** policies: policies that will have ‘no effect’ (i.e. policies that, if included as drafted, self-evidently would not have any effect on a European site due to the type of policy or its operation; for example, a policy controlling town centre shop signage; a policy setting out sustainable development criteria that developments must meet). Note that ‘no effect’ policies cannot have in-combination effects.
 - **‘No likely significant effect’** policies: policies where impact pathways exist but the effects will not be significant (alone or in-combination).
 - **‘Likely significant effect’** policies: policies where the precise effects on European sites (either alone or in combination) are uncertain or significant, or where measures have been incorporated into the policy to mitigate potential effects, and hence require additional investigation (appropriate assessment). Note that further investigation will often demonstrate that there is no significant effect or allow the suitability of any incorporated mitigation measures to be confirmed.
- 4.2.4. Reflecting these policy groups, a colour coding system (see **Table 4.2**) has been used for the review and initial ‘screening’ of the Local Plan policies in **Appendix B**.

Table 4-2 - Colour coding for ‘screening’ of Local Plan policies

	No effect or no LSE – policy will not or cannot affect any European sites and can therefore be screened out (subject to a brief review of the final policy prior to adoption).
	Policies with mitigating/moderating elements that do not have significant effects but which are relied on (at least in part) to ensure that significant or significant adverse effects from specific pathways do not occur; these are examined through AA.
	Policies that have potential pathways for effects that require examination through appropriate assessment; note, this does not imply such policies will have adverse effects or even (potentially) significant effects; rather it is an assessment flag.

- 4.2.11. It should be noted that the inclusion of a policy in the ‘yellow’ category does not mean that significant effects are inevitable since in many instances the assessments reflect uncertainties that need to be explored through further analysis (and it would be possible to undertake an appropriate assessment stage and still conclude (following a further screening) that there will be no significant effects).
- 4.2.12. The review considers the policies collectively and individually, and so takes the non-specific cross-cutting protective policies within the plan into account although cross-cutting or overarching policies are not relied on where specific mitigation for specific effects is considered necessary for the policy (this is particularly relevant for policies that provide broad or non-specific support for development but which are screened out because they do not define or direct particular developments or activities; in these instances the plan’s protective policies will form a key part of the overall decision-making process). The review also considers any internal tensions within the plan that may be relevant to HRA.

- 4.2.13. In summary, the vast majority of the planning policies contained in the Preferred Options Local Plan are categorised as ‘no effect’ or ‘no significant effect’ policies (see **Appendix B**). However, the policies relating to the overall quantum of development, and any policies with ‘mitigating’ elements that might be relied on to ensure adverse effects do not occur are considered through appropriate assessment.

REVIEW OF PREFERRED OPTIONS SITE ALLOCATIONS

- 4.2.14. The allocation sites proposed by the Council have been reviewed to identify those which (if developed) could result in significant effects on a European site that are not obviously avoidable with the standard project-level measures that would be required to meet existing regulatory regimes. The assessment largely focuses on the identification of specific effects that might be associated with specific allocations (and which may therefore require the inclusion of allocation-specific mitigation within the plan) rather than the broader ‘quantum of development’ effects²⁸. The risk of effects is obviously strongly dependent on how a particular development is implemented at the project stage and in most cases potential effects can be avoided using best-practice and standard scheme-level avoidance measures which do not necessarily need to be specified for each allocation.
- 4.2.15. In summary, none of the Preferred Options allocations will have significant effects alone due to their small size, the habitats affected, the absence of impact pathways, and their distance from the nearest European sites, with the possible exception of the following:
- 4.2.16. Two allocations within 500m of a European site:
- Policy R5 Bread and Cheese Field allocates approximately 150 new dwellings within 180m of the Stodmarsh SAC/SPA/Ramsar at its closest point.
 - Policy R6 Land at Hersden allocates approximately 18 new dwellings within ~490m of the Stodmarsh SAC/SPA/Ramsar at its closest point
 - Policy C12 Land north of the University of Kent allocates approximately 2000 new dwellings to a site that is ~200m from Blean Complex SAC at its closest point. C/SPA/Ramsar at its closest point.
- 4.2.17. Allocations that may affect ‘functionally linked land’ (FLL) associated with some sites (see Section 4.3 below).

4.3 REVIEW / ‘SCREENING’ OF EUROPEAN SITES

- 4.3.1. European sites or interest features within a study area can often be excluded from further assessment at an early stage in the assessment process (‘screened out’) because the plan or project will self-evidently have either ‘no effect’ or ‘no significant effect’ on these sites (i.e. the interest features are not sensitive to the environmental changes associated with the plan or project; or will not be exposed to those changes due to the absence of any reasonable impact pathways); or,

²⁸ Effects due to the overall quantum of development are essentially a within-plan ‘in combination’ effect and are considered in relation to specific European sites in Section 4.3.

if both exposed and sensitive, the effects of the environmental changes will clearly be inconsequential to the achievement of the conservation objectives.

- 4.3.2. The following sections provide a brief summary of the screening of the European sites and their interest features based on the baseline data summarised in Section 3 and the policies and proposals of the Preferred Options Draft Local Plan. It should be noted that this aspect of the screening process is a 'low bar', with sites, aspects or features only 'screened out' if they will self-evidently be unaffected by the Local Plan (i.e. it is aiming to identify those aspects that will clearly have 'no effect' or 'no significant effect' (alone or in combination) due to an absence of impact pathways). It does not attempt a detailed quantification if significant effects via particular pathway cannot be simply or self-evidently excluded (this is completed at an 'appropriate assessment' stage, when mitigation is also accounted for).
- 4.3.3. When screening it is appropriate to assume that all relevant lower-tier consents and permissions (etc.) will be correctly assessed and controlled, and that any activities directly or indirectly supported by the Local Plan will adhere to the relevant legislative and regulatory requirements and all normal best-practice (e.g. it would be inappropriate to assume that normal controls on, for example, the installation of a new discharge to a watercourse would not be correctly followed). The screening also recognises that there are some aspects over which the Local Plan will have no control (e.g. agricultural practices).

RECREATIONAL PRESSURE

- 4.3.4. Many European sites will be vulnerable to some degree of impact as a result of recreational pressure, although the effects of recreational pressure are complex and very much dependent on the specific conditions and interest features at each site. For example: some bird species are more sensitive to disturbance associated with walkers or dogs than others; some habitats will be more sensitive to trampling or mechanical disturbance than others; some sites will be more accessible than others.
- 4.3.5. The most typical mechanisms for recreational effects are through direct damage of habitats, or disturbance of certain species. Damage will most often be accidental or incidental, but many sites are particularly sensitive to soil or habitat erosion caused by recreational activities and require careful management to minimise any effects (for example, through provision and maintenance of 'hard paths' (boardwalks, stone slabs etc.) and signage to minimise soil erosion along path margins).
- 4.3.6. Disturbance of species due to recreational activities can also be a significant problem at some sites, although the relationship (again) is highly variable and depends on a range of factors including the species, the time of year and the scale, type and predictability of disturbance. Most studies have focused on the effects on birds, either when breeding or foraging. For example, a long-term monitoring project by Natural England on the Thanet Coast has found that turnstones (a shoreline-feeding waterbird) are particularly vulnerable to disturbance from dogs, which interrupts their feeding behaviour and can prevent them from gaining sufficient body fat for overwintering or migration. Finney *et al.* (2005), meanwhile, noted that re-surfacing the Pennine Way significantly reduced the impact of recreational disturbance on the distribution of breeding Golden plover, by encouraging walkers to remain on the footpath.
- 4.3.7. In contrast, some species are largely unaffected by human disturbance (or even benefit from it) which can result in local or regional changes in the composition of the fauna. The scale, type and

predictability of disturbance is also important; species can become habituated to some disturbance (e.g. noise), particularly if it is regular or continuous. Unpredictable disturbance is most problematic.

- 4.3.8. Most recreational activities with the potential to affect European sites are ‘casual’ and pursued opportunistically (e.g. walking, walking dogs, riding) rather than structured (e.g. organised group activities or trips to specific discrete attractions), which means that it can be difficult to quantify or predict either the uptake or the impacts of these activities on European sites and (ultimately) harder to control or manage effects. It also means that it is difficult to explore in detail all of the potential aspects of visitor pressure at the strategy level. However, it is possible for plans and strategies to influence recreational use of European sites through the planning process, for example by increasing the amount of green space required within or near developments if potentially vulnerable European sites are located nearby.
- 4.3.9. Attempts to predict the effects of increased recreation on European sites that may be associated with development or allocations derived from strategic plans typically aim to identify the distance within which a certain percentage of visits originate. These are then used to identify ‘buffer zones’ or ‘zones of influence’ within which new development would be considered likely to have significant effects on a site.
- 4.3.10. However, it is important to note that there is no standard method for defining the ‘zone of influence’ and a range of approaches have been adopted for different sites. For example, in a study for Canterbury City Council, Fearnley *et al.* (2014) suggested several possible options for a ‘zone of influence’ around the Thanet Coast SAC, on which mitigation proposals could be based; these ranged from 4.9km (the distance within which 75% of all ‘regular visitors’²⁹ live) to 7.2km (the distance within which 90% of all ‘regular visitors’ live), to 9.8km (the distance within which 75% of all visitors live). Indeed, Fearnley *et al.* (2014) note that “*The identification of a ‘zone of influence’ is really an exercise in identifying a boundary which seems pragmatic, representative of visitor patterns to the site, the physical features of the site, infrastructure, current housing distribution and the nature of the surrounding area*”. The South-East Devon European Site Mitigation Strategy (Liley *et al.* 2014) identifies several alternative approaches for determining the a ‘zone of influence’ around the Exe Estuary SPA (and hence the appropriate area for seeking developer contributions towards mitigation); these ranged from 7.8km from the SPA boundary to 14.3km, with a distance of 10km ultimately selected for the purposes of seeking developer contributions.
- 4.3.11. Probably the most common metric now used for ‘buffer zones’ or ‘zones of influence’ is the distance within which approximately 75% of visitors live. This is obviously strongly influenced by the location of the nearest large population centres (i.e. sites that are further from population centres will inevitably have larger 75% distances) but based on various surveys over recent years the distance within which 75% of visitors live is typically less than 7km (although coastal sites are often more attractive with larger distances). Some visitor surveys (particularly for sites that are regional attractions, hence likely to attract occasional visitors travelling relatively far) use the area within

²⁹ People visiting at least once a week.

which 90% of ‘regular visitors’ (i.e. once a week or more) live; this results in smaller Zols (vs the 75% metric) that reflect the relatively greater impact of these users.

- 4.3.12. Visitor surveys have been previously undertaken for some sites within the scope, which provide a reasonable and robust basis for identifying locations within which residential development might result in ‘significant effects’ alone or in combination.

Table 4-3 - Summary of European site screening in relation to visitor pressure

Site	Notes	Screen in?
Blean Complex SAC	Site is within district and close to allocations.	Yes
Stodmarsh Ramsar	Visitor pressure is not identified as an issue affecting the site, and the wetland nature of the site and limited access ensures visitor pressure is appropriately controlled and managed; increasing the population of Canterbury is likely to increase the number of visitors to this site, but the managed nature of access (including to the RSPB reserve) will ensure that this does not undermine the conservation objectives for the site. Considered in relation to specific allocations.	Yes
Stodmarsh SAC	As for Stodmarsh Ramsar	Yes
Stodmarsh SPA	As for Stodmarsh Ramsar	Yes
Tankerton Slopes and Swalecliffe SAC	Parts of the site are known to be well-used by dog walkers.	Yes
Thanet Coast and Sandwich Bay Ramsar	As per the Thanet Coast and Sandwich Bay SPA; the Zol for this site overlaps with the CCC area.	Yes
Thanet Coast and Sandwich Bay SPA	The Thanet Coast “ <i>Strategic Access Management and Monitoring Plan</i> ” (SAMM) ³⁰ sets the Zol for the Thanet section of the Thanet Coast and Sandwich Bay SPA at 7.2km, which covers a proportion of the CCC area.	Yes
The Swale Ramsar	As per The Swale SPA.	Yes
The Swale SPA	The North Kent SAMM ³¹ sets the Zol for The Swale SPA, Medway Estuary and Marshes SPA and Thames Estuary and Marshes SPA at 6km. The Zol for The Swale SPA covers several allocations in the north of Canterbury district.	Yes

³⁰ Available at: <https://www.thanet.gov.uk/wp-content/uploads/2018/03/Thanet-DC-SAMM-MAIN-REPORT-Final-21st-April-2016.pdf>

³¹ Available at: <https://northkent.birdwise.org.uk/about/>

Site	Notes	Screen in?
Outer Thames Estuary SPA	The site is partly located within the district boundary at Whitstable Harbour but the interest features will not be exposed to disturbance effects due to the Draft Local Plan, or effects that are within the control of the Council. Likely significant effects (alone or in combination) are not identified.	No
Wye and Crundale Downs SAC	Although much of the site is 'access land' visitor pressure is not identified as a pressure or threat for this site in the SIP. There is no public parking close to the site and the closest allocations in the CCC area are over 7km away. Potentially notable increases in visitor numbers as a result of the CCC plan are very unlikely and significant effects (alone or in combination) will not therefore occur.	No
Margate and Long Sands SAC	This marine SAC is approximately 1.1km offshore from the northern coast of the CCC area. It is designated for its sub-tidal sandbanks. It will not be exposed or sensitive to the likely effects of the CCC plan (no effects likely, and so no potential for 'in-combination' effects to occur).	No
Parkgate Down SAC	There is no public access to this site, and visitor pressure is not identified as a pressure or threat for this site in the SIP. There is no public parking close to the site and the closest allocations in the CCC area are over 9km away. Potentially notable increases in visitor numbers as a result of the CCC plan are very unlikely and significant effects (alone or in combination) will not therefore occur.	No
Thanet Coast SAC	As per the Thanet Coast and Sandwich Bay SPA; the Zol for this site overlaps with the CCC area. However, the features of the site are not considered sensitive to the typical recreational pressure associated with housing development.	No
Lydden and Temple Ewell Downs SAC	Visitor pressure (notably dog-walking) is identified as a threat in the SIP. However, visitor surveys undertaken for the Dover District Local Plan in 2021 ³² identified a 2.53km Zol for the site; the closest allocations in the CCC area are over 9km away. Potentially notable increases in visitor numbers as a result of the CCC plan are very unlikely and significant effects (alone or in combination) will not therefore occur.	No

³² Blackwood Bayne Ltd (2021), Final Visitor Surveys: Lydden Temple Ewell SAC and Dover to Kingsdown Cliffs SAC July – August 2021. Available at: <https://www.doverdistrictlocalplan.co.uk/uploads/Submission-Documents/NEEB05-Lydden-Temple-Ewell-SAC-and-Dover-to-Kingsdown-Cliffs-SAC-Visitor-surveys.PDF>

available at: <https://moderngov.dover.gov.uk/documents/s48939/Appendix%20-%20Habitat%20Regulations%20Assessment.pdf>

Site	Notes	Screen in?
Sandwich Bay SAC	The Dover District Council SAMP for the Thanet Coast and Sandwich Bay SPA ³³ sets the Zol for the Thanet Coast and Sandwich Bay SPA and Sandwich Bay SAC at 9km from the entrance to the Sandwich Bay estate; this Zol does not overlap with the CCC area.	No
Folkestone to Etchinghill Escarpment SAC	Although much of the site is 'access land' visitor pressure is not identified as a pressure or threat for this site in the SIP, although recent work for Dover District Local Plan has indicated that this may be affecting the site. The closest allocations in the CCC area are over 15km away. Potentially notable increases in visitor numbers as a result of the CCC plan are very unlikely and significant effects (alone or in combination) will not therefore occur.	No
Dover to Kingsdown Cliffs SAC	Visitor pressure is not identified as a pressure or threat for this site in the SIP although recent work for Dover District Local Plan has indicated that this may be affecting the site. The SAC is predominantly managed by the National Trust who have committed to an extensive programme of on-site visitor management and access control measures to minimise impacts. Visitor surveys undertaken for the Dover District Local Plan in 2021 ³⁴ suggest a potentially substantial Zol for this site (up to 61.08km for 75% of all visitors) although this reflects the nature of the White Cliffs as a regional attraction; the '90% of regular visitors' metric is up to 15.98km, depending on location. The closest CCC allocation to the site is a small (20 dwellings) site at Barham approximately 14.5km from the site; all other allocations are over 16km. Consequently, potentially notable increases in visitor numbers as a result of the CCC plan are very unlikely and significant effects (alone or in combination) will not therefore occur.	No
Dungeness, Romney Marsh and Rye Bay SPA	The closest areas of this site are the offshore areas designated for the foraging habitat that they provide for terns breeding on the shingle of the Dungeness peninsula; these areas will not be sensitive to recreational pressure. The closest terrestrial areas of the site are over 15km from the CCC boundary (and over 25km from the nearest allocations). Potentially notable increases in visitor numbers as a result of the CCC plan are very unlikely and significant effects (alone or in combination) will not therefore occur.	No

³³ Available at: <https://www.doverdistrictlocalplan.co.uk/uploads/pdfs/thanet-coast-and-sandwich-bay-spa-samm-evidence-report-sept-2022.pdf>

³⁴ Reported in: LUC (2022). Dover District Local Plan (Reg 19) Habitats Regulations Assessment. Report for Dover District Council; available at: <https://moderngov.dover.gov.uk/documents/s48939/Appendix%20-%20Habitat%20Regulations%20Assessment.pdf>

Site	Notes	Screen in?
Medway Estuary and Marshes Ramsar	As per Medway Estuary and Marshes SPA; the Zol for this site does not overlap with the CCC area.	No
Medway Estuary and Marshes SPA	The North Kent SAMM ³⁵ sets the Zol for The Swale SPA, Medway Estuary and Marshes SPA and Thames Estuary and Marshes SPA at 6km. The Zol for this site does not overlap the CCC area.	No
Dungeness, Romney Marsh and Rye Bay Ramsar	As for Dungeness, Romney Marsh and Rye Bay SPA.	No
Essex Estuaries SAC	As per Foulness (Mid-Essex Coast Phase 5) SPA; the Zol for this site does not overlap with the CCC area.	No
Foulness (Mid-Essex Coast Phase 5) Ramsar	As per Foulness (Mid-Essex Coast Phase 5) SPA; the Zol for this site does not overlap with the CCC area.	No
Foulness (Mid-Essex Coast Phase 5) SPA	The Essex Coast <i>Recreational disturbance Avoidance and Mitigation Strategy</i> (RAMS) ³⁶ defines different Zols for the SPAs associated with the Essex estuaries. The Zol for Foulness (Mid-Essex Coast Phase 5) SPA is 13km and does not overlap with the CCC area (and in reality travel distance would be substantially greater to the Essex sites from the CCC area, and the Essex Coast RAMS is not applied to LPAs south of the Thames).	No
Thames Estuary and Marshes Ramsar	As per Thames Estuary and Marshes SPA; the Zol for this site does not overlap with the CCC area.	No
Thames Estuary and Marshes SPA	As per Medway Estuary and Marshes SPA; the Zol for this site does not overlap with the CCC area. Note that the Essex Coast RAMS ³⁷ sets the Zol for the Essex units of this site at 8.1km, although this is not applied to LPAs south of the Thames).	No

URBANISATION

- 4.3.13. Urbanisation is generally used as a collective term covering a suite of often disparate risks and impacts that occur due to increases in human populations near protected sites. Typically, this would include aspects such as fly-tipping or vandalism, although the effects of these aspects again depend on the interest features of the sites: for example, predation of some species by cats is known to be sizeable (Woods *et al.* 2003) and can be potentially significant for some European sites.

³⁵ Available at: <https://northkent.birdwise.org.uk/about/>

³⁶ Available at: <https://www.chelmsford.gov.uk/media/uj2nfqpl/essex-coast-rams-habitats-regulations-assessment-strategy-document-2018-2038.pdf>

³⁷ Available at: <https://www.chelmsford.gov.uk/media/uj2nfqpl/essex-coast-rams-habitats-regulations-assessment-strategy-document-2018-2038.pdf>

Recreational pressure is arguably one type of effect associated with urbanisation, although this is usually considered separately as it is less closely associated with proximity; as a broad guide, urbanisation effects are more likely when developments (etc.) are within a few hundred metres of a designated site, whereas people will typically travel further for recreation.

- 4.3.14. Where sensitive sites are involved, development buffers of around 400m are typically used to minimise the effects of urbanisation: for example, Natural England has identified a 400m zone around the Chichester and Langstone Harbours SPA within which housing development should not be located due to the potential effects of urbanisation (particularly, the risk of chick predation by cats, which cannot be mitigated). Similarly, LPAs near the Thames Basin Heaths SPA have adopted a 400m zone around the SPA boundary where there is a presumption against new residential development as the impact on the SPA is considered likely to be adverse. For screening purposes therefore it is assumed that proximate urbanisation effects will not occur over 1km from a site.
- 4.3.15. It should be noted that the bird species at these sites are particularly sensitive due to their breeding behaviours; the qualifying features of other sites may have a substantially lower exposure to potential effects due to their behavioural characteristics.
- 4.3.16. Only two allocations are within 500m of a European site:
- Policy R12 Bread and Cheese Field allocates approximately 150 new dwellings within 180m of the **Stodmarsh SAC/SPA/Ramsar** at its closest point.
 - Policy R13 Land at Hersden allocates approximately 18 new dwellings within ~490m of the **Stodmarsh SAC/SPA/Ramsar** at its closest point.
- 4.3.17. These sites are therefore considered further. There will be no significant effects via this aspect, alone or in combination, for any other European sites.

ATMOSPHERIC POLLUTION

- 4.3.18. A number of pollutants have a negative effect on air quality; however, the most significant and relevant to habitats and species (particularly plant species) are the primary pollutants sulphur dioxide (SO₂, typically from combustion of coal and heavy fuel oils although this has declined substantially), nitrogen oxides (NO_x, mainly from vehicles) and ammonia (NH₃, principally from agriculture, although catalytic converters are a significant source), which (together with secondary aerosol pollutants³⁸) are deposited as wet or dry deposits. These pollutants affect habitats and species mainly through acidification and eutrophication.

³⁸ Secondary pollutants are not emitted, but are formed following further reactions in the atmosphere; for example, SO₂ and NO_x are oxidised to form SO₄²⁻ and NO₂⁻ compounds; ozone is formed by the reaction of other pollutants (e.g. NO_x or volatile organic compounds) with UV light; ammonia reacts with SO₄²⁻ and NO₂⁻ to form ammonium (NH₄⁺).

- 4.3.19. Acidification increases the acidity of soils, which can directly affect some organisms and which also promotes leaching of some important base chemicals (e.g. calcium), and mobilisation and uptake by plants of toxins (especially metals such as aluminium).
- 4.3.20. Air pollution contributes to eutrophication within ecosystems by increasing the amounts of available nitrogen (N)³⁹. This is a particular problem in low-nutrient habitats, where available nitrogen is frequently the limiting factor on plant growth, and results in slow-growing low-nutrient species being out-competed by faster growing species that can take advantage of the increased amounts of available N.
- 4.3.21. Overall in the UK, there has been a significant decline in SO_x and NO_x emissions in recent years and a consequential decrease in acid deposition. In England, SO_x and NO_x have declined by 97% and 72% respectively since 1970 (Defra, 2018) which is the result of a switch from coal to gas, nuclear and renewables for energy generation, and increased efficiency and emissions standards for cars. These emissions are generally expected to decline further in future years. In contrast, emissions of ammonia have remained largely unchanged; they have declined by 10% in England since 1980 (Defra, 2018), but since 2008 have started to increase slightly.
- 4.3.22. The effect of SO_x and NO_x decreases on ecosystems has been marked, particularly in respect of acidification; the key contributor to acidification is now thought to be deposited nitrogen, for which the major source (ammonia emissions) has not decreased significantly. Indeed, eutrophication from N-deposition (again, primarily from ammonia) is now considered the most significant air quality issue for many habitats.
- 4.3.23. In practice, the principal source of air pollution associated with the Local Plan will be related to changing patterns of vehicle use due to the promotion of new development (since the Local Plan does not provide for any new significant point-sources). The Department of Transport's *Transport Analysis Guidance*⁴⁰ states that "*beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant*" and therefore this distance is used to determine the potential exposure of the European sites to any local effects associated with the Local Plan. Environment Agency (EA) guidance (EA, 2007) also states that "*Where the concentration within the emission footprint in any part of the European site(s) is less than 1% of the relevant long-term benchmark (EAL, Critical Level or Critical Load), the emission is not likely to have a significant effect alone or in combination irrespective of the background levels*".
- 4.3.24. Highways England's *Design Manual for Roads and Bridges* (DMRB) sets out an approach for assessing the effect of emissions from specific road schemes on designated sites; this suggests that a quantitative air quality assessment may be required if a European site is within 200m of an affected road and the predicted change in annual average daily traffic (AADT) is over 1,000.
- 4.3.25. This approach has some limitations when considering the effects of a Local Plan (rather than a specific road scheme) although in the absence of any other specific guidance or thresholds it has

³⁹ Nitrogen that is in a form that can be absorbed and used by plants.

⁴⁰ See <http://www.dft.gov.uk/webtag/documents/expert/unit3.3.3.php#013>; accessed 15/06/14.

typically been applied to main roads⁴¹ within 200m of a European site, with case law⁴² indicating that changes in AADT on particular roads should be determined ‘in combination’ with other plans and projects.

- 4.3.26. GIS analysis suggests that the following European sites have component units within 200m of a strategic road that is within 20km⁴³ of the CCC area:

Table 4-4 - European sites (and component SSSIs) within 20km of the Canterbury City Council area with main roads within 200m

European site(s)	Relevant SSSIs and A roads
Blean Complex SAC	Church Woods SSSI - A290 Ellenden Wood SSSI - A290
Thanet Coast and Sandwich Bay Ramsar; Thanet Coast and Sandwich Bay SPA; Thanet Coast SAC	Thanet Coast SSSI - A28 in Margate
Thanet Coast and Sandwich Bay Ramsar; Thanet Coast and Sandwich Bay SPA; Thanet Coast SAC	Sandwich Bay to Hacklinge Marshes SSSI - A299 in Ramsgate
Thanet Coast and Sandwich Bay Ramsar; Thanet Coast and Sandwich Bay SPA; Sandwich Bay SAC	Sandwich Bay to Hacklinge Marshes SSSI - A256 in Great Stonar
Thanet Coast and Sandwich Bay Ramsar	Sandwich Bay to Hacklinge Marshes SSSI - A258 at Finglesham
Lydden and Temple Ewell Downs SAC	Lydden and Temple Ewell Downs SSSI - A2 north-west of Dover
Dover to Kingsdown Cliffs SAC	Dover to Kingsdown Cliffs SSSI - A2 in Dover

⁴¹ i.e. trunk roads, A-roads and some B-roads. Changes in the number of vehicles using minor roads in the region will be too small to meaningfully assess using the industry standard approaches to AADT modelling that can be applied at the strategy-level (i.e. without substantial additional data collection including field monitoring at specific locations – this may be appropriate for a specific development or allocation but not for traffic-growth generally).

⁴² Wealden District Council v. Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority [2017] EWHC 351.

⁴³ Note, 20km is currently being used as a threshold as the contribution of Local Plans to AADT increases beyond this distance is almost always negligible; this approach is being reviewed alongside the transport and air quality modelling that CCC is completing in preparation for the Regulation 19 submission. The current screening conclusions are therefore indicative only at this stage, with anticipated road usage based on professional judgement and proxy ‘journey to work’ data.

Folkestone to Etchinghill Escarpment SAC	Folkestone to Etchinghill Escarpment SSSI - A20/M20 at Folkestone
Dungeness, Romney Marsh and Rye Bay SPA; Dungeness, Romney Marsh and Rye Bay Ramsar	Dungeness, Romney Marsh and Rye Bay SSSI - A259 at Dymchurch / St. Mary's Bay
Dungeness, Romney Marsh and Rye Bay Ramsar	Dungeness, Romney Marsh and Rye Bay SSSI - A2070 at Hamstreet
Medway Estuary and Marshes Ramsar; Medway Estuary and Marshes SPA; The Swale Ramsar; The Swale SPA	Medway Estuary and Marshes SSSI - A249 at the Sheppey Crossing The Swale SSSI - A249 at the Sheppey Crossing

4.3.27. Note, for most wetland habitats (particularly waterbodies) eutrophication via agricultural run-off and flood water is overwhelmingly more significant than air pollution, and available-N is rarely a limiting factor in these ecosystems; aquatic and estuarine/marine sites may therefore be screened out due to the limited sensitivity of the features.

Table 4-5 - Summary of European site screening in relation to air quality

Site	Notes	Screen in?
Blean Complex SAC	Site sensitive to air quality changes; A290 within 200m.	Yes
Stodmarsh Ramsar	Site habitats have a low sensitivity to eutrophication from atmospheric pollution. The site is over 200m from the nearest classified numbered road; the roads immediately adjacent to the site are minor roads that will self-evidently not see substantial increases in traffic due to the Local Plan. The site will not therefore be exposed to potentially significant air quality changes associated with traffic alone or in combination with other plans or projects.	No
Stodmarsh SAC	As per Stodmarsh Ramsar.	No
Stodmarsh SPA	As per Stodmarsh Ramsar.	No
Tankerton Slopes and Swalecliffe SAC	Features are not considered sensitive to air quality	No
Thanet Coast and Sandwich Bay Ramsar	Site habitats generally have a low sensitivity to eutrophication from atmospheric pollution, with the exception of the sand dune habitats of Sandwich Bay (which are over 200m from the nearest classified numbered road). The roads within 200m of the site on the Thanet peninsula (i.e. in Margate / Broadstairs) are only close to the intertidal supporting habitats (not sensitive to air quality changes). The site habitats within 200m of the A258 at Finglesham and the A256 at Great Stonar are predominantly aquatic or grazing pastures, and will have a low sensitivity also; these roads are also unlikely to see potentially notable increases in traffic due to the Local Plan, given their location and negligible value as through-routes to or from the CCC area.	No
Thanet Coast and Sandwich Bay SPA	As per Thanet Coast and Sandwich Bay Ramsar (although note that the SPA is not within 200m of the A258 at Finglesham).	No
The Swale Ramsar	Site habitats generally have a low sensitivity to eutrophication from atmospheric pollution, with the exception of some saltmarsh habitats. However, the only main road within 200m is the A249 crossing to Sheppey which will not see potentially notable increases in traffic due to the Local Plan, given the location and negligible value as through-routes to or from the CCC area.	No
The Swale SPA	As per The Swale Ramsar.	No
Outer Thames Estuary SPA	Not sensitive to eutrophication from atmospheric pollution.	No
Wye and Crundale Downs SAC	The site is over 200m from the nearest classified numbered road; the roads near the site are minor roads that will self-evidently not see substantial increases in traffic due to the Local Plan.	No
Margate and Long Sands SAC	Not sensitive to eutrophication from atmospheric pollution.	No

Site	Notes	Screen in?
Parkgate Down SAC	The site is over 200m from the nearest classified numbered road; the roads near the site are minor roads that will self-evidently not see substantial increases in traffic due to the Local Plan.	No
Thanet Coast SAC	Not sensitive to eutrophication from atmospheric pollution.	No
Lydden and Temple Ewell Downs SAC	Site sensitive to air quality changes; A2 within 200m.	Yes
Sandwich Bay SAC	There are two A- or B-roads within 200m of Sandwich Bay SAC, namely the A256 between Sandwich and Cliff's End, and the A299 in Ramsgate. However, these roads are some distance from the emissions-sensitive features of the SAC: the dune systems are primarily associated with the section of coast between the Great Stour estuary and Deal, and so are at least a kilometre from the nearest section of main road (the A256 around Richborough).	No
Folkestone to Etchinghill Escarpment SAC	Site sensitive to air quality changes although the distance and / or connectivity and orientation of the relevant road relative to the CCC area will ensure that CCC's contribution to any 'in combination' increases in AADT over 1000 is likely to be negligible in relative and absolute terms.	No
Dover to Kingsdown Cliffs SAC	Site sensitive to air quality changes; A2 within 200m.	Yes
Dungeness, Romney Marsh and Rye Bay SPA	The distance and / or connectivity and orientation of the relevant road relative to the CCC area will ensure that CCC's contribution to any 'in combination' increases in AADT over 1000 is likely to be negligible in relative and absolute terms.	No
Medway Estuary and Marshes Ramsar	As per The Swale Ramsar.	No
Medway Estuary and Marshes SPA	As per The Swale Ramsar.	No
Dungeness, Romney Marsh and Rye Bay Ramsar	As per Dungeness SPA.	No
Essex Estuaries SAC	Roads near this site will not receive potentially notable additional traffic as a result of the CCC plan due to the travel distance.	No
Foulness (Mid-Essex Coast Phase 5) Ramsar	Roads near this site will not receive potentially notable additional traffic as a result of the CCC plan due to the travel distance.	No
Foulness (Mid-Essex Coast Phase 5) SPA	Roads near this site will not receive potentially notable additional traffic as a result of the CCC plan due to the travel distance.	No
Thames Estuary and Marshes Ramsar	Roads near this site will not receive potentially notable additional traffic as a result of the CCC plan due to the travel distance.	No

Site	Notes	Screen in?
Thames Estuary and Marshes SPA	Roads near this site will not receive potentially notable additional traffic as a result of the CCC plan due to the travel distance.	No

WATER RESOURCES

- 4.3.28. The exploitation and management of water resources is connected to a range of activities, most of which are not directly controlled or influenced by the Local Plan; for example, agriculture, flood defence, recreation, power generation, fisheries and nature conservation. Much of the water supply to water-resource sensitive European sites is managed through specific consenting regimes that are independent of the Local Plan.
- 4.3.29. Development supported or managed by the Local Plan is likely to increase demand for water, which could indirectly affect some European sites in the study area. When assessing the potential effects of increased water demand it is important to understand how the public water supply (PWS) system operates and how it is regulated with other water resource consents.
- 4.3.30. Potable water in the CCC area is supplied primarily by South East Water and Southern Water with a small area by Affinity Water. The broad characteristics of the supply areas (defined as Water Resource Zones) that coincide with CCC are summarised in **Table 4.7**:

Table 4-6 – CCC Water Resource Zones

Supplier	WRZ	Summary
Southern Water	Eastern Area WRZ	Most of its supply from groundwater (75%) with the remainder from the River Medway, River Stour or pipeline transfer from the Kent Medway WRZ.
South East Water	WRZ8 (Ashford)	The zone is comprised of groundwater (various boreholes) and bulk transfers (from Southern Water).
Afinity Water	WRZ7 (Dour)	Abstracting of 90% of water supply from Chalk boreholes, with the

- 4.3.31. However, the supply network is complex and so direct and specific supply relationships cannot necessarily be made; it is rarely possible or appropriate to identify a particular ‘source’ for water supply to a specific area. Consequently, direct effects on specific European sites as a result of development within the CCC area cannot necessarily be identified or quantified.
- 4.3.32. More importantly, the water resources planning process helps to ensure that growth in water demand does not affect European sites. The *Water Industry Act 1991*, as amended by the *Water Act 2003* and *Water Act 2014*, requires that all water companies must publish a Water Resources Management Plan (WRMP) that sets out their strategy for managing water resources across their supply areas over the next 25 years and beyond. WRMPs use calculations of Deployable Output (DO) to establish supply/demand balances; this enables water companies to identify those WRZs

with potential supply deficits over the planning period⁴⁴. The calculations account for any reductions in abstraction that are required to safeguard European sites⁴⁵ and so the WRMP process (with other regulations) helps ensure (as far as is achievable) that future changes in demand will not affect any European sites⁴⁶.

- 4.3.33. The water companies accounted for the growth predicted by CCC and other LPAs in forecasting for their current (2019) WRMPs. The 2019 WRMPs were subject to HRA, which concluded that they would have no adverse effects on any European sites, including those water-resource sensitive sites and features within the Local Plan HRA study area.
- 4.3.34. The water companies are currently preparing their next WRMPs (2024) and have published their Revised Draft WRMPs for 2024. Currently, the HRAs of the WRMPs conclude that there will be no adverse effects on any European sites, including those water-resource sensitive sites and features within the Local Plan HRA study area, although there are some uncertainties for options required at the end of the CCC plan period (i.e. 2041 onwards) that cannot be resolved at this point in the water resources planning cycle. However, there is (a) sufficient time and (b) several Local Plan review cycles and WRMP cycles to allow these uncertainties to be resolved. The final WRMP24 for each water company will be approved by Defra in 2024.
- 4.3.35. The WRMPs provide the best estimate of future water resource demand, and therefore it is reasonable to assume that the growth predicted within the Local Plan can be accommodated without significant effects on any European sites due to PWS abstractions. Furthermore, since the WRMPs explicitly account for the growth predicted by the Council and other LPAs⁴⁷, 'in combination' effects between the Local Plan and the WRMP on water resources will not occur. As it is not possible to identify specific effects on specific sites that are directly related to growth supported by the Local

⁴⁴ Forecasts are completed in accordance with the Water Resources Planning Guidelines (published by the Environment Agency) and take into account (inter alia) economic factors (economic growth, metering, pricing), behavioural factors (patterns of water use), demographic factors (population growth, inward and outward migration, changes in occupancy rate), planning policy (LPA land use plans), company policies (e.g. on leakage control and water efficiency measures) and environmental factors, including climate change. The WRMP therefore accounts for these demand forecasts based on historical trends, an established growth forecast model and through review of local and regional planning documents.

⁴⁵ For example, sustainability reductions required by the Review of Consents (RoC) or the Environment Agency's Restoring Sustainable Abstractions (RSA) programme. It should be noted that, under the WRMP process, the RoC changes (and non- changes to licences) are considered to be valid over the planning period. This means that the WRMP (and its underlying assumptions regarding the availability of water and sustainability of existing consents) is compliant with the RoC and so the WRMP can only affect European sites through any new resource and production-side options it advocates to resolves deficits, and not through the existing permissions regime.

⁴⁶ Calculations of DO include for Target Headroom (precautionary 'over-capacity' in available water) to buffer any unforeseen variation in predicted future demand; the WRMP is also reviewed on a five-yearly cycle to ensure it is performing as expected and to account for any variations between predicted and actual demand.

⁴⁷ Defra/ EA guidance on WRMPs requires that forecast population and property figures be based, wherever possible, upon plans published by local authorities (including 'adopted', 'emergent', 'consultation' and 'draft' local plans).

Plan (due to the integrated nature of the water network), the screening conclusion is not completed on a site-by-site basis.

- 4.3.36. Having said that, the Local Plan can obviously help manage demand and promote water efficiency measures through its policy controls.

WATER QUALITY

- 4.3.37. The majority of the CCC area is in the River Stour catchment. The River Stour flows past (and is hydrologically linked) to **Stodmarsh SAC/SPA/Ramsar**, and discharges to Sandwich Bay via the **Sandwich Bay SAC** and the **Thanet Coast and Sandwich Bay SPA/Ramsar**. Minor watercourses on the north coast discharge to the **Thanet Coast and Sandwich Bay SPA/Ramsar** and the **Outer Thames Estuary SPA**. A small area in the north west of the CCC area drains to **The Swale SPA/Ramsar** at Whitstable. These are the only sites potentially exposed to water quality changes as a result of the Local Plan.
- 4.3.38. None of these sites, with the exception of **Stodmarsh SAC/SPA/Ramsar**, have been identified as sites that are in unfavourable condition due to excessive nutrients (such that ‘nutrient neutrality’ is being deployed or considered as mitigation) in recent NE advice to LPAs⁴⁸.
- 4.3.39. Most waterbodies and watercourses in the LPA area are affected to some extent by point or diffuse sources of pollutants, notably nitrates and phosphates from agriculture. Point sources are usually discrete discharge points, such as wastewater treatment works (WwTW) outfalls, which are generally managed through specific consenting regimes that are independent of the Local Plan. Diffuse pollution is derived from a range of sources (e.g. agricultural run-off; road run-off) that cannot always be easily traced or quantified.
- 4.3.40. Development promoted or supported by the Local Plan is likely to increase demand on wastewater treatment works and potentially increase non-agricultural run-off.
- 4.3.41. Sewerage and wastewater treatment for the CCC area is provided by Southern Water. Wastewater from the CCC area is treated at seven wastewater treatment works (WwTW):
- Canterbury (Sturry) WwTW (Stour catchment);
 - Chartham WwTW (Stour catchment);
 - Dambridge WwTW (Stour catchment);
 - Herne Bay WwTW (Thanet coast);
 - Newnham Valley Preston WwTW (Stour catchment);
 - Swalecliffe WwTW (Thanet coast);
 - Westbere WwTW (Stour catchment).

⁴⁸ Letter from NE to LPA Chief Executives and Heads of Planning, 16 March 2022; Re. Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites.

