

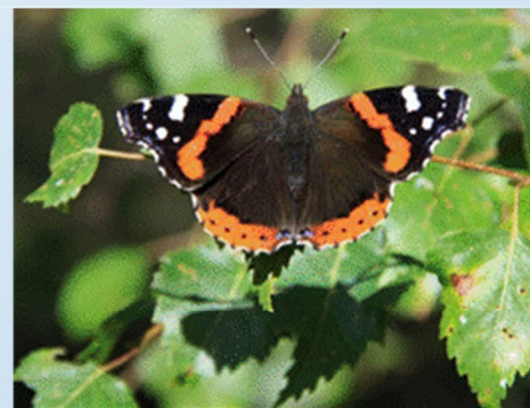


Basingstoke and Deane Borough Council

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# LOCAL PLAN UPDATE HABITATS REGULATIONS ASSESSMENT

*Information to support an initial assessment of the Regulation 18 submission against Regulation 105 of the Conservation of Habitats and Species Regulations 2017*





Basingstoke and Deane Borough Council

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Information to support an initial assessment of the Regulation 18 submission against Regulation 105 of the Conservation of Habitats and Species Regulations 2017

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Basingstoke and Deane Borough Council

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Information to support an initial assessment of the Regulation 18 submission against Regulation 105 of the Conservation of Habitats and Species Regulations 2017

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# 1 INTRODUCTION

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## 1.1 THE BASINGSTOKE AND DEANE BOROUGH COUNCIL (BDBC) LOCAL PLAN UPDATE

- 1.1.1. Basingstoke and Deane Council (the Council) adopted the Basingstoke and Deane Local Plan 2011-2029 (ALP) in May 2016. The ALP covers the period 2011-2029.
- 1.1.2. The Council is currently undertaking the Local Plan Update (LPU) to cover the period to 2040. This is following a decision by Council in May 2019 to review and update the 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. Several of the initial non-statutory stages of plan making have already been completed including an Issues and Options consultation in 2020 and the ongoing development of a detailed evidence base to guide decision making.
- 1.1.3. BDBC is completing the plan preparation process on the following broad timeline:
- Consultation on draft Plan (Regulation 18) – Winter 2023/24
  - Publication of Submission Draft Local Plan (Regulation 19) – Winter 2024/5
  - Submission (Regulation 22) – Spring - 2025
  - Examination and Main Modifications (MMs) – Summer 2025
  - Adoption - Spring 2024

## 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')<sup>1</sup> 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

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<sup>1</sup> 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 site<sup>2</sup> or a European offshore marine site<sup>3</sup> (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)<sup>4</sup>. 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)<sup>5</sup> and, if so, whether there will be any ‘adverse effects on site integrity’<sup>6</sup>. 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

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<sup>2</sup> 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. 181) 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 agreed (e.g. the NPPF in England has adopted the term ‘Habitats sites’ to refer collectively to those sites defined by Regulation 8, whereas the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 uses the term ‘National Site Network’).

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

<sup>4</sup> 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.

<sup>5</sup> Also referred to as the ‘test of significance’.

<sup>6</sup> 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. The Council engaged Wood Group Ltd. (Wood) to undertake an Integrated Impact Assessment (IIA) of the LPU. The IIA will incorporate Habitats Regulations Assessment (HRA), Sustainability Appraisal (SA), Strategic Environmental Assessment (SEA), Health Impact Assessment (HIA) and Equalities Impact Assessment (EqIA). In September 2022, WSP completed the acquisition of the Environment and Infrastructure business of Wood. The consultant team engaged in earlier work has been retained on this project, providing continuity.
- 1.3.3. This report accompanies the draft Local Plan (Regulation 18) plan that is being published for consultation. As The Local Plan is still under development **it does not constitute a formal 'HRA screening' or Appropriate Assessment** and so any screening or appropriate assessment conclusions would be premature; however, the principles of HRA are applied to the draft Local Plan to (a) provide an initial assessment of the likely HRA conclusions, were the plan adopted as currently drafted; (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; and (c) provide an opportunity for consultees to comment specifically on HRA-related issues.
- 1.3.4. This report therefore adopts the broad layout and anticipated content of the final (Submission Draft) HRA report and 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 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 draft Local Plan (Reg. 18) plan (Section 5).
  - Identification of additional data requirements and/or additional measures that may be required to ensure that the Submission Draft (Reg. 19) plan does not adversely affect the integrity of any sites (Section 5).
  - An indication of the anticipated conclusion for the HRA of the Local Plan, assuming a submission consistent with the draft Local Plan (Reg. 18) plan (Section 6).
- 1.3.5. This Regulation 18 HRA Report (this report) has been issued for consultation alongside the draft Local Plan Update. The Council's [website](#) provides details of the Local Plan review and the current consultation.

## 2 APPROACH TO HRA OF THE LOCAL PLAN UPDATE

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### 2.1 OVERVIEW

- 2.1.1. European Commission guidance<sup>7</sup> 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:

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<sup>7</sup> *Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (EC 2002).

## 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 interpretation 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’).

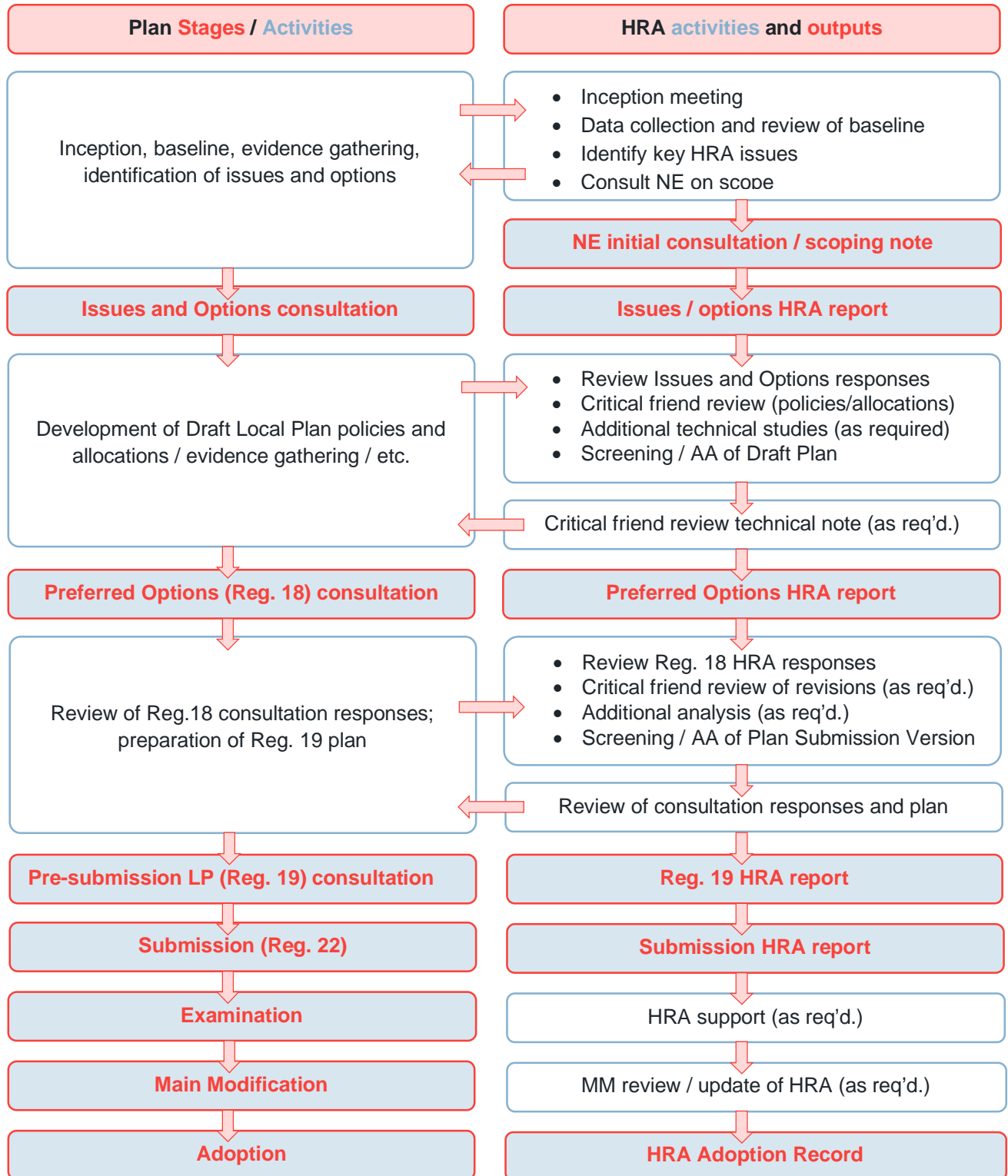
- 2.1.2. HRAs of local planning documents rarely proceed beyond Stage 2, as alternatives to policies or allocations that adversely affect the integrity of a European site<sup>8</sup> are almost always available.
- 2.1.3. The stages in Box 1 (if required) are used to ensure compliance with the Habitats 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 the Local Plan Update 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 to support BDBC 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 RCC 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 Regulation 18 draft Local Plan being accompanied by a ‘Draft Local Plan HRA’ report (this report) that includes a detailed ‘screening’ and ‘appropriate assessment’ of the draft Local Plan, setting out the HRA-related evidence and the anticipated conclusion (if the plan were to be adopted

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<sup>8</sup> 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 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.