- 4.3.42. Drainage and Wastewater Management Plans (DWMP) set out how water companies intend to extend, improve and maintain a robust and resilient drainage and wastewater system. They take a long-term view, setting out a planning period that is appropriate to the risks, covering a period of at least 2025 to 2050. Southern Water has published its DWMP⁴⁹ setting out proposals to address identified drainage and wastewater risks in the area⁵⁰.
- 4.3.43. As with the WRMP, the DWMP modelling takes account of growth predicted by the Council and other LPAs. The DWMP indicates that:
- growth in CCC will increase the risk of non-compliance with Dry Weather Flow permits for the WwTWs at Canterbury, Herne Bay and Newnham Valley Preston;
 - growth in CCC may result in the current permit for wastewater treatment quality being exceeded by 2050 without further investment at Westbere WwTW.
- 4.3.44. Run-off from impermeable surfaces can have considerable effects on waterbodies and watercourses, and is a notable issue in both urban and rural areas. Development has traditionally sought to capture and divert rain and run-off to the nearest watercourse or treatment facility as quickly as possible, and extensive drainage networks have been developed to facilitate this. However, as developed areas have increased so have the total volumes and flow rates of run-off. This has two principal effects: firstly, impermeable surfaces provide very little resistance to the mobilisation and transport of pollutants within run-off; and secondly, flow rates and volumes often exceed the capacity of the receiving drains or watercourses, causing localised flooding or the operation of combined sewer overflows (CSOs)⁵¹. The effect of run-off from developed areas can be mitigated or reduced by the use of Sustainable Drainage Systems (SuDS) and by increasing the area of permeable surfaces (both natural and artificial) within developed areas. These measures offer effective attenuation by reducing the volumes of surface run-off. They also increase the retention of pollutants and, in the case of some SuDS, can allow for treatment of pollutants.
- 4.3.45. With regard to European sites, the principal water quality concerns relate to the **Stodmarsh SAC/SPA/Ramsar** sites, which have been identified as sites where ‘nutrient neutrality’ is required for developments within the catchment i.e. that developments can only proceed if they can demonstrate a zero net increase in nutrient levels within the catchments of the affected sites⁵². However, it should also be recognised that the water quality effects of the Local Plan are ultimately either controlled by existing consents regimes (which must undergo HRA) or have diffuse ‘in

⁴⁹ Available at: <https://www.southernwater.co.uk/dwmp>

⁵⁰ Current risks in the Stour catchment are outlined here: <https://www.southernwater.co.uk/dwmp/stour-catchment/problem-characterisation-stour>

⁵¹ All sewerage pipes have a certain capacity, determined by the size of the pipe and the receiving water treatment works. At times of high rainfall, this capacity can be exceeded, with the risk of uncontrolled bursts. CSOs provide a mechanism to prevent this, by allowing untreated sewerage to mix with surface water run-off when certain volumes are exceeded. This is then discharged to the nearest watercourse.

⁵² Natural England (2022) Nutrient Neutrality: A summary guide and frequently asked questions. Available online <http://publications.naturalengland.org.uk/publication/6248597523005440>

combination' effects that are difficult to quantify, and so the HRA process typically aims to ensure that suitable mitigating policy that will minimise the impacts of plan-supported development on water quality generally is provided.

Table 4-7 - Summary of European site screening in relation to water quality

Site	Notes	Screen in?
Blean Complex SAC	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Stodmarsh Ramsar	Natural England May 2020 advice states that best available up-to-date evidence is that some of the designated site units are in unfavourable condition due to existing levels of nutrients (both P and N). Stodmarsh is a site for which achieving 'nutrient neutrality' has been advocated by NE.	Yes
Stodmarsh SAC	As per Stodmarsh Ramsar	Yes
Stodmarsh SPA	As per Stodmarsh Ramsar	Yes
Tankerton Slopes and Swalecliffe SAC	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Thanet Coast and Sandwich Bay Ramsar	The site is a downstream receptor although has not been identified as a site that is in unfavourable condition due to excessive nutrients (such that 'nutrient neutrality' is being deployed or considered as mitigation) in recent NE advice to LPAs.	No
Thanet Coast and Sandwich Bay SPA	The site is a downstream receptor although has not been identified as a site that is in unfavourable condition due to excessive nutrients (such that 'nutrient neutrality' is being deployed or considered as mitigation) in recent NE advice to LPAs.	No
The Swale Ramsar	Water quality not identified as a threat in the SIP; only a very small part of the CCC area in the north west is within the catchment of this site, and no allocations are proposed for this area.	No
The Swale SPA	As per The Swale SPA.	No
Outer Thames Estuary SPA	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Wye and Crundale Downs SAC	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Margate and Long Sands SAC	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Parkgate Down SAC	Not exposed / sensitive to water quality changes associated with the Local Plan.	No

Site	Notes	Screen in?
Thanet Coast SAC	Some reef features are potentially sensitive to water quality changes, particularly if this results in eutrophication or smothering although the tidal fluxes attenuate local effects to some extent. Impacts from WwTW discharges are very unlikely (these enter the sea via long sea outfalls (LSOs)) and so effects on this feature are only really possible from diffuse pollution or local point sources such as CSOs or unconsented discharges	No
Lydden and Temple Ewell Downs SAC	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Sandwich Bay SAC	Not exposed to water quality changes associated with the plan.	No
Folkestone to Etchingham Escarpment SAC	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Dover to Kingsdown Cliffs SAC	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Dungeness, Romney Marsh and Rye Bay SPA	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Medway Estuary and Marshes Ramsar	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Medway Estuary and Marshes SPA	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Dungeness, Romney Marsh and Rye Bay Ramsar	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Essex Estuaries SAC	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Foulness (Mid-Essex Coast Phase 5) Ramsar	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Foulness (Mid-Essex Coast Phase 5) SPA	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Thames Estuary and Marshes Ramsar	Not exposed / sensitive to water quality changes associated with the Local Plan.	No
Thames Estuary and Marshes SPA	Not exposed / sensitive to water quality changes associated with the Local Plan.	No

FLOODING / WATER LEVEL MANAGEMENT

- 4.3.46. The implementation of the European Floods Directive (Directive 2007/60/EC) in England and Wales is being co-ordinated with the Water Framework Directive. Catchment Flood Management Plans

(prepared by the EA), Shoreline Management Plans (prepared by coastal local authorities and the EA), River Basin District Flood Risk Management Plans (prepared by the EA) and Local Flood Risk Management Strategies set out long term policies for flood risk management. The delivery of the policies from these long-term plans will help to achieve the objectives of these plans and the RBMPs.

- 4.3.47. Development supported by the Local Plan is unlikely to significantly alter regional flood risk levels, but may exacerbate the effects of local flooding. Run-off from impermeable surfaces can have considerable effects on waterbodies and watercourses, meaning that flow rates and volumes often exceed the capacity of the receiving drains or watercourses. This can lead to local water quality impacts on European sites. The effect of run-off from developed areas can be reduced by the use of SuDS and by increasing the area of permeable surfaces (both natural and artificial) within developed areas.
- 4.3.48. Some sites and features may be dependent on water levels being maintained by surface water or groundwater inputs, which may in turn be affected by abstraction (see ‘Water Resources’, above) or local development (e.g. through dewatering of excavations, which can be an issue for groundwater levels). However, these pathways (particularly dewatering) tend to only operate over relatively short distances and hence are predominantly addressed in relation to individual allocations. No European sites are considered to be exposed to potential changes in flood risk that may result from the Draft Local Plan.

Table 4-8 - Summary of European site screening in relation to flooding / water level management

Site	Notes	Screen in?
Blean Complex SAC	Not exposed / sensitive to this aspect.	No
Stodmarsh Ramsar	Local Plan will not alter flood risk or water level management practices in this site.	No
Stodmarsh SAC	Local Plan will not alter flood risk or water level management practices in this site.	No
Stodmarsh SPA	Local Plan will not alter flood risk or water level management practices in this site.	No
Tankerton Slopes and Swalecliffe SAC	Not exposed / sensitive to this aspect.	No
Thanet Coast and Sandwich Bay Ramsar	Not exposed to this aspect due to the CCC plan.	No
Thanet Coast and Sandwich Bay SPA	Not exposed to this aspect due to the CCC plan.	No
The Swale Ramsar	Not exposed to this aspect due to the CCC plan.	No
The Swale SPA	As per The Swale SPA.	No

Site	Notes	Screen in?
Outer Thames Estuary SPA	Not exposed / sensitive to this aspect.	No
Wye and Crundale Downs SAC	Not exposed / sensitive to this aspect.	No
Margate and Long Sands SAC	Not exposed / sensitive to this aspect.	No
Parkgate Down SAC	Not exposed / sensitive to this aspect.	No
Thanet Coast SAC	Features not exposed / sensitive to this aspect.	No
Lydden and Temple Ewell Downs SAC	Not exposed / sensitive to this aspect.	No
Sandwich Bay SAC	Sand dune features not exposed to this aspect.	No
Folkestone to Etchinghill Escarpment SAC	Not exposed / sensitive to this aspect.	No
Dover to Kingsdown Cliffs SAC	Not exposed / sensitive to this aspect.	No
Dungeness, Romney Marsh and Rye Bay SPA	Not exposed / sensitive to this aspect.	No
Medway Estuary and Marshes Ramsar	Not exposed / sensitive to this aspect.	No
Medway Estuary and Marshes SPA	Not exposed / sensitive to this aspect.	No
Dungeness, Romney Marsh and Rye Bay Ramsar	Not exposed / sensitive to this aspect.	No
Essex Estuaries SAC	Not exposed / sensitive to this aspect.	No
Foulness (Mid-Essex Coast Phase 5) Ramsar	Not exposed / sensitive to this aspect.	No
Foulness (Mid-Essex Coast Phase 5) SPA	Not exposed / sensitive to this aspect.	No
Thames Estuary and Marshes Ramsar	Not exposed / sensitive to this aspect.	No
Thames Estuary and Marshes SPA	Not exposed / sensitive to this aspect.	No

EFFECTS ON FUNCTIONAL HABITATS OR SPECIES AWAY FROM EUROPEAN SITES

- 4.3.49. The provisions of the Habitats Regulations ensure that ‘direct’ (encroachment) effects on European sites as a result of a land use plan (i.e. the partial or complete destruction of a European site) are extremely unlikely under normal circumstances, and this will not occur as a result of the Local Plan. However, many European interest features (particularly more mobile animal species) may use or be reliant on non-designated habitats outside of a European site during their life-cycle. Developments some distance from a European site can therefore have an effect on the site if its population of interest features is reliant on the habitats being affected by a development and sufficient numbers are exposed to the environmental changes. All of the above aspects (recreation, water resources, etc.) can therefore also affect European site integrity indirectly through effects on functional habitats outside of the designated site boundary.
- 4.3.50. The 2016 SPA Review (JNCC, 2016) identifies a broad group of 43 species that are known to be associated with or reliant on cropped habitats, which are under-represented in the SPA network (although the SPA Review suggests that this should be addressed outside the SPA Review process through “*wider countryside measures to preserve and promote permanent pasture as feeding and roosting habitat for the species*”). With regard to the European sites within the scope, most functional land will be located relatively close to the site (e.g. less than 5km from the boundary), associated with foraging or roosting behaviours of the bird interest features. However, it is recognised that some areas of cropped lowland farmland may be important for certain wintering waterbirds typically associated with coastal and wetland SPAs (e.g. Mason & MacDonald 1999; Gillings 2003), and that this behaviour is under-recorded by the standard Wetland Bird Survey (WeBS) monitoring technique.
- 4.3.51. In particular, NE noted in its response to Regulation 18 Draft Local Plan 2022 consultation that “*further information on functionally-linked land (FLL) used by bird populations of coastal Habitats Sites*” (i.e. **Thanet Coast and Sandwich Bay SPA/Ramsar** and **The Swale SPA/Ramsar**) may be required to complete the HRA, observing that “*Both of the above SPAs support species well documented to make use of functionally-linked land outside of designated site boundaries – in particular golden plover for the Thanet Coast and dark-bellied brent geese for The Swale*”.

Table 4-9 - Summary of European site screening in relation to functional land

Site	Notes	Screen in?
Blean Complex SAC	Not exposed / sensitive to this aspect.	No
Stodmarsh Ramsar	The Ramsar features have relatively narrow and specific wetland habitat requirements that are met by the site habitats and management regimes; they are not therefore fundamentally dependent on non-designated functional land.	No
Stodmarsh SAC	The SAC features have narrow and specific habitat requirements that are met by the site habitats and management regimes; they are not dependent on access to non-designated functional land for their life-cycle.	No

Site	Notes	Screen in?
Stodmarsh SPA	The SPA features have relatively narrow and specific wetland habitat requirements that are met by the site habitats and management regimes; they are not therefore fundamentally dependent on non-designated functional land.	No
Tankerton Slopes and Swalecliffe SAC	Not exposed / sensitive to this aspect.	No
Thanet Coast and Sandwich Bay Ramsar	Site supports golden plover which can use inland areas for foraging.	Yes
Thanet Coast and Sandwich Bay SPA	Site supports golden plover which can use inland areas for foraging.	Yes
The Swale Ramsar	Site supports dark-bellied Brent goose which can use inland areas for foraging.	Yes
The Swale SPA	Site supports dark-bellied Brent goose which can use inland areas for foraging.	Yes
Outer Thames Estuary SPA	Tern breeding colonies are functionally linked to this site although none will be affected by the Local Plan.	No
Wye and Crundale Downs SAC	No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity; Local Plan will not affect habitats that may be functionally linked to this site.	No
Margate and Long Sands SAC	Functional land not identified for site features.	No
Parkgate Down SAC	No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity; Local Plan will not affect habitats that may be functionally linked to this site.	No
Thanet Coast SAC	Functional land not identified for site features.	No
Lydden and Temple Ewell Downs SAC	No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity; Local Plan will not affect habitats that may be functionally linked to this site.	No
Sandwich Bay SAC	Sand dune features not exposed to this aspect.	No
Folkestone to Etchinghill Escarpment SAC	Supplementary advice notes the importance of other grassland and woodland SAC/SSSIs locally; Local Plan will not affect habitats that may be functionally linked to this site.	No
Dover to Kingsdown Cliffs SAC	No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity; Local Plan will not affect habitats that may be functionally linked to this site.	No

Site	Notes	Screen in?
Dungeness, Romney Marsh and Rye Bay SPA	Qualifying features include golden plover, although no allocations are within 20km of this site.	No
Medway Estuary and Marshes Ramsar	Features not exposed through this mechanism (distance to CCC boundary)	No
Medway Estuary and Marshes SPA	Features not exposed through this mechanism (distance to CCC boundary)	No
Dungeness, Romney Marsh and Rye Bay Ramsar	Species will not be functionally dependent on land within CCC boundary.	No
Essex Estuaries SAC	Features not exposed through this mechanism (distance to CCC boundary)	No
Foulness (Mid-Essex Coast Phase 5) Ramsar	Features not exposed through this mechanism (distance to CCC boundary)	No
Foulness (Mid-Essex Coast Phase 5) SPA	Features not exposed through this mechanism (distance to CCC boundary)	No
Thames Estuary and Marshes Ramsar	Features not exposed through this mechanism (distance to CCC boundary)	No
Thames Estuary and Marshes SPA	Features not exposed through this mechanism (distance to CCC boundary)	No

4.4 SCREENING SUMMARY

4.4.1. **Significant effects on the following sites are not anticipated, alone or in combination;** this is principally due to their distance from the CCC area and the absence of reasonable pathways by which environmental changes associated with the Local Plan could undermine the conservation objectives for the sites:

- Outer Thames Estuary SPA
- Wye and Crundale Downs SAC
- Margate and Long Sands SAC
- Parkgate Down SAC
- Thanet Coast SAC
- Sandwich Bay SAC
- Folkestone to Etchinghill Escarpment SAC
- Dungeness, Romney Marsh and Rye Bay SPA
- Dungeness, Romney Marsh and Rye Bay Ramsar

- Medway Estuary and Marshes Ramsar
- Medway Estuary and Marshes SPA
- Essex Estuaries SAC
- Foulness (Mid-Essex Coast Phase 5) Ramsar
- Foulness (Mid-Essex Coast Phase 5) SPA
- Thames Estuary and Marshes Ramsar
- Thames Estuary and Marshes SPA

4.4.2. Significant effects, alone or in combination, cannot be excluded for the following sites and pathways:

- Blean Complex SAC
 - Air Quality
- Stodmarsh Ramsar
 - Urbanisation
 - Water Quality
- Stodmarsh SAC
 - Urbanisation
 - Water Quality
- Stodmarsh SPA
 - Urbanisation
 - Water Quality
- Tankerton Slopes and Swalecliffe SAC
 - Recreational Pressure
- Thanet Coast and Sandwich Bay Ramsar
 - Recreational Pressure
 - Functional Land (golden plover)
- Thanet Coast and Sandwich Bay SPA
 - Recreational Pressure
 - Functional Land (golden plover)
- The Swale Ramsar
 - Recreational Pressure
 - Functional Land (dark-bellied brent goose)
- The Swale SPA
 - Recreational Pressure
 - Functional Land (dark-bellied brent goose)
- Lydden and Temple Ewell Downs SAC

- Air Quality
- Dover to Kingsdown Cliffs SAC
 - Air Quality

4.4.3. There are residual uncertainties in relation the significance of some effects, and the Local Plan includes measures identified during its development that are intended to minimise or prevent significant or significant adverse effects occurring. These aspects are therefore examined through 'appropriate assessment' in the following sections.

4.4.4. Note that these sites and pathways have notable overlaps (spatially, in interest features, and in environmental functioning and sensitivities) they are grouped geographically in the following sections to simplify the report structure and to minimise repetition:

- **Section 5: Stodmarsh sites** (assesses effects on the site units and features of Stodmarsh SAC, Stodmarsh SPA and Stodmarsh Ramsar);
- **Section 6: Thanet Coast sites** (assesses effects on the site units and features of Thanet Coast and Sandwich Bay SPA and Thanet Coast and Sandwich Bay Ramsar);
- **Section 7: The Swale sites** (assesses effects on the site units and features of The Swale SPA and The Swale Ramsar);
- **Section 8: Blean Complex SAC**
- **Section 9: Lydden and Temple Ewell Downs SAC**
- **Section 10: Dover to Kingsdown Cliffs SAC**

4.4.5. Note also, for the Preferred Options the following assessments are necessarily preliminary and additional data or assessment may be required following the consultation to provide a definitive appropriate assessment conclusion. Key uncertainties are therefore flagged as necessary.

5 STODMARSH SITES

5.1 OVERVIEW

- 5.1.1. The Stodmarsh sites that are screened in are **Stodmarsh SAC, Stodmarsh SPA and Stodmarsh Ramsar**. The screening of the Preferred Options has indicated that the interest features of these sites may be vulnerable (i.e. exposed and sensitive) to environmental changes associated with the implementation of the Local Plan, particularly in relation to 'in combination' effects of **urbanisation** and **water quality** associated with the overall quantum of development.
- 5.1.2. The SSSI units of the Stodmarsh SSSI that underpin the above European sites are almost all at 'favourable' or 'unfavourable recovering' conservation status (the exceptions being some wetland areas of the site that are in 'unfavourable no change' due for land-management reasons or for failing water quality targets).

5.2 WATER QUALITY

SUMMARY OF PATHWAY

- 5.2.1. Poor water quality due to nutrient enrichment from elevated nitrogen (N) and phosphorus (P) levels is one of the primary reasons for freshwater habitats and estuaries being in unfavourable condition. Typically, available P is the limiting factor on plant growth in freshwater aquatic systems (for which a significant source is treated wastewater), whereas in estuarine and marine systems available N is usually limiting (for which a significant source is agricultural run-off).
- 5.2.2. The principal concern in relation to the Draft Local Plan is increased nutrient discharges from wastewater. NE has identified freshwater and estuarine European sites that it considers to be in unfavourable condition due to excessive nutrients⁵³; these include Stodmarsh SAC/SPA/Ramsar (N and P). As noted, the majority of the CCC area is within the catchment of the River Stour.
- 5.2.3. Water quality, particularly nutrient neutrality, has been a key issue during the plan development process. Whilst the current position reflects that outlined by NE in its March 2022 letter to Chief Planning Officers⁵⁴, there remains some uncertainty over the future approach to this aspect. However, the Levelling Up and Regeneration Act 2023 includes a new statutory duty on water and sewerage companies in England to upgrade wastewater treatment works to the highest achievable limits by 2030, in Nutrient Neutrality areas.
- 5.2.4. In consequence, it is likely that the requirements for any policy-based mitigation will alter prior to adoption of the final plan; the measures and assessment below therefore reflect the current iteration of the plan. In particular, there is a strong possibility that additional obligations will be imposed on

⁵³ November 2020 "Advice on Nutrient Neutrality for New Development in the Stour Catchment in Relation to Stodmarsh Designated Sites - For Local Planning Authorities"

⁵⁴ Letter from NE to LPA Chief Executives and Heads of Planning, 16 March 2022; Re. Advice for development proposals with the potential to affect water quality resulting in adverse nutrient impacts on habitats sites.

water companies in relation to the treatment of wastewater in catchments affected by eutrophication, which would likely alter the delivery balance for nutrient neutrality (from developers to water companies).

BASELINE AND PREDICTED CHANGES

- 5.2.5. The NE 2020⁵⁵ advice states that best available up-to-date evidence has identified that some of the designated site units are in unfavourable condition due to existing levels of nutrients (both P and N) and are therefore at risk from additional nutrient inputs. Several of the nature reserve lakes at Stodmarsh are in a state of eutrophication (an unfavourable conservation status).
- 5.2.6. CCC⁵⁶ has identified five WwTWs that treat sewerage from the area that discharge to the River Stour catchment:
- Canterbury (Sturry) WwTW;
 - Herne Bay (Great Stour) WwTW⁵⁷;
 - Westbere WwTW;
 - Chartham WwTW; and
 - Newnham Valley Preston WwTW.
- 5.2.7. All WwTWs have discharge Dry Weather Flow (DWF) permits. The DWMP Baseline Risk and Vulnerability Assessment (BRAVA) identifies a risk of DWF permits being exceeded at Canterbury, Herne Bay, Newnham Valley Preston and Chartham. In addition, the Stour catchment is susceptible to diffuse agricultural pollution. However, modelling of source apportionment shows that the majority of the phosphorus load at permit is from WwTWs whilst urban diffuse pollution in the catchment is larger than the total combined phosphorus loading from farming sources⁵⁸.
- 5.2.8. The baseline and predicted changes are set out in detail in the technical reports completed for CCC, specifically the *Canterbury District Local Plan Nutrient Mitigation Plan*⁵⁹ and *Stodmarsh Nutrient Mitigation: Draft Nutrient Mitigation Strategy*⁶⁰ (see **Appendix D**). In summary, the current Local Plan (2011-2031) plans for 16,000 new homes; as of April 2023 7575 homes have been completed. Including allocations in the current Local Plan, which are being carried forward, the draft Local Plan (2020 – 2041) plans for around 26,700 dwellings. Excluding relevant dwellings due to either planning status or location, the number of dwellings which will form the basis for the nutrient budget

⁵⁵ <https://www.ashford.gov.uk/media/l3dgnfyu/stodmarsh-nutrient-neutral-methodology-november-2020.pdf>

⁵⁶ [Stodmarsh and Water Quality](#)

⁵⁷ The advice doesn't restrict new development on some sites in the villages to the south and east of Herne Bay.

⁵⁸ <https://www.ashford.gov.uk/media/l3dgnfyu/stodmarsh-nutrient-neutral-methodology-november-2020.pdf>

⁵⁹ Water Environment Limited (2022) *Canterbury District Local Plan Nutrient Mitigation Plan*. Document reference: 21160-NUT-RP-01-C01.

⁶⁰ Water Environment Limited (2024) *Stodmarsh Nutrient Mitigation: Draft Nutrient Mitigation Strategy*. Document reference: 21160-NUT-RP-02 | P03.

within the Local Plan to 2041 is 14,377 (including windfall sites). It has been estimated that approximately 41ha of wetland will need to be constructed along the Stour river corridor to fully offset the nutrient budget up to 2041, with 37ha of wetland required to offset the budget to 2030.

INCORPORATED MITIGATION

- 5.2.9. The provision of wastewater treatment capacity in the Stour catchments is a statutory obligation on Southern Water, and it is required to comply with all relevant discharge consents. The Local Plan contributes to the wastewater treatment planning process by providing certainty for Southern Water (through the allocations process) but does not (and cannot) directly influence or control Southern Water's plans for service delivery. The Preferred Options Local Plan adopts a policy-led mitigation approach to this aspect, to ensure that utilities capacity is appropriately considered at the site level when developments are bought forward.
- 5.2.10. However, the Preferred Options Local Plan also includes specific policy measures relating to nutrient neutrality. In particular:
- CCC has developed a **nutrient neutrality mitigation strategy** (Stodmarsh Nutrient Mitigation: Draft Nutrient Mitigation Strategy⁶¹, see **Appendix D**).
- **Policy C20** allocates Land to the south of Sturry Road for the delivery of a strategic wetland as part of the Canterbury Nutrient Mitigation Strategy.
 - **Policy DS17** requires that developments comply with the nutrient mitigation strategy and sets expectations for water quality management and waste water treatment by developers, notably:
 - Proposals for more than 300 homes must provide high quality on-site regulated wastewater treatment facilities with permit levels set at Technically Achievable Limits (TAL), together with an on-site SUDS design which removes a minimum of 50% of P and N from the surface water;
 - Proposals for between 150 and 300 homes must examine all available opportunities for integrating high quality on-site regulated wastewater treatment facilities within the site to minimise the levels of P and N associated with foul water from the site. These developments must integrate an on-site SUDS design which removes a minimum of 50% of P and N from the surface water.
 - All other developments must integrate an on-site SUDS design which removes a minimum of 50% of P and N from the surface water, having regard for Policy DS20 (Flood Risk and Sustainable Drainage).
 - Identifies other safeguarded areas for the delivery of strategic wetlands to mitigate the residual P and N generated by development.
- 5.2.11. In addition, several policies control the general risks associated with development and water management/drainage, treatment and quality, including:
- **Policy DS20** (Flood Risk and Sustainable Drainage)

⁶¹ Water Environment Limited (2024) *Stodmarsh Nutrient Mitigation: Draft Nutrient Mitigation Strategy*. Document reference: 21160-NUT-RP-02 | P03.

- **Policy DM15** (Sustainable Drainage)
- **Policy DM16** (Water Pollution)

ASSESSMENT OF EFFECTS - STODMARSH SAC / STODMARSH SPA / STODMARSH RAMSAR

Nutrient Neutrality

- 5.2.12. As noted, the issues for Stodmarsh relate to achieving nutrient neutrality. The Council has developed a Nutrient Mitigation Strategy in consultation with NE which sets out potential means to mitigate increases in nutrient loading from new development including nutrients contained in surface water runoff and an increase in wastewater flows to any of the WwTW in the Stour catchment. The Strategy employs the NE Nutrient Budget Calculator⁶² and associated guidance⁶³ for the Stour Management Catchment, with the methodology following the staged approach outlined by NE in its latest guidance. The nutrient budget has been calculated on the existing allocations and anticipated housing allocations of the Preferred Options Local Plan.
- 5.2.13. The predicted effectiveness of the Nutrient Mitigation Strategy is set out in detail in this document; in summary, with the WwTW upgrades required by the LURB, nutrient neutrality is considered challenging but achievable using the mechanisms outlined in the strategy.
- 5.2.14. Furthermore, the Preferred Options Local Plan policies (notably DS17) provide assurance that development will not proceed unless nutrient neutrality is demonstrated.
- 5.2.15. On this basis, it can be concluded that the Preferred Options Local Plan will have no adverse effects on the integrity of the **Stodmarsh SAC, Stodmarsh SPA or Stodmarsh Ramsar** due to increased nutrient loading, alone or in combination.

Run-off and water management

- 5.2.16. There are broader 'in combination' risks associated with diffuse pollution, to which run-off will contribute, although the effect of run-off from developed areas can be fully mitigated or reduced by the use of SuDS and by increasing the area of permeable surfaces (both natural and artificial) within developed areas. These measures offer effective attenuation by reducing the volumes of surface run-off. They also increase the retention of pollutants and, in the case of some SuDS, can allow for treatment of pollutants.
- 5.2.17. These measures can be employed to ensure that developments supported by the Local Plan do not contribute significantly to wider diffuse pollution and manage those aspects within their control, and are required by policies within the plan. Consequently, adverse effects on the integrity of the **Stodmarsh SAC, Stodmarsh SPA or Stodmarsh Ramsar** would not be expected through this mechanism.

⁶² Natural England Nutrient Neutrality Budget Calculator – Stodmarsh SAC and Ramsar

⁶³ Natural England Nutrient Budget Calculator Guidance Document – Stodmarsh SAC and Ramsar – Issue 1 v1 March 2022

WATER QUALITY RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

- 5.2.18. The incorporated policy measures and Nutrient Mitigation Strategy provide sufficient safeguards to ensure that water quality changes do not adversely affect **Stodmarsh SAC, Stodmarsh SPA** or **Stodmarsh Ramsar** as a result of the Local Plan. Policy additions are not considered essential to ensure this outcome, and no adverse effects alone or in combination via this mechanism would be expected if the Preferred Options Local Plan is adopted as currently drafted.

5.3 URBANISATION / RECREATIONAL PRESSURE

SUMMARY OF PATHWAY

- 5.3.1. The Stodmarsh sites support qualifying wetland bird species and associated habitats, which are susceptible to impacts from recreational disturbance from activities, such as walking and dog walking.
- 5.3.2. Two allocations are within 500m of the sites, hence may present a risk of urbanisation effects:
- Policy R5 Bread and Cheese Field allocates approximately 150 new dwellings within 180m of the **Stodmarsh SAC/SPA/Ramsar** at its closest point.
 - Policy R6 Land at Hersden allocates approximately 18 new dwellings within ~490m of the **Stodmarsh SAC/SPA/Ramsar** at its closest point.

BASELINE AND PREDICTED CHANGES

- 5.3.3. The SIP⁶⁴ identifies several pressures and threats to site integrity, although these do not include recreational pressure or urbanisation. Similarly, no issues in relation to recreational pressure or urbanisation effects are identified in the Stodmarsh SSSI condition assessments.
- 5.3.4. Some of the site is 'access land' although this area is managed as a National Nature Reserve (NNR) with stewardship agreements and managed access, and dogs are not allowed on the sign-posted 'Short Circuit Nature Trail' and the 'Nature Trail Extension' within the NNR; elsewhere, leashes are required. Access to the remainder of the site is restricted to PRoWs.
- 5.3.5. Zols based on visitor survey data have not been set for the sites. However, visitor surveys undertaken in 2011 by the RSPB (reported in an HRA supporting planning permission for an adjacent site submitted to the Council in 2022) found that the vast majority visitors to Stodmarsh were occasional day visitors and those with particular interest in birds and wildlife, with no visitors living within 2km of the site⁶⁵.
- 5.3.6. Assuming a non-specific Zol of 7km, the Preferred Options Local Plan makes provision for ~8984 dwellings within 7km. With regard to other LPAs:

⁶⁴ [SIP141030FINALv1.0 Stodmarsh.pdf](#)

⁶⁵ RSPB (2011) North Kent Visitor Survey – Non-RSPB Site Report referenced in HRA supporting application ref: CA/22/01584 prepared by Aspect Ecology

- The TDC Local Plan is currently being reviewed, with revised housing numbers yet to be confirmed, although based on the previous plan it is unlikely that any large housing sites will be allocated within 7km.
- The submitted Dover District Local Plan (2040) identifies residential site allocations in Preston, Wingham and Staple within 7km of these European sites, which comprise 156 new housing units.

INCORPORATED MITIGATION

- 5.3.7. Recreational pressure and urbanisation are not identified as specific issues for the Stodmarsh sites, and so strategic access mitigation plans or similar have not been developed or proposed for these sites. However, the Preferred Options Local Plan includes policies that will moderate recreational pressure, notably **Policy DS24** (Publicly accessible open space and sports) which sets out the open space requirements for developments.
- 5.3.8. In addition, project level HRAs are required under **Policy DS17** for proposals that could affect European sites. **Policy R5** requires provision of “...a landscape buffer in the form of natural and semi-natural open space to the south of the [Bread and Cheese] site (i.e. between the Stodmarsh sites and the Bread and Cheese allocation).

ASSESSMENT OF EFFECTS - STODMARSH SAC / STODMARSH SPA / STODMARSH RAMSAR

Cumulative Recreational Pressure

- 5.3.9. As noted, recreational pressure is not noted as a particular issue for the Stodmarsh sites. Although part of the site is ‘access land’ most of this area is covered by the NNR and the associated management controls; elsewhere, the wetland nature of the site and limited access via PRoWs substantially restricts the area potentially exposed to disturbance by walkers or dogs. There is also limited access to the site from nearby roads. The site is not therefore a significant attraction for ‘casual’ recreation, and previous surveys indicate that the vast majority of visitors to Stodmarsh are those with particular interest in birds and wildlife (albeit that the survey relates to the NNR). A potentially notable uplift in recreational pressure as a result of the Preferred Options Local Plan (such that specific site-based mitigation measures would be required) is not therefore expected.

Urbanisation

- 5.3.10. Two allocations are within 500m of the Stodmarsh sites: Bread and Cheese Field (within 180m of the Stodmarsh sites at its closest point) and Land at Hersden (~490m from the Stodmarsh sites). However, access to the Stodmarsh sites from these locations is significantly constrained by private properties (including the Westbere WwTW) and the Canterbury – Minster railway line. Consequently, the closest access point (a footpath across the railway at Westbere) is effectively over 750m from Bread and Cheese Field and 2.2km from Land at Hersden.
- 5.3.11. Furthermore, several planning applications have been granted for land parcels close to the Bread and Cheese Field allocation, including a development of 250 houses and various other uses which

is located along the railway (Hoplands Farm)⁶⁶. A HRA was undertaken for that application, with NE satisfied that the project-specific mitigation (including open space to the southern boundary) would ensure no adverse effects on the integrity of any of the Stodmarsh sites. In particular, the application noted that *“given the spatial separation of the Proposed Development from the SPA/Ramsar, the partial barrier formed to movement of cats by the railway line (which is fully fenced, together with an electrified rail present along the majority of its length), the low proportion of habitat within the SPA/Ramsar likely to be at risk of cat predation and the distribution and vulnerability of specific interest species within Stodmarsh, it is considered that the Proposed Development is unlikely to result in significant adverse effects on SPA/Ramsar species as a result of cat predation”*⁶⁷. Additionally, NE confirmed that it was satisfied cat predation was not likely to have a significant adverse effect on SPA bird interest⁶⁸.

- 5.3.12. Policy R5 requires provision of *“...a landscape buffer in the form of natural and semi-natural open space to the south of the [Bread and Cheese] site (i.e. between the Stodmarsh sites and the Bread and Cheese allocation). Given that similar measures have been previously found acceptable when considered at the project-level (i.e. for Hoplands Farm), it is reasonable to assume that these will be effective for preventing similar effects on the features of the Stodmarsh sites for the Bread and Cheese site also.*

URBANISATION RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

- 5.3.13. The incorporated policy measures are likely to provide sufficient safeguards to ensure that the integrity of **Stodmarsh SAC, Stodmarsh SPA or Stodmarsh Ramsar** is not adversely as a result of recreational pressure or urbanisation effects.
- 5.3.14. Nevertheless, for clarity and additional certainty when considering planning applications, the addition of European site-specific qualifiers to Policy R5 should be considered; for example:
- *“The green and blue infrastructure strategy for the site should... provide a landscape buffer in the form of natural and semi-natural open space to the south of the site that helps safeguard the habitats and species of Stodmarsh SAC, Stodmarsh SPA and Stodmarsh Ramsar in accordance with Policy DS17; and to the north of the site adjacent to the ancient woodland.”*

⁶⁶ CA//16/00404 Hoplands Farm Island Road Hersden Westbere CT3 4HQ Outline planning application for a neighbourhood extension for the creation of up to 250 houses including affordable housing, neighbourhood centre.

⁶⁷ Quinn Estates and Invicta Properties Ltd Hoplands Farm, Westbere Environmental Statement: Volume 1, Main Text

⁶⁸ Aspect Ecology for Quinn Estates Ecological Baseline Assessment ES Appendix 11.1

6 THANET COAST SITES

6.1 OVERVIEW

- 6.1.1. The Thanet coast sites that are screened in are the Thanet Coast and Sandwich Bay SPA and Thanet Coast and Sandwich Bay Ramsar.
- 6.1.2. The screening of the Preferred Options has indicated that the interest features of these sites may be vulnerable (i.e. exposed and sensitive) to environmental changes associated with the implementation of the Local Plan, particularly in relation to 'in combination' effects of **visitor pressure** associated with the overall quantum of development. In addition, the qualifying features of the SPAs and Ramsar site may be exposed to development-related effects when outside the site boundary (i.e. functional land).
- 6.1.3. The SSSI units of the Sandwich Bay to Hacklinge Marshes SSSI and Thanet Coast SSSI that underpin the above European sites are almost all at 'favourable' or 'unfavourable recovering' conservation status (the exceptions being some fields associated with the Ramsar south of Sandwich Bay that are in 'unfavourable no change' or 'unfavourable declining condition' for land-management reasons (note, these locations will not be exposed to the effects of the Local Plan).

6.2 RECREATIONAL PRESSURE / URBANISATION

SUMMARY OF PATHWAY

- 6.2.1. Allocations in close proximity to a designated site can significantly increase the number of visits made to a site, as can population growth regionally. Most recreational activities with the potential to affect European sites are 'casual' and pursued opportunistically (e.g. walking, walking dogs, riding) rather than structured (e.g. organised group activities or trips to specific discrete attractions), which means that it can be difficult to quantify or predict either the uptake or the impacts of these activities on European sites and (ultimately) harder to control or manage effects.
- 6.2.2. Damage of habitats or disturbance of species due to recreational activities can be a significant problem at some sites, although the relationship is highly variable and depends on a range of factors including the habitats, the species, the time of year and the scale, type and predictability of disturbance.
- 6.2.3. With regard to the Thanet coast sites, human activity might affect the qualifying bird species either directly (e.g. through causing them to flee) or indirectly (e.g. through damaging the supporting habitats). However, birds will also display a range of subtle behavioural responses that can have an energetic cost, through reduced food intake and / or increased energy expenditure. Broadly, disturbance can therefore result in reduced breeding success or increased mortality. At the population scale, this can be significant.

BASELINE AND PREDICTED CHANGES

- 6.2.4. The issue of region-wide in combination recreational pressure on the European sites associated with the Thanet coast has been recognised for several years, and has been subject to a detailed

mitigation strategy (The Thanet Coast “*Strategic Access Management and Monitoring Plan*” (SAMM)⁶⁹). This strategy therefore provides the context for the baseline and the assessment.

- 6.2.5. The Thanet Coast SAMM defines ‘Zones of influence’ (Zol) for the European sites associated with the Thanet coast, based on visitor surveys, which provide a reasonable and robust basis for identifying locations within which residential development might result in ‘significant effects’ alone or in combination. The Zol for the Thanet coast sites is 7.2km. The Zols are used to identify areas within which developer contributions are levied to support the SAMM, and hence as a proxy for ‘significant’ effects.
- 6.2.6. The Thanet Coast SAMM was originally developed in 2016 to cover housing growth in the Thanet District Council (TDC) area to 2031. The anticipated housing growth in the emerging TDC Local Plan in 2016 was 12,000 new homes over the planning period; this was revised to 17,140 by the adoption of the TDC Local Plan (2020). The appropriateness of the SAMM to the revised TDC housing numbers was evaluated, and was considered that the measures were inherently scalable; this also applied to the inclusion of the CCC housing growth outlined in its current Local Plan (2011 – 2031). The SAMM is assumed to be an ‘in perpetuity’ provision.
- 6.2.7. The TDC Local Plan is currently being reviewed; revised housing numbers are yet to be confirmed. The CCC Preferred Options Local Plan includes provision for ~4440 homes within 7.2km of the SPA/Ramsar.

INCORPORATED MITIGATION

- 6.2.8. The Preferred Options Local Plan includes several mitigation measures designed to prevent adverse effects on the integrity of European sites due to recreational pressure; these include:
- **Policy DS17** - Habitats of international importance (requires compliance with the SAMM and financial contributions in line with the relevant tariffs).
 - Policies relating to open space provision (e.g. SS1, C6 – C9, DS24).
- 6.2.9. The SAMM was adopted by CCC in 2017 (with adoption of the current Local Plan); it currently covers the period to 2031, although the mitigation delivered by the SAMM is considered fundamentally scalable and extendable to address higher housing numbers and future planning periods; this is consistent with NE’s position on other strategic mitigation schemes (for example, in relation to the Thames Basin Heaths SPA, or the SPAs associated with the Solent and nearby harbours).

ASSESSMENT OF EFFECTS – THANET COAST AND SANDWICH BAY SPA/RAMSAR

- 6.2.10. The Preferred Options Local Plan will increase the population within 7.2km of the SPA/Ramsar, which will increase the number of visits and visitors to the estuary, which may increase the risk of disturbance events having a significant effect on wintering waterbird populations.

⁶⁹ Available at: <https://www.thanet.gov.uk/wp-content/uploads/2018/03/Thanet-DC-SAMM-MAIN-REPORT-Final-21st-April-2016.pdf>

- 6.2.11. In considering the potential effects of increased recreational pressure on these sites due to the Preferred Options Local Plan, the following aspects are relevant:
- The Preferred Options Local Plan incorporates the agreed and accepted strategic mitigation for recreational effects on the European sites associated with the Thanet Coast, i.e. the SAMM and associated developer contributions.
 - The SAMM is considered fundamentally scalable to address higher housing numbers, and extendable to cover the revised plan period. The SAMM is subject to regular monitoring, which will inform future amendments to ensure its continued effectiveness.
- 6.2.12. With regard to monitoring the effectiveness of the SAMM, provision is made within the SAMM for annual monitoring. There is evidence of the effectiveness of the measures (notably ranger provision) from similar programmes such as that associated with the Solent⁷⁰ which have reported significant differences in measures of disturbance.
- 6.2.13. On this basis, it can be concluded that the Preferred Options Local Plan will have no adverse effects on the integrity of the **Thanet Coast and Sandwich Bay SPA** or **Thanet Coast and Sandwich Bay Ramsar** due to recreational pressure or urbanisation effects, alone or in combination.