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 Local Plan Update:

- 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](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, May 2022; and
- the 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 15km 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 the Local Plan Update plan therefore considers:
- all European sites within 15km 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 features<sup>9</sup>, 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;
  - the approximate locations of the interest features within each site (if reported); and

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<sup>9</sup> 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.



- designated or non-designated ‘functional habitats’ (if identified).

2.5.2. These data are derived from:

- 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<sup>10</sup>;
- 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.

2.5.3. Note:

- For SPAs, the qualifying features are taken as those identified on the most recent JNCC datasets and citations 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 draft Local Plan (see below).
- The conservation objectives for Ramsar sites are taken to be the same as for the corresponding SACs / SPAs (where sites or feature ecological characteristics are coincident); SSSI Definition of Favourable Condition (FCTs) are used for those features or areas 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);
- 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.

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<sup>10</sup> 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.

- 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 species<sup>11</sup>).

## 2.6 REVIEWING THE EMERGING PLAN

- 2.6.1. The principles<sup>12</sup> 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.
- 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.

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<sup>11</sup> 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.

<sup>12</sup> 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.

## 2.7 SCREENING / ASSESSMENT OF THE DRAFT PLANS

- 2.7.1. Each iteration of the Local Plan will be accompanied by a HRA document 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 occur<sup>13</sup>.

- 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' 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*<sup>14</sup>).
- 2.7.7. The approaches used for appropriate assessments vary according to the sites affected and the effect-pathways.
- 2.7.8. Consideration of '**in combination**' effects is not a separate assessment but is integral to both the screening and appropriate assessment stages (although it should be noted that effects that are nil or nugatory and indistinguishable from background variations cannot operate 'in combination' and so can be excluded at the screening stage).
- 2.7.9. There is limited guidance available on the scope of the 'in combination' element, particularly with regard to which plans should be considered. 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 plans that could have potential 'in combination' effects with the Local Plan.
- 2.7.10. The plans identified by the IIA will provide the basis for the assessment of 'in combination' effects; these plans are reviewed to identify any potential effects 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. It is considered that 'in combination' effects are most likely in respect of other regional and sub-regional development plans and strategies.

## 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

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<sup>13</sup> 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.

<sup>14</sup> In the absence of avoidance or mitigation measures, as per 'People over Wind'.

plan development process (for example, abandoning a policy or allocation that is likely to have unavoidable adverse effects if implemented)<sup>15</sup>; mitigation measures are used where significant effects are identified in order to prevent adverse effects on a site's integrity<sup>16</sup>.

- 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 currently little information on the practical implementation of the 'People over Wind' judgment<sup>17</sup>, 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,

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<sup>15</sup> Note, the term 'avoidance measures' in this context is not synonymous with the representation of 'mitigation' used in the People over Wind judgment; see also para. 2.3.21.

<sup>16</sup> 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.

<sup>17</sup> The Planning Inspectorate issued a guidance note (PINS Note 05/2018: *Consideration of avoidance and reduction measures in Habitats Regulations Assessment: People over Wind, Peter Sweetman v Coillte Teoranta*) although this does not provide substantive practical information for LPAs or clear guidance on what might constitute an 'avoidance measure', and the guidance note appears to have been subsequently withdrawn.

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. In broad terms, the current iteration of the emerging Local Plan Update and accompanying IIA includes:
- consideration of the number of homes and employment land that should be provided for over the plan period (the quantum of growth);
  - policies providing geographical direction for development (typically specific housing and employment site allocations);
  - policies broadly supporting development or other changes, but which do not specify a quantum or location;
  - various development control policies that set out BDBC tests or expectations when considering proposals, such as safeguarding policies, environmental protection policies or policies relating to design or other qualitative criteria.
- 3.1.4. 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).

**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

Pressure / Threat	Common environmental 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
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

- 3.1.5. 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). 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.
- 3.1.6. 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.) can 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 Update:
- **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 (SO<sub>2</sub>, typically from combustion of coal and heavy fuel oils), nitrogen oxides (NO<sub>x</sub>, mainly from vehicles) and ammonia (NH<sub>3</sub>, 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.

3.1.7. 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’ outside of the designated site boundary.

3.1.8. It should be noted that BDBC has completed various reports and studies to update the environmental baseline for the Local Plan, some of which will be relevant to the HRA baseline including:

- Strategic Flood Risk Assessment (2021);
- Water Cycle Study (2022);

- Climate Change Study (2021).

3.1.9. These are available at <https://www.basingstoke.gov.uk/local-plan-update-evidence>.

## 3.2 EUROPEAN SITE SUMMARIES

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

- all European sites within 15km 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 HRA Scoping Consultation.

3.2.2. This is considered to be a suitably precautionary starting point for the assessment of the Local Plan Update. This area includes the European sites identified in **Table 3.2**. **Note, at the screening stage the assessment would essentially assume that there will be 'no effect' (and hence no possibility of 'in combination' effects) on European sites not included within the scope.**

**Table 3-2 - European sites within study scope (in distance order)**

Site	Location relative to the BDBC Administrative Area
River Itchen SAC	Chalk river ~2.4km to the south of the BDBC area; hydrologically linked; identified to BDBC in NE's advice on nutrient neutrality (2022).
Kennet and Lambourn Floodplain SAC	Floodplain meadows ~2.4km to north of the BDBC area; not hydrologically linked.
Kennet Valley Alderwoods SAC	Alder-ash floodplain woodlands alongside the Kennet ~3.2km north of the BDBC area; not hydrologically linked.
River Lambourn SAC	River ~3.4km to the north of the BDBC area; not hydrologically linked.
Thames Basin Heaths SPA	Network of heathlands ~3.4km east north of the BDBC area at the closest point.
East Hampshire Hangers SAC	Woodlands ~7km to the south-east of the BDBC area.
Shortheath Common SAC	Valley mire and heathland site ~9.5km to the east of the BDBC area; not hydrologically linked.
Wealden Heaths Phase 2 SPA	Large heathland site ~9.7km to the east of the BDBC area; not hydrologically linked.
Hartslock Wood SAC	Chalk woodland and grassland site ~12.9km to the north of the BDBC area.
Woolmer Forest SAC	Large lowland heathland ~13.4km to the south-east of the BDBC area.

Site	Location relative to the BDBC Administrative Area
<b>Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1) SPA</b>	Large lowland heathland ~13.7km to the south-east of the BDBC area.
<b>Thursley, Ash, Pirbright and Chobham SAC</b>	Large lowland heathland ~13.7km to the south-east of the BDBC area.
<b>Salisbury Plain SPA</b>	Extensive chalk grassland ~14.6km west of the BDBC area.
<b>Salisbury Plain SAC</b>	Extensive chalk grassland ~14.6km west of the BDBC area.
<b>The Solent and Southampton Water SPA</b>	Estuarine site downstream of BDD area via the River Itchen and River Test; identified to BDBC in NE's advice on nutrient neutrality (2022).
<b>The Solent and Southampton Water Ramsar</b>	Estuarine site downstream of BDBC area via the River Itchen and River Test; identified to BDBC in NE's advice on nutrient neutrality (2022).
<b>Solent Maritime SAC</b>	Estuarine site downstream of BDBC area via the River Itchen and River Test; identified to BDBC in NE's advice on nutrient neutrality (2022).
<b>Solent and Dorset Coast SPA</b>	Estuarine site downstream of BDBC area via the River Itchen and River Test; identified to BDBC in NE's advice on nutrient neutrality (2022).

- 3.2.3. Initial consultations with Natural England have not identified any additional sites that are likely to require assessment.
- 3.2.4. With regard to downstream receptors, just under half of the BDBC area is within the catchment of the Solent (~48%; the remainder is within the Thames catchment); however, only around 8% is within the catchment of the River Itchen (an area south of Basingstoke, around Preston Candover).
- 3.2.5. The following sections provide a summary of the European sites within 15km of the BDBC area, including a contextual overview of each site; their interest features; their condition; and the current pressures and threats identified for each site<sup>18</sup>. These are based on the citations, the Site Improvement Plans (SIPs), information on the condition of the underlying SSSIs, and any

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<sup>18</sup> 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.

supplementary advice provided by Natural England<sup>19</sup>. A summary of the conservation objectives is subsequently provided.

- 3.2.6. Note, to simplify the data presentation some overlapping sites with shared features or other commonalities are addressed together.
- 3.2.7. The extent of each site in favourable or unfavourable condition has been estimated using the Natural England condition assessments for the corresponding SSSI units, although it must be noted that the boundaries of the component SSSI units (to which the condition assessments relate) do not always match the European site boundaries exactly (i.e. the SSSIs are often larger) and it is not always possible to split SSSI units to determine the precise area of the European site (or interest feature) that is in each condition category.
- 3.2.8. The potential mechanisms by which the Local Plan Update could affect these sites are discussed in **Section 3.1**. There are many factors currently affecting the European sites over which the Local Plan Update will have no or little influence; analysis of the available European site data and the SSSI condition assessments indicates that the most common reasons for an 'unfavourable' condition assessment of the component SSSI units are due to inappropriate management of some form (e.g. over- or under-grazing, scrub control, water-level management etc.).

## RIVER ITCHEN SAC

### Overview

- 3.2.9. The River Itchen is a significant chalk river in southern England, supporting an abundant and rich river flora and associated riparian corridor habitats including wet woodland, fen meadow, flood pasture and swamp habitats.
- 3.2.10. The river is mainly spring-fed from the chalk aquifer, and there is only a narrow range of seasonal variation in physical and chemical characteristics. The water is of high quality, being naturally base-rich and of great clarity; and its temperature is relatively constant, with dissolved oxygen levels at or near saturation. However, there is evidence of nutrient enrichment and parts of the site are identified as being in unfavourable condition due to excessive nutrients in recent NE advice to LPAs<sup>20</sup> (such that 'nutrient neutrality'<sup>21</sup> is being deployed or considered as mitigation).

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<sup>19</sup> NE has published '*Supplementary advice on conserving and restoring site features*' for most SACs and SPAs, 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.

<sup>20</sup> 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.

<sup>21</sup> 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.

3.2.11. Approximately 8% of the BDBC area is covered by a WFD waterbody catchment that relates to the Itchen, although it should be noted that there are few surface watercourses in this area due to the nature of the geology. Exposure is therefore likely to be limited within the BDBC area.

### Interest Features

3.2.12. The SAC has the following **qualifying features**:

- Water courses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation
- Brook lamprey *Lampetra planeri*
- Atlantic salmon *Salmo salar*
- Bullhead *Cottus gobio*
- Southern damselfly *Coenagrion mercuriale*
- White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes*
- Otter *Lutra lutra*

3.2.13. The 'supplementary advice' provides some guidance on the '**typical species**' considered to be associated with the site; these include:

- plant communities characterised by pond water crowfoot *Ranunculus peltatus* and associated aquatic herbs and grasses;
- populations of fish species.

3.2.14. No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although a wide and functional river corridor with a mosaic of natural and semi-natural riparian vegetation types is identified as being important to the integrity of the site and qualifying features.

### Condition, Pressures and Threats

3.2.15. The SSSI underpinning the SAC is predominantly in 'favourable' or 'unfavourable recovering' condition (~66% based on NE data<sup>22</sup>). However, the SIP<sup>23</sup> identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan Update:

- water pollution (eutrophication from wastewater treatment); and
- water abstraction (indirectly, through regional water resource requirements).

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

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<sup>22</sup> [River Itchen SSSI Condition Summary](#)

<sup>23</sup> <http://publications.naturalengland.org.uk/file/5665158219169792>

SSSI condition assessment<sup>24</sup> indicates that most of the units that are in ‘unfavourable no change’ or ‘unfavourable declining’ condition have this status due to local land management issues.

## KENNET AND LAMBOURN FLOODPLAIN SAC

### Overview

- 3.2.17. This SAC comprises several units of floodplain fen or swamp associated with the Kennet and Lambourn rivers, which support the rare Desmoulin’s whorl snail *Vertigo moulinsiana*. Parts of the SAC are former water-meadows managed by extensive cattle grazing but most areas are fringing, riverside or ditch-side vegetation which receive little management.
- 3.2.18. The closest SAC units are approximately 2.4km from the BDBC boundary, along the River Kennet; however, all of the site units are hydrologically upstream of the BDBC area as surface water from BDBC flows to the River Enborne, which joins the Kennet at Woolhampton over 8km downstream of this SAC.

### Interest Features

- 3.2.19. The SAC has the following **qualifying features**:
- Desmoulin’s whorl snail *Vertigo moulinsiana*
- 3.2.20. The **supporting habitats** for this feature are the calcareous wetlands and fens supported by surface and/or ground water. The ‘supplementary advice’ does not identify any specific ‘**typical species**’ considered to be associated with the site, but notes that the species is commonly associated with reed sweet-grass *Glyceria maxima*, greater pond-sedge *Carex riparia* and lesser pond-sedge *C. acutiformis* and that the supporting habitats are mostly dominated by these species.
- 3.2.21. No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although a wide and functional river corridor with a mosaic of natural and semi-natural riparian vegetation types is identified as being important to the integrity of the site and qualifying features.

### Condition, Pressures and Threats

- 3.2.22. 3.2.22 The SSSI underpinning the SAC is predominantly in ‘favourable’ or ‘unfavourable recovering’ condition (~83% based on NE data<sup>25</sup>). The SIP<sup>26</sup> identifies several pressures and threats to site integrity, although most of these are local habitat and land management issues, and the absence of hydrological connectivity with the BDBC area ensures that water quality impacts will not occur. The SSSI condition assessment<sup>27</sup> indicates that most of the units that are in ‘unfavourable no change’ or ‘unfavourable declining’ condition have this status due to local land management issues.

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<sup>24</sup> [Condition of SSSI units for River Itchen](#)

<sup>25</sup> [Kennet and Lambourne Floodplain SSSI Condition Summary](#)

<sup>26</sup> <http://publications.naturalengland.org.uk/file/5702742270017536>

<sup>27</sup> [Condition of SSSI units for River Itchen](#)

- 3.2.23. However, the ‘supplementary advice’ notes that “*The supporting habitat ... is considered sensitive to changes in air quality*”.

## KENNET VALLEY ALDERWOODS SAC

### Overview

- 3.2.24. This SAC comprises two areas of wet woodland in the Kennet Floodplain. Both are situated on alluvium, overlain by a shallow layer of moderately calcareous peat through most of the woodland. The water table is relatively high, giving a range of soil moisture conditions from open water and swamp through to relatively dry woodland which is an important characteristic of the site.
- 3.2.25. The closest SAC units are approximately 3.2km from the BDBC boundary, along the River Kennet; however, all of the site units are hydrologically upstream of the BDBC area as surface water from BDBC flows to the River Enborne, which joins the Kennet at Woolhampton over 8km downstream of this SAC.

### Interest Features

- 3.2.26. The SAC has the following **qualifying features**:
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- 3.2.27. The ‘supplementary advice’<sup>28</sup> identifies that the ‘**typical species**’ of the site are those that are characteristic of the following National Vegetation Classification (NVC) communities:
- W6a *Alnus glutinosa* – *Urtica dioica* woodland, typical subcommunity;
  - W7b *Alnus glutinosa* - *Fraxinus excelsior* - *Lysimachia nemorum* woodland, *Carex remota* - *Cirsium palustre* sub-community;
  - W8a *Fraxinus excelsior*-*Acer campestre* - *Mercurialis perennis* woodland, *Glechoma hederacea* - *Primula vulgaris* sub-community.
- 3.2.28. Specific plant species are also identified, including several bryophytes.
- 3.2.29. No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although a wide and functional river corridor with a mosaic of natural and semi-natural riparian vegetation types is identified as being important to the integrity of the site and qualifying features.

### Condition, Pressures and Threats

- 3.2.30. The SSSI underpinning the SAC is in ‘favourable’ condition (~100% based on NE data<sup>29</sup>). The SIP<sup>30</sup> identifies two threats to site integrity (inappropriate water levels and game management), although

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<sup>28</sup> <http://publications.naturalengland.org.uk/file/4847195312619520>

<sup>29</sup> [Kennet Valley Alderwoods SSSI Condition Summary](#)

<sup>30</sup> <http://publications.naturalengland.org.uk/file/5702742270017536>

these are local habitat and land management issues that will not be influenced by the Local Plan; the absence of hydrological connectivity with the BDBC area ensures that water quality impacts will not occur.

## RIVER LAMBOURN SAC

### Overview

- 3.2.31. The River Lambourn SAC Itchen is a typical chalk river in southern England, fed from the north Wessex Downs chalk aquifer. It is relatively unmodified with near-natural flow characteristics (including a seasonally dry winterbourne section) and supports a characteristic range of *Ranunculus fluitantis* and *Callitriche-Batrachion* aquatic plant communities. However, there is evidence of nutrient enrichment and parts of the site are identified as being in an unfavourable condition due to excessive nutrients in recent NE advice to LPAs<sup>31</sup> (such that 'nutrient neutrality'<sup>32</sup> is being deployed or considered as mitigation).
- 3.2.32. The closest part of the SAC is approximately 3.4km from the BDBC boundary; however, all of the site units are hydrologically upstream of the BDBC area as surface water from BDBC flows to the River Enborne, which joins the Kennet at Woolhampton downstream of this SAC.