RECREATIONAL PRESSURE RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

- 6.2.14. The incorporated policy measures will provide sufficient safeguards to ensure that the recreational pressure does not adversely affect the Thanet Coast sites as a result of the Local Plan. Policy additions are not considered essential to ensure this outcome, and no adverse effects alone or in combination via this mechanism would be expected if the Preferred Options Local Plan is adopted as currently drafted.

6.3 FUNCTIONAL LAND

SUMMARY OF PATHWAY

- 6.3.1. 'Functional habitats' or 'Functionally-linked land' are generally taken to be habitats or features outside a European site boundary that are not covered by the designation but which are important or critical to the functional integrity of the site habitats and / or its interest features.
- 6.3.2. These might include, for example, specific features or habitats relied on by mobile species during their lifecycle (e.g. high-tide roosts for waders; areas that are critical for foraging or migration; etc) –

⁷⁰ Available at: https://solent.birdaware.org/media/33773/Disturbance-Monitoring-Report-Winter-2018-2020/pdf/Disturbance_Monitoring_Report_Winter_2018-19_and_2019-20.pdf

although it is not intended as a speculative catch-all covering any habitat that might be occasionally used by or be theoretically suitable for a particular species⁷¹.

6.3.3. With regard to the **Thanet Coast and Sandwich Bay SPA** or **Thanet Coast and Sandwich Bay Ramsar** the potential effect pathways fall into two principal categories based on the characteristics and habitat requirements of the qualifying features:

- **Turnstone** and **little tern** are essentially coastal species and so only likely to be exposed to environmental changes associated with potential allocations that are in close proximity to their preferred coastal habitats. Only one draft Local Plan allocation meets this criterion, Whitstable Harbour Mixed Use (draft Policy W2).
- **Golden plover** are less dependent on the coastal SPA habitats than turnstone or little tern, and several studies suggest that some areas of lowland farmland may be as important for this species as the habitats of the coastal and wetland SPAs typically associated with wintering waders (e.g. Mason & MacDonald 1999; Gillings 2003), and perhaps even more so. Therefore, potential allocation sites that are inland may also provide FLL for this species.

6.3.4. The **Ramsar Criterion 2 wetland invertebrate assemblage** is understood to be principally associated with the terrestrial wetland habitats of the Pegwell Bay and Lydden Valley sections of the Ramsar site, and is not functionally linked to non-designated habitats at or near potential allocation sites within the CCC area. This feature is not considered further.

BASELINE AND PREDICTED CHANGES

Whitstable Harbour Mixed Use

6.3.5. One potential allocation site (Whitstable Harbour mixed use, which is currently subject to draft Policy W2) is located directly on the coast. Draft Policy W2 does not specify any scale, type or quantum of development for the harbour, only noting that the council will produce a Supplementary Planning Document (SPD) informed by the Whitstable Harbour Strategic Plan (WHSP 2017) to masterplan and facilitate regeneration and redevelopment; and that appropriate development (which might include fishing, commercial, business, employment, leisure, parking and residential, and walking / cycling improvements) would need to be compatible with the maintenance of an operational harbour. The Whitstable Harbour Strategic Plan (which was not subject to HRA) does not provide further clarity on the scale or quantum of development that may arise at the site. There is consequently little information on the potential development at the site, and so limited scope for meaningful (i.e. not entirely speculative) assessment of effect pathways at the plan-level⁷².

⁷¹ Case law notes that such land should be necessary to the conservation of the protected habitat types and species (*Holohan v An Bord Pleanala C-461/17*) or play an important role in maintaining or restoring the population of qualifying species at favourable conservation status.

⁷² Note, the SPD would necessarily be subject to HRA also; this is likely to provide more opportunities for a meaningful and specific HRA, given the non-specific nature of Policy W2.

- 6.3.6. The harbour is a relatively high disturbance environment, with activities currently including “*the handling of aggregate cargo, the berthing of fishing vessels and the accommodation of both operational and pleasure craft*” and associated activities including processing and sale of fish and shellfish, and marine products (WHSP 2017).

Little Tern

- 6.3.7. Little tern colonies in the SPA were historically present on Shell Ness (at the mouth of the Great Stour in Pegwell Bay) and at Plumpudding Island (on the north coast near Minnis Bay) until the 1990s. However, little tern now appear to be absent from the SPA as a regular breeding species⁷³. There is no evidence of little tern using Whitstable harbour, or nearby locations that might be exposed to environmental changes associated with development at Whitstable harbour (i.e. within 1km), for breeding and so the allocation of this site would not affect FLL that may be used by this feature⁷⁴.

Turnstone

- 6.3.8. Wintering turnstone utilise a range of coastal habitats including estuaries, sand or shingle beaches, and rocky shores (Brown & Grice 2005), although they tend to favour foreshores that are stony, rocky or seaweed-covered for foraging and often use similar artificial features such as groynes, seawalls or harbours. They typically forage during the day in small groups, searching for a variety of food items under stones, seaweed and strand-line detritus, before moving to coastal roost sites (to which they tend to have a high degree of fidelity) overnight or at high-tide (although their foraging strategy typically allows foraging to continue throughout the tidal cycle).
- 6.3.9. Studies have shown that turnstones are particularly vulnerable to disturbance from dogs, which interrupt their feeding behaviour so affecting their ability to gain sufficient body fat for overwintering or migration; this has been identified as a particular problem in the northern section of Sandwich Bay, although other activities such as walking, bait digging, and kite surfing may have local impacts. They are also vulnerable at roost sites, although may be locally tolerant of human activity⁷⁵.

⁷³ The SIP notes that “*previous attempts at habitat conservation and management to encourage this species to breed within the site again have been unsuccessful*”; Kent Wildlife Trust (2012) note that “*breeding little terns abandoned the site in the 1990s*”. Surveys for projects (e.g. for the Richborough grid connection project (National Grid 2016)) have not recorded little tern breeding at Shell Ness; the Sandwich Bay Bird Observatory (SBBO) identifies them as ‘migrants’ rather than breeders in its sightings list. Occasional breeding attempts by individual pairs may still occur, but there do not appear to currently be any significant little tern colonies within the site.

⁷⁴ Note that little tern are a feature of the Outer Thames Estuary SPA, which is immediately adjacent to Whitstable harbour. This site provides foraging habitat for common and little tern colonies associated with SPAs in Kent, Essex, Suffolk and Norfolk; however, there will be no effects from the allocation of Whitstable harbour on little terns associated with the Outer Thames Estuary SPA due to the distance to the nearest colonies (i.e. Whitstable harbour is substantially beyond the max-mean foraging range for this species (~6km (Woodward *et al.*, 2019)).

⁷⁵ The Thanet Coast Strategic Access Management and Monitoring Plan (2016) notes that “*Turnstones may be becoming more tolerant of disturbance and feeding regularly in proximity to human activity especially around Whitstable harbour and fishermen*”.

Sandwich Bay Bird Observatory Trust (SBBOT 2018) note that “*the high incidence of dogs off leads continues to be the main cause of Turnstone disturbance in Thanet and is likely to be a significant factor in the decline of the wintering Turnstone population of the Thanet and Sandwich Bay SPA*”.

- 6.3.10. Surveys in 2019 (Footprint 2019) identified a turnstone roost (35 – 44 birds recorded) at Whitstable harbour (precise location or characteristics are not provided in the report), and previous surveys by the Sandwich Bay Bird Observatory Trust (SBBOT 2018) identified hotspots for the species “*close to Whitstable harbour and in front of the beach huts below Valkyrie Ave.*”. The section of coast at Long Rock between Whitstable and Herne Bay (which is part of the SPA/Ramsar) has also been identified as being particularly important for roosting and foraging turnstone (Footprint 2019, SBBOT 2018), although this location is over 2km from the allocation site.
- 6.3.11. With regard to potential effects, it should be recognised that Whitstable harbour is an operational harbour with relatively high levels of anthropogenic activity compared to other sectors of the coast. However, there is some anecdotal evidence that turnstone are less sensitive to the types of activity that currently predominate at the harbour.

Golden plover

- 6.3.12. Recent surveys (SBBOT 2018; Footprint 2019; SBBOT 2020) did not record any golden plover at or near Whitstable harbour, and the coastal habitats in this location are likely to be of limited value to this species. SBBOT (2020) note that “*the coastal areas, particularly the shingle and rocky habitats along the Thanet coastline, are not always the favoured habitat for this species with large flocks often found inland on arable land (Henderson & Sutherland, 2017)*”.

Consequently, this species is not considered to be exposed the likely environmental changes that may result from the allocation of Whitstable harbour.

Inland Allocation Sites (Golden Plover)

Context

- 6.3.13. Several studies suggest that some areas of lowland farmland may be as important for golden plover as the habitats of the coastal and wetland SPAs typically associated with wintering waders (e.g. Mason & MacDonald 1999; Gillings 2003), and perhaps even more so. Broadly, it appears that golden plover retain an association with wetland or coastal sites, typically remaining within a few kilometres of these (except where significant regional movements of flocks occur in response to (for example) weather conditions), but will often spend several tidal cycles (or more) foraging and roosting in farmland, both during the day and night.
- 6.3.14. However, whilst there is evidence of regional site fidelity (i.e. birds associated with the Thanet Coast and Sandwich Bay SPA will predominantly use available habitats within a few kilometres of the site), the species’ use of farmland appears variable according to cropping patterns and rotations, with limited field fidelity from year to year (Mason & MacDonald 1999) except where favoured habitats are consistently or intentionally maintained.
- 6.3.15. There is evidence that certain crops may be favoured, and larger fields (i.e. over 10 – 15 ha.) are favoured over smaller ones, but distributions will often be variable from year to year. Gillings *et al.* (2007) found that flocks occupied only a fraction of the available fields in a given area, concentrating mostly in large fields with open boundaries and where manure had been applied. Mason & MacDonald (1999) found that fields over 15 ha. were favoured by golden plover, with fields of less

than 10 ha. being used less often than their proportion in the study area and fields greater than 15 ha being used more often.

- 6.3.16. It must also be noted that virtually all surveys and datasets are based on diurnal surveys, whereas there is evidence that these do not reliably predict nocturnal habitat choice (Gillings *et al.* 2005). The available data for the region therefore has some limitations.
- 6.3.17. When considering thresholds for significance, 1% of the relevant population is typically used; so, for golden plover, the threshold for designation as an international site is 4,000 birds, based on the currently estimated UK population of golden plover of 400,000 (Stroud *et al.* 2016). This 1% value is often used for HRAs of projects – so a project likely to affect 1% of an SPA’s population of a species could potentially have a significant effect (in HRA terms). As the population of golden plover associated with the SPA is uncertain, it is considered appropriate to use the current WeBS 5 year peak mean for Pegwell Bay and Thanet Coast (around 3370 birds if combined) and the GB population (400,000) to provide guidance on appropriate thresholds; on this basis, aggregations of 34 – 40 birds (i.e. 1% of the 5 year peak mean, and 0.1% of the threshold for SPA designation) would be considered potentially notable, such that significant effects could potentially occur.

Regional Distribution Patterns

- 6.3.18. The majority of the birds associated with the SPA (over 80%, based on EN (2004)) appear to use areas of permanent pasture within and immediately outside the SPA to the south of the Great Stour, associated with Sandwich Bay and Pegwell Bay (i.e. some distance from the CCC boundary). However, other *ad hoc* surveys and records, including Kent Ornithological Society sightings data and surveys reported for the Richborough Grid Connection project (National Grid (2016)) indicate areas close to or partly within the CCC area where potentially notable numbers of golden plover are regularly recorded (or have been recorded historically), including:
- the fields and marshes associated with the former Wensum Channel (particularly Ash Level (predominantly south east of the CCC area) and the fields and marshes west of St Nicholas at Wade);
 - the fields and marshes between Reculver and Birchington (several hundred birds recorded in most years); and
 - the fields and marshes at Seasalter (west of Whitstable).
- 6.3.19. Fields in these areas appear more likely to regularly support potentially significant aggregations of golden plover than agricultural areas in general, based on the available data and the characteristics of the fields and topography in these areas.

- 6.3.20. Urbanisation or disturbance effects are typically considered likely if development takes place within around 400m of a designated site⁷⁶. Although not directly applicable to functional land⁷⁷, the potential CCC allocations are all over 2km from the broad areas noted above, and so are likely to have a relatively lower risk of affecting potentially notable FLL both directly and indirectly.

INCORPORATED MITIGATION

- 6.3.21. The Preferred Options Local Plan includes several mitigation measures designed to prevent adverse effects on the integrity of European sites due to impacts on FLL; these include
- **Policy W2** states that “*The SPD process (and any development at the harbour prior to this) must safeguard the value of the harbour for roosting birds associated with the nearby SPA / Ramsar sites, particularly turnstone associated with the Thanet Coast and Sandwich Bay SPA and Thanet Coast and Sandwich Bay Ramsar site*”
 - **Policy DS17** states that “*Where there is the potential for a site to be functionally linked land with a SPA, SAC and/or RAMSAR, an assessment of the potential value of the site must be undertaken. Any development considered likely to have significant effects must follow the mitigation hierarchy. Where mitigation measures are agreed by the council, the development will be required to fund and/or implement such mitigation measures*”.
 - Allocation specific policies (e.g. W5 Land South of Thanet Way) require that “*The green and blue infrastructure strategy for the site should... Assess the site’s potential to be functionally linked land for golden plover, in line with Policy DS17*”.

ASSESSMENT OF EFFECTS

Whitstable Harbour Mixed Use

- 6.3.22. As noted, there is no evidence of **little tern** using Whitstable harbour, or nearby locations that might be exposed to environmental changes associated with development at Whitstable harbour (i.e. within 1km), for breeding and so the allocation of this site would not affect FLL that may be used by this feature⁷⁸.

⁷⁶ For example, 400m has been identified as the distance from the Thames Basin Heaths SPA and the Solent and Harbours SPAs within which development should not occur due to the risk of significant effects on the SPAs themselves.

⁷⁷ SPAs typically support higher value and more unique habitats where concentrations of (usually dependent) species are found; agricultural land is more ubiquitous and so pressure on, say, an individual field would not typically carry the same degree of risk as pressure on an equivalent area of an SPA.

⁷⁸ Note that little tern are a feature of the Outer Thames Estuary SPA, which is immediately adjacent to Whitstable harbour. This site provides foraging habitat for common and little tern colonies associated with SPAs in Kent, Essex, Suffolk and Norfolk; however, there will be no effects from the allocation of Whitstable harbour on little terns associated with the Outer Thames Estuary SPA due to the distance to the nearest

- 6.3.23. With regard to **turnstone**, the proposals for the site are not defined by draft Policy W2 in sufficient detail to allow a meaningful assessment of likely effects, or the identification of development-specific mitigation measures. Furthermore, not allocating the site would not prevent future development at the site. Development at the harbour clearly has the potential to affect its value as a roost for turnstone although it is recognised that:
- the continued presence of turnstone at this location suggests that typical harbour activities are not fundamentally inconsistent with the maintenance of roosting opportunities;
 - turnstone frequently utilise artificial structures for roosting;
 - there is no presumption for any scale, type or quantum of development at Whitstable harbour in draft policy W2; and
 - opportunities to maintain the value of the harbour as a roost site are consequently available and can be precisely defined through the SPD and associated masterplan (which would arguably not be available as control mechanisms if the site were not allocated in the plan).
- 6.3.24. The mitigation provided by Policy W2 will however provide sufficient plan-level safeguards to ensure that this aspect is fully assessed and mitigated at the appropriate level in the planning hierarchy; on this basis there will be no adverse effects on the integrity of the turnstone population as a result of the Local Plan.

Allocation Sites

- 6.3.25. The Local Plan allocations could arguably affect golden plover through environmental changes affecting associated functional habitat and favoured non-SPA areas due to the allocations themselves (direct loss of functional habitat) or through increased recreational pressure associated with developments.
- 6.3.26. A high-level assessment of the likely value of the potential allocation sites to golden plover as FLL is outlined in **Appendix E**. This is based on the generally accepted habitat preferences of the species in winter, and the typical characteristics of known areas of FLL elsewhere. Potential allocation sites were reviewed using freely-available desk-study information including recent and historical aerial photographs and ecological data from existing planning applications locally.
- 6.3.27. In summary, the vast majority of the potential allocation sites have no or very low potential to support significant aggregations of golden plover (such that there is potential for the site to be considered FLL). However, the following allocations utilise some relatively large fields (i.e. >10 ha) and/or are relatively close to the SPA (within 10km); or have potentially suitable fields immediately adjacent to the potential allocation site; or have cumulative potential as FLL:
- Land at Merton Park
 - Land to the North of Hollow Lane

colonies (i.e. Whitstable harbour is substantially beyond the max-mean foraging range for this species (~6km (Woodward *et al.*, 2019)).

- Land South of Thanet Way
- Land to the West of Thornden Wood Road
- Altira
- Broad Oak Reservoir and Country Park
- Land at Brooklands Farm
- Land north of University of Kent

6.3.28. FLL for golden plover can be difficult to identify at the plan level as regional distributions and the use of many fields will vary year to year according to local and regional conditions (e.g. cold winters may increase use of some terrestrial habitats) and cropping patterns. Furthermore, this variability and transience creates a risk of potential effects that cannot be avoided by simply excluding certain fields or sites in the allocation process, and it is possible that some allocation areas will, in the future, become valuable for this species. Full assessment of this aspect must therefore necessarily be deferred to the project-level, which the Preferred Options Local Plan requires through its policy provisions.

6.3.29. However, it is recognised that the allocations in the CCC plan will not substantially reduce the non-designated habitat areas potentially available to golden plover within the CCC area. The Local Plan does not therefore introduce a systematically unavoidable risk of effects on FLL for golden plover that might affect population integrity, and the mitigation provides sufficient plan-level safeguards to ensure that this aspect is fully assessed and mitigated at the appropriate level in the planning hierarchy; on this basis there will be no adverse effects on the integrity of the golden plover population as a result of the local plan.

FUNCTIONAL LAND RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

6.3.30. The incorporated policy measures will provide sufficient safeguards to ensure that the integrity of **Thanet Coast and Sandwich Bay SPA** or **Thanet Coast and Sandwich Bay Ramsar** is not adversely affected through effects on FLL. Policy additions are not considered essential to ensure this outcome, and no adverse effects alone or in combination via this mechanism would be expected if the Preferred Options Local Plan is adopted as currently drafted.

7 THE SWALE SITES

7.1 OVERVIEW

- 7.1.1. The Swale sites that are screened in are **The Swale SPA** and **The Swale Ramsar**.
- 7.1.2. The screening of the Preferred Options has indicated that the interest features of these sites may be vulnerable (i.e. exposed and sensitive) to environmental changes associated with the implementation of the Local Plan, particularly in relation to 'in combination' effects of **visitor pressure** associated with the overall quantum of development. In addition, the qualifying features of the SPA and Ramsar site may be exposed to development-related effects when outside the site boundary (i.e. functional land).
- 7.1.3. The SSSI units of The Swale SSSI that underpin the above European sites are almost all at 'favourable' conservation status (the exceptions being grasslands and ditch systems associated with Seasalter Levels, which are in 'unfavourable no change' condition for land-management reasons).

7.2 RECREATIONAL PRESSURE / URBANISATION

SUMMARY OF PATHWAY

- 7.2.1. The pathway for effects on the interest features of the Swale SPA/Ramsar is essentially as per the Thanet Coast sites (see Section 6.2), i.e. through effects on the qualifying bird species either directly (e.g. through causing them to flee) or indirectly (e.g. through damaging the supporting habitats).

BASELINE AND PREDICTED CHANGES

- 7.2.2. The issue of region-wide in combination recreational pressure on the European sites associated with The Swale has been recognised for several years, and has been subject to a detailed mitigation strategy (The North Kent Marshes "*Strategic Access Management and Monitoring Strategy*" (SAMMS)⁷⁹). This strategy therefore provides the context for the baseline and the assessment.
- 7.2.3. The Thames, Medway and Swale Estuaries SAMMS defines 'Zones of influence' (Zol) for the European sites associated with the North Kent Marshes (including The Swale SPA/Ramsar), based on visitor surveys, which provide a reasonable and robust basis for identifying locations within which residential development might result in 'significant effects' alone or in combination. The Zol for The Swale SPA/Ramsar sites is 6km. The Zols are used to identify areas within which developer contributions are levied to support the SAMMS, and hence as a proxy for 'significant' effects.
- 7.2.4. The CCC Preferred Options Local Plan includes provision for ~4023 homes within 6km of the SPA/Ramsar.

⁷⁹ Available at: <https://swale.gov.uk/news-and-your-council/publications/planning-and-planning-policy/strategic-access-management-and-monitoring-strategy-samms>

INCORPORATED MITIGATION

- 7.2.5. The Preferred Options Local Plan includes mitigation measures designed to prevent adverse effects on the integrity of European sites due to recreational pressure; these include:
- **Policy DS17** - Habitats of international importance (requires compliance with the SAMMS and financial contributions in line with the relevant tariffs).
 - Policies relating to open space provision (e.g. SS1, C6 – C9, DS24).
- 7.2.6. The SAMMS was adopted by CCC in 2017 (with adoption of the current Local Plan); the mitigation delivered by the SAMM is considered fundamentally scalable and extendable to address higher housing numbers and future planning periods; this is consistent with NE's position on other strategic mitigation schemes (for example, in relation to the Thames Basin Heaths SPA, or the SPAs associated with the Solent and nearby harbours).

ASSESSMENT OF EFFECTS – THANET COAST AND SANDWICH BAY SPA/RAMSAR

- 7.2.7. The Preferred Options Local Plan will increase the population within 6km of the SPA/Ramsar, which will increase the number of visits and visitors to the estuary, which may increase the risk of disturbance events having a significant effect on wintering waterbird populations.
- 7.2.8. In considering the potential effects of increased recreational pressure on these sites due to the Preferred Options Local Plan, the following aspects are relevant:
- The Preferred Options Local Plan incorporates the agreed and accepted strategic mitigation for recreational effects on the European sites associated with The Swale SPA/Ramsar, i.e. the SAMMS and associated developer contributions.
 - The SAMMS is considered fundamentally scalable to address higher housing numbers, and extendable to cover the revised plan period. The SAMMS is subject to regular monitoring, which will inform future amendments to ensure its continued effectiveness.
- 7.2.9. With regard to monitoring the effectiveness of the SAMMS, provision is made within the SAMMS for annual monitoring. There is evidence of the effectiveness of the measures (notably ranger provision) from similar programmes such as that associated with the Solent⁸⁰ which have reported significant differences in measures of disturbance.
- 7.2.10. On this basis, it can be concluded that the Preferred Options Local Plan will have no adverse effects on the integrity of **The Swale SPA** or **The Swale Ramsar** due to recreational pressure or urbanisation effects, alone or in combination.

⁸⁰ Available at: https://solent.birdaware.org/media/33773/Disturbance-Monitoring-Report-Winter-2018-2020/pdf/Disturbance_Monitoring_Report_Winter_2018-19_and_2019-20.pdf

RECREATIONAL PRESSURE RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

- 7.2.11. The incorporated policy measures will provide sufficient safeguards to ensure that the recreational pressure does not adversely affect The Swale sites as a result of the Local Plan. Policy additions are not considered essential to ensure this outcome, and no adverse effects alone or in combination via this mechanism would be expected if the Preferred Options Local Plan is adopted as currently drafted.

7.3 FUNCTIONAL LAND

SUMMARY OF PATHWAY

- 7.3.1. With regard to **The Swale SPA** and **The Swale Ramsar** the only feature likely to be reliant on FLL outside the designated site boundaries is **Dark-bellied brent goose**, which are known to forage in agricultural fields at low and high tide, some of which will be outside the designated site boundaries.
- 7.3.2. The remaining features of the SPA and Ramsar are more fundamentally associated with the habitats of the designated sites themselves (e.g. intertidal mudflats, saltmarsh, grazing marsh) and are not typically considered reliant on FLL away from the coast. These features are not considered further.
- 7.3.3. The following sections summarise the anticipated exposure of **Dark-bellied brent goose** associated with The Swale SPA / Ramsar to the potential allocations in the CCC plan.

BASELINE AND PREDICTED CHANGES

- 7.3.4. Dark-bellied brent geese typically winter on coastal mudflats, where they feed on eelgrass (*Zostera* spp.) and marine algae. However, the species in the UK has diversified its foraging preferences to include farmland with arable or pasture, and sometimes amenity grassland, which is thought to be a response to reductions in natural terrestrial habitats. The species shows significant site fidelity.
- 7.3.5. Substantial work on dark-bellied brent geese FLL has been undertaken for the Solent Waders and Brent Goose Strategy (Whitfield 2020), which notes that “*The suitability of sites for brent geese depends on distance from the coast, the size of the grazing area, the type of grassland management, visibility and disturbance. Brent geese prefer large open sites where they have clear sightlines and short, lush grass for grazing. They use a great deal of energy travelling between feeding areas, so tend to preferentially select sites adjacent to the coast*”. The Solent Waders and Brent Goose Strategy project has developed the Solent Waders and Brent Goose Network⁸¹ which identifies FLL around the Solent; virtually all sites identified through this process are within 2 – 3km of the coast, reflecting the relative importance of this proximity aspect.
- 7.3.6. In addition to proximity to the coast, Whitfield (2020) notes that favoured sites are typically large, low-lying and flat.

⁸¹ <https://hiwwt.maps.arcgis.com/>

7.3.7. With regard to the potential allocations, sites that are over 5km from the SPA are considered very unlikely to provide FLL for the SPA population of dark-bellied brent geese. This effectively excludes all sites except for:

- Land at Brooklands Farm
- Land South of Thanet Way
- Land to the West of Thornden Wood Road
- St Vincent's Centre

7.3.8. No site-specific baseline survey data are available for the proposed allocation sites; more generally, there are known areas of FLL for dark-bellied brent geese associated with The Swale sites immediately adjacent to the CCC boundary at Graveney, Cleve and Nagden Marshes (note, this area forms part of the Cleve Hill Solar Farm which has received DCO permission).

INCORPORATED MITIGATION

- **Policy DS17** states that “*Where there is the potential for a site to be functionally linked land with a SPA, SAC and/or RAMSAR, an assessment of the potential value of the site must be undertaken. Any development considered likely to have significant effects must follow the mitigation hierarchy. Where mitigation measures are agreed by the council, the development will be required to fund and/or implement such mitigation measures*”.

ASSESSMENT OF EFFECTS – THE SWALE SPA/RAMSAR

- 7.3.9. A high-level assessment of the likely value of the potential allocation sites to dark-bellied brent goose as FLL is outlined in **Appendix E**. This is based on the generally accepted habitat preferences of the species in winter, and the typical characteristics of known areas of FLL elsewhere. Potential allocation sites were reviewed using freely-available desk-study information including recent and historical aerial photographs and ecological data from existing planning applications locally.
- 7.3.10. In summary none of the proposed allocation sites are considered likely to provide FLL for the SPA population of dark-bellied brent geese due to their fundamental characteristics (e.g. size, habitats present, topography). Notwithstanding this, the policy-based mitigation provides sufficient plan-level safeguards to ensure that this aspect is fully assessed and mitigated at the appropriate level in the planning hierarchy; on this basis there will be no adverse effects on the integrity of the dark-bellied brent goose population as a result of the Preferred Options Local Plan.

FUNCTIONAL LAND RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

- 7.3.11. The incorporated policy measures will provide sufficient safeguards to ensure that the integrity of **The Swale SPA** or **The Swale Ramsar** is not adversely affected through effects on FLL. Policy additions are not considered essential to ensure this outcome, and no adverse effects alone or in combination via this mechanism would be expected if the Preferred Options Local Plan is adopted as currently drafted.

8 TANKERTON SLOPES AND SWALECLIFFE SAC

8.1 OVERVIEW

- 8.1.1. **Tankerton Slopes and Swalecliffe SAC** is a small site comprising two units of coastal grassland east of Whitstable designated for its population of **Fisher's estuarine moth**, which is dependent on hogs-fennel for its larval food plant. The SSSI units of the Thanet Coast SSSI and Tankerton Slopes SSSI that underpin the site are in 'favourable' condition.

8.2 RECREATIONAL PRESSURE / URBANISATION

SUMMARY OF PATHWAY

- 8.2.1. The site is located in an urban area and so is potentially vulnerable to changes in recreational pressure that may damage the site habitats (particularly those locations where hogs-fennel is present). The site is heavily used by dog walkers and is vulnerable to under-management.

BASELINE AND PREDICTED CHANGES

- 8.2.2. The SSSI units underpinning the SAC are in favourable condition. There is no SIP or supplementary advice specifically for this site, however.
- 8.2.3. The Ramsgate to Whitstable Access and Sensitive Features Appraisal for the England Coastal Path⁸² notes the following:
- The area is currently well accessed with both the Oyster Bay Trail walking route and a Regional Cycle Route through and alongside the sites
 - Walkers and dog walkers use both sites largely on established routes
 - The Tankerton Slope SSSI unit is steep with limited accessibility
 - The Thanet Coast SSSI unit has characteristics (marshy, thick vegetation, shingle, cut off by tides) that concentrate usage of the site on the existing surfaced trails
 - *"Local authorities in the area have developed strategic solutions to ensure that their housing allocations (which would otherwise have a likely significant effect) also have no likely significant effect on the SPA [sic] – which would also address any potential concerns over [this] SAC"*
- 8.2.4. The site is also actively managed by the Council.
- 8.2.5. No ZoI has been identified for this SAC, although it is likely to be relatively small (i.e. the vast majority of visitors will almost certainly live in Whitstable or Herne Bay, given the size and nature of the site units). Allocations in Whitstable may therefore increase recreational pressure on these areas. However, the closest allocations are over 1.1km from the site, and located in areas south of the railway line where closer, more accessible greenspace is available to the south.

⁸² Available at: <https://assets.publishing.service.gov.uk/media/5a805d6940f0b62305b8ab9a/ramsgate-whitstable-sensitive-features-appraisal.pdf>

INCORPORATED MITIGATION

- 8.2.6. The Preferred Options Local Plan includes several mitigation measures designed to prevent adverse effects on the integrity of European sites due to recreational pressure; these include:
- **Policy DS17** - Habitats of international importance (requires compliance with the Thanet Coast SAMM and financial contributions in line with the relevant tariffs).
 - Policies relating to open space provision (e.g. DS21, DS24, SS1, C6 – C9).
- 8.2.7. The SAMM was adopted by CCC in 2017 (with adoption of the current Local Plan); it currently covers the period to 2031, although the mitigation delivered by the SAMM is considered fundamentally scalable and extendable to address higher housing numbers and future planning periods; this is consistent with NE's position on other strategic mitigation schemes (for example, in relation to the Thames Basin Heaths SPA, or the SPAs associated with the Solent and nearby harbours).
- 8.2.8. The measures noted in the SAMM apply to the Thanet Coast SSSI unit of Tankerton Slopes and Swalecliffe SAC.

ASSESSMENT OF EFFECTS – TANKERTON SLOPES AND SWALECLIFFE SAC

- 8.2.9. The Preferred Options Local Plan will increase the population within 6km of the SAC. It is unlikely that this would result in potentially notable increases in usage of the site however due to the limited accessibility, both to the site itself from the allocation sites (through urban Whitstable), and within the site (due to the site characteristics, especially when compared with the well-maintained paths and amenity grassland adjacent to the site). The sites are well managed and recreation is not identified as a threat or pressure.
- 8.2.10. In considering the potential effects of increased recreational pressure on these sites due to the Preferred Options Local Plan, the following aspects are relevant:
- The Preferred Options Local Plan incorporates the agreed and accepted strategic mitigation for recreational effects on the European sites associated with the Thanet Coast, i.e. the SAMM and associated developer contributions.
 - The SAMM is considered fundamentally scalable to address higher housing numbers, and extendable to cover the revised plan period. The SAMM is subject to regular monitoring, which will inform future amendments to ensure its continued effectiveness.
 - The SAMM measures are applicable to this site also.
 - The provision of open space commensurate with planned growth and allocations will reduce any additional effects on these sites.
- 8.2.11. Policy DS21 will support green infrastructure provision whilst Policy DS24 will provide policy provisions to ensure open space, including natural and semi-natural open space, is provided commensurate with new development proposed, which will ensure broader open space needs linked to new development within the district will be met. Allocation policies include provision for the inclusion of open space with standards.
- 8.2.12. On this basis, it can be concluded that the site has a relatively low sensitivity to recreational pressure, that recreational activity at the site is currently well-managed as part of the broader management of the site (and there is no reason to assume that this will change), and that the



measures incorporated into the Preferred Options Local Plan will ensure that adverse effects on the integrity of this site via this mechanism will not occur.

RECREATIONAL PRESSURE RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

- 8.2.13. The incorporated policy measures will provide sufficient safeguards to ensure that the recreational pressure does not adversely affect Tankerton Slopes and Swalecliffe SAC as a result of the Local Plan. Policy additions are not considered essential to ensure this outcome, and no adverse effects alone or in combination via this mechanism would be expected if the Preferred Options Local Plan is adopted as currently drafted.

9 BLEAN COMPLEX SAC

9.1 OVERVIEW

- 9.1.1. Blean Complex SAC comprises three woodland blocks (Church Woods SSSI, Ellenden Wood SSSI, and East Blean SSSI) that support the **Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*** feature (hereafter '**Oak-hornbeam forests**'). The SSSIs units underpinning the SAC are all in 'favourable' or 'unfavourable recovering' condition, with the exception of one unit in East Blean SSSI where invasive periwinkle *Vinca minor* exceeds the target for the unit. The SIP⁸³ identifies air pollution as the only threat to site integrity.
- 9.1.2. The screening of the Preferred Options has indicated that the interest features of these sites may be vulnerable (i.e. exposed and sensitive) to environmental changes associated with the implementation of the Local Plan, particularly in relation to 'in combination' effects of **air quality** changes associated with the overall quantum of development. **Recreational pressure** may also increase as a result of the Local Plan.

9.2 RECREATIONAL PRESSURE / URBANISATION

SUMMARY OF PATHWAY

- 9.2.1. Woodland habitats can be susceptible to disturbance from recreational activities or urbanisation impacts through a range of mechanisms, including compaction of soil (particularly around ancient and veteran trees), damage to trees and other vegetation, introduction of invasive species, or (depending on habitat) eutrophication from faeces.
- 9.2.2. The SSSI that comprise Blean Complex SAC are typically several kilometres from the nearest allocations, although one notable allocation (University of Kent) includes land within approximately 200m of the Church Woods SSSI at its closest point.

BASELINE AND PREDICTED CHANGES

- 9.2.3. The SIP does not identify recreational pressure or urbanisation as a threat or pressure. Similarly, no issues in relation to recreational pressure or urbanisation effects are identified in the relevant SSSI condition assessments. The Supplementary Advice⁸⁴ notes that "*Recreation levels at Blean Complex SAC will need to be monitored, but it is not currently a particular concern, due to the current access management and educational programme on this site*". As a result, Zols based on visitor surveys have not been identified for the site, although most of the allocations will be within 5 - 7km of the SAC.

⁸³ [141222FINALv1 Blean Complex.pdf](#)

⁸⁴ <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0013697.pdf>

INCORPORATED MITIGATION

9.2.4. The Preferred Options Local Plan includes several mitigation measures designed to prevent adverse effects on the integrity of European sites due to recreational pressure or moderate incidental effects; these include:

- **Policy DS23** – Blean Woodland Complex (sets requirements for the safeguarding and enhancement of the Blean Woodland Complex which includes the SAC plus other designated and undesignated woodland blocks (i.e. non-SAC) that will contribute to the overall woodland resource and hence integrity of the SAC).
- **Policy C12** – Landscape and Green Infrastructure (requires that no residential development take place within 400m of the Blean Woods SAC).
- Policies relating to open space provision within developments (e.g. DS21, DS24, SS1, C6 – C9).

ASSESSMENT OF EFFECTS

- 9.2.5. As noted, recreational pressure is not identified as either a pressure or a threat for the site. Recent correspondence between CCC and NE (2024) has confirmed this position, and the expectation that this will not change as a result of the Local Plan. The effects of the Local Plan and population growth on the features of the SAC are therefore considered nominal, and arguably ‘not significant’ (i.e. the screening test) as the conservation objectives are not likely to be undermined.
- 9.2.6. In addition, Policy DS21 will support green infrastructure provision whilst Policy DS24 includes policy provisions to ensure open space, including natural and semi-natural open space, is provided commensurate with new development proposed, which will ensure that the broader open space needs linked to new development within the district will be met. Allocation policies include provision for the inclusion of open space with standards. These measures will help moderate the residual risk of increased recreational pressure affecting areas of the SAC.
- 9.2.7. More importantly, Policy DS23 (with DS17) will (a) ensure that the integrity of the SAC is not adversely affected by development within the CCC area and (b) help ensure maintenance and/or improvement of the SAC conservation status by improving the overall condition of the Blean woodland complex generally (i.e. including non-SAC areas) which will increase the resilience to environmental change. Policy C12 will safeguard against potential urbanisation effects.

RECREATIONAL PRESSURE RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

- 9.2.8. The SAC site has a relatively low sensitivity to recreational pressure, and recreational activity at the site is currently well-managed as part of the broader management of the site (and there is no reason to assume that this will change). The incorporated policy measures will help moderate the residual risk of increased recreational pressure due to population growth and contribute to the SAC achieving and/or maintaining ‘favourable’ conservation status. Policy additions are not considered essential to ensure this outcome, and no adverse effects alone or in combination via this mechanism would be expected if the Preferred Options Local Plan is adopted as currently drafted.

9.3 AIR QUALITY

SUMMARY OF PATHWAY

- 9.3.1. The Local Plan proposals may indirectly contribute to local air pollution and wider diffuse pollution. In practice, the principal source of air pollution associated with the Local Plan will be related to changing patterns of vehicle use due to the promotion of new development (since the Local Plan does not provide for any new significant point-sources).
- 9.3.2. Highways England’s *Design Manual for Roads and Bridges* (DMRB) sets out an approach for assessing the effect of emissions from specific road schemes on designated sites; this suggests that a quantitative air quality assessment may be required if a European site is within 200m of an affected road and the predicted change in annual average daily traffic (AADT) is over 1,000.
- 9.3.3. This approach has some limitations when considering the effects of a Local Plan (rather than a specific road scheme) although in the absence of any other specific guidance or thresholds it has typically been applied to main roads⁸⁵ within 200m of a European site, with case law⁸⁶ indicating that changes in AADT on particular roads should be determined ‘in combination’ with other plans and projects.
- 9.3.4. The majority of this SAC is over 200m from any strategic roads, or other roads likely to receive significant additional traffic as a result of the Local Plan; however, approximately 6.7ha of Ellenden Wood SSSI and Church Wood, Blean SSSI are within 200m of the A290 north of Canterbury.

BASELINE AND PREDICTED CHANGES

- 9.3.5. The SIP indicates that the current levels of nitrogen deposition exceed the critical load for the **Oak-hornbeam forests** feature. This is supported by data from APIS:

Table 9-1 – APIS data for nutrient nitrogen site critical loads for Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*

Nutrient N component	Critical Load / Critical Level	Current (2020)*
Total N Deposition (kg/N/ha/yr)	10 – 20	24.3
Ammonia (µg/m3)	3	1.3
NOx (µg/m3)	30	11.4

⁸⁵ i.e. trunk roads, A-roads and most B-roads. Changes in the number of vehicles using minor roads in the region will be too small to meaningfully assess using the industry standard approaches to AADT modelling that can be applied at the strategy-level (i.e. without substantial additional data collection including field monitoring at specific locations – this may be appropriate for a specific development or allocation but not for traffic-growth generally).

⁸⁶ Wealden District Council v. Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority [2017] EWHC 351.

SO2 (µg/m3)	20	0.9
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*The current level is the maximum for the areas of the site within 200m, based on APIS mapping data.

- 9.3.6. It should be noted that the APIS source attribution data for the site suggest that road transport is responsible for 12.3% of the local contributions to N deposition (compared with, for example, livestock and fertiliser application which account for 29.1% of local contributions to N deposition).
- 9.3.7. With regard to traffic increases, CCC is currently revisiting its transport and air quality assessments and LPA-specific data are not therefore available for this Reg. 18 consultation.
- 9.3.8. However, traffic and air quality assessments have been completed by the University of Kent to support its proposed allocation; these used 2019 as a baseline year and modelled the future baseline in 2040 with and without the allocation (note, this would have included assumptions around housing growth within the CCC area but not the specific numbers set out in the Preferred Options Local Plan). In summary:
- The relevant critical load for N deposition is predicted to be exceeded both with and without the UoK allocation; however, the maximum change in N deposition for the UoK allocation ‘alone’ is 0.49% of the critical load (i.e. below the 1% threshold for significance), with in combination effects unlikely to then result in an exceedance of the critical load.
 - The relevant Critical Levels for both NO_x and NH₃ are predicted to be met within Blean Complex SAC in all years (2019 Baseline and 2040), without and with the Proposed Development, with the changes in these pollutants being <1% of the relevant Critical Level ‘alone’ and ‘in-combination’ (hence likely to be considered ‘not significant’).
 - The changes within Blean Complex SAC were therefore considered to be small (less than 1% of the relevant CL), supporting a ‘no LSE’ conclusion for the proposed allocation, alone and in combination.
- 9.3.9. It should be noted that the background rate of N-deposition from vehicles has been declining for some years and is expected to decrease substantially over the plan period with the shift to electric vehicles, based on the UK Air Quality Plan for Nitrogen Dioxide and government predictions⁸⁷; incorporating allowances for expected background air quality improvements into any assessments is in accordance with IAQM guidance (IAQM 2020)⁸⁸.
- 9.3.10. The Church Woods, Blean SSSI and Ellenden Wood SSSI units within 200m of the A290 are all in ‘favourable’ condition.