### Interest Features

- 3.2.33. The SAC has the following **qualifying features**:
- Water courses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation
  - Brook lamprey *Lampetra planeri*
  - Bullhead *Cottus gobio*
- 3.2.34. The 'supplementary advice' provides some guidance on the '**typical species**' considered to be associated with the site; these include:
- In-channel species: River water-crowfoot *Ranunculus penicillatus* subsp. *pseudofluitans*; Pond water-crowfoot *Ranunculus peltatus*; Water parsnip *Berula erecta*; Water starwort *Callitriche stagnalis*.
  - Fish and lamprey: Brook lamprey *Lampetra planeri*; Bullhead *Cottus gobio*; Brown trout *Salmo trutta*; Grayling *Thymallus thymallus*.

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<sup>31</sup> 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.

<sup>32</sup> 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.



- Mammals: Water vole *Arvicola amphibia*; Otter *Lutra lutra*.

3.2.35. No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although a wide and functional river corridor with a mosaic of natural and semi-natural riparian vegetation types is identified as being important to the integrity of the site and qualifying features.

#### **Condition, Pressures and Threats**

3.2.36. The SSSI underpinning the SAC is in 'unfavourable recovering' condition (100% based on NE data<sup>33</sup>). However, the SIP<sup>34</sup> identifies several pressures and threats to site integrity, although most of these are local habitat and land management issues, and the absence of hydrological connectivity with the BDBC area ensures that water quality impacts will not occur (note, the SIP is shared with the Kennet and Lambourn Floodplain SAC).

#### **THAMES BASIN HEATHS COMPLEX**

3.2.37. The Thames Basin Heaths complex includes three European sites which are addressed together for clarity and consistency with NE's SIP; these are:

- **Thames Basin Heaths SPA**
- **Thursley, Ash, Pirbright and Chobham SAC**
- **Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1) SPA**

3.2.38. These sites comprise lowland heathland, acid grassland, mire and commercial conifer plantations that support characteristic heathland birds, and are underpinned by a network of 14 SSSIs. The component SSSIs within 5km of the BDBC boundary (Bramshill SSSI, Hazeley Heath SSSI, and Castle Bottom to Yateley and Hawley Commons SSSI) underpin the **Thames Basin Heaths SPA** only; the other European sites are over 13km from the BDBC boundary.

#### **Interest Features**

3.2.39. **Thames Basin Heaths SPA** and **Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1) SPA** both have the following **qualifying features**:

- European nightjar *Caprimulgus europaeus*
- Wood lark *Lullula arborea*
- Dartford warbler *Sylvia undata*

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<sup>33</sup> [River Lambourn SSSI Condition Summary](#)

<sup>34</sup> <http://publications.naturalengland.org.uk/file/5702742270017536>

- 3.2.40. For the SPAs, the supplementary advice documents<sup>35,36</sup> indicate that the within-site **supporting habitats** for the qualifying features include:
- Nightjar: bare patches or areas of very short or sparse vegetation with scattered trees on open heath, in patchy scrub, heath / woodland interfaces and woodland clearings.
  - Woodlark: bare ground or sparsely vegetated areas, with scattered trees or large bushes for song posts.
  - Dartford warbler: structurally diverse gorse and/or tall, mature heather in a predominantly open landscape.
- 3.2.41. With regard to ‘**functional habitats**’, no specific area of functional land are identified; however:
- The foraging range of nightjar is known to extend up to several kilometres from their nest sites.
  - Woodlark will often utilise areas adjacent to heathland for feeding, including areas of short grassland, stubble fields or weedy margins of arable fields, golf courses and bare areas in quarry sites; these may be particularly important in the winter.
  - 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.
- 3.2.42. Therefore, land-use in the areas outside and (particularly) between the SPA units is important to site integrity.
- 3.2.43. **Thursley, Ash, Pirbright and Chobham SAC** has the following **qualifying features**:
- Northern Atlantic wet heaths with *Erica tetralix*
  - European dry heaths
  - Depressions on peat substrates of the *Rhynchosporion*
- 3.2.44. The ‘supplementary advice’<sup>37</sup> identifies that the ‘**typical species**’ of the site are those that are characteristic of the relevant National Vegetation Classification (NVC) communities; in addition:
- For the **Depressions on peat substrates of the *Rhynchosporion*** feature:
    - Flora: Heather *Calluna vulgaris*, crossleaved heath *Erica tetralix*, purple moor-grass *Molinia caerulea*, common cotton-grass *Eriophorum angustifolium*, bog asphodel *Narthecium ossifragum*, white beak-sedge *Rhynchospora alba*, meadow thistle *Cirsium dissectum*, roundleaved sundew *Drosera rotundifolia*, intermediate sundew *D. intermedia*, bog myrtle *Myrica gale*, cranberry *Vaccinium oxycoccos*, royal fern *Osmunda regalis*, black bog-rush *Schoenus nigricans*, lesser bladderwort *Utricularia minor*.

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<sup>35</sup> <http://publications.naturalengland.org.uk/file/5240175429419008>

<sup>36</sup> <http://publications.naturalengland.org.uk/file/4590853229117440>

<sup>37</sup> <http://publications.naturalengland.org.uk/file/4847195312619520>

- Mosses: *Calypogeia sphagnicola*, *Cephalozia macrostachya*, *Sphagnum auriculatum*, *S. cuspidatum*, *S. capillifolium*, *S. papillosum*, *S. magellanicum*, *S. tenellum*.
- Fauna: Raft spider *Dolomedes fimbriatus*, small red damselfly *Ceriatrigon tenellum*, curlew *Numenius arquata*, the reptile assemblage including smooth snake *Coronella austriaca*.

■ For the **European dry heaths** feature

- Flora: Heather, bell heather *Erica cinerea*, dwarf gorse *Ulex minor*, bilberry *Vaccinium myrtillus*, petty whin *Genista anglica*, sand sedge *Carex arenaria*,
- Mosses and lichens: *Hypnum jutlandicum*, *Dicranum scoparium*, *Polytrichum juniperinum*, *Cladonia floerkeana*, *C. fimbriata*, *C. furcata*, *C. portentosa*.
- Fauna: Reptile assemblage including smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis*; Silver-studded blue *Plebejus argus*, heath tiger-beetle *Cicindela sylvatica*, mottled beefly *Thyridanthrax fenestratus*, heath grasper *Haplodrassus dalmatensis*.

■ For the **Northern Atlantic wet heaths with *Erica tetralix*** feature:

- Flora: Heather, bell heather, creeping willow *Salix repens*, dwarf gorse, sedges *Carex spp.*, common cotton-grass, purple moor-grass, marsh clubmoss *Lycopodiella inundatum*, brown beak-sedge *Rhynchospora fusca*, deer grass *Trichophorum cespitosum*, round-leaved sundew, intermediate sundew, marsh gentian *Gentiana pneumonanthe*.
- Mosses: *Aulacomnium palustre*, *Sphagnum capillifolium*, *S. compactum*.
- Fauna: reptile assemblage including smooth snake.

3.2.45. No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of SAC integrity, although the importance of habitat ‘corridors’ and habitat patches to the overall functional integrity of the site is noted.

### Condition, Pressures and Threats

3.2.46. The SSSIs underpinning the SPAs and SAC are almost entirely in ‘favourable’ or ‘unfavourable recovering’ condition; however, the SIP<sup>38</sup> identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan Update:

- public access / disturbance (recreational use and dog walkers);
- wildfire / arson (associated with recreational use);
- air pollution (atmospheric nitrogen deposition); and
- habitat fragmentation (predominantly an issue between SSSI units, but potentially associated with wider functionally associated land for SPA species).
- water abstraction (indirectly, through regional water resource requirements).

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

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<sup>38</sup> <http://publications.naturalengland.org.uk/file/5946121331408896>

SSSI condition assessments indicates that most of the units that are in ‘unfavourable no change’ condition have this status due to local land management issues.

## EAST HAMPSHIRE HANGERS SAC

### Overview

- 3.2.48. This large site comprises seven SSSIs (the closest of which is Upper Greensand Hangers: Wyck to Wheatley SSSI, ~7km from the BDBC boundary) on slopes and escarpments supporting beech and mixed woodlands, with areas of chalk grassland. The site has no hydrological connectivity with the BDBC area.

### Interest Features

- 3.2.49. The SAC has the following **qualifying features**:
- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (\* important orchid sites)
  - *Asperulo-Fagetum* beech forests
  - *Tilio-Acerion* forests of slopes, screes and ravines
  - *Taxus baccata* woods of the British Isles
  - Early gentian *Gentianella anglica*
- 3.2.50. The ‘supplementary advice’<sup>39</sup> indicates that the ‘**typical species**’ of the site include:
- The constant and preferential plant species associated with the relevant NVC communities.
  - For the grassland features:
    - Flora: Musk orchid *Herminium monorchis*, Chalk Eyebright *Euphrasia pseudokernerii*, Frog Orchid *Coeloglossum viride*, Fly Orchid, *Ophrys insectifera*, Juniper *Juniperis communis*.
    - Fauna: Brown Hairstreak *Thecla betulae*, Duke of Burgundy *Hamearis lucina*, Fairy Shrimp *Chirocephalus diaphanous*.
  - For the woodland features:
    - Flora: Small-leaved lime *Tilia cordata*, Bent Moss *Campylostelium Saxicola*, Curve-stalked Feather-moss *Rhynchostegiella curviseta*, White helleborine *Cephalanthera damasonium*, Violet helleborine *Epipactis purpurata*, Green-flowered helleborine *Epipactis purpurata*, Narrow-leaved helleborine *Cephalanthera longifolia*, Red Helleborine *Cephalanthera rubra*, Birds nest *Neottia nidus-avis*, Yellow bird's-nest *Monotropa hypopitys*, Fly Orchid *Ophrys insectifera*, Lesser Butterfly orchid *Platanthera bifolia* and Italian Lords and Ladies *Arum italicum* ssp. *Neglectum*.
    - Lichens: *Varicellaria hemisphaerica* and Eagle's claws *Anaptychia ciliaris* subsp. *ciliaris*.

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<sup>39</sup> <http://publications.naturalengland.org.uk/file/5402220917161984>

- Fauna: Brown Hairstreak *Thecla betulae*.

3.2.51. 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 and Threats

3.2.52. The SSSIs 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 (undergrazing of grasslands or the need for woodland thinning). The SIP<sup>40</sup> identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan Update:

- air pollution (atmospheric nitrogen deposition; threat).

3.2.53. The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan (forestry and woodland management, invasive species).

### SHORTHEATH COMMON SAC

3.2.54. This site comprises one SSSI (Shortheath Common SSSI, ~9.5km from the BDBC boundary) supporting a range of open heathland and woodland habitats; a key feature of the site is a large valley mire. The site has no hydrological connectivity with the BDBC area.

### Interest Features

3.2.55. The SAC has the following **qualifying features**:

- European dry heaths
- Transition mires and quaking bogs
- Bog woodland

3.2.56. The 'supplementary advice'<sup>41</sup> indicates that the '**typical species**' of the site include:

- The constant and preferential plant species associated with the relevant NVC communities.
- For the European dry heaths feature:
  - Flora: Heather, bell heather, dwarf gorse, sand sedge, wavy-hair grass *Deschampsia flexuosa*, and lichens *Cladonia* spp.
  - Fauna: Assemblage of Orthoptera species including field cricket *Gryllus campestris*.
- For the Transition mires and quaking bogs feature:

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<sup>40</sup> <http://publications.naturalengland.org.uk/file/5118683003224064>

<sup>41</sup> <http://publications.naturalengland.org.uk/file/5178635791368192>

- Flora: *Sphagnum recurvum*, *S. capillifolium*, *S. papillosum*, Cranberry *Vaccinium oxycoccus*, common cottongrass, marsh cinquefoil *Potentilla palustris*, cross-leaved heath, round-leaved sundew, sedges *Carex rostrata* and *Carex canescens*, sharp-flowered rush *Juncus acutiflora*.
- Fauna: Bog bush cricket *Metrioptera brachyptera*.

■ For the Bog woodland feature:

- Flora: Downy birch *Betula pubescens*, common sallow *Salix cinerea*, bottle sedge *Carex rostrata*, *Sphagnum recurvum*.

3.2.57. 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. In addition, the 'supplementary advice' notes that "*Shorth Heath Common is part of a chain of important lowland heathland sites around Bordon, some of which are components of the Wealden Heaths II Special Protection Area (SPA)*" and so it is assumed that other heathland sites in the area (including those not covered by European designations) may have some functional associations with the SAC.

### Condition, Pressures and Threats

3.2.58. The SSSI units underpinning the SAC are in 'favourable' or 'unfavourable recovering' condition (100% based on NE data). The SIP<sup>42</sup> identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan Update:

- air pollution (atmospheric nitrogen deposition; pressure);
- public access / disturbance (threat; site is common land with nearby parking facilities).

3.2.59. The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan (scrub control, direct encroachment by local householders).

## WEALDEN HEATHS PHASE 2 SPA

### Overview

3.2.60. This site comprises four SSSIs (the closest of which is Broxhead and Kingsley Commons SSSI, ~9.5km from the BDBC boundary) on sandstone hills supporting extensive areas of lowland heath (similar to that found in the Thames Basin Heaths complex, see above), with local areas of impeded drainage forming streams and wetland habitats. The site is designated for its characteristic heathland birds. The site has no hydrological connectivity with the BDBC area.

### Interest features

3.2.61. The SPA has the following **qualifying features**:

- European nightjar *Caprimulgus europaeus*

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<sup>42</sup> <http://publications.naturalengland.org.uk/file/5069207664328704>

- Wood lark *Lullula arborea*
- Dartford warbler *Sylvia undata*

3.2.62. For the SPAs, the supplementary advice documents<sup>43,44</sup> indicate that the within-site **supporting habitats** for the qualifying features include:

- Nightjar: bare patches or areas of very short or sparse vegetation with scattered trees on open heath, in patchy scrub, heath / woodland interfaces and woodland clearings.
- Woodlark: bare ground or sparsely vegetated areas, especially where adjacent to structurally diverse vegetation and short heather, with scattered trees or large bushes for song posts.
- Dartford warbler: structurally diverse gorse and/or tall, mature heather in a predominantly open landscape.

3.2.63. With regard to ‘**functional habitats**’, no specific areas of functional land are identified; however:

- The foraging range of nightjar is known to extend up to several kilometres from their nest sites.
- Woodlark will often utilise areas adjacent to heathland for feeding, including areas of short grassland, stubble fields or weedy margins of arable fields, golf courses and bare areas in quarry sites; these may be particularly important in the winter.
- 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.

3.2.64. Therefore, land-use in the areas outside and (particularly) between the SPA units is important to site integrity.

### **Condition, Pressures and Threats**

3.2.65. The SSSIs units underpinning the SPA are all in ‘favourable’ or ‘unfavourable recovering’ condition; however, the SIP<sup>45</sup> identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan Update:

- public access / disturbance (recreational use and dog walkers);
- wildfire / arson (associated with recreational use); and
- air pollution (atmospheric nitrogen deposition, particularly at Woolmer Forest SSSI).

3.2.66. The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan (land management, invasive species, local hydrology / ditch management, etc.).

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<sup>43</sup> <http://publications.naturalengland.org.uk/file/5240175429419008>

<sup>44</sup> <http://publications.naturalengland.org.uk/file/4590853229117440>

<sup>45</sup> <http://publications.naturalengland.org.uk/file/4738514889474048>

## HARTSLOCK WOOD SAC

### Overview

3.2.67. This small site comprises one SSSI (Hartslock Wood SSSI, ~12.5km from the BDBC boundary) on chalk slopes above the River Thames, supporting a mosaic of chalk grassland, scrub and broadleaved woodland. The site borders the River Thames and includes areas of riverine fen.

### Interest Features

3.2.68. The SAC has the following **qualifying features**:

- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (\* important orchid sites)
- *Taxus baccata* woods of the British Isles

3.2.69. The 'supplementary advice'<sup>46</sup> indicates that the '**typical species**' of the site include:

- The constant and preferential plant species associated with the relevant NVC communities.
- In addition, for the grassland features:
  - Flora: Bastard toad-flax *Thesium humifusum*, Downy-fruited sedge *Carex tomentosa*, Monkey orchid.
  - Fauna: Assemblage of invertebrates including brown argus *Aricia agestis*, green hairstreak *Callophrys rubi*, small heath *Coenonympha pamphilus*, chalkhill blue *Polyommatus coridon* and grizzled skipper *Pyrgus malvae*

3.2.70. 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 and Threats

3.2.71. The SSSIs units underpinning the SAC are in 'favourable' or 'unfavourable recovering' condition. The SIP<sup>47</sup> identifies air pollution as the only threat to site integrity (principally in relation to the chalk grassland).

## WOOLMER FOREST SAC

3.2.72. This site comprises one SSSI (Woolmer Forest SSSI, ~13.4km from the BDBC boundary) on sandstone hills supporting extensive areas of lowland heath (similar to that found in the Thames Basin Heaths complex, see above), with associated habitats including valley mire, oligotrophic ponds, wet woodland, secondary woodland, acid grassland, scrub and conifer plantations. The site is unique in the UK in supporting natural populations of all 12 British amphibians and reptiles. The

<sup>46</sup> <http://publications.naturalengland.org.uk/file/4911193850904576>

<sup>47</sup> <http://publications.naturalengland.org.uk/file/6116888155258880>



site partly coincides with the Wealden Heaths Phase 2 SPA, and has no hydrological connectivity with the BDBC area.

### Interest Features

3.2.73. The SAC has the following **qualifying features**:

- Natural dystrophic lakes and ponds
- Northern Atlantic wet heaths with *Erica tetralix*
- European dry heaths
- Transition mires and quaking bogs
- Depressions on peat substrates of the *Rhynchosporion*

3.2.74. The ‘supplementary advice’<sup>48</sup> indicates that the ‘**typical species**’ of the site include:

- The constant and preferential plant species associated with the relevant NVC communities.
- The assemblage of native reptiles and amphibians including smooth snake, sand lizard and natterjack toad *Epidalea calamita*.
- The assemblage nationally-rare and scarce heathland invertebrates.
- Spangled diving beetle *Graphoderus zonatus*.