⁸⁷ Air quality plan for nitrogen dioxide (NO₂) in UK (2017): <https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017>

⁸⁸ This notes that “*To assume no improvement over a 15 or 20 year period, would effectively ignore the more stringent legal requirements for vehicle NO_x emission standards to be achieved under real world driving conditions, trends in new vehicle registrations and ongoing government and international initiatives to improve air quality through reductions in emissions*”

INCORPORATED MITIGATION

9.3.11. The potential for effects on European sites due to air quality is difficult for a Local Plan to specifically mitigate, since the decision to travel by car outside the LPA area is typically made in the context of regional and national travel conditions rather than local provision of sustainable travel options. However, the promotion of sustainable transport is woven throughout the Draft Local Plan, particularly via the following policies:

- **Policy SS4** - Movement and Transportation Strategy for the district
- **Policy DS13** - Movement Hierarchy
- **Policy DS14** - Active and sustainable travel
- **Policy DS15** - Highways and parking
- **Policy DS16** - Air Quality
- **Policy DS23** – Blean Woodland Complex (sets requirements for the safeguarding and enhancement of the Blean Woodland Complex which includes the SAC).

9.3.12. These policy measures will help moderate the effects of the plan but will not necessarily mitigate or offset potential changes in air quality in their entirety.

ASSESSMENT OF EFFECTS

9.3.13. The SACO target for air quality is “Restore as necessary, the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System”.

9.3.14. As noted, CCC is currently revisiting its transport and air quality assessments and LPA-specific data are not therefore available for this Reg. 18 consultation. However the air quality assessment data associated with the University of Kent allocation provides evidence that the air quality changes due to traffic growth linked to the CCC Local Plan provisions are likely to be negligible. It is therefore very likely that there will be no adverse effects on the integrity of this SAC via air quality changes associated with the Local Plan, alone or in combination. The measures included in the Preferred Options Local Plan will have a small moderating effect, although these may not substantively alter future traffic growth on the A290 near to this SAC for the reasons noted.

RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

9.3.15. The conclusions in relation to air quality are preliminary only and subject to review following ongoing transport and air quality assessments being completed by CCC. The mitigating policies within the plan will also be reviewed at this point, as required. However, existing data and models suggest that the CCC Local Plan will have no adverse effect on Blean Complex SAC, alone or in combination, due to air quality changes.

10 LYDDEN AND TEMPLE EWELL DOWNS SAC

10.1 OVERVIEW

- 10.1.1. **Lydden and Temple Ewell Downs SAC** consists of five separate areas of chalk grassland adjacent to the A2, approximately 3km south-east of the CCC area (therefore also limiting CCC's involvement with the site as it is within Dover District). The site includes some of the richest chalk grassland in Kent, mostly located on south-west facing slopes with thin soils, with outstanding assemblages of plants and invertebrates. The site is designated for **Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*)**. The site is underpinned by the Lydden and Temple Ewell Downs SSSI and Lydden Temple Ewell NNR.
- 10.1.2. The screening of the Preferred Options has indicated that the interest features of these sites may be vulnerable (i.e. exposed and sensitive) to environmental changes associated with the implementation of the Local Plan, principally in relation to 'in combination' effects of **air quality changes** associated with the overall quantum of development in nearby LPA areas.
- 10.1.3. The SSSI units of the site are at 'favourable' or 'unfavourable recovering' conservation status (the 'unfavourable recovering' condition is due to grazing levels).

10.2 AIR QUALITY

SUMMARY OF PATHWAY

- 10.2.1. The pathway for this site is essentially as per that set out in **Section 9.2**. The majority of this SAC is over 200m from the A2, although approximately 1.4ha of SSSI Unit 5 is within 200m⁸⁹.

BASELINE AND PREDICTED CHANGES

- 10.2.2. The SIP indicates that the current levels of nitrogen deposition exceed the critical load for calcareous grassland. This is supported by data from APIS:

Table 10-1 – APIS data for nutrient nitrogen site critical loads for Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*)

Nutrient N component	Critical Load / Critical Level	Current (2020)*
Total N Deposition (kg/N/ha/yr)	10 – 20	16
Ammonia (µg/m3)	1	1.2
NOx (µg/m3)	30	11
SO2 (µg/m3)	10	0.8

⁸⁹ Note, very small areas of SSSI Units 1 and 2 (<0.006ha and 0.02ha respectively) are also within 200m of the A2.

*The current level is the maximum for the areas of the site within 200m, based on APIS mapping data.

- 10.2.3. It should be noted that the APIS source attribution data for the site suggest that road transport is responsible for 8.71% of the local contributions to N deposition (compared with, for example, livestock and fertiliser application which account for 31.5% of local contributions to N deposition).
- 10.2.4. With regard to traffic increases, CCC is currently revisiting its transport and air quality assessments and LPA-specific data are not therefore available for this Reg. 18 consultation. It is likely that AADT increases on the A2 over the plan period will be over 1000, and that Canterbury’s contribution is unlikely to be considered ‘*de minimis*’.
- 10.2.5. However, a recently completed HRA for Dover District Council⁹⁰ included an air quality assessment, which considered the effects of the Dover Local Plan alone and in combination, with the in combination assessment taking account of anticipated housing numbers in nearby LPA areas (including Canterbury) at that point; in summary:
 No ecological receptor locations were found to exceed NOx thresholds.
 The process contribution of nitrogen deposition from the Dover Local Plan was calculated to be less than 1% of the minimum critical load (and so ‘not significant’).
 The process contribution of acid deposition from the Dover Local Plan was calculated to be less than 1% of the minimum critical load (and so ‘not significant’).
- 10.2.6. It should be noted that the background rate of N-deposition from vehicles has been declining for some years and is expected to decrease substantially over the plan period with the shift to electric vehicles, based on the UK Air Quality Plan for Nitrogen Dioxide and government predictions⁹¹; incorporating allowances for expected background air quality improvements into any assessments is in accordance with IAQM guidance (IAQM 2020)⁹².
- 10.2.7. The SSSI units within 200m of the A2 are in the following condition:

Table 10-2 – Condition of Lydden and Temple Ewell Downs SSSI units within 200m of the A2

Unit	Dominant habitat	Condition	Unfavourable condition notes
1	Calcareous grassland	Unfavourable recovering	Grazing levels rectified
2	Calcareous grassland	Favourable	-

⁹⁰ Available at: <https://moderngov.dover.gov.uk/documents/s48939/Appendix%20%20-%20Habitat%20Regulations%20Assessment.pdf>

⁹¹ Air quality plan for nitrogen dioxide (NO2) in UK (2017): <https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017>

⁹² This notes that “*To assume no improvement over a 15 or 20 year period, would effectively ignore the more stringent legal requirements for vehicle NOx emission standards to be achieved under real world driving conditions, trends in new vehicle registrations and ongoing government and international initiatives to improve air quality through reductions in emissions*”

Unit	Dominant habitat	Condition	Unfavourable condition notes
5	Calcareous grassland	Favourable	-

INCORPORATED MITIGATION

10.2.8. The potential for effects on European sites due to air quality is difficult for a Local Plan to specifically mitigate, since the decision to travel by car outside the LPA area is typically made in the context of regional and national travel conditions rather than local provision of sustainable travel options. However, the promotion of sustainable transport is woven throughout the Draft Local Plan, particularly via the following policies:

- Policy SS4 - Movement and Transportation Strategy for the district
- Policy DS13 - Movement Hierarchy
- Policy DS14 - Active and sustainable travel
- Policy DS15 - Highways and parking
- Policy DS16 - Air Quality

10.2.9. These policy measures will help moderate the effects of the plan but will not necessarily mitigate or offset potential changes in air quality in their entirety.

ASSESSMENT OF EFFECTS

10.2.10. The SACO target for air quality is “Maintain as necessary, the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System”.

10.2.11. As noted, CCC is currently revisiting its transport and air quality assessments and LPA-specific data are not therefore available for this Reg. 18 consultation. However the air quality assessment data associated with the Dover Local Plan provides strong evidence that the air quality changes due to traffic growth linked to the CCC Local Plan provisions are likely to be negligible. It is therefore very likely that there will be no adverse effects on the integrity of this SAC via air quality changes associated with the Local Plan, alone or in combination. The measures included in the Preferred Options Local Plan will have a small moderating effect, although these may not substantively alter future traffic growth on the A2 near to this SAC for the reasons noted.

RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

10.2.12. The conclusions in relation to air quality are preliminary only and subject to review following ongoing transport and air quality assessments being completed by CCC. The mitigating policies within the plan will also be reviewed at this point, as required. However, existing data and models suggest that the CCC Local Plan will have no adverse effect on **Lydden and Temple Ewell Downs SAC**, alone or in combination, due to air quality changes.

11 DOVER TO KINGSDOWN CLIFFS SAC

11.1 OVERVIEW

- 11.1.1. **Dover to Kingsdown Cliffs SAC** covers an area of coastline between Dover Harbour and Kingsdown (outside of Canterbury district) that supports a range of habitats including cliff-top grasslands interspersed with areas of scrub, vegetated chalk cliffs and a shingle beach. The SAC has the following qualifying features:
- Vegetated sea cliffs of the Atlantic and Baltic Coasts.
 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites).
- 11.1.2. The site is underpinned by the Dover to Kingsdown Cliffs SSSI. The screening of the Preferred Options has indicated that the interest features of these sites may be vulnerable (i.e. exposed and sensitive) to environmental changes associated with the implementation of the Local Plan, principally in relation to ‘in combination’ effects of **air quality changes** associated with the overall quantum of development in nearby LPA areas.
- 11.1.3. The SSSI units of the site are mostly at ‘favourable’ or ‘unfavourable recovering’ conservation status; two units are in ‘unfavourable no change’ condition due to grazing levels.

11.2 AIR QUALITY

SUMMARY OF PATHWAY

- 11.2.1. The pathway for this site is essentially as per that set out in **Section 9.2**. The vast majority of this SAC is over 200m from the A2, although approximately 0.6ha of the SAC (SSSI Units 10, 12, 14 and 15) is within 200m of the A2 at Jubilee Way, Dover.

BASELINE AND PREDICTED CHANGES

- 11.2.2. The SIP indicates that the current levels of nitrogen deposition exceed the critical load for calcareous grassland. This is supported by data from APIS:

Table 11-1 – APIS data for nutrient nitrogen site critical loads

Nutrient N component	Critical Load / Critical Level	Current (2020)*
Total N Deposition (kg/N/ha/yr)	Calcareous grassland: 10 – 20 Vegetated sea cliffs: n/a	14.2
Ammonia (µg/m3)	Calcareous grassland: 1 Vegetated sea cliffs: 1 or 3	1.1
NOx (µg/m3)	Calcareous grassland: 30 Vegetated sea cliffs: 30	11
SO2 (µg/m3)	Calcareous grassland: 10 Vegetated sea cliffs: 10 – 20	15.8

*The current level is the maximum for the areas of the site within 200m, based on APIS mapping data.

- 11.2.3. It should be noted that the APIS source attribution data for the site suggest that road transport is responsible for 8.2% of the local contributions to N deposition (compared with, for example, livestock and fertiliser application which account for almost 25% of local contributions).
- 11.2.4. With regard to traffic increases, CCC is currently revisiting its transport and air quality assessments and LPA-specific data are not therefore available for this Reg. 18 consultation. It is likely that AADT increases on the A2 over the plan period will be over 1000, and that Canterbury’s contribution is unlikely to be considered ‘*de minimis*’.
- 11.2.5. However, a recently completed HRA for Dover District Council⁹³ included an air quality assessment, which considered the effects of the Dover Local Plan alone and in combination, with the in combination assessment taking account of anticipated housing numbers in nearby LPA areas (including Canterbury) at that point; in summary:
- No ecological receptor locations were found to exceed NOx thresholds.
 - The process contribution of nitrogen deposition from the Dover Local Plan was calculated to be less than 1% of the minimum critical load (and so ‘not significant’).
 - The process contribution of acid deposition from the Dover Local Plan was calculated to be less than 1% of the minimum critical load (and so ‘not significant’).
- 11.2.6. It should be noted that the background rate of N-deposition from vehicles has been declining for some years and is expected to decrease substantially over the plan period with the shift to electric vehicles, based on the UK Air Quality Plan for Nitrogen Dioxide and government predictions⁹⁴; incorporating allowances for expected background air quality improvements into any assessments is in accordance with IAQM guidance (IAQM 2020)⁹⁵.
- 11.2.7. The SSSI units within 200m of the A2 are in the following condition:

Table 11-2 – Condition of Dover to Kingsdown Cliffs SSSI units within 200m of the A2

Unit	Dominant habitat	Condition	Unfavourable condition notes
10	Vegetated chalk cliff	Favourable	-
12	Calcareous grassland	Favourable	-

⁹³ Available at: <https://moderngov.dover.gov.uk/documents/s48939/Appendix%20%20-%20Habitat%20Regulations%20Assessment.pdf>

⁹⁴ Air quality plan for nitrogen dioxide (NO2) in UK (2017): <https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017>

⁹⁵ This notes that “*To assume no improvement over a 15 or 20 year period, would effectively ignore the more stringent legal requirements for vehicle NOx emission standards to be achieved under real world driving conditions, trends in new vehicle registrations and ongoing government and international initiatives to improve air quality through reductions in emissions*”

Unit	Dominant habitat	Condition	Unfavourable condition notes
14	Calcareous grassland	Unfavourable recovering	Scrub management ongoing.
15	Calcareous grassland	Unfavourable no change	Undergrazing.

INCORPORATED MITIGATION

11.2.8. The potential for effects on European sites due to air quality is difficult for a Local Plan to specifically mitigate, since the decision to travel by car outside the LPA area is typically made in the context of regional and national travel conditions rather than local provision of sustainable travel options. However, the promotion of sustainable transport is woven throughout the Draft Local Plan, particularly via the following policies:

- Policy SS4 - Movement and Transportation Strategy for the district
- Policy DS13 - Movement Hierarchy
- Policy DS14 - Active and sustainable travel
- Policy DS15 - Highways and parking
- Policy DS16 - Air Quality

11.2.9. These policy measures will help moderate the effects of the plan but will not necessarily mitigate or offset potential changes in air quality in their entirety.

ASSESSMENT OF EFFECTS

11.2.10. The SACO target for air quality is “Maintain as necessary, the concentrations and deposition of air pollutants to at or below the site-relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System”.

11.2.11. As noted, CCC is currently revisiting its transport and air quality assessments and LPA-specific data are not therefore available for this Reg. 18 consultation. However, the air quality assessment data associated with the Dover Local Plan provides strong evidence that the air quality changes due to traffic growth linked to the CCC Local Plan provisions are likely to be negligible. It is therefore very likely that there will be no adverse effects on the integrity of this SAC via air quality changes associated with the Local Plan, alone or in combination. The measures included in the Preferred Options Local Plan will have a small moderating effect, although these may not substantively alter future traffic growth on the A2 near to this SAC for the reasons noted.

RECOMMENDATIONS AND PREFERRED OPTIONS CONCLUSION

11.2.12. The conclusions in relation to air quality are preliminary only and subject to review following ongoing transport and air quality assessments being completed by CCC. The mitigating policies within the plan will also be reviewed at this point, as required. However, existing data and models suggest that the CCC Local Plan will have no adverse effect on **Dover to Kingsdown Cliffs SAC**, alone or in combination, due to air quality changes.

12 SUMMARY AND CONCLUSIONS

12.1 SUMMARY

- 12.1.1. Canterbury City Council has decided to prepare a new Local Plan to ensure it remains fit for purpose, reflects national planning guidance, delivers local priorities, and meets future needs whilst restoring a five-year supply of deliverable housing sites.
- 12.1.2. The Council is currently consulting on the Regulation 18 draft Local Plan to 2040 (2024) (known in this report as Preferred Options Local Plan). In broad terms, the Preferred Options Local Plan includes:
- a housing requirement that will deliver 1,149 houses per annum, equivalent to 24,129 dwellings between 2020 and 2040;
 - a requirement for 141,100 sqm of employment floorspace, 414 sqm floorspace for convenience retail use, and 5,290 sqm floorspace for comparison retail use;
 - policies that provide geographical direction for development (typically specific site allocations, but also policies that set out implicit locational preferences for certain activities or development types prescribed through (for example) opportunity areas);
 - various district wide strategic policies and development management policies that set out the Council's tests or expectations when considering proposals, such as safeguarding policies, environmental protection policies or policies relating to design or other qualitative criteria
- 12.1.3. Regulation 105 of the Habitats Regulations states that if a land-use plan is “(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and (b) is not directly connected with or necessary to the management of the site” then the plan-making authority must “...make an appropriate assessment of the implications for the site in view of that site’s conservation objectives” before the plan is given effect. The process by which Regulation 105 is met is known as HRA. An HRA determines whether there will be any ‘likely significant effects’ (LSE) on any European site as a result of a plan’s implementation (either on its own or ‘in combination’ with other plans or projects) and, if so, whether these effects will result in any adverse effects on the site’s integrity. The Council has a statutory duty to prepare the Local Plan and is therefore the Competent Authority for an HRA.
- 12.1.4. There is no statutory requirement for HRA to be undertaken on draft plans or similar developmental stages (e.g. issues and options; preferred options). However, it is accepted best-practice for the HRA of strategic planning documents to be run as an iterative process alongside plan development, with the emerging policies or options reviewed during development to ensure that potentially adverse effects on European sites can be identified at an early stage, and avoided or mitigated through the plan development process.
- 12.1.5. This report therefore accompanies the Preferred Options (Regulation 18) plan that is being published for consultation. **It does not constitute a formal ‘HRA screening’ or Appropriate Assessment** as the plan is still in development and so any screening or appropriate assessment conclusions would be premature; however, the principles of HRA are applied to Preferred Options to (a) provide an initial assessment of the likely HRA conclusions, were the plan adopted as currently drafted and (b) identify additional data requirements and/or additional measures that may be

required to ensure that the Submission Draft Plan (Regulation 19) has no adverse effects on any European sites.

- 12.1.6. The assessment completed to date indicates that the majority of the Preferred Option Local Plan policies and proposed site allocations will have ‘no effect’ (either alone or in combination) on any European sites, typically because either they are policy types that do not make provision for changes or because they relate to sites that are a considerable distance from the European sites (with no known pollutant or effect pathway).
- 12.1.7. The HRA of the Preferred Options Local Plan has considered potential effects on:
- all European sites within 20km of the Council’s administrative area (see Table 3.2);
 - any additional sites that may be hydrologically linked to the Local Plan’s zone of influence; and
 - any additional sites identified by Natural England following the Regulation 18 Draft Local Plan (20220 consultation).
- 12.1.8. This is considered to be a suitably precautionary starting point for the assessment of the Local Plan
- 12.1.9. The initial ‘screening’ assessment has concluded that **significant effects on the following sites are not anticipated, alone or in combination**; this is principally due to their distance from the CCC area and the absence of reasonable pathways by which environmental changes associated with the Local Plan could undermine the conservation objectives for the sites:
- Outer Thames Estuary SPA
 - Wye and Crundale Downs SAC
 - Margate and Long Sands SAC
 - Parkgate Down SAC
 - Thanet Coast SAC
 - Sandwich Bay SAC
 - Folkestone to Etchinghill Escarpment SAC
 - Dungeness, Romney Marsh and Rye Bay SPA
 - Dungeness, Romney Marsh and Rye Bay Ramsar
 - Medway Estuary and Marshes Ramsar
 - Medway Estuary and Marshes SPA
 - Essex Estuaries SAC
 - Foulness (Mid-Essex Coast Phase 5) Ramsar
 - Foulness (Mid-Essex Coast Phase 5) SPA
 - Thames Estuary and Marshes Ramsar
 - Thames Estuary and Marshes SPA
- 12.1.10. Further examination of potential effects through an ‘appropriate assessment stage was completed for the following sites and pathways:
- Blean Complex SAC

- Air Quality
- Stodmarsh Ramsar
 - Urbanisation
 - Water Quality
- Stodmarsh SAC
 - Urbanisation
 - Water Quality
- Stodmarsh SPA
 - Urbanisation
 - Water Quality
- Tankerton Slopes and Swalecliffe SAC
 - Recreational Pressure
- Thanet Coast and Sandwich Bay Ramsar
 - Recreational Pressure
 - Functional Land (golden plover)
- Thanet Coast and Sandwich Bay SPA
 - Recreational Pressure
 - Functional Land (golden plover)
- The Swale Ramsar
 - Recreational Pressure
 - Functional Land (dark-bellied brent goose)
- The Swale SPA
 - Recreational Pressure
 - Functional Land (dark-bellied brent goose)
- Lydden and Temple Ewell Downs SAC
 - Air Quality
- Dover to Kingsdown Cliffs SAC
 - Air Quality

12.1.11. These aspects have been examined through an ‘appropriate assessment’ stage to ensure that proposals coming forward under the Local Plan either avoid affecting designated sites entirely (no significant effect) or will not adversely affect site integrity where potential effect pathways remain. Site integrity (in HRA terms) is “*the coherent sum of the site’s ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated*” (EC Guidance ‘Managing Natura 2000’ (2018)).

12.1.12. In summary:

- **Water quality:** Development within the CCC area will have no adverse effects on any water quality sensitive sites (notable Stodmarsh SAC/SPA/Ramsar) alone or in combination due to safeguarding measures relating to SuDS and wastewater treatment capacity provision included within the plan, and the development and implementation of the 'Nutrient Mitigation Strategy'.
- **Visitor/Recreational Pressures:** The Local Plan will have no adverse effects on sites sensitive to visitor pressure (i.e. the Thanet Coast sites and the North Kent Coast sites) due to the adoption of the relevant Strategic Access Management and Mitigation strategies (SAMMs). This conclusion accounts for measures included within policy relating to open-space provision although these are not relied on to ensure adverse effects do not occur.
- **Functional Land:** no potential areas of functionally-linked land have been identified that may be critical to the integrity of the qualifying species populations.

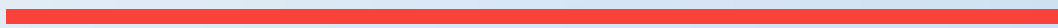
12.1.13. With regard to **Air Quality**, CCC is currently updating its transport and air quality assessments and so definitive conclusions are not available at this stage; however, there is substantial proxy data and evidence to suggest that the CCC Local Plan will not adversely affect the integrity of any air quality sensitive European sites (notably **Blean Complex SAC, Lydden and Temple Ewell Downs SAC** and **Dover to Kingsdown Cliffs SAC**) as a result of the plan proposals, alone or in combination.

12.2 CONCLUSIONS

- 12.2.1. Overall, the assessment of the Preferred Options Local Plan has concluded that most aspects of the plan will have no significant effects on any European sites, alone or in combination due to the absence of effect pathways.
- 12.2.2. Appropriate assessments have been undertaken for those aspects where effect pathways are present (in combination water quality, air quality and visitor pressure effects, and effects on species away from the sites), taking into account specific and cross-cutting policy-based mitigation and avoidance measures that have been incorporated into the plan. These appropriate assessments have employed additional analyses and data to resolve uncertainties present at the initial screening, and have concluded that (as currently drafted) **the Preferred Options Local Plan will have no adverse effects on the integrity of any European sites, alone or in combination.**
- 12.2.3. It will be necessary to review any changes that are made to the Preferred Options Local Plan as it proceeds to the Submission Draft (Regulation 19) in order to ensure that these initial HRA conclusions remain applicable.

Appendix A

EUROPEAN SITE SUMMARIES



APPENDIX A – EUROPEAN SITE SUMMARIES

Notes

The following proformas provide a summary of the European sites in the scope and/or provide hyperlinks to these data where publicly available.

These data are derived from (where available / relevant):

- the most recent JNCC-hosted GIS datasets;
- the Standard Data forms for SACs and SPAs and Information Sheets for Ramsar sites;
- Article 12 and 17 reporting;
- the published site Conservation Objectives;
- Supplementary Advice to the conservation objectives (SACO) where available;
- Site Improvement Plans (SIPs);
- the supporting Site of Special Scientific Interest's favourable condition tables where relevant and where no SACOs applicable to the features are available.

Note:

- For SPAs, the qualifying features are taken as those identified on the most recent JNCC datasets and citations or NE conservation objectives sheets, where these post-date the 2nd SPA Review (i.e. it will be assumed that any amendments suggested by the SPA review have been made) unless otherwise identified to us by NE; any site-specific issues relating to the SPA Review can be addressed in the screening and appropriate assessment of the preferred options (see below).
- The conservation objectives for Ramsar sites are taken to be the same as for the corresponding SACs / SPAs (where sites overlap); SSSI Definition of Favourable Condition (FCTs) are used for those Ramsar features not covered by SAC/SPA designations.

Note also that SPA feature lists are derived from the JNCC datasets and so may include species that are only designated as part of the assemblage; the qualifying species identified by the Natural England conservation objective documents are in **bold**.

Where possible the site data is used to identify other features that may be relevant to site integrity, particularly '**typical species**' (for SACs), **within-site supporting habitats**, and designated or non-designated '**functional habitats**' where these are identified in the available documentation (or otherwise well-known), although it should be noted that the tables are intended to provide an overview of these aspects only and not a detailed or exhaustive account for the site or all features.

BLEAN COMPLEX SAC	
Site Code	UK0013697
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0013697.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5635542456729600?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5635542456729600?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0013697.pdf
Associated SSSIs	Church Woods, Blean SSSI; East Blean Woods SSSI; Ellenden Wood SSSI
Site Overview	This site comprises an area of ancient broadleaved woodland situated on London Clay across three SSSIs (Church Woods SSSI, Ellenden Wood SSSI, and East Blean SSSI) within the Canterbury City Council (CCC).
Qualifying Features / Ramsar criteria	- H9160: Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i>
Other interest features (SAC typical species, SPA supporting habitats, etc.)	<p>The 'supplementary advice' indicates that the 'typical species' of the site include:</p> <ul style="list-style-type: none"> ■ The constant and preferential plant species associated with the relevant National Vegetation Classification (NVC) communities. ■ Flora: Great wood-rush <i>Luzula sylvatica</i> and greater stitchwort <i>Stellaria holostea</i>. ■ Fauna: Heath fritillary butterfly <i>Mellicta athalea</i>, Nightingale <i>Luscinia megarhynchos</i>, Black Cap <i>Sylvia atricapilla</i>, Chiff chaff <i>Phylloscopus collybita</i>, Willow warbler <i>Phylloscopus trochilus</i>, Great spotted woodpecker <i>Dendrocopos major</i>, Garden warblers <i>Sylvia borin</i>, Green woodpecker <i>Picus viridis</i>, Lesser-spotted woodpecker <i>Dryobates minor</i>, Nightjar <i>Caprimulgus europaeus</i>, Dormouse <i>Muscardinus avellanarius</i>, and Money spider <i>Walckenaeria mitrata</i>
Functional Land	There are areas of deciduous woodland, good quality semi-improved grassland and ancient woodland adjacent to the SAC. The importance of habitat 'corridors' and habitat patches to the overall functional integrity of this feature is noted.



BLEAN COMPLEX SAC

Condition, Pressures, Threats

The SSSIs units underpinning the SAC are in 'favourable' or 'unfavourable recovering' condition. The SIP identifies air pollution as the only threat to site integrity (principally in relation to the oak-hornbeam forests).

DOVER TO KINGSDOWN CLIFFS SAC	
Site Code	UK0030330
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030330.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/4785841763254272?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/4785841763254272?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030330.pdf
Associated SSSIs	Dover to Kingsdown Cliffs SSSI
Site Overview	Dover to Kingsdown Cliffs SAC includes chalk cliffs, cliff-top grasslands and broad shingle beach as habitats. Supports different grassland species and some nationally rare plants such as early spider orchid <i>Ophrys sphegodes</i> and oxtongue broomrape <i>Orobanche artemisiae-campestris</i> . The invertebrate fauna is rich and there are numerous breeding sea birds along the cliffs. The site is approximately 11.1km south-east of the CCC area and has no hydrological connectivity with the CCC area.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - H1230: Vegetated sea cliffs of the Atlantic and Baltic Coasts - H6210: Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)
Other interest features (SAC typical species, SPA supporting habitats, etc.)	<p>The 'supplementary advice' indicates that the 'typical species' of the site include:</p> <ul style="list-style-type: none"> ■ For the Vegetated sea cliffs of the Atlantic and Baltic Coasts feature: <ul style="list-style-type: none"> - NVC types: MC1 - Crithmum maritimum -spergularia rupicola, MC4 - Brassica oleracea, MC8 - Festuca rubra - Armeria maritime, MC11 - Festuca rubra – Daucus carota sudsp gummifer. ■ For the Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) feature: <ul style="list-style-type: none"> - NVC types: CG4 Brachypodium pinnatum and CG5 Bromus erectus -Brachypodium pinnatum.

DOVER TO KINGSDOWN CLIFFS SAC

- Vascular plant assemblage: Early Spider Orchid *Ophrys sphegodes*, Ox-tongue broomrape *Orobanche artemisiae-campestris*, Meadow Clary *Salvia pratensis*, Nottingham Catchfly *Silene nutans*, Slender Bedstraw *Galium pumilum* and Burnt Orchid *Orchis ustulate*.

Functional Land

No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although the need to maintain or restore the connectivity of the site to its wider landscape through features such as habitat patches, hedges, watercourses and verges is noted.

Condition, Pressures, Threats

The SSSI unit underpinning the SAC is in 'favourable' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Inappropriate scrub control (private areas insufficiently managed);
- Undergrazing (private areas insufficiently grazed);
- Air pollution (atmospheric nitrogen deposition).

DUNGENESS, ROMNEY MARSH AND RYE BAY SPA

Site Code	UK9012091
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9012091.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5208885390475264?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5208885390475264?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9012091
Associated SSSIs	Dungeness, Romney Marsh and Rye Bay SSSI; Hastings Cliffs to Pett Beach SSSI
Site Overview	The site comprises a large area of coastal and marine landscape, forming a barrier of extensive coastal shingle beaches and sand dunes across an area of intertidal mud and sand flats. Is located approximately 13.9km south of the CCC area and has no hydrological connectivity with the CCC area.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - A021w: Great bittern <i>Botaurus stellaris</i> - A037w: Tundra swan <i>Cygnus columbianus bewickii</i> - A056w: Northern shoveler <i>Anas clypeata</i> - A081r: Eurasian marsh harrier <i>Circus aeruginosus</i> - A082w: Hen harrier <i>Circus cyaneus</i> - A132r: Pied avocet <i>Recurvirostra avosetta</i> - A140w: European golden plover <i>Pluvialis apricaria</i> - A151w: Ruff <i>Philomachus pugnax</i> - A176r: Mediterranean gull <i>Larus melanocephalus</i> - A191r: Sandwich tern <i>Sterna sandvicensis</i> - A193r: Common tern <i>Sterna hirundo</i> - A195r: Little tern <i>Sterna albifrons</i> - A294c: Aquatic warbler <i>Acrocephalus paludicola</i> - WATR: Waterbird assemblage

DUNGENESS, ROMNEY MARSH AND RYE BAY SPA

Other interest features (SAC typical species, SPA supporting habitats, etc.)

The supplementary advice⁹⁶ indicates that the within-site **supporting habitats** for the qualifying features are:

- Aquatic warbler: Coastal reedbeds and Freshwater and coastal grazing marsh.
- Avocet: Atlantic salt meadows (*Glauco-Puccinellietalia maritima*), Coastal lagoons, Freshwater and coastal grazing marsh, Intertidal coarse sediment, Intertidal mixed sediments, Intertidal mud, Intertidal sand and muddy sand, Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*), *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritima*).
- Bewick's swan: freshwater and coastal grazing marsh.
- Bittern: Coastal lagoons, Coastal reedbeds and Freshwater and coastal grazing marsh.
- Common tern: Atlantic salt meadows (*Glauco-Puccinellietalia maritima*), Coastal lagoons, Freshwater and coastal grazing marsh, Intertidal mixed sediments, Intertidal sand and muddy sand.
- Golden plover: Atlantic salt meadows (*Glauco-Puccinellietalia maritima*), Coastal lagoons, Freshwater and coastal grazing marsh, Intertidal coarse sediment, Intertidal mixed sediments, Intertidal mud, Intertidal rock, Intertidal sand and muddy sand, Intertidal seagrass beds, *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritima*).
- Hen harrier: Atlantic salt meadows (*Glauco-Puccinellietalia maritima*), Coastal lagoons, Coastal reedbeds, Freshwater and coastal grazing marsh, Intertidal coarse sediment, Intertidal mixed sediments, Intertidal rock, Intertidal sand and muddy sand, Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*), *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritima*).
- Little tern: Coastal lagoons, Intertidal mixed sediments, Intertidal sand and muddy sand.

⁹⁶ [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk)

DUNGENESS, ROMNEY MARSH AND RYE BAY SPA

- Marsh harrier: Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*), Coastal lagoons, Coastal reedbeds, Freshwater and coastal grazing marsh, Intertidal coarse sediment, Intertidal mixed sediments, Intertidal rock, Intertidal sand and muddy sand, Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*), *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritimae*).
- Mediterranean gull: Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*), Coastal lagoons, Freshwater and coastal grazing marsh, Infralittoral rock, Intertidal biogenic reef: mussel beds, Intertidal mixed sediments, Intertidal mud, Intertidal sand and muddy sand, Intertidal stony reef, *Spartina* swards (*Spartinion maritimae*).
- Ruff: Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*), Coastal lagoons, Freshwater and coastal grazing marsh, Intertidal coarse sediment, Intertidal mixed sediments, Intertidal mud, Intertidal rock, Intertidal sand and muddy sand, *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritimae*).
- Sandwich tern: Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*), Coastal lagoons, Intertidal coarse sediment, Intertidal mixed sediments, Intertidal sand and muddy sand, Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*).
- Shoveler: Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*), Coastal lagoons, Coastal reedbeds, Freshwater and coastal grazing marsh, Intertidal mixed sediments, Intertidal mud, Intertidal sand and muddy sand, *Spartina* swards (*Spartinion maritimae*).
- Waterbirds assemblage: intertidal rock, Intertidal coarse sediment, Intertidal sand and muddy sand, Intertidal mud, Intertidal mixed sediments, Intertidal seagrass beds, Intertidal biogenic reef: mussel beds, Intertidal stony reef, Coastal lagoons, Freshwater and coastal grazing marsh and Saltmarsh, which comprises of the following features: *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritimae*), and Atlantic salt meadows (*Glauco-puccinellietalia maritimae*).

Functional Land

With regard to ‘**functional habitats**’, no specific area of functional land is identified; however:

- The foraging range of Common tern is known to extend up to 30 kilometres from their nest sites.
- The foraging range of Little tern is known to extend up to 11 kilometres from their nest sites.
- The foraging range of the Mediterranean gull is known to extend up to 20 kilometres from their nest sites.

DUNGENESS, ROMNEY MARSH AND RYE BAY SPA

- The foraging range of the Sandwich tern is known to extend up to 54 kilometres from their nest sites.

Condition, Pressures, Threats

The SSSIs units underpinning the SPA and Ramsar are in ‘favourable’, ‘favourable-recovering’, ‘unfavourable-no change’ and ‘unfavourable-declining’ condition. Threats identified include:

- Vehicles: disturbance to bird species (wintering) from illicit vehicle use.
- Invasive species: Garden escapees, Crassula and Red Valerian can outcompete and smother native species.
- Inappropriate scrub control: On natural pit wetlands on the shingle ridges (within RSPB reserve) would result in a loss of fen species due to overshadowing of the wetlands. Reduce suitable nesting and foraging habitat.
- Public access/disturbance (boating and watersports, dog walking and fishing);
- Inappropriate water levels: Water levels across the grazing marsh areas potentially impact habitats supporting birds using the site. Feeding and roosting areas in Winter. Breeding areas for waders, reedbed birds and sea birds.



DUNGENESS, ROMNEY MARSH AND RYE BAY RAMSAR

Site Code	UK11023
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11023.pdf
Conservation Objectives	As per associated SAC / SPA, or underpinning SSSI(s)
Site Improvement Plan	As per associated SAC / SPA, or underpinning SSSI(s)
Supplementary advice	As per associated SAC / SPA, or underpinning SSSI(s)
Associated SSSIs	Dungeness, Romney Marsh and Rye Bay SSSI; Hastings Cliffs to Pett Beach SSSI
Site Overview	The site comprises a large area of coastal and marine landscape, forming a barrier of extensive coastal shingle beaches and sand dunes across an area of intertidal mud and sand flats. Is located approximately 13.9km south of the CCC area and has no hydrological connectivity with the CCC area.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none">- Crit. 1 - sites containing representative, rare or unique wetland types- Crit. 2 - supports vulnerable, endangered, or critically endangered species or threatened eco. communities- Crit. 5 - regularly supports 20,000 or more waterbirds- Crit. 6 - regularly supports 1% of the individuals in a population of one species/subspecies of waterbirds
Other interest features (SAC typical species, SPA supporting habitats, etc.)	As per features of the associated SPA and SAC.
Functional Land	With regard to ' functional habitats ', no specific area of functional land is identified.

DUNGENESS, ROMNEY MARSH AND RYE BAY RAMSAR

Condition, Pressures, Threats

The SSSIs units underpinning the SPA and Ramsar are in 'favourable', 'favourable-recovering', 'unfavourable-no change' and 'unfavourable-declining' condition. Threats identified include:

- Vehicles: disturbance to bird species (wintering) from illicit vehicle use.
- Invasive species: Garden escapees, Crassula and Red Valerian can outcompete and smother native species.
- Inappropriate scrub control: On natural pit wetlands on the shingle ridges (within RSPB reserve) would result in a loss of fen species due to overshadowing of the wetlands. Reduce suitable nesting and foraging habitat.
- Public access/disturbance (boating and watersports, dog walking and fishing);
- Inappropriate water levels: Water levels across the grazing marsh areas potentially impact habitats supporting birds using the site. Feeding and roosting areas in Winter. Breeding areas for waders, reedbed birds and sea birds.

ESSEX ESTUARIES SAC	
Site Code	UK0013690
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0013690.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/4781199427895296?category=6581547796791296
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/4781199427895296?category=6581547796791296
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK0013690
Associated SSSIs	Blackwater Estuary SSSI; Colne Estuary SSSI; Crouch and Roach Estuaries SSSI; Dengie SSSI; Foulness SSSI
Site Overview	Essex Estuaries comprises the major estuaries of Colne, Blackwater, Crouch and Roach rivers, which consist in a coastal plain estuarine system with associated open coast mudflats and sandbanks. The site is approximately 17.8km from the CCC area across the Kent/Essex strait and has no hydrological connectivity with the CCC area.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - H1110: Sandbanks which are slightly covered by sea water all the time - H1130: Estuaries - H1140: Mudflats and sandflats not covered by seawater at low tide - H1310: <i>Salicornia</i> and other annuals colonizing mud and sand - H1320: <i>Spartina</i> swards (<i>Spartinion maritimae</i>) - H1330: Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) - H1420: Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>)
Other interest features (SAC typical species, SPA supporting habitats, etc.)	<p>The 'supplementary advice' indicates that the 'typical species' of the site include:</p> <ul style="list-style-type: none"> ■ For the <i>Salicornia</i> and other annuals colonizing mud and sand feature: Flora: Sea Aster <i>Aster tripolium</i>, Common saltmarsh-grass <i>Puccinellia maritima</i>, Glasswort <i>Salicornia</i> species, Herbaceous seepweed <i>Suaeda maritima</i>, Sea purslane <i>Halimione portulacoides</i>, Ephemeral salt-marsh vegetation with <i>Sagina maritima</i>. ■ For the <i>Spartina</i> swards (<i>Spartinion maritimae</i>) feature: Flora: Small cordgrass <i>Spartina maritima</i>, Smooth cord grass <i>S. alterniflora</i> and <i>Arthrocnemum perenne</i>. ■ For the Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) feature: Flora: Transitional low-marsh vegetation with <i>Puccinellia maritima</i> annual <i>Salicornia</i> species and <i>Suaeda maritima</i>; and <i>Eleocharis uniglumis</i> salt-marsh community.

ESSEX ESTUARIES SAC

- For the Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*) feature: Flora: Shrubby sea-blite *Sueada vera*, Chickenclaws *Sarcocornia perennis*, Sea lavender *Limonium* species and saltbush *Atriplex* species.

Functional Land

No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although the need to maintain or restore the connectivity of estuarine features to surrounding rivers, freshwater, marine and coastal habitats is noted.

Condition, Pressures, Threats

The SSSIs units underpinning the SAC are predominantly in 'favourable' or 'unfavourable recovering' condition. Units in 'unfavourable no change' or 'unfavourable declining' condition are categorised as such primarily due to local land management issues (birds population declining). The SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Coastal squeeze (rising sea levels);
- Public access/disturbance (land- and water-based activities);
- Fisheries: commercial marine and estuarine (commercial fishing activities and Bottom towed fishing gear);
- Planning permission: general;
- Changes in species distribution (decline in waterbird species may be due to climate change);
- Invasive species (Pacific oyster, American whelk tingle, Slipper limpet and *Spartina* sp.);
- Fisheries: recreational marine and estuarine (Recreational bait digging);
- Air pollution (atmospheric nitrogen deposition).