3.2.75. No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of SAC integrity, although the importance of habitat ‘corridors’ and habitat patches to the overall functional integrity of the site is noted. The ‘supplementary advice’ notes that “*Woolmer Forest SAC is an important component of the Wealden Heaths Phase II Special Protection Area (SPA). Maintaining the functionality of heathland and other supporting semi-natural habitats within the local landscape is essential for the conservation objectives of the SPA.*”

### Condition, Pressures and Threats

3.2.76. The SSSI units underpinning the SAC are all in ‘favourable’ condition; the SIP<sup>49</sup> (which also relates to the Wealden Heaths Phase 2 SPA) identifies several pressures and threats to site integrity, the following of which may be potentially influenced by the Local Plan Update:

- public access / disturbance (recreational use and dog walkers);
- wildfire / arson (associated with recreational use); and
- air pollution (atmospheric nitrogen deposition, particularly at Woolmer Forest SSSI).

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<sup>48</sup> <http://publications.naturalengland.org.uk/file/4519224966119424>

<sup>49</sup> <http://publications.naturalengland.org.uk/file/4738514889474048>

3.2.77. The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan (land management, invasive species, local hydrology / ditch management, etc.).

### SALISBURY PLAIN SITES

3.2.78. Salisbury Plain has three European sites associated with it, although only two are within 15km of the BDBC area; the baseline for these two sites is addressed together for clarity and consistency with NE's SIP; the sites are:

- **Salisbury Plain SPA**
- **Salisbury Plain SAC**
- **Porton Down SPA** (note, this site is over 15km from the BDBC area and is not explicitly considered further, although a 'no adverse effects' conclusion for the Salisbury Plain SPA or SAC will ensure the same conclusion for this site).

3.2.79. Salisbury Plain is the largest surviving semi-natural dry grassland area in north-west Europe, supporting orchid-rich and calcareous grassland on a chalk plateau. The closest point of the SPA/SAC is ~14.5km from the BDBC area and there is no surface water hydrological connectivity, and so effects on the sites are likely to be weak.

### Interest Features

3.2.80. **Salisbury Plain SPA** has the following qualifying features:

- Stone-curlew *Burhinus oedicanus* (breeding)
- Eurasian hobby *Falco subbuteo* (over winter)
- Common quail *Coturnix coturnix* (breeding)
- Hen harrier *Circus cyaneus* (breeding)

3.2.81. For the SPA, the supplementary advice<sup>50</sup> indicates that the within-site **supporting habitats** for the qualifying features are principally the lowland calcareous grassland, semi-improved and improved grassland, and arable land.

3.2.82. With regard to '**functional habitats**', all of the features periodically use habitats outside the SPA boundary, with the following areas specifically noted:

- Stone curlew: breeding also occurs at grassland sites outside the SPA, particularly to the south and east (including RSPB reserves in these areas), and within the wider military training area; autumn roosts are located within the wider training area, at locations including Upavon Down.
- Hobby: nests in small woods including Everleigh Ashes, outside of the SPA.

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<sup>50</sup> <http://publications.naturalengland.org.uk/file/6316828921430016>

3.2.83. Therefore, land-use in the areas outside and (particularly) between the SPA units is important to site integrity.

3.2.84. **Salisbury Plain SAC** has the following **qualifying features**:

- *Juniperus communis* formations on heaths or calcareous grasslands
- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (\* important orchid sites)
- Marsh fritillary butterfly *Euphydryas* (*Eurodryas*, *Hypodryas*) *aurinia*

3.2.85. The 'supplementary advice'<sup>51</sup> identifies that the '**typical species**' of the site include:

- The constant and preferential plant species associated with the relevant NVC communities.
- Fauna: the assemblage of chalk grassland invertebrates; the assemblage of invertebrates associated with juniper (~27 species); fungi species fully or partially dependent on juniper (~40 species); population of fairy shrimp *Chirocephalus diaphanous*; population of European rabbit *Oryctolagus cuniculus*

3.2.86. With regard to functional land, other designated sites locally may support the **Marsh fritillary butterfly** feature or provide 'grassland ecological networks' (including various grassland SSSIs near the SAC, Parsonage Down SSSI/NNR, Porton Down, Winterbourne Downs RSPB reserve, various County Wildlife Sites) that support the meta-population and dispersal between habitat patches. The importance of habitat 'corridors' and habitat patches to the overall functional integrity of this feature is noted.

### Condition, Pressures and Threats

3.2.87. The SSSI units underpinning the SPAs and SAC are almost entirely in 'favourable' or 'unfavourable recovering' condition (over 98%, based on NE data), other than one unit that has been 'partially destroyed' (reasons not stated); the SIP<sup>52</sup> identifies one pressure or threat that may be potentially influenced by the Local Plan Update (air pollution (atmospheric nitrogen deposition)).

3.2.88. The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan.

## SOUTHAMPTON WATER SITES

### Overview

3.2.89. Southampton Water is the ultimate downstream receptor for surface water drainage from approximately half of the BDBC area via the River Test and (to a lesser extent) the River Itchen. Four European sites are associated with Southampton Water:

- **Solent and Southampton Water SPA**

<sup>51</sup> <http://publications.naturalengland.org.uk/file/4892385184317440>

<sup>52</sup> <http://publications.naturalengland.org.uk/file/5230260905836544>

- **Solent and Southampton Water Ramsar**
- **Solent Maritime SAC**
- **Solent and Dorset Coast SPA**

3.2.90. The interest features of these sites are partially coincident or co-dependent, and are only exposed to the outcomes of the Local Plan Update through water quality issues, and so the site baselines are considered together in this section. In addition, although these sites extend substantially beyond Southampton Water to include areas on the Isle of Wight and the harbours to the east, the effects of water quality changes will not be distinguishable outside of Southampton Water and so the baseline focuses on the habitats in this area and those species most reliant on them.

### Interest Features

3.2.91. The **qualifying features** of the **Solent and Southampton Water SPA** are:

- Ringed plover *Charadrius hiaticula* (non-breeding)
- Mediterranean gull *Larus melanocephalus* (breeding)
- Black-tailed godwit *Limosa limosa islandica* (non-breeding)
- Little tern *Sterna albifrons* (breeding)
- Roseate tern *Sterna dougallii* (breeding)
- Dark-bellied brent goose *Branta bernicla bernicla* (non-breeding)
- Sandwich tern *Sterna sandvicensis* (breeding)
- Eurasian teal *Anas crecca* (non-breeding)
- Common tern *Sterna hirundo* (breeding)
- Waterbird assemblage

3.2.92. The **Solent and Southampton Water Ramsar** site meets the following **Ramsar criteria**:

- Criterion 1 (Sites containing representative, rare or unique wetland types):
  - Sheltered channel with unusual double tide.
- Criterion 2 (Supports vulnerable, endangered, or critically endangered species or threatened ecological communities):
  - Assemblage of rare plants and invertebrates (33 British Red Data Book (BRDB) invertebrates; 8 BRDB plants).
- Criterion 5 (Assemblages of international importance):
  - Species with peak counts in winter: 51343 waterfowl (5-year peak mean 1998/99-2002/2003).
- Criterion 6 (Species/populations occurring at levels of international importance):
  - Ringed plover *Charadrius hiaticula* (spring/autumn);
  - Dark-bellied brent goose *Branta bernicla bernicla* (winter);
  - Black-tailed godwit *Limosa limosa islandica* (winter)
  - Eurasian teal *Anas crecca* (winter)

- 3.2.93. The supplementary advice<sup>53</sup> 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. extensive intertidal mudflats and sandbanks, intertidal and subtidal rock, areas of saltmarsh, coastal lagoons, coastal reed beds, shingle banks, and grazing marsh. Specific areas of non-designated '**functional habitat**' are identified in the *Solent Waders and Brent Goose Strategy* (HWT, 2020) and associated online GIS<sup>54</sup>.
- 3.2.94. The **Solent and Dorset Coast SPA** protects the waters surrounding existing tern colonies associated with Poole Harbour SPA, Solent & Southampton Water SPA, Chichester & Langstone Harbours SPA and Pagham Harbour SPA, as these marine areas are used by the terns for foraging and maintenance activities, such as bathing and preening. The **qualifying features** are:
- Sandwich tern *Sterna sandvicensis* (breeding)
  - Common tern *Sterna hirundo* (breeding)
  - Little tern *Sterna albifrons* (breeding)
- 3.2.95. The supplementary advice<sup>55</sup> does not identify specific within-site **supporting habitats** for the qualifying features of the SPA but these are assumed to be the marine habitats covered by the SPA. Similarly, specific areas of non-designated '**functional habitat**' are not identified (although these are likely to be limited as (a) most breeding sites are covered by existing SPAs and (b) the Solent and Dorset Coast SPA covers the core foraging areas.
- 3.2.96. The **Solent Maritime SAC** has the largest number of small estuaries in the tightest cluster anywhere in Great Britain with extensive areas of intertidal mudflats and sandflats, often supporting eelgrass (*Zostera* species), subtidal sandbanks, saltmarsh and natural shoreline transitions such as drift line vegetation. The **qualifying features** are:
- Sandbanks which are slightly covered by sea water all the time
  - Estuaries
  - Mudflats and sandflats not covered by seawater at low tide
  - Coastal lagoons
  - Annual vegetation of drift lines
  - Perennial vegetation of stony banks
  - Salicornia and other annuals colonizing mud and sand
  - *Spartina* swards (*Spartinion maritimae*)
  - Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

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<sup>53</sup> [Solent and Southampton Water SPA supplementary advice](#)

<sup>54</sup> [Solent Waders and Brent Goose Strategy - Online Mapping](#)

<sup>55</sup> [Solent and Southampton Water SPA supplementary advice](#)

- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")
- Desmoulin's whorl snail *Vertigo moulinsiana*

- 3.2.97. The 'supplementary advice'<sup>56</sup> 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 Classification (NVC) communities; no specific fauna are identified as typical species.
- 3.2.98. The supplementary advice notes the importance of habitat 'corridors' and habitat patches to the overall functional integrity of the site; in addition, specific areas of '**functional habitat**' are noted in relation sediment supply to the **Shifting dunes** and **Perennial vegetation of stony banks** features.