FOLKESTONE TO ETCHINGHILL ESCARPMENT SAC

Site Code	UK0012835
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0012835.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/6261005457817600?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/6261005457817600?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012835.pdf
Associated SSSIs	Folkestone to Etchinghill Escarpment SSSI
Site Overview	Folkestone to Etchinghill Escarpment SAC is a chalk grassland area, hosting the priority habitat type 'orchid rich sites', an assemblage of rare plants species and a diverse insect fauna including a number of nationally rare flies, moths and butterflies. Part of the site is important also for its fossil remains. This site is approximately 8.1km south of the CCC area and has no hydrological connectivity with the CCC area.
Qualifying Features / Ramsar criteria	- H6210: Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The 'supplementary advice' identifies that the 'typical species' of the site are: <ul style="list-style-type: none"> ■ NVC communities: CG4 Tor-grass <i>Brachypodium pinnatum</i> and CG5 <i>Bromus erectus</i> -<i>Brachypodium pinnatum</i>. ■ Important orchid assemblage: early spider-orchid <i>Ophrys sphegodes</i>, late spider-orchid <i>O. fuciflora</i> and burnt-tip orchid <i>Orchis ustulate</i>. ■ Fauna: Adonis Blue <i>Polyommatus bellargus</i>.
Functional Land	The supplementary advice notes the importance of additional areas of lowland calcareous grassland, good quality semi-improved grassland, and areas of deciduous woodland that are connected to the SAC, for the maintenance of SAC integrity (Dover to Kingsdown Cliffs SAC, Lydden and Temple Ewell Downs SAC, Folkstone Warren SSSI, Alkham, Lydden and Swingfields Woods, Lympne Escarpment SSSI, Otterpool Quarry SSSI and Great Shuttlesfield SSSI).

FOLKESTONE TO ETCHINGHILL ESCARPMENT SAC

Condition, Pressures, Threats

The SSSI unit underpinning the SAC is in 'favourable' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Undergrazing (Scrub/woodland encroachment and a dominance of Tor grass);
- Inappropriate scrub control (existing incentives insufficient);
- Air pollution (atmospheric nitrogen deposition).

FOULNESS (MID-ESSEX COAST PHASE 5) SPA

Site Code	UK9009246
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9009246.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5131941422563328?category=6581547796791296
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5131941422563328?category=6581547796791296
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9009246
Associated SSSIs	Foulness SSSI
Site Overview	The site comprises estuaries and intertidal sand and silt flats including several islands, shingle and shell beaches and extensive areas of saltmarsh. It supports nationally rare plants, as well as nationally and internationally important populations of various species of breeding, migratory and wintering waterbirds.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - A082w: Hen harrier <i>Circus cyaneus</i> - A130w: Eurasian oystercatcher <i>Haematopus ostralegus</i> - A132w: Pied avocet <i>Recurvirostra avosetta</i> - A132r: Pied avocet <i>Recurvirostra avosetta</i> - A137r: Ringed plover <i>Charadrius hiaticula</i> - A141w: Grey plover <i>Pluvialis squatarola</i> - A143w: Red knot <i>Calidris canutus</i> - A157w: Bar-tailed godwit <i>Limosa lapponica</i> - A162w: Common redshank <i>Tringa totanus</i> - A191r: Sandwich tern <i>Sterna sandvicensis</i> - A193r: Common tern <i>Sterna hirundo</i> - A195r: Little tern <i>Sterna albifrons</i> - A675w: Dark-bellied brent goose <i>Branta bernicla bernicla</i> - WATR: Waterbird assemblage

FOULNESS (MID-ESSEX COAST PHASE 5) SPA

Other interest features (SAC typical species, SPA supporting habitats, etc.)

The supplementary advice documents indicate that the within-site supporting habitats for the qualifying features include: Atlantic salt meadows (*Glauco-Puccinellietalia maritima*), Freshwater and coastal grazing marsh, Intertidal coarse sediment, Intertidal mixed sediments, Intertidal mud, Intertidal sand and muddy sand, Intertidal seagrass beds, Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*), *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritima*), Subtidal seagrass beds, Intertidal biogenic reef: mussel beds, Intertidal stony reef, cockle banks

Functional Land

With regard to ‘functional habitats’, specific areas of functional land are identified:

- Dark-bellied brent goose: Access to functionally-linked non-SPA grassland and agricultural land may be important.
- Hen harrier: for the species, the habitat to feed is grassland/grazing marsh, but is not within this site, so this feature is reliant on a mosaic of habitats including grazing marsh, grassland with scattered scrub, rough margins and saltmarsh available throughout the suite of SPAs that make up the Mid-Essex coastal sites and functionally-linked arable land.
- Ringed plover: Breeding ringed plover use shingle, pebble and cockle shell beaches/spits for breeding, and saltmarsh and intertidal areas for feeding. In this site, these habitats are located in close proximity and suitable habitat is also available for the feature to feed, nest and roost offsite within adjacent SPAs

Condition, Pressures, Threats

The SSSIs units underpinning the SPA are in ‘favourable’, ‘unfavourable-recovering’, ‘unfavourable-no change’ and ‘unfavourable-declining’ condition. The SIP⁹⁷ identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Coastal squeeze (rising sea levels);
- Public access/disturbance (land- and water-based activities);
- Fisheries: commercial marine and estuarine (commercial fishing activities and Bottom towed fishing gear);
- Planning permission: general;

⁹⁷ [SIP150401FINALv1.0 Essex Estuaries \(2\).pdf](#)

FOULNESS (MID-ESSEX COAST PHASE 5) SPA

- Changes in species distribution (decline in waterbird species may be due to climate change);
- Invasive species (Pacific oyster, American whelk tingle, Slipper limpet and *Spartina* sp.);
- Fisheries: recreational marine and estuarine (Recreational bait digging);
- Air pollution (atmospheric nitrogen deposition).

FOULNESS (MID-ESSEX COAST PHASE 5) RAMSAR

Site Code	UK11026
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11026.pdf
Conservation Objectives	As per associated SAC / SPA, or underpinning SSSI(s)
Site Improvement Plan	As per associated SAC / SPA, or underpinning SSSI(s)
Supplementary advice	As per associated SAC / SPA, or underpinning SSSI(s)
Associated SSSIs	Foulness SSSI
Site Overview	The site comprises estuaries and intertidal sand and silt flats including several islands, shingle and shell beaches and extensive areas of saltmarsh. It supports nationally rare plants, as well as nationally and internationally important populations of various species of breeding, migratory and wintering waterbirds.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - Crit. 1 - sites containing representative, rare or unique wetland types - Crit. 2 - supports vulnerable, endangered, or critically endangered species or threatened eco. communities - Crit. 3 - supports populations of plant/animal species important for maintaining regional biodiversity - Crit. 5 - regularly supports 20,000 or more waterbirds - Crit. 6 - regularly supports 1% of the individuals in a population of one species/subspecies of waterbirds
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice documents indicate that the within-site supporting habitats for the qualifying features include: Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>), Freshwater and coastal grazing marsh, Intertidal coarse sediment, Intertidal mixed sediments, Intertidal mud, Intertidal sand and muddy sand, Intertidal seagrass beds, Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>), <i>Salicornia</i> and other annuals colonising mud and sand, <i>Spartina</i> swards (<i>Spartinion maritimae</i>), Subtidal seagrass beds, Intertidal biogenic reef: mussel beds, Intertidal stony reef, cockle banks

FOULNESS (MID-ESSEX COAST PHASE 5) RAMSAR

Functional Land

With regard to ‘functional habitats’, specific areas of functional land are identified:

- Dark-bellied brent goose: Access to functionally-linked non-SPA grassland and agricultural land may be important.
- Hen harrier: for the species, the habitat to feed is grassland/grazing marsh, but is not within this site, so this feature is reliant on a mosaic of habitats including grazing marsh, grassland with scattered scrub, rough margins and saltmarsh available throughout the suite of SPAs that make up the Mid-Essex coastal sites and functionally-linked arable land.
- Ringed plover: Breeding ringed plover use shingle, pebble and cockle shell beaches/spits for breeding, and saltmarsh and intertidal areas for feeding. In this site, these habitats are located in close proximity and suitable habitat is also available for the feature to feed, nest and roost offsite within adjacent SPAs

Condition, Pressures, Threats

The SSSIs units underpinning the SPA are in ‘favourable’, ‘unfavourable-recovering’, ‘unfavourable-no change’ and ‘unfavourable-declining’ condition. The SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Coastal squeeze (rising sea levels);
- Public access/disturbance (land- and water-based activities);
- Fisheries: commercial marine and estuarine (commercial fishing activities and Bottom towed fishing gear);
- Planning permission: general;
- Changes in species distribution (decline in waterbird species may be due to climate change);
- Invasive species (Pacific oyster, American whelk tingle, Slipper limpet and *Spartina* sp.);
- Fisheries: recreational marine and estuarine (Recreational bait digging);
- Air pollution (atmospheric nitrogen deposition).

LYDDEN AND TEMPLE EWELL DOWNS SAC

Site Code	UK0012834
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0012834.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5024513766981632?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5024513766981632?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012834.pdf
Associated SSSIs	Lydden and Temple Ewell Downs SSSI
Site Overview	Lydden and Temple Ewell Downs SAC comprises chalk grassland, with assemblages of plants and invertebrates and broad-leaved deciduous woodland. The site is approximately 3.3km from the south-eastern boundary of the CCC area and has no hydrological connectivity with the CCC area.
Qualifying Features / Ramsar criteria	- H6210: Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)
Other interest features (SAC typical species, SPA supporting habitats, etc.)	<p>The 'supplementary advice' identifies that the 'typical species' of the site are:</p> <ul style="list-style-type: none"> ■ characteristic of the following National Vegetation Classification (NVC) communities: CG4 Brachypodium pinnatum grassland and CG5 Bromus erectus-Brachypodium pinnatum grassland. ■ Vascular plant assemblage including: Early Spider Orchid <i>Ophrys sphegodes</i>, Musk Orchid <i>Herminium monorchis</i>, Burnt-tip Orchid <i>Orchis ustulate</i>, Fragrant Orchid <i>Gymnadenia conopsea</i>, Autumn Ladies-tresses <i>Spiranthes spiralis</i>, Slender Bedstraw <i>Galium pumilum</i>. ■ Fauna: Silver spotted Skipper <i>Hesperia comma</i> and Wart-biter Bush Cricket <i>Decticus verrucivorus</i>.
Functional Land	No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although the need to maintain or restore the connectivity of the site to its wider landscape through features such as habitat patches, hedges, watercourses and verges is noted.

LYDDEN AND TEMPLE EWELL DOWNS SAC

Condition, Pressures, Threats

The SSSI underpinning the SAC is in 'favourable' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Overgrazing (rabbits);
- Public access/ disturbance (dog walking);
- Air pollution (atmospheric nitrogen deposition).

MARGATE AND LONG SANDS SAC	
Site Code	UK0030371
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030371.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/6706064372269056?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/6706064372269056?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK0030371
Associated SSSIs	n/a
Site Overview	Margate and Long Sands SAC comprises a number of sandbanks slightly covered by seawater at all times, with mud and gravel sediments, and the upper crests of some of the larger banks dry out at low tide. This site is approximately 1.1km offshore from the northern CCC boundary.
Qualifying Features / Ramsar criteria	- H1110: Sandbanks which are slightly covered by sea water all the time
Other interest features (SAC typical species, SPA supporting habitats, etc.)	Specific typical species are not identified in the SACO. Natural England has included an attribute for the abundance of key structural and influential species for habitat features. Structural species are those that form part of the habitat structure or help to define a key biotope. Influential species are those that are likely to have a key role affecting the structure and function of the habitat (such as bioturbators (mixers of sediment), grazers, surface borers, predators or other species with a significant functional role linked to the habitat).
Functional Land	Functionally associated land is not identified.
Condition, Pressures, Threats	The SIP identifies one pressure to site integrity, commercial fishing activities.

MEDWAY ESTUARY AND MARSHES SPA

Site Code	UK9012031
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9012031.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/6672791487119360?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/6672791487119360?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9012031
Associated SSSIs	Medway Estuary and Marshes SSSI
Site Overview	The site is a wetland comprising grazing marshes, intertidal flats and saltmarshes. Provides habitat for important assemblages of wildfowls and waders, plants and invertebrates. The site is approximately 14.2km north-west of the CCC area and has no hydrological connectivity with the CCC area
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - A001w: Red-throated diver <i>Gavia stellata</i> - A005w: Great crested grebe <i>Podiceps cristatus</i> - A017w: Great cormorant <i>Phalacrocorax carbo</i> - A037w: Tundra swan <i>Cygnus columbianus bewickii</i> - A048w: Common shelduck <i>Tadorna tadorna</i> - A050w: Eurasian wigeon <i>Anas penelope</i> - A052w: Eurasian teal <i>Anas crecca</i> - A053w: Mallard <i>Anas platyrhynchos</i> - A054w: Northern pintail <i>Anas acuta</i> - A056w: Northern shoveler <i>Anas clypeata</i> - A059w: Common pochard <i>Aythya ferina</i> - A082w: Hen harrier <i>Circus cyaneus</i> - A098w: Merlin <i>Falco columbarius</i> - A130w: Eurasian oystercatcher <i>Haematopus ostralegus</i> - A132r: Pied avocet <i>Recurvirostra avosetta</i> - A132w: Pied avocet <i>Recurvirostra avosetta</i>

MEDWAY ESTUARY AND MARSHES SPA

- **A137w: Ringed plover *Charadrius hiaticula***
- **A141w: Grey plover *Pluvialis squatarola***
- **A143w: Red knot *Calidris canutus***
- A160w: Eurasian curlew *Numenius arquata*
- **A162w: Common redshank *Tringa totanus***
- A164w: Common greenshank *Tringa nebularia*
- A169w: Ruddy turnstone *Arenaria interpres*
- A193r: Common tern *Sterna hirundo*
- **A195r: Little tern *Sterna albifrons***
- A616w: Black-tailed godwit *Limosa limosa islandica*
- **A672w: Dunlin *Calidris alpina alpina***
- **A675w: Dark-bellied brent goose *Branta bernicla bernicla***
- **BBA: Breeding bird assemblage**
- **WATR: Waterbird assemblage**

Other interest features (SAC typical species, SPA supporting habitats, etc.)

The supplementary advice documents indicate that the within-site supporting habitats for the qualifying features include: intertidal mud, intertidal sand and muddy sand, salt marsh, grazing marsh, arable fields, grassland habitats, freshwater and coastal grazing marsh, Coastal lagoons, Intertidal mixed sediments, Intertidal coarse sediment and Intertidal rock.

Functional Land

With regard to 'functional habitats', no specific areas of functional land are identified; however a permeable landscape and habitat linkages to facilitate movement of birds between the SPA and any off-site supporting habitat is considered critical to the breeding success and to adult fitness and survival.

Condition, Pressures, Threats

The SSSI unit underpinning the SAC is in 'Unfavourable-recovering' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Public access/disturbance (boating and watersports, walking and fishing);
- Air pollution (atmospheric nitrogen deposition).

MEDWAY ESTUARY AND MARSHES RAMSAR

Site Code	UK11040
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11040.pdf
Conservation Objectives	As per associated SAC / SPA, or underpinning SSSI(s)
Site Improvement Plan	As per associated SAC / SPA, or underpinning SSSI(s)
Supplementary advice	As per associated SAC / SPA, or underpinning SSSI(s)
Associated SSSIs	Medway Estuary and Marshes SSSI
Site Overview	The site is a wetland comprising grazing marshes, intertidal flats and saltmarshes. Provides habitat for important assemblages of wildfowls and waders, plants and invertebrates. The site is approximately 14.2km north-west of the CCC area and has no hydrological connectivity with the CCC area
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - Crit. 2 - supports vulnerable, endangered, or critically endangered species or threatened eco. communities - Crit. 5 - regularly supports 20,000 or more waterbirds - Crit. 6 - regularly supports 1% of the individuals in a population of one species/subspecies of waterbirds
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice documents indicate that the within-site supporting habitats for the qualifying features include: intertidal mud, intertidal sand and muddy sand, salt marsh, grazing marsh, arable fields, grassland habitats, freshwater and coastal grazing marsh, Coastal lagoons, Intertidal mixed sediments, Intertidal coarse sediment and Intertidal rock.
Functional Land	With regard to 'functional habitats', no specific areas of functional land are identified; however a permeable landscape and habitat linkages to facilitate movement of birds between the SPA and any off-site supporting habitat is considered critical to the breeding success and to adult fitness and survival.

MEDWAY ESTUARY AND MARSHES RAMSAR

Condition, Pressures, Threats

The SSSI unit underpinning the Ramsar is in 'Unfavourable-recovering' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Public access/disturbance (boating and watersports, walking and fishing);
- Air pollution (atmospheric nitrogen deposition).

OUTER THAMES ESTUARY SPA	
Site Code	UK9020309
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9020309.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/4927106139029504?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/4927106139029504?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9020309
Associated SSSIs	Benfleet and Southend Marshes SSSI; Corton Cliffs SSSI; Crouch and Roach Estuaries SSSI; Dengie SSSI; Foulness SSSI; Great Yarmouth North Denes SSSI; Minsmere-Walberswick Heaths and Marshes SSSI; Pakefield to Easton Bavents SSSI; The Cliff, Burnham-On-Crouch SSSI
Site Overview	The site contains areas of shallow and deeper water, with high tidal current streams and a range of mobile sediments, including several shallow sandbanks, are underpinned by a network of eleven SSSIs; designated for the foraging habitat it provides for wintering and breeding birds.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - A001w: Red-throated diver <i>Gavia stellata</i> - A193r: Common tern <i>Sterna hirundo</i> - A195r: Little tern <i>Sterna albifrons</i>
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice documents indicate that the within-site supporting habitats for the qualifying features include: subtidal sand, subtidal coarse sediment, subtidal mixed sediments, subtidal mud, circalittoral rock and water column, shallow subtidal waters and on land, islands, beaches and inland bodies of freshwater.
Functional Land	No specific area of functional land are identified; however a permeable landscape and habitat linkages to facilitate movement of birds between the SPA and any off-site supporting habitat is considered critical to the breeding success and to adult fitness and survival.



OUTER THAMES ESTUARY SPA

Condition, Pressures, Threats

The SSSIs units underpinning the SPA are predominantly in 'favourable' or 'unfavourable recovering' condition. Units in 'unfavourable no change or 'unfavourable declining' condition are categorised as such primarily due to local land management issues (undergrazing of grasslands or water pollution). The pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan.

PARKGATE DOWN SAC

Site Code	UK0030338
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030338.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5786073259048960?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5786073259048960?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030338.pdf
Associated SSSIs	Parkgate Down SSSI
Site Overview	Parkgate Down SAC comprises grassland, a wide range of typical chalk downland plants and an assemblage of orchids in a broad-leaved deciduous woodland. The site is approximately 1.9km outside the southern boundary of the CCC area and has no hydrological connectivity with the CCC area.
Qualifying Features / Ramsar criteria	- H6210: Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The 'supplementary advice' indicates that the 'typical species' of the site include Tor-grass <i>Brachypodium pinnatum</i> , Erect brome <i>Bromus erectus</i> , Monkey orchid <i>Orchis simia</i> , Late Spider Orchid <i>Ophrys fuciflora</i> , Lady Orchid <i>Orchis purpurea</i> , Musk Orchid <i>Herminium monorchis</i> and Slender bedstraw <i>Galium pumilum</i> .
Functional Land	No areas of 'functional land' are identified in relation to this site, and the site does not support interest features (including mobile species) that will be functionally dependent on habitats outside the site boundary.

PARKGATE DOWN SAC

Condition, Pressures, Threats

The SSSI underpinning the SAC is in 'favourable' condition; however, the SIP identifies several threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Habitat fragmentation (small size and relative isolation);
- Air pollution (atmospheric nitrogen deposition).

SANDWICH BAY SAC	
Site Code	UK0013077
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0013077.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5132828329115648?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5132828329115648?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0013077.pdf
Associated SSSIs	Sandwich Bay to Hacklinge Marshes SSSI
Site Overview	3.2.74 Sandwich Bay SAC comprises an extensive fixed dune grassland, with a rare species such as fragrant evening-primrose <i>Oenothera stricta</i> , bedstraw broomrape <i>Orobanche caryophyllacea</i> , sand catchfly <i>Silene conica</i> and lizard orchid <i>Himantoglossum hircinum</i> ; and in the seaward edge has embryonic shifting dune communities, with strandline species on the seaward edge and sand-binding grasses inland.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - H2110: Embryonic shifting dunes - H2120: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes") - H2130: Fixed coastal dunes with herbaceous vegetation ("grey dunes") - H2170: Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) - H2190: Humid dune slacks
Other interest features (SAC typical species, SPA supporting habitats, etc.)	<p>The 'supplementary advice' indicates that the 'typical species' of the site include:</p> <ul style="list-style-type: none"> ■ For the embryonic shifting dunes feature: Flora: <i>Cakile maritima</i> –<i>Honckenya peploides</i> (strandline) and <i>Elytrigia juncea</i> (embryo dune). ■ For the Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes") feature: Flora: Marram grass <i>Ammophila arenaria</i>. ■ For the Fixed coastal dunes with herbaceous vegetation ("grey dunes") feature: NVC community types: <i>Ammophila arenaria</i>-<i>Festuca rubra</i>, <i>Festuca rubra</i>-<i>Galium verum</i>, <i>Carex arenaria</i>-<i>Cornicularia aculeata</i>, <i>Carex arenaria</i>-<i>Festuca ovina</i>-<i>Agrostis capillaris</i>; Vascular plant assemblage: Narrow leaved birds foot trefoil, Divided sedge, Long bracted

SANDWICH BAY SAC	
	<p>sedge, Fragrant evening primrose, Sand catchfly <i>Silene conica</i>; Lizard orchid <i>Himantoglossum hircinum</i>; Bedstraw broomrape <i>Orobanche caryophyllacea</i>.</p> <ul style="list-style-type: none"> ■ For the Dunes with <i>Salix repens</i> ssp. <i>Argentea</i> (<i>Salicion arenariae</i>) and Humid dune slacks features: NVC community types: <i>Salix repens</i>-<i>Bryum pseudotriquetrum</i>, <i>Salix repens</i>-<i>Campylium stellatum</i>, <i>Salix repens</i>-<i>Calliergon cuspidatum</i>, <i>Salix repens</i>-<i>Holcus lanatus</i> and <i>Potentilla anserina</i>-<i>Carex nigra</i>.
Functional Land	<p>No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although the need to maintain or restore the connectivity of the site to its wider landscape through features such as habitat patches, hedges, watercourses and verges, as well as soft eroding cliffs, dunes and offshore sandbanks is noted.</p>
Condition, Pressures, Threats	<p>The SSSI underpinning the SAC is in 'favourable' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:</p> <ul style="list-style-type: none"> ■ Changes in species distributions (decline in the overwintering turnstone); ■ Public access/disturbance (dog walkers); ■ Air pollution (atmospheric nitrogen deposition); ■ Water pollution (insufficiently treated Sewage Treatment Works discharges)

STODMARSH SAC	
Site Code	UK0030283
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030283.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5199409650335744?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5199409650335744?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030283.pdf
Associated SSSIs	Stodmarsh SSSI
Site Overview	Stodmarsh is a wetland that lies within the natural floodplain of Great Stour River and contains a wide range of habitats including open water, extensive reedbeds, scrub and alder carr. It is hydrologically linked to the adjacent Great Stour River.
Qualifying Features / Ramsar criteria	- S1016: Desmoulin`s whorl snail <i>Vertigo moulinsiana</i>
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The ‘supplementary advice’ identifies the ‘typical species’ associated with the qualifying habitats; these are generally those species that are constants and/or characteristic of the relevant National Vegetation Communities (NVC); no specific fauna are identified.
Functional Land	No specific areas of functional land are identified, and the qualifying features are very unlikely to be dependent on non-designated habitats due to their narrow and specific habitat requirements.
Condition, Pressures, Threats	<p>The SSSI units underpinning the SPA, Ramsar and SAC are in ‘favourable’, ‘unfavourable recovering’ and ‘unfavourable - No change’ condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:</p> <ul style="list-style-type: none"> ■ Water pollution (high nitrogen and orthophosphate levels); ■ Air pollution (atmospheric nitrogen deposition).

STODMARSH SAC

- The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Draft Local Plan (overgrazing, scrub control, ditch management, etc.).

STODMARSH SPA	
Site Code	UK9012121
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9012121.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/6543516511502336?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/6543516511502336?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9012121.pdf
Associated SSSIs	Stodmarsh SSSI
Site Overview	Stodmarsh is a wetland that lies within the natural floodplain of Great Stour River and contains a wide range of habitats including open water, extensive reedbeds, scrub and alder carr. It is hydrologically linked to the adjacent Great Stour River.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - A021w: Great bittern <i>Botaurus stellaris</i> - A050w: Eurasian wigeon <i>Anas penelope</i> - A051r: Gadwall <i>Anas strepera</i> - A051w: Gadwall <i>Anas strepera</i> - A053w: Mallard <i>Anas platyrhynchos</i> - A056w: Northern shoveler <i>Anas clypeata</i> - A059w: Common pochard <i>Aythya ferina</i> - A061w: Tufted duck <i>Aythya fuligula</i> - A082w: Hen harrier <i>Circus cyaneus</i> - A118w: Water rail <i>Rallus aquaticus</i> - A142w: Northern lapwing <i>Vanellus vanellus</i> - A153w: Common snipe <i>Gallinago gallinago</i> - A394w: Greater white-fronted goose <i>Anser albifrons albifrons</i> - BBA : Breeding bird assemblage

STODMARSH SPA

Other interest features (SAC typical species, SPA supporting habitats, etc.)

The supplementary advice indicates that the within-site supporting habitats for the qualifying features include:

- Bittern: scrub-free areas of reed-bed habitat.
- Gadwall: ditches and bank-side habitats, with an optimal depth <0.25m deep water.
- Shoveler: poorly drained treeless meadows interspersed with eutrophic shallow, stagnant freshwater pools and lakes, rivers with undisturbed creeks and muddy bottoms usually processing lush emergent and floating vegetation.
- Hen harrier: reedbeds and an optimal mix of vegetation.

Functional Land

No specific areas of functional land are identified; however a permeable landscape and habitat linkages to facilitate movement of birds between the SPA and any off-site supporting habitat is considered critical to the breeding success and to adult fitness and survival.

Condition, Pressures, Threats

The SSSI units underpinning the SPA, Ramsar and SAC are in 'favourable', 'unfavourable recovering' and 'unfavourable - No change' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Water pollution (high nitrogen and orthophosphate levels);
- Air pollution (atmospheric nitrogen deposition).
- The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Draft Local Plan (overgrazing, scrub control, ditch management, etc.).

STODMARSH RAMSAR	
Site Code	UK11066
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11066.pdf
Conservation Objectives	As per associated SAC / SPA, or underpinning SSSI(s)
Site Improvement Plan	As per associated SAC / SPA, or underpinning SSSI(s)
Supplementary advice	As per associated SAC / SPA, or underpinning SSSI(s)
Associated SSSIs	Stodmarsh SSSI
Site Overview	Stodmarsh is a wetland that lies within the natural floodplain of Great Stour River and contains a wide range of habitats including open water, extensive reedbeds, scrub and alder carr. It is hydrologically linked to the adjacent Great Stour River.
Qualifying Features / Ramsar criteria	- Crit. 2 - supports vulnerable, endangered, or critically endangered species or threatened eco. Communities (Six British Red Data Book wetland invertebrates. Two nationally rare plants, and five nationally scarce species. A diverse assemblage of rare wetland birds).
Other interest features (SAC typical species, SPA supporting habitats, etc.)	As per associated SPA/SAC
Functional Land	As per associated SPA/SAC

STODMARSH RAMSAR

Condition, Pressures, Threats

The SSSI units underpinning the SPA, Ramsar and SAC are in 'favourable', 'unfavourable recovering' and 'unfavourable - No change' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Water pollution (high nitrogen and orthophosphate levels);
- Air pollution (atmospheric nitrogen deposition).
- The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Draft Local Plan (overgrazing, scrub control, ditch management, etc.).

TANKERTON SLOPES AND SWALECLIFFE SAC

Site Code	UK0030378
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030378.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5658609703714816?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5658609703714816?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030378.pdf
Associated SSSIs	Tankerton Slopes SSSI; Thanet Coast SSSI
Site Overview	Tankerton Slopes and Swalecliffe SAC is a small site comprising two units of coastal grassland east of Whitstable designated for its population of Fisher’s estuarine moth, which is dependent on hogs-fennel for its larval food plant.
Qualifying Features / Ramsar criteria	- S4035: Fisher's estuarine moth <i>Gortyna borelii lunata</i>
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supporting habitats for this feature are rough grassland with an abundance of Hog's-fennel above upper areas of saltmarsh. The ‘supplementary advice’ does not identify any specific ‘typical species’ considered to be associated with the site but notes that long coarse grasses species like Cock’s-foot (<i>Dactylis glomerata</i>), Couch (<i>Elytrigia</i> spp.) and False Oat grass (<i>Arrhenatherum elatius</i>), are required to fulfil the moth’s egg laying requirements.
Functional Land	No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although the need to maintain or restore the connectivity of the site to its wider landscape through features such as habitat patches, hedges, watercourses and verges is noted.
Condition, Pressures, Threats	The SSSI unit that forms the SAC is in favourable condition but is heavily used by dog walkers and is vulnerable to under-management

THAMES ESTUARY AND MARSHES SPA	
Site Code	UK9012021
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9012021.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/4698344811134976?category=6581547796791296
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/4698344811134976?category=6581547796791296
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9012021
Associated SSSIs	Mucking Flats and Marshes SSSI, South Thames Estuary and Marshes SSSI
Site Overview	Thames Estuary and Marshes is a wetland comprising intertidal habitats, saltmarsh, coastal grazing marshes, saline lagoons and chalk pits. The site provides support to different wetland birds, plants and invertebrates species. The site is approximately 19.2km north-west of the CCC area and has no hydrological connectivity with the CCC area.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - A082w: Hen harrier <i>Circus cyaneus</i> - A132w: Pied avocet <i>Recurvirostra avosetta</i> - A137c: Ringed plover <i>Charadrius hiaticula</i> - A141w: Grey plover <i>Pluvialis squatarola</i> - A143w: Red knot <i>Calidris canutus</i> - A162w: Common redshank <i>Tringa totanus</i> - A616w: Black-tailed godwit <i>Limosa limosa islandica</i> - A672w: Dunlin <i>Calidris alpina alpina</i> - WATR: Waterbird assemblage
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice indicates that the within-site supporting habitats for the qualifying features are principally: coastal lagoons, coastal reedbeds, freshwater and coastal grazing marsh, intertidal mixed sediments, intertidal sand and muddy sand, <i>Salicornia</i> and other annuals colonising mud and sand, <i>Spartina</i> swards (<i>Spartinion maritimae</i>).
Functional Land	Specific areas of functional land are identified for Black-tailed godwit (Holehaven Creek SSSI).

THAMES ESTUARY AND MARSHES SPA

Condition, Pressures, Threats

The SSSIs units underpinning the SPA and Ramsar are in 'favourable', 'favourable-recovering', 'unfavourable-no change' and 'unfavourable-declining' condition. The SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Public access/disturbance (boating and watersports, walking and fishing);
- Air pollution (atmospheric nitrogen deposition).

THAMES ESTUARY AND MARSHES RAMSAR

Site Code	UK11069
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11069.pdf
Conservation Objectives	As per associated SAC / SPA, or underpinning SSSI(s)
Site Improvement Plan	As per associated SAC / SPA, or underpinning SSSI(s)
Supplementary advice	As per associated SAC / SPA, or underpinning SSSI(s)
Associated SSSIs	Mucking Flats and Marshes SSSI, South Thames Estuary and Marshes SSSI
Site Overview	Thames Estuary and Marshes is a wetland comprising intertidal habitats, saltmarsh, coastal grazing marshes, saline lagoons and chalk pits. The site provides support to different wetland birds, plants and invertebrates species. The site is approximately 19.2km north-west of the CCC area and has no hydrological connectivity with the CCC area.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - Crit. 2 - supports vulnerable, endangered, or critically endangered species or threatened eco. communities - Crit. 5 - regularly supports 20,000 or more waterbirds - Crit. 6 - regularly supports 1% of the individuals in a population of one species/subspecies of waterbirds
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice indicates that the within-site supporting habitats for the qualifying features are principally: coastal lagoons, coastal reedbeds, freshwater and coastal grazing marsh, intertidal mixed sediments, intertidal sand and muddy sand, <i>Salicornia</i> and other annuals colonising mud and sand, <i>Spartina</i> swards (<i>Spartinion maritimae</i>).
Functional Land	Specific areas of functional land are identified for Black-tailed godwit (Holehaven Creek SSSI).
Condition, Pressures, Threats	<p>The SSSIs units underpinning the SPA and Ramsar are in ‘favourable’, ‘favourable-recovering’, ‘unfavourable-no change’ and ‘unfavourable-declining’ condition. The SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:</p> <ul style="list-style-type: none"> ■ Public access/disturbance (boating and watersports, walking and fishing); ■ Air pollution (atmospheric nitrogen deposition).

THANET COAST AND SANDWICH BAY SPA	
Site Code	UK9012071
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9012071.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/6009926887407616?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/6009926887407616?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9012071
Associated SSSIs	Sandwich Bay to Hacklinge Marshes SSSI Thanet Coast SSSI
Site Overview	The Thanet Coast has the longest continuous stretch of coastal chalk in Britain (23 km). The intertidal reef, together with the mudflats and sandflats which characterise the remainder of the coastline in North East Kent, provide valuable feeding grounds and roosting areas at low water for wintering waders.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - A140w: European golden plover <i>Pluvialis apricaria</i> - A169w: Ruddy turnstone <i>Arenaria interpres</i> - A195r: Little tern <i>Sterna albifrons</i>
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice does not identify specific within-site supporting habitats for the qualifying features of the SPA / Ramsar but these are assumed to be the key habitats of the site, i.e. intertidal mud and sandflats, arable fields, grazing marsh, sand and shingle shores, shallow coastal waters and chalk shores
Functional Land	No specific areas of functional land are identified; however the SACO identifies the need for a permeable landscape and habitat linkages to facilitate movement of birds between the SPA and any off-site supporting habitat is considered critical to the breeding success and to adult fitness and survival. Golden plover are known to use non-designated agricultural land some distance from the European site.

THANET COAST AND SANDWICH BAY SPA

Condition, Pressures, Threats

The SSSI underpinning the SPA, SAC and Ramsar site is in 'favourable' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Changes in species distribution (anthropogenic disturbance);
- Public access/disturbance (dog walkers and vehicles);
- Air pollution (atmospheric nitrogen deposition);
- Water Pollution (insufficiently treated Sewage Treatment Works discharges);

The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan. In this case, some non-native species are increasing, including the Pacific oyster *Crassostrea gigas*, common mussel and the native oyster *Ostrea edulis*; evidence of bait-digging and suggestions by local people of large-scale removal of cockles and oysters.



THANET COAST AND SANDWICH BAY RAMSAR

Site Code	UK11070
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11070.pdf
Conservation Objectives	As per associated SAC / SPA, or underpinning SSSI(s)
Site Improvement Plan	As per associated SAC / SPA, or underpinning SSSI(s)
Supplementary advice	As per associated SAC / SPA, or underpinning SSSI(s)
Associated SSSIs	Sandwich Bay to Hacklinge Marshes SSSI Thanet Coast SSSI
Site Overview	The Thanet Coast has the longest continuous stretch of coastal chalk in Britain (23 km). The intertidal reef, together with the mudflats and sandflats which characterise the remainder of the coastline in North East Kent, provide valuable feeding grounds and roosting areas at low water for wintering waders.
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none">- Crit. 2 - supports vulnerable, endangered, or critically endangered species or threatened eco. communities- Crit. 6 - regularly supports 1% of the individuals in a population of one species/subspecies of waterbirds
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice does not identify specific within-site supporting habitats for the qualifying features of the SPA / Ramsar but these are assumed to be the key habitats of the site, i.e. intertidal mud and sandflats, arable fields, grazing marsh, sand and shingle shores, shallow coastal waters and chalk shores
Functional Land	No specific areas of functional land are identified; however the SACO identifies the need for a permeable landscape and habitat linkages to facilitate movement of birds between the SPA and any off-site supporting habitat is considered critical to the breeding success and to adult fitness and survival. Golden plover are known to use non-designated agricultural land some distance from the European site.

THANET COAST AND SANDWICH BAY RAMSAR

Condition, Pressures, Threats

The SSSI underpinning the SPA, SAC and Ramsar site is in 'favourable' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Changes in species distribution (anthropogenic disturbance);
- Public access/disturbance (dog walkers and vehicles);
- Air pollution (atmospheric nitrogen deposition);
- Water Pollution (insufficiently treated Sewage Treatment Works discharges);

The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan. In this case, some non-native species are increasing, including the Pacific oyster *Crassostrea gigas*, common mussel and the native oyster *Ostrea edulis*; evidence of bait-digging and suggestions by local people of large-scale removal of cockles and oysters.



THANET COAST SAC	
Site Code	UK0013107
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0013107.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5766780467281920?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5766780467281920?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK0013107
Associated SSSIs	Sandwich Bay to Hacklinge Marshes SSSI Thanet Coast SSSI
Site Overview	The Thanet Coast has the longest continuous stretch of coastal chalk in Britain (23 km) representing about 20% of UK coastal chalk and 12% of the coastal exposure in Europe. The chalk cliff face, cave and tunnel habitats and communities here are very uncommon in Europe and therefore important internationally.
Qualifying Features / Ramsar criteria	- H1170: Reefs - H8330: Submerged or partially submerged sea caves
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice does not identify typical species for the SAC.
Functional Land	No specific areas of functional land are identified.

THANET COAST SAC

Condition, Pressures, Threats

The SSSI underpinning the SPA, SAC and Ramsar site is in 'favourable' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Water Pollution (insufficiently treated Sewage Treatment Works discharges);

The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan. In this case, some non-native species are increasing, including the Pacific oyster *Crassostrea gigas*, common mussel and the native oyster *Ostrea edulis*; evidence of bait-digging and suggestions by local people of large-scale removal of cockles and oysters.

THE SWALE SPA	
Site Code	UK9012011
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9012011.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5745862701481984?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5745862701481984?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9012011
Associated SSSIs	The Swale SSSI
Site Overview	The site is a wetland comprising intertidal mudflats, shell-beaches, saltmarshes and extensive grazing marshes. The saltmarshes and mudflats support a high species diversity of plants and invertebrates, including several nationally rare species and is an important habitat for an assemblage of wintering waterfowls and notable breeding bird species. The site is within the CCC area at Whitstable and there is no surface water hydrological connectivity, and so effects on the sites are likely to be weak
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none"> - A051w: Gadwall <i>Anas strepera</i> - A052w: Eurasian teal <i>Anas crecca</i> - A130w: Eurasian oystercatcher <i>Haematopus ostralegus</i> - A137w: Ringed plover <i>Charadrius hiaticula</i> - A141w: Grey plover <i>Pluvialis squatarola</i> - A160w: Eurasian curlew <i>Numenius arquata</i> - A162w: Common redshank <i>Tringa totanus</i> - A672w: Dunlin <i>Calidris alpina alpina</i> - A675w: Dark-bellied brent goose <i>Branta bernicla bernicla</i> - BBA: Breeding bird assemblage - WATR: Waterbird assemblage

THE SWALE SPA

Other interest features (SAC typical species, SPA supporting habitats, etc.)

Within-site supporting habitats for the qualifying features include: intertidal mud, intertidal sand and muddy sand, saltmarsh, grazing marsh, seagrass beds, grassland, arable fields and intertidal mussel beds.

Functional Land

No specific areas of functional land are identified; however dark-bellied brent geese are known to use nearby areas of agricultural land (typically within 5km of the SPA), including at Graveney Marshes / Seasalter. A permeable landscape and habitat linkages to facilitate movement of birds between the SPA and any off-site supporting habitat is considered critical to the breeding success and to adult fitness and survival.

Condition, Pressures, Threats

The SSSI underpinning the SPA is in 'favourable' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Coastal squeeze (sea level rise);
- Public access/disturbance (boating and watersports, walking and fishing);
- Air pollution (atmospheric nitrogen deposition).



THE SWALE RAMSAR

Site Code	UK11071
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11071.pdf
Conservation Objectives	As per associated SAC / SPA, or underpinning SSSI(s)
Site Improvement Plan	As per associated SAC / SPA, or underpinning SSSI(s)
Supplementary advice	As per associated SAC / SPA, or underpinning SSSI(s)
Associated SSSIs	The Swale SSSI
Site Overview	The site is a wetland comprising intertidal mudflats, shell-beaches, saltmarshes and extensive grazing marshes. The saltmarshes and mudflats support a high species diversity of plants and invertebrates, including several nationally rare species and is an important habitat for an assemblage of wintering waterfowls and notable breeding bird species. The site is within the CCC area at Whitstable and there is no surface water hydrological connectivity, and so effects on the sites are likely to be weak
Qualifying Features / Ramsar criteria	<ul style="list-style-type: none">- Crit. 2 - supports vulnerable, endangered, or critically endangered species or threatened eco. communities- Crit. 5 - regularly supports 20,000 or more waterbirds- Crit. 6 - regularly supports 1% of the individuals in a population of one species/subspecies of waterbirds
Other interest features (SAC typical species, SPA supporting habitats, etc.)	Within-site supporting habitats for the qualifying features include: intertidal mud, intertidal sand and muddy sand, saltmarsh, grazing marsh, seagrass beds, grassland, arable fields and intertidal mussel beds.
Functional Land	No specific areas of functional land are identified; however dark-bellied brent geese are known to use nearby areas of agricultural land (typically within 5km of the SPA), including at Graveney Marshes / Seasalter. A permeable landscape and habitat linkages to facilitate movement of birds between the SPA and any off-site supporting habitat is considered critical to the breeding success and to adult fitness and survival.