### Condition, Pressures and Threats

- 3.2.99. The SSSIs underpinning the terrestrial components of the SPA and SAC that are associated with Southampton Water are almost entirely in 'favourable' or 'unfavourable recovering' condition; however, the SIP<sup>57</sup> identifies several pressures and threats to integrity, although the only one potentially influenced by the Local Plan Update is 'water pollution' (eutrophication and toxicity, principally from local sources (the SIP predates the recent NE advice to LPAs regarding 'nutrient neutrality')).
- 3.2.100. The remaining pressures and threats typically relate to local land management issues that will not be influenced by the Local Plan (overgrazing, scrub control, ditch management, etc.) and the SSSI condition assessments indicates that most of the units that are in 'unfavourable no change' condition have this status due to local land management issues.

### CONSERVATION OBJECTIVES

- 3.2.101. The Conservation Objectives and Supplementary advice documents for the SACs and SPAs benchmark Favourable Conservation Status (FCS) for each feature. Guidance<sup>58</sup> 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*".
- 3.2.102. 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:

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<sup>56</sup> [Solent Maritime SAC supplementary advice](#)

<sup>57</sup> <http://publications.naturalengland.org.uk/publication/4692013588938752>

<sup>58</sup> 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].

### 3.2.103. 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.*

### 3.2.104. 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.*

3.2.105. The conservation objectives for Ramsar sites are taken to be the same as for the corresponding SACs / SPAs, where sites and feature ecological characteristics are coincident; where Ramsar sites or features do not coincide with an SPA or SAC the conservation objectives for the corresponding SSSI are referred to. 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.

3.2.106. As noted, NE has published ‘*Supplementary advice on conserving and restoring site features*’ for most 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.

## 4 LOCAL PLAN 'SCREENING'

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### 4.1 REGULATION 18 DRAFT LOCAL PLAN SUMMARY

- 4.1.1. The current BDBC Local Plan was adopted in May 2016 and covers the period 2011 to 2029. BDBC is currently undertaking an update to the Local Plan to 2040.
- 4.1.2. The draft Local Plan sets out the strategic vision, objectives and spatial strategy for the borough, as well as the planning policies which will help to determine the future location, scale, type and design of new development in the borough.
- 4.1.3. The draft Local Plan is available at <https://www.basingstoke.gov.uk/lpu>
- 4.1.4. In broad terms, the draft Local Plan includes:
- provision for 15,300 homes and associated infrastructure over the plan period (the quantum of growth);
  - Employment uses will be supported within Strategic Employment Areas and other suitable locations in order to meet the needs identified through the Council's Economic Needs Assessment;
  - policies providing geographical direction for development (typically specific housing and employment site allocations);
  - policies broadly supporting development or other changes, but which do not specify a quantum or location;
  - various development management policies that set out BDBC's tests or expectations when considering proposals, such as safeguarding policies, environmental protection policies or policies relating to design or other qualitative criteria.
- 4.1.5. 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 4.1**); or collectively by exacerbating regional pressures (e.g. pressures on water supply or sewerage treatment).

### 4.2 REVIEW / 'SCREENING' OF PLAN COMPONENTS: POLICIES AND ALLOCATIONS

#### REVIEW OF DRAFT SITE ALLOCATIONS

- 4.2.1. The allocation sites (housing, employment, retail, etc.) proposed by BDBC 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'



effects<sup>59</sup>. 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.

- 4.2.2. None of the allocations will have significant effects alone due principally to their size, their distance from the nearest European sites, and the absence of impact pathways. In combination effects are possible via recreational pressure, water quality and air quality (see above).

## REVIEW OF DRAFT POLICIES IN THE LOCAL PLAN UPDATE

- 4.2.3. 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.

<sup>59</sup> 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.

Broad Policy Type	Notes
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 April 2000 at 4.3.2

4.2.4. 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.

4.2.5. The criteria in **Table 4.1** were applied to a review of the draft policies within the Local Plan Update 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.

4.2.6. Reflecting these policy groups, a colour coding system (see **Table 4.2**) has been used for the purposes of screening 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.

<p>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.</p>
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- 4.2.7. 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).
- 4.2.8. 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.
- 4.2.9. In summary, the vast majority of the planning policies contained in the draft Local Plan Update are categorised as ‘no effect’ or ‘no significant effect’ policies (see **Appendix B**). However, the policies in **Table 4.3** are explored further through appropriate assessment.

**Table 4-3 - Policy aspects requiring examination through appropriate assessment**

Policies	Screening rationale
<p><b>Policy SPS5:</b> Sites Allocated for Residential/Mixed Use Development</p>	<p>The policy identifies the sites that are proposed for allocation and provides general criteria relating to how sites will come forward, including the use of design codes.</p> <p>The policy has the potential to significantly affect European sites through effect pathways associated with quantum of development etc. and aspects of it need to be examined through appropriate assessment. The effectiveness of cross-cutting mitigating policies requires review.</p>
<p><b>Policies SPS5.1 – SPS3.15:</b> (Allocation-specific policies)</p>	<p>Policies relate to specific allocations and their locations; these are unlikely to affect any sites alone but will contribute to ‘in combination’ effects.</p>
<p><b>Policy CLC1:</b> A carbon neutral climate adapted Borough</p>	<p>The policy sets the broad criteria that new development in will be expected to meet in relation to climate change adaptation and mitigation. 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.</p>

Policies	Screening rationale
<p><b>Policy INF2:</b> Transport</p>	<p>The policy sets out the Council's intention to promote a safe, efficient and convenient transport system which is consistent with the Council's declared Climate Emergency. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development. 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.</p>
<p><b>Policy ENV3:</b> Thames Basin Heaths Special Protection Area</p>	<p>The policy requires new residential development which is likely to have a significant effect on the ecological integrity of the Thames Basin Heaths Special Protection Area (SPA) to clearly demonstrate that any potential adverse effects are fully mitigated. The policy also sets out criteria for development within 5km of the SPA. 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 / criteria that would need to be met in relation to recreational pressure and which are intended to minimise effects on the SPA and which have therefore been considered as part of the AA.</p>
<p><b>Policy ENV4:</b> Nutrient Neutrality</p>	<p>Under this policy new dwellings and development resulting in a net increase in population (including student accommodation, and tourist attractions and accommodation) served by a wastewater system that will discharge into the River Test and Itchen catchments will be required to demonstrate nutrient neutrality through the submission of a nutrient budget(s). The policy specifies the International nature conservation sites that it applies to. 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 / criteria that would need to be met in relation to water discharges and which are intended to minimise effects on the SPA/SAC/Ramsar sites and which have therefore been considered as part of the AA.</p>
<p><b>Policy ENV9:</b> Water Quality</p>	<p>The policy seeks to protect water quality. Where new water supply or wastewater infrastructure is required or proposed in support of new development, the development will be phased alongside the provision of the infrastructure in order to ensure compliance with the Habitats Regulations and Water Framework Directive requirements. 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 / criteria that would need to be met in relation to water discharges and which are intended to minimise effects on the European sites and which have therefore been considered as part of the AA.</p>

Policies	Screening rationale
<b>ENV14:</b> Pollution and Air Quality	The policy sets out general criteria for the avoidance of pollution and protection of air quality. 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 / 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.

### 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, 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 Local Plan Update. 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 Update (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 Update will have no control (e.g. agricultural practices).

#### Screening at the Regulation 18 Stage

- 4.3.4. Note, the screening tests are strictly applied to the final, submitted plan and not to emerging or developmental stages; any 'screening conclusions' set out in the following sections are necessarily provisional, therefore, based on the plan as currently conceived; however, they are intended to be robust should the plan be adopted as currently drafted. In some cases there may be data gaps or uncertainties associated with policy implementation, and some baseline studies are being updated by BDBC (see below); however, it does indicate those aspects that may require specific consideration prior to finalisation of the Local Plan, and those that would appear to have a low probability of affecting European sites or features.