THE SWALE RAMSAR

Condition, Pressures, Threats

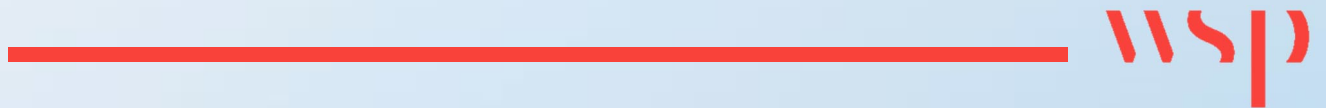
The SSSI underpinning the SPA is in 'favourable' condition; however, the SIP identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan:

- Coastal squeeze (sea level rise);
- Public access/disturbance (boating and watersports, walking and fishing);
- Air pollution (atmospheric nitrogen deposition).



Appendix B

SUMMARY OF INITIAL SCREENING
OF DRAFT POLICIES



APPENDIX B – POLICY REVIEW

Key

	No effect or no LSE – policy will not or cannot affect any European sites and can therefore be screened out (subject to a brief review of the final policy prior to adoption).
	Policies with mitigating/moderating elements that do not have significant effects but which are relied on (at least in part) to ensure that significant or significant adverse effects from specific pathways do not occur; these are examined through AA.
	Policies that have potential pathways for effects that require examination through appropriate assessment; note, this does not imply such policies will have adverse effects or even (potentially) significant effects; rather it is an assessment flag.

Policy	HRA Summary	Notes
Policy SS1 Environmental Strategy for the district	No LSE	The policy sets out the strategic approach to the protection and enhancement of the environment, including indicating the range of open spaces to be provided, the protection of green and blue infrastructure, and the achievement of 20% biodiversity net gain. Strictly the policy is a 'no LSE' policy as it does not itself trigger development although the policy includes 'mitigating' elements / criteria that would need to be met in relation to habitats which are intended to minimise effects on designated sites and which have therefore been considered as part of the AA.
Policy SS2 Sustainable Design Strategy for the district	No LSE	The policy sets out the strategic approach to ensuring sustainable communities within the district. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy SS3 Development Strategy for the district	Uncertain	The policy will set the overall scale of housing and employment development to be provided within the period 2020 to 2040 and provides general criteria relating to the distribution of development and its location. There are 'in combination' issues in relation to nutrient neutrality, air quality and recreational pressure which are being examined through appropriate assessment.
Policy SS4 Movement and Transportation Strategy for the district	No LSE*	The policy sets out overall approach to delivering movement and transport strategy and transport infrastructure improvements.

Policy	HRA Summary	Notes
Policy SS5 Infrastructure Strategy for the district	No LSE*	The policy sets out the strategic approach to the provision of infrastructure protection including the range of open spaces to be provided, and a reservoir at Broad Oak. Strictly the policy is a 'no LSE' policy as it does not itself trigger development although the policy includes 'mitigating' elements / criteria that would need to be met in relation to habitats which are intended to minimise effects on designated sites and which have therefore been considered as part of the AA.
Policy C1 Canterbury City Centre Strategy	No LSE	The policy sets out objectives that development within City centre should be consistent with and criteria for development. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
Policy C2 43 to 45 St George's Place	Uncertain (i/c)	Proposed allocation. The policy sets out criteria for development of the site. Allocation could affect sites through recreational pressure, air quality changes or water quality changes in combination with other allocations; potential effects on functional land also require consideration.
Policy C3 Land north of Canterbury West Station	Uncertain (i/c)	As per C2
Policy C4 Canterbury City Centre Regeneration Opportunity Areas	No LSE	Proposes city centre regeneration areas which may come forward for regeneration and environmental improvement within plan period.
Policy C5 Canterbury urban area	No LSE	Proposes overall all approach to the Canterbury Urban Area which may come forward for regeneration and environmental improvement within plan period.
Policy C6 Land at Merton Park	Uncertain (i/c)	As per C2
Policy C7 Land to the North of Hollow Lane	Uncertain (i/c)	As per C2
Policy C8 Nackington Police Station	Uncertain (i/c)	As per C2
Policy C9 Milton Manor House	Uncertain (i/c)	As per C2
Policy C10 Land to North of Cockerling Road	Uncertain (i/c)	As per C2

Policy	HRA Summary	Notes
Policy C11 South West Canterbury Link Road	Uncertain (i/c)	As per C2
Policy C13 Becket House	Uncertain (i/c)	As per C2
Policy C14 Land at Station Road East	Uncertain (i/c)	As per C2
Policy C15 Land at the Former Chaucer Technology School	Uncertain (i/c)	As per C2
Policy C16 Land at Folly Farm	Uncertain (i/c)	As per C2
Policy C17 Land at Canterbury Business Park	Uncertain (i/c)	As per C2
Policy C18 Land on the eastern side of Shelford Landfill	Uncertain (i/c)	As per C2
Policy C19 Wincheap Commercial Area	Uncertain (i/c)	As per C2
Policy C20 Land to the south of Sturry Road	Uncertain (i/c)	As per C2
Policy C21 Canterbury Urban Area Regeneration Opportunity Areas	Uncertain (i/c)	As per C4
Policy C12 Land north of University of Kent	Uncertain (i/c)	As per C2
Policy W1 Whitstable Town Centre Strategy	Uncertain (i/c)	The policy sets out objectives that development within Whitstable town centre should be consistent with and criteria for development. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy W2 Whitstable Harbour	Uncertain (i/c)	As per C2
Policy W3 Whitstable Urban Area	No LSE	The policy sets out objectives that development within the Whitstable urban areas should be consistent with and criteria for development.

Policy	HRA Summary	Notes
Policy W4 Land at Brooklands Farm	Uncertain (i/c)	As per C2
Policy W5 Land south of Thanet Way	Uncertain (i/c)	As per C2
Policy W6 Bodkin Farm	Uncertain (i/c)	As per C2
Policy W7 St Vincent's Centre	Uncertain (i/c)	As per C2
Policy HB1 Herne Bay Town Centre Strategy	No LSE	The policy sets out objectives that development within Herne Bay town centre should be consistent with and criteria for development. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy HB2 Herne Bay Town Centre Regeneration Opportunity Areas	No LSE	Sets out broad areas for regeneration Herne Bay Town Centre.
Policy HB3 Herne Bay Urban Area	No LSE	The policy sets out objectives that development within the Herne Bay urban areas should be consistent with and criteria for development.
Policy HB4 Land to the West of Thornden Wood Road	Uncertain (i/c)	As per C2
Policy HB5 Land comprising Nursery Industrial Units and former Kent Ambulance Station	Uncertain (i/c)	As per C2
Policy HB6 Hawthorn Corner	Uncertain (i/c)	As per C2
Policy HB7 Former gas holder site	Uncertain (i/c)	As per C2
Policy HB8 Altira	Uncertain (i/c)	As per C2
Policy HB9 Former metric site	Uncertain (i/c)	As per C2
Policy HB10 Eddington Business Park	Uncertain (i/c)	As per C2

Policy	HRA Summary	Notes
Policy R1 Rural Service Centres	Uncertain (i/c)	The policy will set the overall scale of housing and employment development to be provided within the period 2020 to 2040 and provides general criteria relating to the distribution of development and its location. There are 'in combination' issues in relation to nutrient neutrality, air quality and recreational pressure which are being examined through appropriate assessment.
Policy R2 Great Pett Farmyard	Uncertain (i/c)	As per C2
Policy R3 Land at Ashford Road (east)	Uncertain (i/c)	As per C2
Policy R4 Land at Ashford Road (west)	Uncertain (i/c)	As per C2
Policy R5 Bread and Cheese Field	Uncertain	Proposed allocation. The policy sets out criteria for development of the site. The associated site is within 400m of the Stodmarsh SAC/SPA/Ramsar
Policy R6 Land at Hersden	Uncertain (i/c)	As per C2
Policy R7 The Hill, Littlebourne	Uncertain (i/c)	As per C2
Policy R8 Land north of Court Hill	Uncertain (i/c)	As per C2
Policy R9 Land north of Popes Lane	Uncertain (i/c)	As per C2
Policy R10 Land at The Paddocks, Shalloak Road	Uncertain (i/c)	As per C2
Policy R11 Local Service Centres	Uncertain (i/c)	The policy will set the overall scale of housing and employment development to be provided within the period 2020 to 2040 and provides general criteria relating to the distribution of development and its location. There are 'in combination' issues in relation to nutrient neutrality, air quality and recreational pressure which are being examined through appropriate assessment.
Policy R12 Land west of Cooting Lane and south of Station Road	Uncertain (i/c)	As per C2
Policy R13 Land adjacent to Valley Road	Uncertain (i/c)	As per C2

Policy	HRA Summary	Notes
Policy R14 Land at Goose Farm, Shalloak Road	Uncertain (i/c)	As per C2
Policy R15 Land at Shalloak Road	Uncertain (i/c)	As per C2
Policy R16 Land fronting Mayton Lane	Uncertain (i/c)	As per C2
Policy R17 Broad Oak Reservoir and Country Park	No LSE	External project to the plan. Project level AA has confirmed that this will have no adverse effect on any European sites; project is not proposed by the CCC plan and this policy primarily provides development control.
Policy R18 Land at Church Farm	Uncertain (i/c)	As per C2
Policy R19 Countryside	Uncertain (i/c)	As per SS3
Policy DS1 Affordable housing	No LSE	The policy sets out the requirements for affordable housing in terms of the overall level of provision, location within new development, and tenure. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DS2 Housing mix	No LSE	The policy sets out the requirements for housing mix and dwelling size and types. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DS3 Estate regeneration	No LSE	The policy supports regeneration of existing areas where they would result in a benefit to the local community, providing a mix of new homes and an improved local environment with to meet local needs.
Policy DS4 Rural housing	No LSE	Residential development designed to meet the identified housing needs of local people unable to meet their own needs in the housing market will be permitted on areas adjacent to Urban Area, Rural Service Centre or Local Service Centre on Rural Exception Sites and entry-level exception sites. The policy sets out criteria for relevant proposals. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DS5 Specialist housing provision	No LSE	The policy sets out criteria relating to the provision of specialist accommodation. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.

Policy	HRA Summary	Notes
Policy DS6 Sustainable design	No LSE	The policy sets out a range of requirements for qualifying new developments relating to sustainable design and construction.
Policy DS7 Infrastructure delivery	No LSE	The policy sets out the approach to the delivery of a wide range of infrastructure, including transport, utility services, community and health facilities. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DS8 Business and Employment Areas	No LSE	Support for employment in existing employment locations identified.
Policy DS9 Education and associated development	No LSE	The policy sets out general planning principles that will be applicable to education establishment, including the University of Kent, Canterbury Chris Church, and University of Creative Arts campus.
Policy DS10 Town centres and community facilities	No LSE	The policy sets out general retail planning principles that will be applicable across the district. The policy sets out the hierarchy of centres within the district. The policy sets out criteria for managing development within centres and for managing proposals for proposals outside of town centres.
Policy DS11 Tourism development	No LSE	The policy sets out general criteria for proposals for tourism related uses in the district. General statement of policy / general design / guidance criteria; no pathway for effects.
Policy DS12 Rural economy	No LSE	The policy sets out general criteria for proposals for economic uses in the rural area. General statement of policy / General design / guidance criteria; no pathway for effects.
Policy DS13 Movement Hierarchy	No LSE*	The policy sets out the Council's Movement Hierarchy to prioritise active and sustainable travel in new development. General statement of policy / general design / guidance criteria; no pathway for effects.
Policy DS14 Active and sustainable travel	No LSE*	The policy sets out the Council's intention to promote walking and cycling which is consistent with the Council's Movement Hierarchy. Strictly the policy is a 'no LSE' policy as it does not itself trigger development although the policy includes 'mitigating' elements / criteria that would need to be met in relation to shifts from car use that may be relied on to minimise effects on air quality sensitive sites and which have therefore been considered as part of the AA.

Policy	HRA Summary	Notes
Policy DS15 Highways and parking	No LSE*	The policy sets out general criteria for highways and parking provision. Strictly the policy is a 'no LSE' policy as it does not itself trigger development although the policy includes 'mitigating' elements / criteria that would need to be met in relation to shifts from car use that may be relied on to minimise effects on air quality sensitive sites and which have therefore been considered as part of the AA.
Policy DS16 Air quality	No LSE*	The policy sets out general criteria for the avoidance of pollution and protection of air quality. Strictly the policy is a 'no LSE' policy as it does not itself trigger development although the policy includes 'mitigating' elements / criteria that would need to be met in relation to air quality and which are intended to minimise effects on designated sites and which have therefore been considered as part of the AA.
Policy DS17 Habitats of international importance	No LSE*	The policy requires new development which may have a significant effect on the ecological integrity of Special Area of Conservation (SAC), Special Protection Area (SPA) or Ramsar to clearly demonstrate that any potential adverse effects are fully mitigated. The policy requires new residential development within the two identified Zones of Influence (Thanet Coast and Sandwich Bay SPA 7.2km and the Swale SPA 6km) to comply with the relevant Strategic Access Management and Monitoring Strategy or Strategies (SAMMs). The policy requires new development to not have an adverse effect on the integrity of Stodmarsh SAC/SPA/Ramsar site and requires applicants to comply with Nutrient Mitigation Strategies and to demonstrate that the requirements of the Habitats Regulations will be met, such as by applying the advice on Nutrient Neutrality issued by Natural England.
Policy DS18 Habitats and landscapes of national importance	No LSE	The policy seeks to avoid material harm to biodiversity and/or geodiversity or secure mitigation where this is not possible. The policy also protects the integrity of designated and proposed designated sites, including nationally designated sites. Protective policy.
Policy DS19 Habitats, landscapes and sites of local importance	No LSE	The policy sets out protection of local landscapes, sites and habitats of importance, including Green Gaps. Protective policy.
Policy DS20 Flood risk and sustainable drainage	No LSE	The policy sets out criteria for managing development within flood risk areas and attenuation of flood risk.

Policy	HRA Summary	Notes
Policy DS21 Supporting biodiversity recovery	No LSE*	The policy seeks to protect existing green and blue infrastructure and ensure that major development delivers new green infrastructure and non-major developments incorporate blue and green infrastructure proportionately. The policy requires a 20% biodiversity net gain plan to demonstrate how this will be achieved in new development. Protective policy; no pathway for effects. Strictly the policy is a 'no LSE' policy as it does not itself trigger development although the policy includes 'mitigating' elements / and which are intended to minimise effects which have therefore been considered as part of the AA.
Policy DS22 Landscape Character	No LSE	The policy sets out general criteria for the protection of landscape character. Safeguarding policy that cannot lead to or trigger development. General design / guidance criteria.
Policy DS23 The Blean Woodland Complex	No LSE*	The policy seeks to protect the Blean Woodland Complex from harmful development and to secure enhancement of the landscape, ecology or setting of the Blean Woodland Complex. Protective policy; no pathway for effects. Strictly the policy is a 'no LSE' policy as it does not itself trigger development although the policy includes 'mitigating' elements / and which are intended to minimise effects on the Blean Woodland Complex and which have therefore been considered as part of the AA.
Policy DS24 Publicly accessible open space and sports	No LSE*	The policy sets out standards for the provision of open space within new development. General statement of policy / general design / guidance criteria; no pathway for effects. Strictly the policy is a 'no LSE' policy as it does not itself trigger development although the policy includes 'mitigating' elements / criteria which are intended to ensure appropriate open space provision that could minimise effects and which have therefore been considered as part of the AA.
Policy DS25 Renewable energy and <i>carbon</i> sequestration	No LSE	The policy sets out criteria for proposals relating to renewable and low <i>carbon</i> energy generation and <i>carbon</i> sequestration. It does not allocate specific areas for such development.
Policy DS26 Historic environment and archaeology	No LSE	The policy sets out criteria for development affecting designated or non-designated heritage assets and/or their settings. General statement of policy / general design / guidance criteria; no pathway for effects.
Policy DM1 Conversion of existing rural buildings	No LSE	The policy sets out criteria relating to the conversion of existing rural buildings. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.

Policy	HRA Summary	Notes
Policy DM2 Residential garden land	No LSE	The policy sets out criteria relating to the proposals for development of domestic gardens. General statement of policy / general design / guidance criteria; no pathway for effects.
Policy DM3 Housing in multiple occupation (HMOs)	No LSE	The policy sets out criteria relating to the HMOs. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM4 Reducing waste and supporting the circular economy	No LSE	The policy sets out criteria relating to waste generation from new development. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM5 Parking design	No LSE	The policy sets out criteria relating to parking provision. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM6 Extensions and alterations to existing buildings	No LSE	The policy sets out criteria relating to extensions and alteration to existing buildings. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM7 Health and Crime Impact Assessments	No LSE	The policy sets out criteria relating to undertaking health and crime impact assessments. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM8 Shopfronts	No LSE	The policy sets out criteria relating to the design of shopfronts. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM9 Advertisements	No LSE	The policy sets out criteria relating to control of advertisements. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM10 Residential annexes and ancillary accommodation	No LSE	The policy sets out criteria relating to the design of residential annexes and ancillary accommodation. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM11 Residential design	No LSE	The policy sets out criteria relating to the design of residential development. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM12 Non-residential design	No LSE	The policy sets out criteria relating to the design of non-residential development. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.

Policy	HRA Summary	Notes
Policy DM13 Biomass technology	No LSE	The policy sets out criteria relating to biomass criteria. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM14 Flood risk	No LSE	The policy sets out criteria for managing development within flood risk areas and attenuation of flood risk. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM15 Sustainable drainage	No LSE*	The policy sets out criteria for managing drainage development. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM16 Water Pollution	No LSE*	The policy seeks to protect water quality. The policy requires development to not compromise Water Framework Directive objectives and development to not have an adverse impact on water dependent protected sites or species.
Policy DM17 Noise, odour and dust pollution	No LSE	The policy sets out criteria for integration of noise insulation and reducing noise pollution. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM18 Light pollution and dark skies	No LSE	The policy sets out criteria for light pollution and dark skies. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy DM19 Contamination and unstable land	No LSE	The policy sets out criteria for development on sites which may have contamination. General statement of policy / general design / guidance criteria or policies that cannot lead to or trigger development.
Policy CF1 Strategic Site Allocations	Uncertain (i/c)	Policy sets out over quantum of development; allocations could affect sites through recreational pressure, air quality changes or water quality changes in combination; potential effects on functional land also require consideration.
Policy CF2 Housing Allocations	Uncertain (i/c)	Policy sets out over quantum of development; allocations could affect sites through recreational pressure, air quality changes or water quality changes in combination; potential effects on functional land also require consideration.
Policy CF3 Pedestrian and Cycle Routes	No LSE	Plans or projects that are proposed by other plans or permissions regimes and which are referred to in the plan being assessed for completeness



Policy	HRA Summary	Notes
Policy CF4 Sturry Road Park and Ride	No LSE	Plans or projects that are proposed by other plans or permissions regimes and which are referred to in the plan being assessed for completeness
Policy CF5 New Dover Road Park and Ride	No LSE	Plans or projects that are proposed by other plans or permissions regimes and which are referred to in the plan being assessed for completeness
Policy CF6 A2 Bridge Interchange	No LSE	Plans or projects that are proposed by other plans or permissions regimes and which are referred to in the plan being assessed for completeness
Policy CF7 Herne Relief Road	No LSE	Plans or projects that are proposed by other plans or permissions regimes and which are referred to in the plan being assessed for completeness
Policy CF8 Sturry Relief Road	No LSE	Plans or projects that are proposed by other plans or permissions regimes and which are referred to in the plan being assessed for completeness
Policy CF9 A28/A257 Barracks Link Road	No LSE	Plans or projects that are proposed by other plans or permissions regimes and which are referred to in the plan being assessed for completeness
Policy CF10 Swalecliffe	No LSE	General statement of policy

Appendix C

REVIEW OF PLANS AND
PROGRAMMES





APPENDIX C – REVIEW OF PLANS AND PROGRAMMES

Table C-1 - Plans and programmes considered for potential 'in combination' effects with the Draft Canterbury District Local Plan

Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
<p>Dover District Local Development Framework - Core Strategy (adopted February 2010)</p>	<p>Allocates a number of strategic sites and contains the Core Policies and Development Management Policies to guide the future development of the district to 2026.</p>	<p>No adverse effects</p>	<p>Yes</p>	<p>The Core Strategy HRA concludes that the Council has taken all possible steps to avoid an adverse effect on European sites as a result of the Submission version of the Core Strategy.</p> <p>With regard to the CCC plan, individual allocations in the CCC and DDC plans will not interact to affect European sites although they will both contribute to the overall quantum of development regionally which has the potential to significantly affect Lydden Downs and Ewell Temple SAC through 'in combination' effects on air quality. The CCC HRA at this preliminary stage demonstrates that there will be no adverse effects 'in combination'.</p>
<p>Dover District Local Development Framework - Land Allocations Plan (2015)</p>	<p>The Land Allocations Local Plan identifies and allocates specific sites for employment, retail and housing development to deliver the aims of the Core Strategy.</p>	<p>No adverse effects</p>	<p>Yes</p>	<p>As above.</p>



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Dover District Local Plan (post examination)	The Local Plan will replace the Core Strategy and Land Allocations plan and set out strategic, site allocation and development management policies to meet and manage the District's housing, employment and other land use needs, as well as protect and conserve the District's natural, cultural and historic assets up to 2040. The draft Local Plan sets out a requirement for 10,998 homes to 2040.	Post-examination; Reg 19 drafts of the HRA suggest 'No adverse effects'	Yes	Plan has been examined. Appropriate Assessment ruled out adverse effects on Stodmarsh SPA and Ramsar, Thanet Coast SAC, Blean Complex SAC in relation to recreational pressures. The AA also ruled out adverse effects on the integrity of Lydden and Temple Ewell Downs SAC and Dover to Kingsdown Cliffs SAC in relation to air quality. The CCC HRA demonstrates that there will be no adverse effects 'in combination'.
Thanet Local Plan (2020)	The Local Plan guides development and regeneration decisions and investment over the period 2018 to 2031. It seeks to deliver a minimum of 5,000 jobs across the District during the Plan period to 2031.	No adverse effects	Yes	The HRA screening found that significant effects on the Thanet Coast and Sandwich Bay SPA, Thanet Coast and Sandwich Bay Ramsar and (to a lesser extent) Sandwich Bay SAC could not be screened out due to recreation pressure on Thanet Coast and Sandwich Bay SPA and Thanet Coast and Sandwich Bay Ramsar. The HRA concluded that the Thanet Coast Strategic Access Management and Monitoring Plan (SAMM) will ensure the plan will not adversely affect site integrity. It concludes that there will be no adverse effects on any European sites as a result of the Thanet plan, alone or in combination. The CCC HRA at this preliminary stage demonstrates that there will be no adverse effects 'in combination'.

Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Thanet Local Plan Review (in preparation)	In preparation; not yet consulted on.	-	Yes	There is potential to interact with the new TDC plan although this cannot be assessed at this stage (no information on the TDC plan available); however, assuming that the TDC plan adopts similar plan-level mitigation to the 2020 plan then no adverse effects would occur.
Swale Borough Publication Draft Local Plan (2017)	The draft Local Plan for the period 2022 to 2038 is currently under review. The adopted Local Plan set out the requirement for 14,966 dwellings in the period 2014-2031. The draft Local Plan sets out the requirement to allocate an additional 6,290 dwellings in the period 2022-2038.	No adverse effects	Yes	The Appropriate Assessment for the draft local plan concluded no adverse effect on the integrity of Swale SPA and Ramsar with regard to the requirement to comply with the Bird Wise North Kent SAMM and the requirement for site specific project HRAs for particular land allocations. The screening concluded no LSE on Blean Complex with regard to air quality. The CCC HRA demonstrates that there will be no adverse effects 'in combination'. There is potential to interact with the new SBC plan although this cannot be assessed at this stage (no information on the SBC plan available); however, assuming that the SBC plan adopts similar plan-level mitigation to the 2017 plan then no adverse effects would occur.
Ashford Local Plan (2019)	The Local Plan sets out the vision objectives and policies to support development up to 2030. The plan makes provision for 16,872 new dwellings between 2011 and 2030 and 63ha of employment land between 2014 and 2030.	No significant effects	Yes	The HRA report concludes that there will be no likely significant effects on the assessed European sites either alone or in combination and further appropriate assessment is not required.



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Folkestone & Hythe Core Strategy Review (2022)	The Local Plan sets out the spatial vision, objectives, development strategy and a series of over-arching strategic policies that will guide the scale, location and type of development in the District until 2037. The Local Plan sets out a housing requirement of 13,284.	No significant effects	Yes	The HRA Appropriate Assessment considered found no adverse effects in relation to air pollution and recreational on Folkestone and Etchinghill Escarpment SAC, and in relation to recreational pressure and functional offsite loss on Dungeness SAC, SPA, or Ramsar.



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Southern Water Resources Management Plan	Water companies in England and Wales are required to produce a Water Resources Management Plan that sets out how they aim to maintain water supplies over a 25-year period. The Southern Water WRMP demonstrates how, in the medium to long term, it is intended to develop new resources, tackle leakage and use water sensibly through metering and water efficiency campaigns. The long term strategy is to increase the robustness of the water resources network to climate change. The plan is required to be updated every five years with the next update in 2024. Southern Water are currently engaging with customers and stakeholders as they prepare to update their plan for 2024.	No significant effect	No	<p>Southern Water's WRMP for the next 25 years explicitly accounts for any reductions in abstraction that are required to safeguard European sites (see Section 3) and for the growth predicted by CCC and other LPAs in its forecasting. Therefore, the future water</p> <p>resource requirements of Canterbury are factored into the abstraction regime, such that they will not affect European sites (i.e. the growth provided for by the Canterbury Local Plan is in line</p> <p>with SW predictions and will not increase water resources</p> <p>pressure on any European sites, alone or in combination).</p>



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
South East River Basin District: River Basin Management Plan.	<p>A RBMP is a strategic plan which gives everyone concerned with the river basin</p> <p>district a measure of certainty about the future of water management in that district. It will include objectives for each water body and a summary of the programme of measures necessary to reach those objectives. The RBMP is a high level plan that identifies potential measures for river basin management but does not identify precisely where and how the programme of measures will be implemented.</p>	No significant effect	No	The plans will be complementary and the policies within both plans do not create a scenario where there is insufficient flexibility at the project stage to allow significant effects to be avoided.
Local Transport Plan 4: Delivering Growth without Gridlock (2016-2031)	The LTP sets KCCs vision for its transport network and services.	No significant effects	No	The CCC reflects the transport plan; landscape or strategy-level effects will not occur; effects of individual projects will be prevented by policy controls within both documents.



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Kent Minerals and Waste Local Plan 2013-2030 (early partial review) (2020)	Includes a spatial vision, spatial strategy, strategic objectives, and core policies which set out the key principles to guide the future winning and working of minerals and the form of waste management development. The Local Plan sets out the long term Spatial Vision and Strategic Objectives for Kent's minerals and waste; the delivery strategy; two areas where strategic mineral and waste development is likely to occur; and the DM policies that will be used when the County Council makes decisions on planning applications; the framework to enable annual monitoring of the policies within the Plan.	No significant effects	No	The Minerals Plan HRA did not identify LSEs, alone or in combination with other plans or projects for any sites with the exception of effects on Dungeness, Romney Marsh & Rye Bay SPA & Ramsar site. "This AA has concluded that, as the Lydd Quarry and Allens Bank Extension site will not be allocated, there would be no residual adverse effects predicted on the conservation objectives of the features of any European sites, as a result of the KMSP, either alone or in-combination with any other plans or projects. In addition, the minor wording changes to the policies relating to Norwood Quarry Extension, as a result of the Early Partial Review, do not result in any changes to the conclusions of the initial HRA screening for the KMWLP." No likely significant effects possible.

Appendix D

NUTRIENT MANAGEMENT STRATEGY





APPENDIX D – NUTRIENT MANAGEMENT STRATEGY

STODMARSH NUTRIENT MITIGATION

DRAFT NUTRIENT MITIGATION STRATEGY

CANTERBURY CITY COUNCIL

DOCUMENT REFERENCE:

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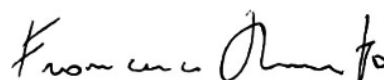
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Authorisation and Version Control

Water Environment was commissioned by Canterbury City Council to develop a “Draft Nutrient Mitigation Strategy” to address concerns raised by Natural England regarding the nutrient loading from proposed development within the Stour Catchment and the potential adverse effects on the Stodmarsh Special Area of Conservation, Special Protection Area, Ramsar, and Site of Special Scientific Interest. This version of the report has been produced to address changes in the draft site allocations and new relevant legislation.

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for and on behalf of Water Environment Limited

Document Version History

Rev	Date	Comments	Auth	Chck	Appr
C01	06/10/2022	Final issue	FR	GL	GL
C02	21/01/2024	Update to draft allocations and legislation	GS	GL	GL

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EXECUTIVE SUMMARY

In the Stour Valley River catchment in East Kent, developments could adversely affect the Stodmarsh complex, which is designated a Site of Special Scientific Interest, Special Protection Area, Special Area of Conservation and Ramsar site. Several of the nature reserve lakes at Stodmarsh are in a state of eutrophication (an unfavourable conservation status) and it has been found that the nutrients of highest significance in terms of water quality in Stodmarsh are nitrogen and phosphorus.

The nutrient loading from new developments is due to the nutrients contained in surface water runoff and the increase in wastewater flows to any of the Wastewater Treatment Works in the Stour catchment. A nutrient budget has been calculated for Canterbury City Council based on the existing allocations in the Canterbury District Local Plan 2017 and the emerging New Local Plan to 2041.

Dwellings that have been granted a full planning permission at the time of writing, or have agreed on-site mitigation, are omitted from the following analysis. Moreover, proposed new dwellings both lying outside of the surface water catchment and draining to a Wastewater Treatment Works outside of the catchment have been omitted from the analysis.

Following the omission of the relevant dwellings due to either planning status or location, the total number of dwellings which will form the basis for the nutrient budget within the adopted Canterbury District Local Plan and New Local Plan to 2041 is 14,377 (including windfall sites).

The nutrient budget has been calculated for each development site following the Generic Methodology produced by Natural England. A total increase in nutrient loading up to 2041 has been calculated as 1,406kg of Phosphorus and 4,939kg of Nitrogen. The nutrient loading has more than halved from the previous version of this report, primarily due to the Levelling Up and Regeneration Act which includes upgrading Wastewater Treatment Works to Technically Achievable Limits by 2030. These upgrades are not considered a mitigation but will change the future baseline by reducing the concentration of nutrients reaching the Stodmarsh. These upgrades have been taken into account within the calculations which are expressed as a cumulative budget.

Considering onsite mitigation measures such as foul water treatment for large developments and surface water treatment through the use of SuDS, a partially mitigated budget has been further calculated as 495kgP and 1,160kgN. Since through onsite mitigation it is not possible to achieve nutrient neutrality, other offsetting measures such as retrofitting the Canterbury City Council housing stock with water saving devices to reduce consumption, land use change and environmental enhancement elsewhere in the Stour catchment as well as nutrient treatment wetlands are discussed herein. Other mitigation measures will be considered as and when they are considered robust.

Principally, strategic constructed wetlands have been established as an efficient large scale offsetting solution to the nutrient problem, with wetlands operational in the catchment. The calculation of the wetland area is based on the mitigated budget calculated after the use of onsite mitigation measures. It has been estimated that up to approximately 41ha of wetland will need to be constructed along the Stour river corridor to fully offset the nutrient budget up to 2041, with 37ha of wetland required to offset the budget to 2030.

ABBREVIATIONS

Acronym	Definition
AA	Appropriate Assessment
CCC	Canterbury City Council
FWS	Free Water Surface
NE	Natural England
NEGM	Natural England Generic Methodology
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage Systems
SW	Southern Water
TP	Total Phosphorus
TN	Total Nitrogen
WwTW	Wastewater Treatment Works

1 INTRODUCTION – “THE PROBLEM”

- 1.1 A Habitats Regulations Assessment refers to the several distinct stages of assessment which must be undertaken in accordance with the Conservation of Habitats and Species Regulations 2017 to determine if a plan or project may affect the protected features of a designated site (any site which would be included within the definition at Regulation 8 of the Conservation of Habitats and Species Regulations 2017) before deciding whether to undertake, permit or authorise it. A risk or a possibility of such an effect is enough to warrant the need for an Appropriate Assessment (AA) to be carried out by the competent authority (in this case, Canterbury City Council, CCC). An AA must contain complete, precise, and definitive findings and conclusions to ensure that there is no reasonable scientific doubt as to the effects of the proposed plan or project.
- 1.2 In 2018, the European Court of Justice refined in the so-called ‘Dutch case’ the definition of plans and projects and ruled that mitigation needs to be in place to ensure that there will be no adverse effect on the conservation status of European designated sites.
- 1.3 In the Stour Valley River catchment in East Kent, developments could adversely affect the Stodmarsh complex, which is designated a Site of Special Scientific Interest (SSSI), Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar site. Several of the nature reserve lakes at Stodmarsh are in a state of eutrophication (an unfavourable conservation status) and therefore the ruling of the Dutch Case applies. It has been found that the nutrients of highest significance in terms of water quality in Stodmarsh are nitrogen and phosphorus.
- 1.4 The practical implication of The Dutch Case across the Stour catchment is the necessity to mitigate increases in nutrient loading from new development including nutrients contained in surface water runoff and an increase in wastewater flows to any of the WWTW in the Stour catchment. Moreover, the ability to develop strategic growth plans in order to meet housing targets is impacted by uncertainty over the provision of mitigation within the catchment to offset increases in nutrient load in the River Stour resulting from development. This is constrained by the potential limited ability on certain sites to provide on-site mitigation due to spatial and technical constraints.
- 1.5 Water Environment Ltd have been commissioned by CCC to support the development of a Stodmarsh Mitigation Plan to address Natural England (NE) concerns regarding the future impact of new housing development on Stodmarsh.
- 1.6 Through this work, CCC have committed to developing a holistic framework to provide larger-scale mitigation by reducing the nutrient loading from future development through different mitigation strategies including measures such as land use change and constructed wetlands to treat water. Net reductions in nutrient loading on strategic mitigation sites can then be used to offset increases in nutrient loading due to future development within the district. Such mitigation sites must fall within the Stour catchment area to provide benefits in relation to the downstream impacts of human activity on the Stodmarsh.
- 1.7 This report outlines the process by which the CCC Stodmarsh Nutrient Mitigation Framework has been developed and the scale of required mitigation calculated. Key assumptions made during this process are noted.
- 1.8 A more detailed Nutrient Mitigation Plan report has been produced¹ which contains additional background on Stodmarsh, Nutrient Neutrality Methodology, Wastewater Treatment Works (WwTW), mitigation options and case studies. This Nutrient Mitigation Strategy report summarises the key findings of the strategy and reports on the latest nutrient budget calculations

¹ Water Environment Limited (July 2022) Canterbury District Local Plan Nutrient Mitigation Plan. Document reference: 21160-NUT-RP-01-C01

in accordance with the Natural England March 2022 Generic Methodology and Stodmarsh calculator.

2 NUTRIENT NEUTRALITY – “THE CONCEPT”

- 2.1 In December 2019, NE issued methodology² surrounding nutrient neutrality for new development in the Stour Valley catchment, which was updated in July 2020³ and again in November 2020⁴. This methodology lays out the process of calculation and provides a worked example for a single development.
- 2.2 This methodology has been superseded by a Generic Methodology produced by NE⁵ which provides generic national methodology on achieving nutrient neutrality. At the time of writing Issue 1 of the methodology has been made available to LPAs.
- 2.3 This NE Generic Methodology (NEGM) is supplemented by a specific Nutrient Budget Calculator⁶ and associated Guidance Document⁷ for the Stodmarsh SAC and Ramsar site which provides an updated calculation for developments within the Stour catchment. This NEGM has been followed throughout the calculations.
- 2.4 The key measurement, with respects to nitrogen levels, is the amount of Total Nitrogen (TN). This includes organic and inorganic forms of nitrogen, both of which are available for plant growth and can contribute to algal blooming. TN is the sum of inorganic forms of nitrogen (nitrate-nitrogen (NO₃-N), nitrate nitrogen (No₂-N) and ammonia) and organically bonded nitrogen. Similarly, in respects to phosphorous levels, the key measurement is the amount of Total Phosphorous (TP). TP includes all phosphorous components: phosphates, dissolved organic phosphorous, particulate phosphorous in algal and bacterial cells, and includes mineral particles such as clay.
- 2.5 Stage 1 of the calculation is to calculate the nutrient load from the additional wastewater that will be generated by the development. This stage specifically only includes new overnight stays in the development, as it is assumed that any additional wastewater generated by diurnal use would be accounted for elsewhere. The NEGM recommends a water usage of 110 litres per person per day (l/p/d), plus an additional 10 l/p/d for any future changes to water fixtures.
- 2.6 Stage 2 of the calculation is to consider the existing land use on the site. Using the ADAS Farmscoper tool⁸, loading factors are determined for all different agriculture uses within the catchment. These loading factors are further separated by the underlying soil drainage conditions in the NEGM.
- 2.7 For non-agricultural uses, it is assumed in the NEGM that the land-use would not leach phosphorus except in the case of urban land-uses. Greenspace, woodlands, and similar were all therefore conservatively assigned a loading factor of 0.02 kgP/ha/year – which, in some studies, was the lowest detectable loading factor. Urban loading factors are modelled using an assumed⁹ concentration of TP for rainfall events, and therefore this varies with the rainfall.
- 2.8 Using these loading factors, and the areas of various land-uses on the site, the existing nutrient load from diffuse sources can be calculated.

² Natural England (December 2019) Advice on Nutrient Neutrality for New Development in the Stour Valley Catchment in Relation to Stodmarsh Designated Sites – For Local Planning Authorities

³ Natural England (July 2020) Advice on Nutrient Neutrality for New Development in the Stour Valley Catchment in Relation to Stodmarsh Designated Sites – For Local Planning Authorities

⁴ Natural England (November 2020), Advice on Nutrient Neutrality for New Development in the Stour Valley Catchment in Relation to Stodmarsh.

⁵ Natural England Nutrient Neutrality Generic Methodology – Issue 1: February 2022

⁶ Natural England Nutrient Neutrality Budget Calculator – Stodmarsh SAC and Ramsar

⁷ Natural England Nutrient Budget Calculator Guidance Document – Stodmarsh SAC and Ramsar – Issue 1 v1 March 2022

⁸ <https://www.adas.uk/Service/farmscoper>

⁹ Mitchell, G (2005) does not disclose how he calculated the event mean concentrations listed in his paper

- 2.9 Stage 4 of the calculation is the final stage. At this point, the totals from Stage 1 and Stage 3 are added together, and the total from Stage 2 is subtracted. If there is a surplus (i.e., the proposed total is higher than the existing total), a buffer (factor of safety) of 20% is added on to the total, and this is then referred to as 'the nutrient budget'. If the nutrient budget comes out as less than or equal to zero, then the development has achieved nutrient neutrality.
- 2.10 NE has provided a calculator for the Stour catchment in the form of a Microsoft Excel spreadsheet which incorporates all elements listed above. This calculator has been referenced throughout this report.
- 2.11 The methodology has been used in this case to calculate the nutrient budget for all development within the district.

What types of development require mitigation?

- 2.12 The NEGM covers all areas within the Stour Valley river catchment. A map of the catchment is shown in Figure 1. The Stour Valley catchment covers large areas of the district, including Canterbury City.

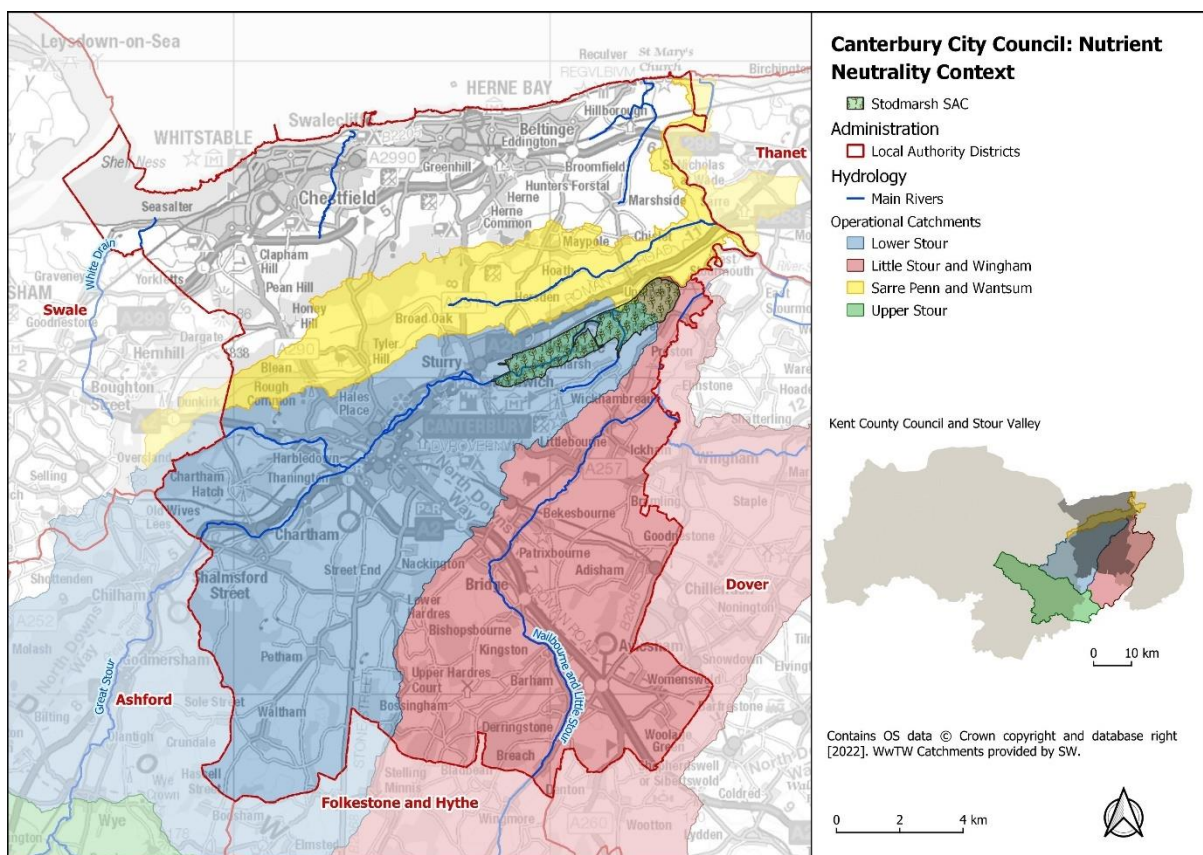


Figure 1: Nutrient Neutrality Context

- 2.13 New developments within the Canterbury district may impact Stodmarsh if one or both of the following are true:
- Treated effluent from the development discharges into a water course that ultimately reaches Stodmarsh (via tidal or storm overtopping); or
 - The runoff from the development discharges into a water course that ultimately reaches the Stodmarsh (via tidal or storm overtopping).

- 2.14 The watercourses that discharge to Stodmarsh belong to the Stour Management Catchment. Within the Canterbury district area, the Operational Catchments of interest are the Lower Stour, the Little Stour and Wingham, as well as part of the Stour Marshes (Sarre Penn and River Wantsum). The Lower Stour (and Upper Stour, although not directly relevant in this case) is part of the upstream 'fluvial' catchment draining in an easterly direction through Stodmarsh, whereas the Little Stour and Wingham, and Sarre Penn and River Wantsum catchments are 'downstream' as they discharge into the tidal section of the River Stour which has a backwater effect in a westerly direction through Stodmarsh.
- 2.15 In accordance with the NEGM, the types of new development which require mitigation include new homes, student accommodation, tourism attractions and tourist accommodation.
- 2.16 Other commercial development, which does not involve overnight accommodation, will generally be exempt from the mitigation strategy unless it has other (non-sewerage) water quality implications. It is recommended that any promoters of high-water use developments engage with Natural England, through their Discretionary Advice Service.
- 2.17 Proposals which would have otherwise been within the scope of the NEGM but which already have full planning permission may proceed without needing to undertake any additional assessment exercise. However, Reserved Matters applications are subject to the NEGM and require mitigation. The council also considers that existing planning applications within the scope of the advice and either undetermined by the council or with a resolution/delegated decision to grant permission subject to the prior completion of a Section 106 Agreement or other matters, are subject to the NEGM. Existing planning applications within the scope of the NEGM and currently the subject of an appeal to the Secretary of State/Planning Inspectorate are also subject to the NEGM.

3 CANTERBURY CITY COUNCIL NUTRIENT BUDGET

- 3.1 In order to establish an estimate for the scale of mitigation required, a nutrient budget has been calculated for CCC based on the existing allocations in the Canterbury District Local Plan 2017 and the emerging New Local Plan 2041 (with projections to 2041).
- 3.2 The current Local Plan (2011-2031) plans for 16,000 new homes and as of April 2023, 7,575 homes have been completed. The draft Local Plan (2020-2041) covers some of the same time period as the current Local Plan and therefore, there is overlap in the need and supply. Including allocations in the current Local Plan, which are being carried forward, the draft Local Plan (2020-2041) plans for around 26,700 dwellings.
- 3.3 The remaining need is met by the supply components: existing permissions for housing, student and older persons housing (2,163), saved allocations from the 2017 Local Plan (11,461), draft proposed allocations (8,694), and an annual windfall site allowance of 170. This data was provided by CCC to facilitate the strategy.
- 3.4 Dwellings that have been granted a full planning permission at the time of writing, or have agreed on-site mitigation, are omitted from the following analysis. All other proposals, including those with reserved matters and/or outline granted permissions are to be included in the analysis.
- 3.5 As parts of the district, including some WwTW's, do not lie within the Stour Valley river catchment, a geographic analysis of the proposed developments in the district has been undertaken. Proposed new dwellings both lying outside of the surface water catchment and draining to a WwTW outside of the catchment can be omitted from the analysis.
- 3.6 Following the omission of the relevant dwellings due to either planning status or location, the total number of dwellings which will form the basis for the nutrient budget is 1,814 for the current Local Plan including non-completed applications and 7,867 (plus 589 single occupation units for older persons accommodation) for the New Local Plan to 2041. A windfall allowance of 136 (80% of the total allowance¹⁰) is added annually resulting in a grand total of dwellings to mitigate of 12,680 to 2041.

Table 1: Dwellings Considered for the Nutrient Budget

Catchment	Number of Dwellings					Total To 2041
	2023/ 2024	2025/ 2029	2030/ 2034	2035/ 2039	2040/ 2044	
Lower Stour	70	1,610	3,066	2,215	815	7,776
Sarre Penn	0	295	400	148	0	843
Little Stour	0	273	145	0	0	418
Outside Catchment	0	351	164	0	1,697	2,212
Total	70	2,529	3,775	2,363	2,512	11,249
Total Including Windfall Sites	478	3,209	4,455	3,043	3,192	14,377

¹⁰ For future windfall sites it is assumed that the proportion of new dwellings at each WwTW in the catchment is as follows: 40% to Canterbury WwTW, 20% rural sites, all assumed to discharge to Canterbury WwTW, 20% to Herne Bay WwTW and 20% in Whitstable and therefore outside catchment.

- 3.7 The nutrient budget has been calculated for each development site within the adopted Canterbury District Local Plan and New Local Plan to 2041 (for a grand total of 12,680 dwellings, including windfall sites). Calculations have been performed for each operational catchment and on a 5-year basis (excluding the first 2023-2024 period), as shown in Table 1.
- 3.8 The budgets from each individual development have been summed to establish a nutrient budget for the entire district in each Local Plan scenario. The following assumptions have been made in the calculation of the initial budget:
- All new development in the Canterbury district area will be expected to achieve a maximum water use standard of 90 litres per person per day (l/p/d). An additional 10 litres have been added to this figure in accordance with the NEGM.
 - Additional populations have been calculated using an occupancy rate of 2.37 people per dwelling, figure provided by CCC.
 - When designating the current land use of a development site, satellite imagery was reviewed. For development sites on active farmland a judgment has been made on the type of farming and the appropriate leaching coefficients used in light of further information.
 - In determining the soil type of a development site, the Soil Scapes¹¹ webtool has been used in accordance with the NEGM. In cases where a development site is shown to have varying soil types, the soil type which covers the majority of the site has been assumed. For cases where the site is split approximately 50/50 in terms of soil types, the type with the lowest leaching rate has been selected as a precautionary measure.
 - For windfall sites, a conservative assumption has been made that these will all be developed on freely draining sites.
 - In determining the average annual rainfall at each site, the National River Flow Archive database¹² has been used. This is in accordance with the latest NEGM.
 - Unless Public Open Space provisions have been specified by CCC for allocated sites, (or draft allocations) future land use for residential developments has been set as entirely 'Residential Urban'. This is a conservative assumption as it does not allow for sites where they may be a proportion of the site set aside for open space.
 - All development sites have been assumed to connect to their nearest / most appropriate WwTW. This has been established using shapefiles provided by Southern Water (SW) showing the catchment area of each WwTW. Although some developments will undoubtedly be located in non-sewered areas and therefore require a separate private treatment system, the vast majority of developments are expected to connect to their local WwTW and as such this approach is considered to be robust.
 - The calculations are based on the relevant provisions contained within the Levelling Up and Regeneration Act (LURA)¹³. Specifically the requirements for upgrading relevant WwTWs with a Population Equivalent of > 2000 in the catchment to the Technically Achievable Limits (TAL) by 2030.

¹¹ <http://www.landis.org.uk/soilscapes/#>.

¹² <https://nrfa.ceh.ac.uk/data>

¹³ Levelling-up and Regeneration Act 2023 (legislation.gov.uk)

- For future windfall sites it is assumed that the proportion of new dwellings at each WwTW in the catchment is as follows: 40% to Canterbury WwTW, 20% rural sites, all assumed to discharge to Canterbury WwTW, 20% to Herne Bay WwTW and 20% in Whitstable and therefore outside catchment.
- For sites where the existing nutrient load exceed the proposed nutrient load, the nutrient budget is applied as an offset to other sites in the strategy.

3.9 Following the 4-stage calculation process outlined in the NEGM for each identified development site within the district, a total increase in **nutrient loading has been calculated for the current Local Plan and New Local Plan to 2041 combined as 1,406kg of Phosphorus and 4,939kg of Nitrogen.**

3.10 Table 2 shows the phased nutrient budget calculations subdivided by catchments.

Table 2: Nutrient Budget

Catchment	2023/2024		2025/2029		2030/2034		2035/2039		2040/2041	
	TP	TN	TP	TN	TP	TN	TP	TN	TP	TN
Lower Stour	191	-2,000	519	2,195	625	-1,666	671	184	687	836
Sarre Penn	0	0	243	113	519	1,036	621	1,382	621	1,383
Little Stour	0	0	38	375	27	-84	27	-84	27	-84
Outside Catchment	0	0	2	236	6	332	6	332	7	390
Total	191	-2,000	802	2,719	1,176	-496	1,325	1,699	1,343	2,409
Including Windfall Sites	259	-975	958	5,452	1,217	1,148	1,382	3,976	1,406	4,939

3.11 A full set of calculations is included in the Appendix.

4 MITIGATING THE NUTRIENT BUDGET “THE SOLUTION”

Improvements to WwTW

- 4.1 The committed improvements to WwTW to be delivered by 2024 have been taken into account for the nutrient budget calculations. These upgrades are not considered a mitigation but will change the future baseline by reducing the concentration of nutrients reaching the Stodmarsh.
- 4.2 The upgrade of WwTWs to TAL by 2030 will substantially reduce nutrient loading thereafter, especially as Canterbury WwTW (as the largest WwTW in the Canterbury District) currently has Total Phosphorus permit limit of 2.0mg/l (reduced down to 0.25mg/l) and no Total Nitrogen limit (reduce down to 10mg/l).

Onsite Mitigation

- 4.3 The nutrient budget has been developed by considering the nutrient contribution from the increased residential occupancy and the change in land use predicted to occur as a result of proposed new development within the Stour Catchment in the Canterbury district area, or from development outside the catchment which is known to discharge foul sewage to a Wastewater Treatment Works (WwTW) within the catchment. An allowance has been included for larger developments achieving some level of onsite foul treatment reduction and for all sites deemed as ‘Major’ to utilise SuDS for nutrient removal.
- 4.4 Large development sites often have the scope, budget, and available space to deliver on-site mitigation to reduce the future nutrient loading from the development. This has been proven through several nutrient neutrality assessments submitted with planning applications to CCC and other districts within the catchment.
- 4.5 Therefore, a key component of the mitigation framework is the enforcement through the planning system that larger sites must undertake the maximum achievable level of onsite mitigation. This mitigation is expected to be delivered both in respect of foul water and surface water. With an assumed level of onsite mitigation achieved on larger sites, the nutrient budget has been refined to provide an estimate of the scale of nutrient offsetting required.

Foul Water Treatment for Large Developments

- 4.6 The following assumptions have been made in order to calculate the reduction in nutrient loading from additional foul water from large developments:
 - Large sites are considered as sites which aim to deliver a minimum of 300 dwellings.
 - It is assumed that sites of this size will be able to implement additional foul sewage infrastructure in the form of an onsite treatment works. It is assumed that foul sewage will be able to be treated to a level of 10mgN/l and 0.25mgP/l. This represents the realistic limit of sewage treatment using available technologies and is lower than the current Technically Achievable Limit (TAL) as defined in the LURA.
- 4.7 It has been found that, proposed dwellings considered under the existing Local Plan, 1,200 dwellings are expected to be delivered on large sites. The remaining dwellings would be delivered on other unresolved allocation sites with a capacity less than 300. In terms of the draft allocations, 5,875 dwellings are anticipated to be delivered on large sites. These large sites contribute significantly to the nutrient budget for the district. The focus of this section is on the potential for large sites to deliver mitigation with respect to foul water drainage, in particular, the potential for large sites to install onsite WwTWs operated by Ofwat (Water Services

Regulation Authority) regulated New Appointments and Variations (NAVs), which would discharge to surface waters or to ground.

- 4.8 It was originally considered as part of the Nutrient Mitigation Plan that large sites would be able to achieve nutrient neutrality via on-site solutions and would therefore not require any additional offsetting through any CCC mitigation scheme. However, through our experience using the new NE calculator it is proving difficult even for larger sites to achieve complete neutrality onsite in the district (primarily due to the soil types in this part of the catchment), with most schemes still potentially requiring some level of off-site offsetting in order to achieve neutrality. Therefore, a precautionary approach has been taken in assuming that larger sites should be included in the determination of the scale of mitigation offsetting. Offsetting through any CCC scheme will be made available to large sites provided a site-specific mitigation strategy showing a significant reduction in nutrient loading from the development has been submitted and approved.

Surface Water Treatment (SuDS)

- 4.9 The updated NE guidance has increased the assumed leaching rate from residential urban land from 0.83kgP/ha/year to a value that varies according to soil type and average annual rainfall for the area. Across CCC, the Phosphorus leaching rate varies between 1.1kgP/ha/year to 1.45kgP/ha/year. From our discussions with NE, this is to represent more accurately an 'unmitigated' scenario, and sites are expected to reduce their leaching rates significantly through the use of Sustainable Drainage (SuDS) systems.
- 4.10 A development is required to implement SuDS when deemed as 'Major'. Within the context of this strategy and for the calculations, a 'Major' site comprises ten dwellings or more or the development is carried out on an area of one hectare or more.
- 4.11 Therefore, it is a key aspect of the mitigation strategy to enforce 'Major' development sites to significantly reduce their surface water nutrient loading through the implementation of SuDS and other measures such as on-site wetlands. It is assumed for the purpose of this calculation, that all sites will be able to achieve a reduction in leaching rates of 50%.
- 4.12 This level of mitigation is achievable through the implementation of SuDS and surface water wetlands which are known to reduce phosphorus levels by approximately 50%. Further guidance on this point is expected to be published by NE, in collaboration with CIRIA. Official CIRIA guidance documents for nutrient removal rates in SuDS can be found in C808 for phosphorus and C815 for Nitrogen. This factor is considered precautionary due to the fact that there has been no allowance made for open space designations on proposed development sites, therefore the unmitigated surface water load is currently being significantly over estimated.

Summary

The mitigated nutrient budget has been calculated for each development site within the adopted Canterbury District Local Plan and New Local Plan to 2041. Calculations have been performed for each operational catchment and on a 5-year basis (excluding the first 2023-2024 period), as shown in

- 4.13 Table 3.
- 4.14 Including onsite mitigation at the level described, both for foul and surface water, **a mitigated nutrient budget has been calculated as 495kgP and 1,160kgN for the current Local Plan and New Local Plan to 2041.** This represents a 65% reduction in the phosphorus budget and a 76% reduction in the nitrogen budget. The onsite mitigation does not apply to windfall sites.

Table 3: Mitigated Nutrient Budget

Catchment	2022/2024		2025/2029		2030/2034		2035/2039		2040/2041	
	TP	TN	TP	TN	TP	TN	TP	TN	TP	TN
Lower Stour	93	-2,916	261	-481	351	-3,953	370	-2,103	376	-1,451
Sarre Penn	0	0	32	-20	34	-286	36	-158	36	-158
Little Stour	0	0	17	46	13	-36	13	-36	13	-36
Outside Catchment	0	0	2	236	6	332	6	332	7	390
TOTAL	93	-2,916	306	-916	404	-4,058	424	-2,080	432	-1,370
Including Windfall sites	162	-1,891	462	1,816	446	-2,413	481	197	495	1,160

4.15 This makes it clear the significance of onsite nutrient mitigation measures in reducing the nutrient budget and strategic measures should not be relied upon solely to deliver mitigation.

4.16 It must be noted that mitigation on large sites are the main contributors to the noticeable reductions in the nutrient budget.

Offsetting from Other Projects

4.17 Through onsite mitigation is not possible to achieve nutrient neutrality, therefore other solutions within the district must be found. Retrofitting the CCC housing stock to reduce water consumption and land use change elsewhere are discussed as offsetting measures in this section.

Retrofitting Housing Stock

4.18 A direct connection has been made by NE, through their NMEG, between domestic water usage and nutrient levels in the effluent at WwTWs. Therefore, retrofitting existing homes with water saving measures can reduce the overall nutrient load at the outfall of WwTWs within the catchment can be decreased and used to offset new development. Canterbury has a significant General Needs housing (4,159 of which 3,505 are within the catchment) along with leasehold housing, sheltered housing and hostels which could all be converted.

4.19 There are different methods for reducing water consumption, with flow control devices considered the most robust. LPAs in the Sussex North Water Resource Zone (SNWRZ) have agreed a Water Neutrality mitigation strategy based on flow controlled devices following a successful pilot study of 100 dwellings in Crawley. Further work on viability is currently being conducted with intention of commissioning a similar scheme in the district. Until such time as the scheme is confirmed, as precautionary measure the benefits that could be achieved through retrofitting are not included in the mitigation calculations.

Land Use Change Elsewhere

4.20 There is significant potential within the district to reduce nutrient loadings further through changes in land use, either specifically for the purpose of nutrient reduction or through other schemes or programs designed for other purposes but which will also provide a reduction in nutrient loading. These schemes may not have nutrient offsetting as their main function, but this may arise as a secondary benefit from other ecological or amenity enhancement programs within the district.

- 4.21 For example, South East Water have plans for a significant new water supply reservoir in Broad Oak (Figure 2).

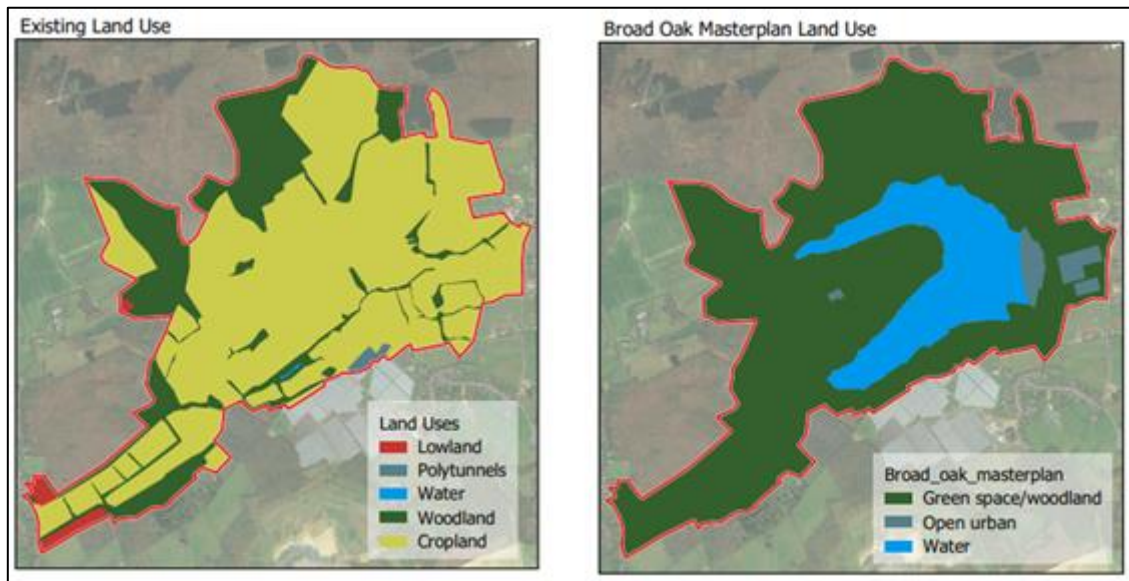


Figure 2: Broad Oak Reservoir

- 4.22 The land is currently agricultural and on 'Impeded drainage' (as defined by NEGM), with a correspondingly relatively high likely nutrient load. Therefore, creation of the reservoir biodiversity enhancement at the site, if implemented correctly, could have a potential beneficial effect on reducing nutrient loading in the downstream catchment. The proposals include a number of different uses including the reservoir top water level outline, main dam and secondary embankments, Water Treatment Works and pump house, 2 x car parks and river diversion, and will be constructed on varying land use types including arable, fruit, pasture, woodland and 'urban' (dwellings/structures). In addition, the NEGM for determining nutrient leaching rates from different land uses depends on the underlying soil classification which is not consistent across the area. A preliminary calculation based on high level information has been undertaken to broadly estimate the nutrient reductions from the reservoir development, as 145kg TP/year and 5,617kg TN/year. A detailed study will be required to determine the nutrient reduction, but it will be meaningful in the context of the nutrient mitigation framework. It is important to note that any nutrient reductions resulting from the scheme will most likely only count towards offsetting nutrient increases from development also within the Wantsum and Sarre Penn sub catchment due the different hydrology between the upstream and downstream Stour catchments. It is recommended that further work is conducted on this.
- 4.23 Moreover, woodland planting can complement other wider strategies such as provision of public amenity as well as contributing to other ecological and environmental goals. Woodlands have very low leaching rates, therefore any land use change to woodlands results in offsetting the nutrient load from surface water and can contribute towards offsetting the District nutrient budget. The exact amount of offsetting is variable and depends on the prior land use, the soil characteristics, and the average rainfall at the woodland location. As a reference, in a 600mm to 900mm average rainfall area, 10ha of woodlands can offset between 0.2kg and 9.5kg of Phosphorus per year depending on the soil type.
- 4.24 In general, any small scheme, although having a limited total level of nutrient offsetting, will form a key part of the offsetting strategy as these nutrient reductions can potentially be realised much faster than a large-scale strategic offsetting scheme.

- 4.25 A potential example is environmental enhancement of land in the district and in CCC’s ownership. The land is currently scrubland and could be enhanced to provide habitat creation and nutrient mitigation in the form of floodplain meadows and wetlands to treat surface water runoff from the Southern Water sewer network which outfalls into ditches through the site. A feasibility study suggests that environmental enhancement of the land could reduce Phosphorus loading by up to 20kg/yr and Nitrogen by up to 200kg/yr.

Wetland Treatment

- 4.26 Strategic constructed wetlands have been established as an efficient large scale offsetting solution to the nutrient problem. Wetlands can remove a proportion of nutrients from incoming nutrient-rich water through, sedimentation, plant growth and denitrification among other processes. Many studies have quantified this effect. For the purpose of this strategy, in line with NE guidance, median removal rates from the Land et al. wetland metastudy¹⁴ will be used. The study found that the median values for TN and TP removal were 93g/m²/yr. and 1.2g/m²/yr., respectively, and that wetlands remove TN and TP with a median efficiency of 37% and 46%, respectively.
- 4.27 The majority of the offsetting is to be delivered through the creation of strategic wetlands located adjacent to the Great Stour River. It is proposed to create a series of Free Water Surface (FWS) Wetlands. These wetlands have areas of open water, floating vegetation, emergent plants, and are similar in appearance to natural marshes. As water flows through the wetland, nitrogen and phosphorus are removed by the processes of sedimentation, filtration, oxidation, reduction, adsorption, and precipitation. As FWS constructed wetlands closely mimic natural wetlands, it is known that they attract a wide variety of wildlife, namely, insects, molluscs, fish, amphibians, reptiles, birds, and mammals.
- 4.28 Applying a precautionary principle and in the absence of sufficient certainty regarding other offsetting project (as described at the section above, “Offsetting from Other Projects”) the calculation of the wetland area is based on the mitigated budget as shown in
- 4.29 Table 3. Other offsetting project will be continued to be investigated and once there is further certainty on them these measures will be incorporated within the strategy.
- 4.30 Based on the median removal rates quoted in the Land et al. wetland metastudy, it has been estimated that up to **approximately 41ha of wetland will need to be constructed along this river corridor to fully offset the nutrient budget up to 2041**. A wetland, or series of wetlands, of this size would be expected to remove a minimum of 38,130kgN and 498kgP. This is a conservative assumption as it is known that wetlands specifically designed for the purpose of nutrient removal can achieve nutrient removal rates higher than the median values used.
- 4.31 Considering the 5-year phasing (excluding the first 2023-2024 period), the amount of wetland required varies according to the number of sites developed as shown in Table 4.

Table 4: Wetland Area Requirements

	Wetland area required based on the Mitigated Budget					
	2023/2024	2025/2029	2030/2034	2035/2039	2040/2041	Total to 2041
Wetland Size (ha)	13	38	37	40	41	41

¹⁴ Land et al. (2016), How effective are created or restored freshwater wetlands for nitrogen and phosphorus removal? A systematic review

- 4.32 The scale of mitigation required through surface water treatment wetlands for the project housing growth in the 2023/2024 period is 13 ha. The size of wetland required to mitigate the cumulative nutrient budget between 2025/2029 increases to 38 ha. This is due to the proposed 3,209 dwellings within the five-year period. The area required to successfully mitigate the nutrient budget according to the Draft Local Plan decreases to 37ha in 2030/2034 period due to the proposed upgrades to WwTW within the Stodmarsh catchment (This is despite an additional 4,455 dwellings proposed within this time). The required wetland size for mitigation increases gradually between 2035 and 2041 due to increased proposed development. The nutrient budget up to 2041 can be mitigated by 41 ha of surface water treatment wetlands based on published theoretical wetland efficiency rates.
- 4.33 It is proposed that, in order to establish 41ha of fully operational wetlands, approximately 75ha of total land may be required. This additional area will allow for the appropriate buffer zones and floodplain compensation areas on the site, as well as accommodate for any site constraints which may be present.
- 4.34 It should be noted that the NEGM recommends a 20% buffer is added to nutrient budget calculations. A 20% buffer has not been included in the calculations at this stage. Rather than use an arbitrary factor of safety, a precautionary approach has been taken throughout the calculations. The mitigation strategy will remain adaptive and flexible through the design of the strategic wetlands and the accumulation of other offsetting projects within the district. This will allow the strategy to respond to housing delivery and adjustments can be made as necessary throughout the lifetime of the strategy to ensure that the required level of offsetting is delivered.
- 4.35 Catchment analysis has been carried out to assess potential suitable locations for wetlands. Potentially suitable locations have been identified based on immediate proximity to watercourses for a source of supply, and relatively low-lying flat land to minimise excavation. Figure 3 shows potentially suitable wetland locations. The sites have been sifted into those sites for which there are no obvious constraints (high level review) – demarcated in green – those sites for which wetlands are possible but there are constraints such as topography or existing designations – orange – and sites which are low lying adjacent to the river but which would be very difficult to convert into wetlands (e.g. existing lakes) - red. For context the green sites add up to 55ha and there is a potential of removing in the region of 330 - 660 kg of Phosphorus per year. The calculation will be refined in relation to the actual area available and will depend on the levels of nutrients in the river: in this instance average nutrient removal rates have been used and the total area has conservatively been halved based on 50% of the Green land being constructed as 'fully utilised wetland'.
- 4.36 This is less than required offset the entire budget.

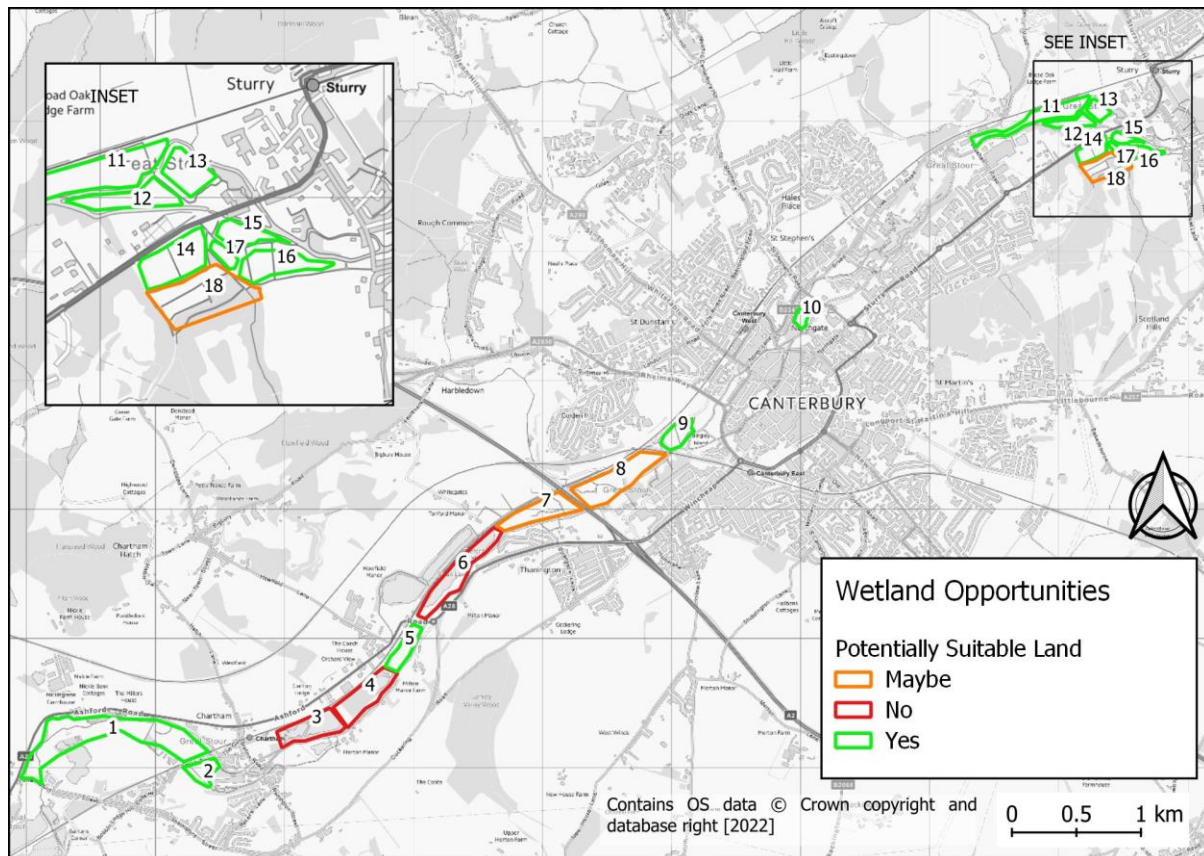


Figure 3: Wetland Opportunities Within CCC

- 4.37 Sites 11 – 17 are of particular interest and are considered 'Prime' locations as they are in close proximity to Canterbury WwTW on Sturry Road.
- 4.38 Taking treated effluent from Canterbury WwTW and passing it through a wetland would result in significant nutrient removal. This solution presents logistical, technical and legislative (permitting) challenges but might solve the nutrients issue in Canterbury District. Preliminary analysis based on the current permit limit (2.0mg/l of TP) suggests that a 10ha constructed wetland can remove more than 1,500 kg of Phosphorus yearly (efficiency dependant, subject to detailed design, and based on current permit limits remaining), which is greater than the calculated mitigated budget. Feasibility studies for a wetland downstream of Canterbury WwTW have commenced.

5 CONCLUSIONS

- 5.1 This report seeks to provide an outline of the methodology followed in the calculation of the nutrient budget for the proposed projected growth based on the Canterbury adopted Local Plan and draft allocations under the emerging Local Plan to 2041 (including windfall development). This methodology follows the clear staged approach outlined by NE in their latest guidance document on the matter. This report has provided details of the key assumptions made when scaling up the NE methodology, which has been written with single developments in mind, to a much larger proposed housing stock.
- 5.2 It has been demonstrated that there is significant potential to reduce the nutrient budget for the district by implementing planning policies to ensure that sites include nutrient reduction measures into their development plans (parallels can be drawn with SuDS which are required for new developments). Large sites are expected to reduce their nutrient loading with respect to both surface water and foul water drainage, and smaller sites are expected to deliver significant reductions in terms of surface water loading.
- 5.3 Furthermore, this note has given an outline to the role of small offsetting projects within the district and the role these can play in reducing the overall nutrient budget.
- 5.4 Following the inclusion of onsite mitigation, an overall nutrient budget has been calculated to the year 2041 at 1,160kgN and 495kgP.
- 5.5 Strategic constructed wetlands have been established as an efficient large-scale solution to help offset this budget. The requirements contained in the Levelling Up and Regeneration Act to improve Wastewater Treatment Works in the catchment by 2030 will help in reducing the scale of nutrient mitigation. Despite these measures, based on the current measures included in the framework, the area of wetland required to offset the budget and allow for the delivery of housing to 2041 is still considered challenging.
- 5.6 Opportunities will therefore be taken to reduce, and mitigate the nutrient budget, including the potential for retrofitting existing council housing stock to reduce water usage, and other projects within the district which will reduce the nutrient loading from surface water runoff (e.g. Broad Oak Reservoir).
- 5.7 The mitigation framework will be phased with short-, medium- and long-term solutions to allow the released of nutrient credits as quickly as possible whilst also considering the full scale of the Local Plan delivery.
- 5.8 The Stodmarsh mitigation strategy will continue to be adaptive, responding to changes in guidance, housing delivery, the market and as opportunities for offsetting through the district arise. CCC will continue to liaise with neighbouring authorities, as well as all relevant regulators to develop a holistic nutrient mitigation framework.

6 NEXT STEPS

6.1 Next steps include:

- Ongoing identification of land use change projects within the District/Stour catchment;
- Viability assessment for retrofitting housing stocks for water saving measures;
- Scoping of suitable wetland sites, based on the wetland opportunities plan (as shown in Figure 3);
- Develop nutrient credit bank costing and apportionment scheme;
- Develop an Action Plan.

6.2 Below (Figure 4) a flowchart describing the process to secure wetlands as a mitigation measure.

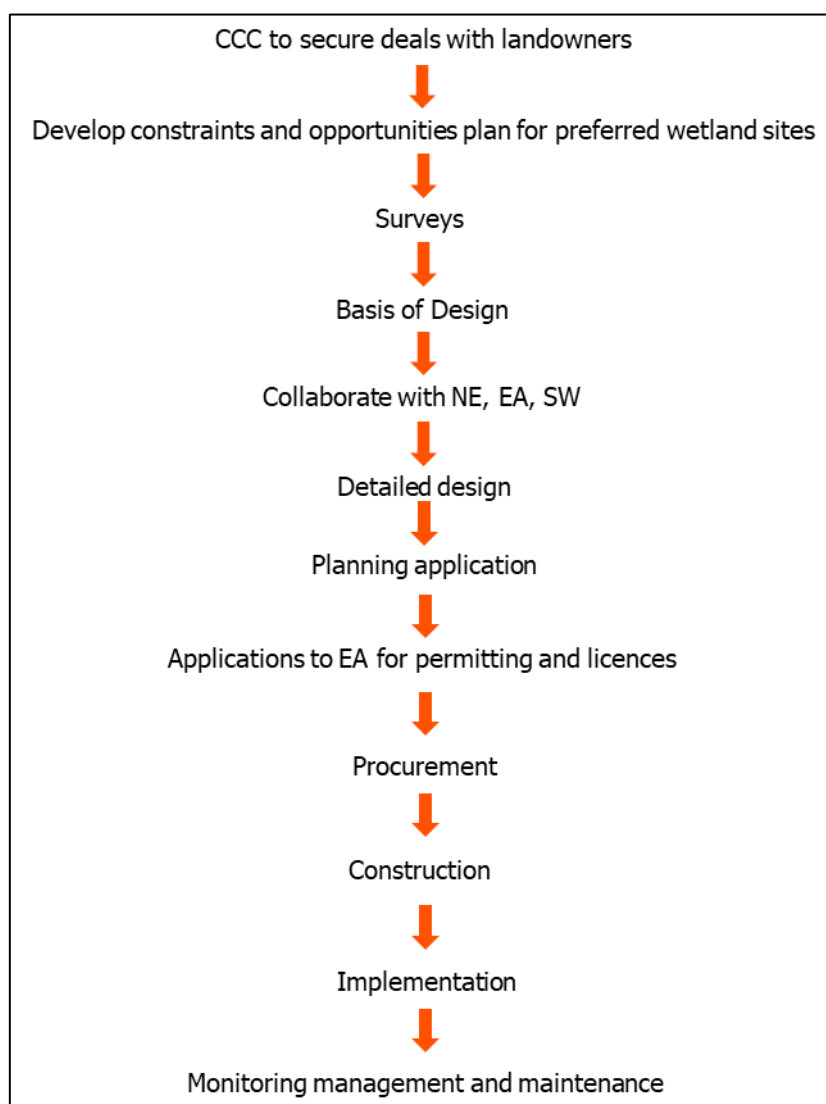


Figure 4: Wetland Flowchart

APPENDIX A: CALCULATIONS

Site code	Site Name	Local Plan	Yield	Older Persons Accommodation	Site Occupation					2040/2041	WwTW Catch
					2023/2024	2025/2029	Yield at 2030	2030/2034	2035/2039		
SLAA163	Bread and Cheese Field	New	150	0	0	23	153	130	0	0	Westbere
SLAA090	Milton Manor House	New	95	0	0	9	94	85	0	0	Chartham
SLAA011	Land North of Popes Lane, Sturry	New	110	0	0	20	110	90	0	0	Canterbury
SLAA066	The Paddocks, Shalloak Road, Sturry	New	50	0	0	30	50	20	0	0	Canterbury
SLAA099	43-45 St George's Place	New	50	0	0	30	50	20	0	0	Canterbury
SLAA102	LAND AT THE FORMER CHAUCER TECHNOLOGY SCHOOL	New	70	0	40	30	70	0	0	0	Canterbury
SLAA137B	Cockering Farm	New	36	0	0	36	36	36	0	0	Canterbury
SLAA151	Merton Park	New	2250	225	0	0	870	870	960	420	Canterbury
SLAA156	Land at Station Road East	New	37	0	0	37	37	37	0	0	Canterbury
SLAA162	Folly Farm	New	17	0	0	17	17	0	0	0	Canterbury
SLAA235	Goose Farm	New	26	0	0	0	26	26	0	0	Canterbury
SLAA239	Becket House	New	67	0	0	40	67	27	0	0	Canterbury
SLAA259	Land on the west side of Hollow Lane	New	800	80	0	0	505	505	295	0	Canterbury
0	Wincheap Commercial Area	New	1000	100	0	570	1000	430	0	0	Canterbury
SLAA158	Land North of Kent University	New	2000	200	0	0	645	645	960	395	Canterbury
SLAA309	Nackington Police Station	New	20	0	0	20	20	0	0	0	Canterbury
SLAA313	Goose Farm/Land west of Shalloak Road	New	12	0	0	12	12	0	0	0	Canterbury
SLAA146	Land at Hersden	New	18	0	0	18	18	0	0	0	Westbere
SLAA202	Land at Church Farm Hoath	New	17	0	0	17	17	0	0	0	Westbere
SLAA045	Land fronting Mayton Lane Broad Oak	New	8	0	0	8	8	0	0	0	Canterbury
SLAA062	Land adjacent to Valley Road, Barham	New	20	0	0	20	20	0	0	0	Newnham Valley
SLAA098	Land off the Hill	New	300	30	0	175	300	125	0	0	Newnham Valley
SLAA145	Land north of Court Hill, Littlebourne	New	50	0	0	30	50	20	0	0	Newnham Valley
SLAA185	Land west of Cooting Lane, Addisham	New	10	0	0	10	10	0	0	0	Dambridge
SLAA218	Great Pett Farm,Bridge	New	13	0	0	13	13	0	0	0	Newnham Valley
SLAA013	Former Metric Site	New	9	0	0	9	9	0	0	0	
SLAA223	St Vincents Farm	New	10	0	0	0	0	0	0	10	
SLAA067	Land comprising Nusery Industrial Units and former Kent Ambulance Station	New	14	0	0	14	14	14	0	0	
SLAA247	Bodkin Farm	New	250	0	0	250	250	0	0	0	
SLAA226A&B	Altira	New	67	0	0	0	0	0	0	67	Herne Bay
SLAA240	Land to the West of Thornden Wood Road	New	150	0	0	20	150	130	0	0	
SLAA067	Kent Ambulance Station	New	14	0	0	0	0	0	0	0	Herne Bay
SLAA132	Land at Thannet Way	New	220	0	0	0	0	0	0	220	
SLAA104	Land at Brooklands Farm	New	1400	140	0	0	0	0	0	1400	Whitstable
	Site 11 Land at Cockering Farm, Thanington	Current	400	0	30	300	400	70	0	0	Canterbury
	Site 9 Land at Howe Barracks, Canterbury	Current	129	0	0	129	129	0	0	0	Canterbury
	Site 8 Land North of Hersden	Current	800	0	0	252	652	400	148	0	Westbere
	CA043B Rosemary Lane Car Park, Canterbury	Current	20	0	0	20	20	0	0	0	Canterbury
	CA047 St Radigund's Place, Canterbury	Current	7	0	0	7	7	0	0	0	Canterbury
	CA278 Northgate Car Park, Canterbury	Current	21	0	0	21	21	0	0	0	Canterbury
	CA281 Hawks Lane, Canterbury	Current	9	0	0	9	9	0	0	0	Canterbury
	CA282 St Johns Lane Employment Exch, Canterbury	Current	24	0	0	0	24	24	0	0	Canterbury
	CA286 St John's Lane Car Park, Canterbury	Current	5	0	0	5	5	0	0	0	Canterbury
	CA347 Ivy Lane North, Canterbury	Current	10	0	0	10	10	0	0	0	Canterbury
	CA477 Holmans Meadow Car Park, Canterbury	Current	20	0	0	20	20	0	0	0	Canterbury
	CA481 Adj Canterbury West Station, Canterbury	Current	20	0	0	20	20	0	0	0	Canterbury
	CA507 Castle Street Car Park, Canterbury	Current	54	0	0	27	27	27	0	0	Canterbury
	Rouch Common (Road and Land to rear of 51 Rouch Common Road)	Current	28	0	0	28	28	0	0	0	Canterbury

Site code	Site Name	Local Plan	Yield	Older Persons Accommodation	Site Occupation					2040/2041	WwTW Catch
					2023/2024	2025/2029	Yield at 2030	2030/2034	2035/2039		
	St Martin's Hospital, Canterbury	Current	164	0	0	140	164	24	0	0	Canterbury
	Barham Court Farm, Barham	Current	25	0	0	25	25	0	0	0	Newnham Valley
	CA340 Garage Site, Kings Road, Herne Bay	Current	43	0	0	43	43	0	0	0	
	CA491 Herne Bay Station, Land at	Current	35	0	0	15	35	20	0	0	

Site code	Site Name	Catchment	Area (ha)	Open Space (ha)	Existing Land Use	Proposed Land Use	Soilscape Drainage	Existing Land Use Load	
								Scenario	TP (kg/year) existing
SLAA163	Bread and Cheese Field	Lower Stour	7.51	3.1542	Greenspace	Residential urban land	Freely draining	3.00	0.15
SLAA090	Milton Manor House	Lower Stour	4.53	1.812	Greenspace	Residential urban land	Freely draining	3.00	0.09
SLAA011	Land North of Popes Lane, Sturry	Lower Stour	9.31	6.19	Cereals	Residential urban land	Freely draining	3.00	0.37
SLAA066	The Paddocks, Shalloak Road, Sturry	Lower Stour	2.44	0.5368	Lowland	Residential urban land	Impeded drainage	10.00	0.46
SLAA099	43-45 St George's Place	Lower Stour	0.15	0.033	Commercial/industrial urban land	Residential urban land	Freely draining	3.00	0.13
SLAA102	LAND AT THE FORMER CHAUCER TECHNOLOGY SCHOOL	Lower Stour	1.66	0.1992	Open urban land	Residential urban land	Freely draining	3.00	1.08
SLAA137B	Cockering Farm	Lower Stour	1.92	0.4224	Greenspace	Residential urban land	Freely draining	3.00	0.04
SLAA151	Merton Park	Lower Stour	99.67	29.30298	Cereals	Residential urban land	Freely draining	3.00	3.99
SLAA156	Land at Station Road East	Lower Stour	0.66	0.0792	Open urban land	Residential urban land	Freely draining	3.00	0.43
SLAA162	Folly Farm	Lower Stour	0.62	0.1364	Greenspace	Residential urban land	Freely draining	3.00	0.01
SLAA235	Goose Farm	Lower Stour	2.11	0.4642	Commercial/industrial urban land	Residential urban land	Impeded drainage	10.00	1.88
SLAA239	Becket House	Lower Stour	1.11	0.1212	Commercial/industrial urban land	Residential urban land	Freely draining	3.00	0.99
SLAA259	Land on the west side of Hollow Lane	Lower Stour	40.89	15.951189	Cereals	Residential urban land	Freely draining	3.00	1.64
0	Wincheap Commercial Area	Lower Stour	14.96	1.7952	Commercial/industrial urban land	Residential urban land	Freely draining	3.00	13.31
SLAA158	Land North of Kent University	Lower Stour	93.56	33.064104	Cereals	Residential urban land	Freely draining	3.00	3.74
SLAA309	Nackington Police Station	Lower Stour	0.75	0.09	Commercial/industrial urban land	Residential urban land	Freely draining	3.00	0.67
SLAA313	Goose Farm/Land west of Shalloak Road	Lower Stour	0.43	0.0946	Greenspace	Residential urban land	Freely draining	3.00	0.01
SLAA146	Land at Hersden	Penn and War	1.24	0.2728	Cereals	Residential urban land	Impeded drainage (Sarre	12.00	0.68
SLAA202	Land at Church Farm Hoath	Penn and War	1.16	0.2266	Cereals	Residential urban land	Freely draining (Sarre Pe	14.00	0.08
SLAA045	Land fronting Mayton Lane Broad Oak	Penn and War	0.50	0.11	Greenspace	Residential urban land	Impeded drainage (Sarre	12.00	0.01
SLAA062	Land adjacent to Valley Road, Barham	Vingham Opera	2.78	0.6116	Greenspace	Residential urban land	Naturally wet (Little Sto	11.00	0.06
SLAA098	Land off the Hill	Vingham Opera	15.99	6.24	Cereals	Residential urban land	Freely draining (Little Sto	9.00	0.64
SLAA145	Land north of Court Hill, Littlebourne	Vingham Opera	1.96	0.4312	Greenspace	Residential urban land	Freely draining (Little Sto	9.00	0.04
SLAA185	Land west of Cooting Lane, Addisham	Vingham Opera	0.00	0	Greenspace	Residential urban land	Freely draining (Little Sto	8.00	0.00
SLAA218	Great Pett Farm,Bridge	Vingham Opera	0.86	0.189	Commercial/industrial urban land	Residential urban land	Freely draining (Little Sto	8.00	0.98
SLAA013	Former Metric Site	0.00	0.17	0.0204	Not relevant			#N/A	0.00
SLAA223	St Vincents Farm	0.00	0.29	0	Not relevant			#N/A	0.00
SLAA067	Land comprising Nusery Industrial Units and former Kent Ambulance Station	0.00	0.50	0.11	Not relevant			#N/A	0.00
SLAA247	Bodkin Farm	0.00	24.03	0	Not relevant			#N/A	0.00
SLAA226A&B	Altira	0.00	1.57	0	0	0	0	#N/A	0.00
SLAA240	Land to the West of Thornden Wood Road	0.00	16.25	3.02575	Not relevant			#N/A	0.00
SLAA067	Kent Ambulance Station	0.00	0.50	0	0	0	0	#N/A	0.00
SLAA132	Land at Thannet Way	0.00	14.04	0	Not relevant			#N/A	0.00
SLAA104	Land at Brooklands Farm	0.00	79.13	0	Not relevant	Not relevant	0	#N/A	0.00
	Site 11 Land at Cockering Farm, Thanington	Lower Stour	153.54	0	Cereals	Residential urban land	Freely draining	3.00	6.14
	Site 9 Land at Howe Barracks, Canterbury	Lower Stour	27.70	0	Greenspace	Residential urban land	Freely draining	3.00	0.55
	Site 8 Land North of Hersden	Penn and War	62.09	0	Cereals	Residential urban land	Impeded drainage (Sarre	12.00	34.15
	CA043B Rosemary Lane Car Park, Canterbury	Lower Stour	0.27	0	Open urban land	Residential urban land	Freely draining	3.00	0.17
	CA047 St Radigund's Place, Canterbury	Lower Stour	0.07	0	Open urban land	Residential urban land	Naturally wet	4.00	0.05
	CA278 Northgate Car Park, Canterbury	Lower Stour	0.21	0	Open urban land	Residential urban land	Freely draining	3.00	0.13
	CA281 Hawks Lane, Canterbury	Lower Stour	0.03	0	Open urban land	Residential urban land	Freely draining	3.00	0.02
	CA282 St Johns Lane Employment Exch, Canterbury	Lower Stour	0.08	0	Open urban land	Residential urban land	Freely draining	3.00	0.05
	CA286 St John's Lane Car Park, Canterbury	Lower Stour	0.06	0	Open urban land	Residential urban land	Freely draining	3.00	0.04
	CA347 Ivy Lane North, Canterbury	Lower Stour	0.08	0	Open urban land	Residential urban land	Freely draining	3.00	0.05
	CA477 Holmans Meadow Car Park, Canterbury	Lower Stour	0.54	0	Open urban land	Residential urban land	Freely draining	3.00	0.35
	CA481 Adj Canterbury West Station, Canterbury	Lower Stour	0.28	0	Open urban land	Residential urban land	Freely draining	3.00	0.18
	CA507 Castle Street Car Park, Canterbury	Lower Stour	0.28	0	Open urban land	Residential urban land	Freely draining	3.00	0.18
	Rouch Common (Road and Land to rear of 51 Rouch Common Road)	Lower Stour	1.11	0	Greenspace	Residential urban land	Freely draining	3.00	0.02

Site code	Site Name	Catchment	Area (ha)	Open Space (ha)	Existing Land Use	Proposed Land Use	Soilscape Drainage	Existing Land Use Load	
								Scenario	TP (kg/year) existing
	St Martin's Hospital, Canterbury	Lower Stour	6.39	0	Greenspace	Residential urban land	Freely draining	3.00	0.13
	Barham Court Farm, Barham	Wingham Opera	1.46	0	Greenspace	Residential urban land	Freely draining (Little St	8.00	0.03
	CA340 Garage Site, Kings Road, Herne Bay	0.00	0.13	0	Open urban land			#N/A	0.00
	CA491 Herne Bay Station, Land at	0.00	0.58	0	Open urban land	Residential urban land	Naturally wet	2.00	0.00

		Unmitigated Budget											
		Proposed Land Use Load		WwTW Load									
Site code	Site Name	TN (kg/year) existing	TP (kg/year) proposed	TN (kg/year) proposed	2023/2024 TP	2023/2024 TN	2025/2029 TP	2025/2029 TN	2030/2034 TP	2030/2034 TN	2035/2039 TP	2035/2039 TN	2040/2041 TP
SLAA163	Bread and Cheese Field	22.53	5.33	58.77	0.00	0.00	15.92	53.72	105.88	357.35	0.00	0.00	0.00
SLAA090	Milton Manor House	13.59	3.33	36.20	0.00	0.00	6.23	21.02	2.03	81.31	0.00	0.00	0.00
SLAA011	Land North of Popes Lane, Sturry	236.57	3.90	53.89	0.00	0.00	3.11	46.71	2.38	95.16	0.00	0.00	0.00
SLAA066	The Paddocks, Shalloak Road, Sturry	21.20	2.31	23.15	0.00	0.00	4.67	70.07	1.08	43.25	0.00	0.00	0.00
SLAA099	43-45 St George's Place	0.91	0.14	1.42	0.00	0.00	4.67	70.07	1.08	43.25	0.00	0.00	0.00
SLAA102	LAND AT THE FORMER CHAUCER TECHNOLOGY SCHOOL	11.09	1.77	17.13	6.23	93.43	4.67	70.07	1.51	60.55	0.00	0.00	0.00
SLAA137B	Cockering Farm	5.76	1.82	18.22	0.00	0.00	5.61	84.08	0.78	31.14	0.00	0.00	0.00
SLAA151	Merton Park	2532.61	85.73	884.46	0.00	0.00	0.00	0.00	18.11	724.47	20.06	802.32	8.38
SLAA156	Land at Station Road East	4.41	0.70	6.81	0.00	0.00	5.76	86.42	0.80	32.01	0.00	0.00	0.00
SLAA162	Folly Farm	1.86	0.59	5.88	0.00	0.00	2.65	39.71	0.37	14.71	0.00	0.00	0.00
SLAA235	Goose Farm	12.74	2.00	20.02	0.00	0.00	0.00	0.00	0.56	22.49	0.00	0.00	0.00
SLAA239	Becket House	6.70	1.20	11.56	0.00	0.00	6.23	93.43	1.45	57.96	0.00	0.00	0.00
SLAA259	Land on the west side of Hollow Lane	1039.01	30.49	330.16	0.00	0.00	0.00	0.00	10.59	423.52	6.05	241.86	0.00
0	Wincheap Commercial Area	90.36	15.97	154.41	0.00	0.00	85.75	1286.31	21.21	848.38	0.00	0.00	0.00
SLAA158	Land North of Kent University	2377.36	73.86	784.01	0.00	0.00	0.00	0.00	13.32	532.95	20.14	805.45	7.92
SLAA309	Nackington Police Station	4.53	0.80	7.74	0.00	0.00	3.11	46.71	0.43	17.30	0.00	0.00	0.00
SLAA313	Goose Farm/Land west of Shalloak Road	1.29	0.41	4.08	0.00	0.00	1.87	28.03	0.26	10.38	0.00	0.00	0.00
SLAA146	Land at Hersden	24.95	1.18	11.77	0.00	0.00	12.46	42.04	12.46	42.04	0.00	0.00	0.00
SLAA202	Land at Church Farm Hoath	30.58	1.13	11.25	0.00	0.00	11.76	39.71	11.76	39.71	0.00	0.00	0.00
SLAA045	Land fronting Mayton Lane Broad Oak	1.50	0.47	4.74	0.00	0.00	1.25	18.69	0.17	6.92	0.00	0.00	0.00
SLAA062	Land adjacent to Valley Road, Barham	8.34	3.16	31.13	0.00	0.00	1.56	46.71	0.43	0.00	0.00	0.00	0.00
SLAA098	Land off the Hill	408.54	11.92	129.09	0.00	0.00	13.17	395.23	6.36	103.13	0.00	0.00	0.00
SLAA145	Land north of Court Hill, Littlebourne	5.88	1.86	18.60	0.00	0.00	2.34	70.07	1.08	17.30	0.00	0.00	0.00
SLAA185	Land west of Cooting Lane, Addisham	0.00	0.00	0.00	0.00	0.00	0.19	23.36	0.22	0.00	0.00	0.00	0.00
SLAA218	Great Pett Farm,Bridge	6.62	0.98	9.63	0.00	0.00	1.01	30.36	0.28	0.00	0.00	0.00	0.00
SLAA013	Former Metric Site	0.00	0.00	0.00	0.00	0.00	0.21	21.02	0.19	7.79	0.00	0.00	0.00
SLAA223	St Vincents Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SLAA067	Land comprising Nusery Industrial Units and former Kent Ambulance Station	0.00	0.00	0.00	0.00	0.00	0.33	32.70	0.30	12.11	0.00	0.00	0.00
SLAA247	Bodkin Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SLAA226A&B	Altira	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45
SLAA240	Land to the West of Thornden Wood Road	0.00	0.00	0.00	0.00	0.00	0.47	46.71	3.24	129.76	0.00	0.00	0.00
SLAA067	Kent Ambulance Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SLAA132	Land at Thannet Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SLAA104	Land at Brooklands Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Site 11 Land at Cockering Farm, Thanington	3901.56	185.79	1738.12	4.67	70.07	46.71	700.69	8.65	346.02	0.00	0.00	0.00
	Site 9 Land at Howe Barracks, Canterbury	83.09	33.51	313.53	0.00	0.00	20.09	301.30	2.79	111.59	0.00	0.00	0.00
	Site 8 Land North of Hersden	1249.25	75.13	702.86	0.00	0.00	174.39	588.58	451.21	1522.83	102.42	345.67	0.00
	CA043B Rosemary Lane Car Park, Canterbury	1.78	0.32	3.02	0.00	0.00	3.11	46.71	0.43	17.30	0.00	0.00	0.00
	CA047 St Radigund's Place, Canterbury	0.49	0.09	0.83	0.00	0.00	1.09	16.35	0.15	6.06	0.00	0.00	0.00
	CA278 Northgate Car Park, Canterbury	1.37	0.25	2.32	0.00	0.00	3.27	49.05	0.45	18.17	0.00	0.00	0.00
	CA281 Hawks Lane, Canterbury	0.18	0.03	0.31	0.00	0.00	1.40	21.02	0.19	7.79	0.00	0.00	0.00
	CA282 St Johns Lane Employment Exch, Canterbury	0.52	0.09	0.87	0.00	0.00	0.00	0.00	0.52	20.76	0.00	0.00	0.00
	CA286 St John's Lane Car Park, Canterbury	0.43	0.08	0.73	0.00	0.00	0.78	11.68	0.11	4.33	0.00	0.00	0.00
	CA347 Ivy Lane North, Canterbury	0.54	0.10	0.91	0.00	0.00	1.56	23.36	0.22	8.65	0.00	0.00	0.00
	CA477 Holmans Meadow Car Park, Canterbury	3.58	0.65	6.07	0.00	0.00	3.11	46.71	0.43	17.30	0.00	0.00	0.00
	CA481 Adj Canterbury West Station, Canterbury	1.86	0.34	3.15	0.00	0.00	3.11	46.71	0.43	17.30	0.00	0.00	0.00
	CA507 Castle Street Car Park, Canterbury	1.84	0.33	3.11	0.00	0.00	4.20	63.06	0.58	23.36	0.00	0.00	0.00
	Rouch Common (Road and Land to rear of 51 Rouch Common Road)	3.32	1.34	12.51	0.00	0.00	4.36	65.40	0.61	24.22	0.00	0.00	0.00

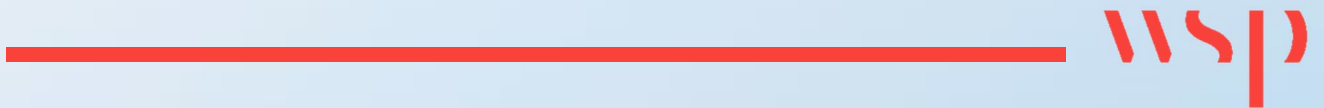
		Unmitigated Budget											
		Proposed Land Use Load		WwTW Load									
Site code	Site Name	TN (kg/year) existing	TP (kg/year) proposed	TN (kg/year) proposed	2023/2024 TP	2023/2024 TN	2025/2029 TP	2025/2029 TN	2030/2034 TP	2030/2034 TN	2035/2039 TP	2035/2039 TN	2040/2041 TP
	St Martin's Hospital, Canterbury	19.16	7.73	72.29	0.00	0.00	21.80	326.99	3.55	141.87	0.00	0.00	0.00
	Barham Court Farm, Barham	4.37	2.11	19.70	0.00	0.00	1.95	58.39	0.54	21.63	0.00	0.00	0.00
	CA340 Garage Site, Kings Road, Herne Bay	0.00	0.00	0.00	0.00	0.00	1.00	100.43	0.93	37.20	0.00	0.00	0.00
	CA491 Herne Bay Station, Land at	0.00	0.00	0.00	0.00	0.00	0.35	35.03	0.76	30.28	0.00	0.00	0.00

		Mitigated Budget											
		Proposed Land Use Load		WwTW Load									
Site code	Site Name	2040/2041 TN	mTP (kg/year) proposed	mTN (kg/year) proposed	m2023/2024 TP	m2023/2024 TN	m2025/2029 TP	m2025/2029 TN	m2030/2034 TP	m2030/2034 TN	m2035/2039 TP	m2035/2039 TN	m2040/2041 TP
SLAA163	Bread and Cheese Field	0.00	2.67	29.39	0.00	0.00	15.92	53.72	105.88	357.35	0.00	0.00	0.00
SLAA090	Milton Manor House	0.00	1.66	18.10	0.00	0.00	6.23	21.02	2.03	81.31	0.00	0.00	0.00
SLAA011	Land North of Popes Lane, Sturry	0.00	1.95	26.94	0.00	0.00	3.11	46.71	2.38	95.16	0.00	0.00	0.00
SLAA066	The Paddocks, Shalloak Road, Sturry	0.00	1.16	11.58	0.00	0.00	4.67	70.07	1.08	43.25	0.00	0.00	0.00
SLAA099	43-45 St George's Place	0.00	0.07	0.71	0.00	0.00	4.67	70.07	1.08	43.25	0.00	0.00	0.00
SLAA102	LAND AT THE FORMER CHAUCER TECHNOLOGY SCHOOL	0.00	0.89	8.57	6.23	93.43	4.67	70.07	1.51	60.55	0.00	0.00	0.00
SLAA137B	Cockering Farm	0.00	0.91	9.11	0.00	0.00	5.61	84.08	0.78	31.14	0.00	0.00	0.00
SLAA151	Merton Park	335.19	42.87	442.23	0.00	0.00	0.00	0.00	7.24	724.47	8.02	802.32	3.35
SLAA156	Land at Station Road East	0.00	0.35	3.41	0.00	0.00	5.76	86.42	0.80	32.01	0.00	0.00	0.00
SLAA162	Folly Farm	0.00	0.29	2.94	0.00	0.00	2.65	39.71	0.37	14.71	0.00	0.00	0.00
SLAA235	Goose Farm	0.00	1.00	10.01	0.00	0.00	0.00	0.00	0.56	22.49	0.00	0.00	0.00
SLAA239	Becket House	0.00	0.60	5.78	0.00	0.00	6.23	93.43	1.45	57.96	0.00	0.00	0.00
SLAA259	Land on the west side of Hollow Lane	0.00	15.25	165.08	0.00	0.00	0.00	0.00	4.24	423.52	2.42	241.86	0.00
0	Wincheap Commercial Area	0.00	7.98	77.21	0.00	0.00	4.76	476.41	8.48	848.38	0.00	0.00	0.00
SLAA158	Land North of Kent University	316.69	36.93	392.00	0.00	0.00	0.00	0.00	5.33	532.95	8.05	805.45	3.17
SLAA309	Nackington Police Station	0.00	0.40	3.87	0.00	0.00	3.11	46.71	0.43	17.30	0.00	0.00	0.00
SLAA313	Goose Farm/Land west of Shalloak Road	0.00	0.20	2.04	0.00	0.00	1.87	28.03	0.26	10.38	0.00	0.00	0.00
SLAA146	Land at Hersden	0.00	0.59	5.88	0.00	0.00	12.46	42.04	12.46	42.04	0.00	0.00	0.00
SLAA202	Land at Church Farm Hoath	0.00	0.57	5.62	0.00	0.00	11.76	39.71	11.76	39.71	0.00	0.00	0.00
SLAA045	Land fronting Mayton Lane Broad Oak	0.00	0.47	4.74	0.00	0.00	1.25	18.69	0.17	6.92	0.00	0.00	0.00
SLAA062	Land adjacent to Valley Road, Barham	0.00	1.58	15.56	0.00	0.00	1.56	46.71	0.43	0.00	0.00	0.00	0.00
SLAA098	Land off the Hill	0.00	5.96	64.55	0.00	0.00	1.46	146.38	2.55	254.51	0.00	0.00	0.00
SLAA145	Land north of Court Hill, Littlebourne	0.00	0.93	9.30	0.00	0.00	2.34	70.07	1.08	17.30	0.00	0.00	0.00
SLAA185	Land west of Cooting Lane, Addisham	0.00	0.00	0.00	0.00	0.00	0.19	23.36	0.22	0.00	0.00	0.00	0.00
SLAA218	Great Pett Farm,Bridge	0.00	0.49	4.82	0.00	0.00	1.01	30.36	0.28	0.00	0.00	0.00	0.00
SLAA013	Former Metric Site	0.00	0.00	0.00	0.00	0.00	0.21	21.02	0.19	7.79	0.00	0.00	0.00
SLAA223	St Vincents Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SLAA067	Land comprising Nusery Industrial Units and former Kent Ambulance Station	0.00	0.00	0.00	0.00	0.00	0.33	32.70	0.30	12.11	0.00	0.00	0.00
SLAA247	Bodkin Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SLAA226A&B	Altira	57.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45
SLAA240	Land to the West of Thornden Wood Road	0.00	0.00	0.00	0.00	0.00	0.47	46.71	3.24	129.76	0.00	0.00	0.00
SLAA067	Kent Ambulance Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SLAA132	Land at Thannet Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SLAA104	Land at Brooklands Farm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Site 11 Land at Cockering Farm, Thanington	0.00	92.89	869.06	0.26	25.95	2.60	259.52	3.46	346.02	0.00	0.00	0.00
	Site 9 Land at Howe Barracks, Canterbury	0.00	16.76	156.76	0.00	0.00	20.09	301.30	2.79	111.59	0.00	0.00	0.00
	Site 8 Land North of Hersden	0.00	37.56	351.43	0.00	0.00	2.18	217.99	5.64	564.01	1.28	128.03	0.00
	CA043B Rosemary Lane Car Park, Canterbury	0.00	0.16	1.51	0.00	0.00	3.11	46.71	0.43	17.30	0.00	0.00	0.00
	CA047 St Radigund's Place, Canterbury	0.00	0.09	0.83	0.00	0.00	1.09	16.35	0.15	6.06	0.00	0.00	0.00
	CA278 Northgate Car Park, Canterbury	0.00	0.12	1.16	0.00	0.00	3.27	49.05	0.45	18.17	0.00	0.00	0.00
	CA281 Hawks Lane, Canterbury	0.00	0.03	0.31	0.00	0.00	1.40	21.02	0.19	7.79	0.00	0.00	0.00
	CA282 St Johns Lane Employment Exch, Canterbury	0.00	0.05	0.44	0.00	0.00	0.00	0.00	0.52	20.76	0.00	0.00	0.00
	CA286 St John's Lane Car Park, Canterbury	0.00	0.08	0.73	0.00	0.00	0.78	11.68	0.11	4.33	0.00	0.00	0.00
	CA347 Ivy Lane North, Canterbury	0.00	0.05	0.46	0.00	0.00	1.56	23.36	0.22	8.65	0.00	0.00	0.00
	CA477 Holmans Meadow Car Park, Canterbury	0.00	0.32	3.04	0.00	0.00	3.11	46.71	0.43	17.30	0.00	0.00	0.00
	CA481 Adj Canterbury West Station, Canterbury	0.00	0.17	1.58	0.00	0.00	3.11	46.71	0.43	17.30	0.00	0.00	0.00
	CA507 Castle Street Car Park, Canterbury	0.00	0.17	1.56	0.00	0.00	4.20	63.06	0.58	23.36	0.00	0.00	0.00
	Rouch Common (Road and Land to rear of 51 Rouch Common Road)	0.00	0.67	6.26	0.00	0.00	4.36	65.40	0.61	24.22	0.00	0.00	0.00

		Mitigated Budget											
		Proposed Land Use Load		WwTW Load									
Site code	Site Name	2040/2041 TN	mTP (kg/year) proposed	mTN (kg/year) proposed	m2023/2024 TP	m2023/2024 TN	m2025/2029 TP	m2025/2029 TN	m2030/2034 TP	m2030/2034 TN	m2035/2039 TP	m2035/2039 TN	m2040/2041 TP
	St Martin's Hospital, Canterbury	0.00	3.86	36.14	0.00	0.00	21.80	326.99	3.55	141.87	0.00	0.00	0.00
	Barham Court Farm, Barham	0.00	1.06	9.85	0.00	0.00	1.95	58.39	0.54	21.63	0.00	0.00	0.00
	CA340 Garage Site, Kings Road, Herne Bay	0.00	0.00	0.00	0.00	0.00	1.00	100.43	0.93	37.20	0.00	0.00	0.00
	CA491 Herne Bay Station, Land at	0.00	0.00	0.00	0.00	0.00	0.35	35.03	0.76	30.28	0.00	0.00	0.00

Appendix E

FUNCTIONAL LAND REVIEW SUMMARY



APPENDIX E – FUNCTIONAL LAND REVIEW SUMMARY

Notes

Table A1 below provides an initial assessment of the potential for the possible allocation sites to provide FLL for golden plover and dark-bellied brent goose. This is based on:

European site information available from NE or the JNCC, including:

- the most recent JNCC-hosted GIS datasets;
- the Standard Data forms for SACs and SPAs and Information Sheets for Ramsar sites;
- Article 12 and 17 reporting;
- the published site Conservation Objectives;
- Supplementary Advice to the conservation objectives (SACO), where available⁹⁸;
- Natural England Conservation Advice for Marine Protected Areas, where available;
- Site Improvement Plans (SIPs); and
- the supporting Site of Special Scientific Interest's favourable condition tables where relevant and where no SACOs applicable to the features are available.
- Grey literature sources, including EIAs and previous planning applications that have required HRA related to these European sites and functional land.
- A review of the habitats and characteristics of the potential allocation sites based on freely available aerial photography (recent and historical) and the CORINE land cover dataset from CEH.
- GIS data on field sizes.

The assessment has not included any allocation-specific field surveys or records centre data requests.

The 'FLL Potential' is based on the site and the immediately adjacent land parcels, and categorised as follows:

- None – site and adjacent land parcels have and will have no value as FLL (e.g. very small sites within urban areas).

⁹⁸ NE has published '*Supplementary advice on conserving and restoring site features*' for most European sites in England which describe in more detail the range of ecological attributes which are most likely to contribute to a site's overall integrity, and the targets each qualifying feature needs to achieve in order for the site's conservation objectives to be met.



- Very low / Low – site has some characteristics that may not deter bird species (e.g. field size >10 ha) or is immediately adjacent to such areas, but is typically a substantial distance from the SPA.
- Moderate – site has several characteristics that may be attractive to bird species (e.g. field size >15 ha) or is immediately adjacent to such areas, and is typically within 5km of the coast / SPA boundary.
- High – site meets most of the criteria typically expected for FLL and is located within or close to recognised core areas for the species in the region.

Note, all sites over 5km from the boundary of The Swale SPA/Ramsar are assumed to be unsuitable as FLL for dark-bellied brent goose associated with this site, based on existing studies and data from similar sites in the UK (e.g. the Solent habitats sites; Crouch and Roach Estuary SPA/Ramsar).

Table E-1 – Initial assessment of possible allocation sites for their potential to provide FLL for golden plover and dark-bellied brent goose

Site Name	Area (ha.)	SLAA Ref.	Characteristics	Golden Plover		Dark-bellied brent goose	
				FLL potential	Notes	FLL potential	Notes
Land at Merton Park	99.7	SLAA151	This is a large site comprising large arable fields and several fields with fruit trees, located south of Canterbury adjacent to the A2.	Low	Much of the site will not be attractive to this species due to the current cropping (notably areas used for fruit farming) and/ or relatively small field size / nature of the boundary habitats. There is however one large arable field that may be objectively suitable, although this is some distance from the SPA and core areas known to be used by this species in Kent. Note that surveys for this species were not previously required by NE in relation to the nearby Cockerling / Thanington developments.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land to the North of Hollow Lane	40.9	SLAA259	This arable site forms part of the existing Cockerling Farm allocation in the 2017 Local Plan.	Low	Much of the site will not be attractive to this species due to the shape of the fields and proximity of boundaries, and the ongoing development of the adjacent land parcels. There is one large arable field that may be objectively suitable, although this is some distance from the SPA and core areas known to be used by this species in Kent. Note that surveys for this species were not previously required by NE in relation to the nearby Cockerling / Thanington developments.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Milton Manor House	4.5	SLAA090	Site comprises two small (<2 ha.) relatively narrow maintained grassland / parkland fields surrounded by woodland. Fields / habitats immediately adjacent have similar mixed characteristics, or are currently being developed for housing as part of the Cockerling Road / Thanington Park developments.	None	Very unlikely to be attractive to this species (land-use; field size / shape; poor sight-lines due to woodland). Note, bird surveys undertaken for the ongoing Cockerling Road / Thanington Park developments did not record this species (although specific surveys for this species were not undertaken).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land to North of Cockerling Farm	1.9	SLAA137B	Site comprises a small (<2 ha.) grass / scrubland site, currently subject to a planning application. Fields / habitats immediately adjacent have similar mixed characteristics, or are currently being developed for housing as part of the Cockerling Road / Thanington Park developments.	None	Very unlikely to be attractive to this species (land-use; field size / shape; poor sight-lines due to woodland). Note, bird surveys undertaken for the ongoing Cockerling Road / Thanington Park developments did not record this species (although specific surveys for this species were not undertaken).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land at the Former Chaucer Technology School	1.7	SLAA102	Car park and field associated with former school in urban area.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).

Site Name	Area (ha.)	SLAA Ref.	Characteristics	Golden Plover		Dark-bellied brent goose	
				FLL potential	Notes	FLL potential	Notes
Becket House	1.1	SLAA239	Disused office building and hardstanding in urban area.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
43-45 St George's Place	0.2	SLAA099	Urban site.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land at Folly Farm	0.6	SLAA162	Small part of a larger rough grassland field (~6ha) bordered by developed areas and woodland.	Very low	Very unlikely to be attractive to this species (land-use; field size / shape; poor sight-lines due to woodland; distance from SPA).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land at Station Road East	0.7	SLAA156 (and existing allocation)	Station car-park in urban area.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Wincheap	15.0		Existing industrial estate in urban area.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land South of Thanet Way	14.0	SLAA132	Relatively large fields close to SPA, adjacent to urban area.	Moderate	Intrinsic merits of the site are low based on proximity of developed areas (with associated effects on sightlines etc); however the fields are close to a unit of the SPA and are relatively large (with the adjacent allocation) and so may have relatively greater contextual value than would otherwise be the case as adjacent land parcels may also be suitable.	Very low	Intrinsic merits of the site are very low based on proximity of developed areas and preferences of this species; however the fields are close to a unit of the SPA and are relatively large (with the adjacent allocation) and so may have relatively greater contextual value than would otherwise be the case as adjacent land parcels may also be suitable.
St Vincent's Centre	0.3	SLAA223	Urban site.	None	Not suitable (existing land-use and characteristics).	None	Not suitable (existing land-use and characteristics).
Land comprising Nusery Industrial Units and former Kent Ambulance Station	0.5	SLAA067	Urban site.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land to the West of Thornden Wood Road	16.3	SLAA240	Three arable fields (~3.5 - 6ha each) with hedgerows. Located between Molehill Solar Farm and the edge of Herne Bay.	Low	Intrinsic merits of the site are low based on field size and proximity of developed areas (with associated effects on sightlines etc); however the fields are close to a unit of the SPA and within the 'green gap' between Whitstable and Herne Bay and so may have relatively greater contextual value than would otherwise be the case. Note, surveys for this species were not undertaken in connection with Molehill Solar Farm or the nearby Owl's Hatch Solar Farm, or requested by NE at that time (2014/15)	Very low	Very unlikely to be attractive to this species (field size; shape / habitats; poor sight-lines; distance from SPA). Adjacent habitats have low suitability. Distance from SPA makes use as FLL very unlikely.

Site Name	Area (ha.)	SLAA Ref.	Characteristics	Golden Plover		Dark-bellied brent goose	
				FLL potential	Notes	FLL potential	Notes
Former Metric Site	0.2	SLAA013	Urban site.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Altira (Housing element, with planning permission)	1.6	SLAA226A&B	Small field and existing housing bordered by woodland.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land North of Popes Lane	9.3	SLAA011	~9 ha arable field on edge of urban area; bordered by woodland blocks and developed areas.	Very low	Unlikely to be attractive to this species based on field size / location / wooded boundaries and sight-line impacts. Adjacent habitats have low / no suitability. Distance from SPA makes use as FLL very unlikely	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land at The Paddocks, Shalloak Road	2.4	SLAA066	Small grassland field bordered by woodland; adjacent land parcels are woodland and housing.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Bread and Cheese Field	7.5	SLAA163	~7.5ha arable field on village edge, bordered by housing, woodland / trees, and rough grassland. Adjacent land parcels are small areas of rough grassland, woodland and housing.	Very low	Very unlikely to be attractive to this species (field size; shape / habitats; poor sight-lines; distance from SPA). Adjacent habitats have low suitability. Distance from SPA makes use as FLL very unlikely.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land at Hersden	1.2	SLAA146	Small area of rough grassland and woodland on village edge, bordered by mature treelines and hedges; adjacent land parcels are arable or housing / amenity / developed land. Nearby arable fields relatively large.	Very low	Very unlikely to be attractive to this species (field size; shape / habitats; poor sight-lines; distance from SPA). may be suitable in terms of field size but distance from SPA makes use as FLL very unlikely.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
The Hill, Littlebourne	16.0	SLAA098	Arable fields on edge of village; fields bordered by mature treelines and hedges. Adjacent land parcels mixed farmland or housing.	Very low	Very unlikely to be attractive to this species (field shape relatively to boundaries; poor sight-lines; distance from SPA). Adjacent habitats have low suitability. Distance from SPA makes use as FLL very unlikely, although note that KoS has a record of 30 golden plover from a location near Bekesbourne.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land north of Court Hill	2.0	SLAA145	Small grassland field and agricultural buildings on edge of village. Nearby arable fields relatively large.	Very low	Very unlikely to be attractive to this species (field size / shape; poor sight-lines; distance from SPA). Adjacent habitats may be suitable in terms of field size but distance from SPA makes use as FLL very unlikely.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land west of Cooting Lane and south of Station Road	0.7	SLAA185	Small area of rough grassland on village edge, bordered by mature treelines; adjacent land parcels are arable or housing / amenity / developed land. Nearby arable fields relatively large.	Very low	Very unlikely to be attractive to this species (field size / shape; poor sight-lines; distance from SPA). Adjacent habitats may be suitable in terms of field size but distance from SPA makes use as FLL very unlikely.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).

Site Name	Area (ha.)	SLAA Ref.	Characteristics	Golden Plover		Dark-bellied brent goose	
				FLL potential	Notes	FLL potential	Notes
Land adjacent to Valley Road	2.8	SLAA062	Small pasture with trees in village; adjacent land parcels are developed land with mature trees.	None	Very unlikely to be attractive to this species (field size / shape; poor sight-lines; distance from SPA). Adjacent land parcels have little / no suitability.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land at Goose Farm, Shalloak Road	2.1	SLAA235	Brownfield site dominated by hardstanding; currently being developed with industrial units.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land fronting Mayton Lane	0.5	SLAA045	Small field on edge of village; adjacent land parcels are developed land or agricultural with polytunnels, bordered by trees and hedges.	Very low	Very unlikely to be attractive to this species (field size / shape; poor sight-lines due to woodland; distance from SPA). Adjacent habitats have little / no suitability.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land at Church Farm	1.2	SLAA202	Small arable field and existing agricultural building on edge of village; adjacent land parcels are developed land or relatively small arable fields bordered by trees and hedges.	Very low	Very unlikely to be attractive to this species (field size / shape; poor sight-lines due to woodland; distance from SPA). Adjacent habitats have little / no suitability.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land on the eastern side of Shellford Landfill	4.9	SLAA056	Small rough grassland field and hardstanding area bordered by trees, associated with existing landfill site. Surrounding land parcels are landfill, woodland, industrial units.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Hawthorne Corner	2.8	SLAA042	Small field with grassland and areas of scrub, bordered by trees and hedges; adjacent land includes developed areas, woodland and a wastewater treatment plant.	Very low	Relatively close to SPA but very unlikely to be attractive to this species (land-use; field size / shape; poor sight-lines). Land parcels that are immediately adjacent to site are not suitable as FLL for this species (woodland, developed areas).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land at Ashford Road (east)	0.4	SLAA115	Site comprises a small grassland / scrub field (<1 ha.) adjacent to the A28, bordered by mature trees. Fields / habitats immediately adjacent are used for tree growing.	None	Very unlikely to be attractive to this species (land-use; field size / shape; poor sight-lines).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Former Gas Holder Site	0.4	SLAA068	Urban site.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land at Canterbury Business Park	22.4	SLAA155	Site comprises a number of small agricultural fields (all< 3ha) with woodland / trees and amenity grassland; surrounding fields are generally small also.	Very low	Very unlikely to be attractive to this species (land-use; field size / shape; poor sight-lines due to woodland; distance from SPA).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).

Site Name	Area (ha.)	SLAA Ref.	Characteristics	Golden Plover		Dark-bellied brent goose	
				FLL potential	Notes	FLL potential	Notes
Altira (employment parcels)	7.0	SLAA226A&B	Rough grassland associated with industrial site on edge of urban area; adjacent land parcels include large arable fields.	Low	Site itself not suitable, but located adjacent to large arable fields near the SPA that may be attractive to the species.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Broad Oak Reservoir and Country Park (entire site, including country park)	443.6	SLAA233	Proposed reservoir site, predominantly arable fields and woodland.	Low	Although the allocation is large the vast majority of the land parcels affected are small (<10ha); most will have a very low intrinsic suitability for this species based on field size / habitat preferences. Note that SE Water have been completing surveys for the site and engaging with NE, so are likely to have already addressed this issue.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Broad Oak Reservoir and Country Park (only the proposed Reservoir and buildings)	92.5	SLAA233	Proposed reservoir site, predominantly arable fields and woodland.	Low	Although the allocation is large the vast majority of the land parcels affected are small (<10ha); most will have a very low intrinsic suitability for this species based on field size / habitat preferences. Note that SE Water have been completing surveys for the site and engaging with NE, so are likely to have already addressed this issue.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Eddington Business Park	6.3		Site comprises three areas of rough grassland / scrub with trees associated with existing industrial site and within an urban area.	None	Not suitable (site size; existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Whitstable Harbour	7.9		Developed operational harbour.	None	Not suitable (site size; existing land-use and characteristics).	None	Not suitable (site size; existing land-use and characteristics).
Land at Brooklands Farm	79.1	SLAA104	Large site with large arable fields (>10 ha) relatively close to the SPA, south of Whitstable.	Moderate	Some areas of the site may be attractive to this species based on field size, land use and proximity to the SPA.	Very low	Some areas of the site may be attractive to this species based on field size and proximity to the SPA; however, the site topography, elevation and location away from the coast ensure it is very unlikely that this area provides FLL for this species.
Great Pett Farmyard	0.9	SLAA218	Small farmyard area surrounded by trees; adjacent land cropped.	None	Not suitable (site size; existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Nackington Police Station	0.8	SLAA309	Former police station with buildings and hardstanding.	None	Not suitable (site size; existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land west of Shalloak Road	0.4	SLAA313	Small site with existing buildings and trees.	None	Not suitable (existing land-use and characteristics).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).

Site Name	Area (ha.)	SLAA Ref.	Characteristics	Golden Plover		Dark-bellied brent goose	
				FLL potential	Notes	FLL potential	Notes
Land at Ashford Road (west)	0.7	SLAA311	Site comprises a small grassland field (<1 ha.) adjacent to the A28, bordered by mature trees. Fields / habitats immediately adjacent are used for tree growing.	None	Very unlikely to be attractive to this species (land-use; field size / shape; poor sight-lines).	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).
Land north of University of Kent	102.3	SLAA158	Large allocation comprising smaller fields and land parcels near woodland areas.	Low	Although the allocation is large the vast majority of the land parcels affected are small (<10ha); most will have a very low intrinsic suitability for this species based on field size / habitat preferences. However, the size of the site may benefit from a precautionary approach.	None	Very unlikely to comprise FLL based on the habitats, species' preferences and distance to the SPA (>5km).





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