4.3.5. It should be noted that BDBC is completing various reports and studies to update the environmental baseline for the Local Plan, some of which will be relevant to the HRA baseline. Additional studies will be undertaken or co-opted as required depending on the impact pathways that are identified during the plan development process; these might include new or ongoing regional investigations, or studies relating to specific allocation sites.

4.3.6. Note, **for European sites not identified in Table 3.2 the final HRA will almost certainly conclude that there will be ‘no effect’ (and hence no possibility of ‘in combination’ effects) on these sites due to the absence of reasonable pathways for effects.** This is based on initial assessments of the emerging plan and will be reviewed as the plan is developed, but is a robust conclusion based on the currently available information. **Only sites identified in Table 3.2 are therefore considered further in this report.**

## RECREATIONAL PRESSURE

- 4.3.7. 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.
- 4.3.8. 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).
- 4.3.9. 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.
- 4.3.10. 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.
- 4.3.11. 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.

- 4.3.12. Visitor surveys are often sought to determine whether public access is having a significant or significant adverse effect on a site, although in practice they rarely assist in quantifying the scale or ecological significance of any effects; rather, they typically assume that the site is being (or will be) significantly affected by visitor pressure and then provide a semi-quantitative basis for setting radii for policy interventions (such as developer contributions) that are intended to ensure that possible adverse effects do not occur or can be mitigated. Probably the most common metric used for ‘buffer zones’ or ‘zones of influence’ is the distance within which approximately 70 - 75% of visitors live; these have been determined for several sites around the UK where visitor pressure is considered significant enough to warrant policy-based interventions. In general, for most inland terrestrial sites these ‘zone of influence’ distances (i.e. those within which ‘significant’ effects may occur) are less than 10km, and typically in the range 6 – 8km. Some sites (typically coastal sites or ‘national attraction’ sites) have larger distances but these are almost always less than 20km<sup>60</sup>. These values can be used if sites are potentially vulnerable to visitor pressure but bespoke buffers have not been developed.

**Table 4-4 - Summary of European site issues in relation to visitor pressure**

Site	Notes	Screen in?
<b>River Itchen SAC</b>	Visitor pressure is not identified as a pressure or threat for this site; public access to the river is limited; and the habitats of the site have a low-sensitivity to typical recreational pressure. The closest point of the SAC is >2km from the BDBC boundary (and further from the nearest allocations) and so significant effects (alone or in combination) will not occur.	No
<b>Kennet and Lambourn Floodplain SAC</b>	Visitor pressure is not identified as a pressure or threat for this site; public access to the river is limited; and the habitats of the site have a low exposure to recreational pressure (limited accessibility). The closest point of the SAC is >3km from the BDBC boundary (and further from the nearest allocations) and so significant effects (alone or in combination) will not occur.	No
<b>Kennet Valley Alderwoods SAC</b>	Visitor pressure is not identified as a pressure or threat for this site and public access to the site units is limited (few / no public footpaths) and so significant effects (alone or in combination) will not occur.	No

<sup>60</sup> It is worth noting, however, that visitor pressure ‘zone of influence’ distances very often reflect local population distribution as much as (if not more than) the inherent ‘attractiveness’ of the site to visitors.

Site	Notes	Screen in?
<b>River Lambourn SAC</b>	Visitor pressure is not identified as a pressure or threat for this site; public access to the river is limited; and the habitats of the site have a low-sensitivity to typical recreational pressure. The closest point of the SAC is >3km from the nearest allocations and so significant effects (alone or in combination) will not occur.	No
<b>Thames Basin Heaths SPA</b>	Visitor pressure known to be an issue for the site that relies on mitigation that needs to be considered through appropriate assessment.	Yes
<b>East Hampshire Hangers SAC</b>	Visitor pressure is not identified as a pressure or threat for this site; public access to woodlands via PRoW but the closest point of the SAC is >7km from the BDBC area (further from the nearest allocations) and so significant effects (alone or in combination) will not occur.	No
<b>Shortheath Common SAC</b>	Public access / disturbance is identified as a threat (site is common land / access land with nearby parking facilities). Visitor survey data for Shortheath* indicate that 75% of visitors to the Common live within 5.3km (80% within 6.8km) and so significant effects due to visitors originating from new development in the BDBC area (>9.5km from the site, further still to the nearest allocations) would not be expected.	No
<b>Wealden Heaths Phase 2 SPA</b>	Public access / disturbance is identified as a threat (parts of site are common land / access land with nearby parking facilities). Visitor survey data* indicate that the greatest '75% distance' for visitors to this site is 6.9km for visitors to the Kingsley Heath component (also the closest site unit to the BDBC area), and so significant effects due to visitors originating from new development in the BDBC area (>9.5km from the site, further still to the nearest allocations) would not be expected.	No
<b>Hartslock Wood SAC</b>	Small site on steep slopes with limited public access; visitor pressure not identified as a pressure or threat for this site; site over 12km from the BDBC area (further still to the nearest allocations) so significant effects will not occur.	No
<b>Woolmer Forest SAC</b>	Public access / disturbance is identified as a threat. Visitor survey data* indicates that the '75% distance' for visitors to this site is 3.19km, and so significant effects due to visitors originating from new development in the BDBC area (>13km from the site, further still to the nearest allocations) would not be expected.	No
<b>Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1) SPA</b>	Public access / disturbance is identified as a threat (site includes common land / access land with nearby parking facilities). However, the site is over 13km from the BDBC area and so significant effects due to visitors originating from new development in the BDBC area would not be expected.	No



Site	Notes	Screen in?
<b>Thursley, Ash, Pirbright and Chobham SAC</b>	Public access / disturbance is identified as a threat (site includes common land / access land with nearby parking facilities). However, the site is over 13km from the BDBC area and so significant effects due to visitors originating from new development in the BDBC area would not be expected.	No
<b>Salisbury Plain SPA</b>	Public access / disturbance is not identified as a threat or pressure at the site; site is over 13km from the BDBC area and so significant effects due to visitors originating from new development in the BDBC area would not be expected.	No
<b>Salisbury Plain SAC</b>	Public access / disturbance is not identified as a threat or pressure at the site; site is over 13km from the BDBC area and so significant effects due to visitors originating from new development in the BDBC area would not be expected.	No
<b>The Solent and Southampton Water SPA</b>	The Solent sites are subject to the Solent Recreation Mitigation Strategy** which sets developer contribution buffers at 5.6km; significant effects as a result of the Local Plan Update will not occur.	No
<b>The Solent and Southampton Water Ramsar</b>	The Solent sites are subject to the Solent Recreation Mitigation Strategy** which sets developer contribution buffers at 5.6km; significant effects as a result of the Local Plan Update will not occur.	No
<b>Solent Maritime SAC</b>	The Solent sites are subject to the Solent Recreation Mitigation Strategy** which sets developer contribution buffers at 5.6km; significant effects as a result of the Local Plan Update will not occur.	No
<b>Solent and Dorset Coast SPA</b>	The Solent sites are subject to the Solent Recreation Mitigation Strategy** which sets developer contribution buffers at 5.6km; significant effects as a result of the Local Plan Update will not occur.	No

\* Panter, C. (2018). Wealden Heaths and Shortheath Common 2018 Visitor Surveys [online]. Report for East Hants Council. Footprint Ecology, Dorset. [Available at:

<https://cdn.easthants.gov.uk/public/documents/Wealden%20visitor%20survey%20final%20report.pdf>

\*\*Available at: <https://cdn.havant.gov.uk/public/documents/EB17%20Solent%20Recreation%20Mitigation%20Strategy.pdf>

## 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. 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.
- 4.3.15. Urbanisation effects as a result of the Local Plan will not occur for any of the European sites due to the separation distances.

### **ATMOSPHERIC POLLUTION**

- 4.3.16. 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 (SO<sub>2</sub>, typically from combustion of coal and heavy fuel oils although this has declined substantially), nitrogen oxides (NO<sub>x</sub>, mainly from vehicles) and ammonia (NH<sub>3</sub>, principally from agriculture), which (together with secondary aerosol pollutants<sup>61</sup>) are deposited as wet or dry deposits. These pollutants affect habitats and species mainly through acidification and eutrophication.
- 4.3.17. 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).
- 4.3.18. Air pollution contributes to eutrophication within ecosystems by increasing the amounts of available nitrogen (N)<sup>62</sup>. 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.
- 4.3.19. Overall in the UK, there has been a significant decline in SO<sub>x</sub> and NO<sub>x</sub> emissions in recent years and a consequential decrease in acid deposition. In England, SO<sub>x</sub> and NO<sub>x</sub> 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 expected to decline further in future years with the transition to

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<sup>61</sup> Secondary pollutants are not emitted, but are formed following further reactions in the atmosphere; for example, SO<sub>2</sub> and NO<sub>x</sub> are oxidised to form SO<sub>4</sub><sup>2-</sup> and NO<sub>2</sub><sup>-</sup> compounds; ozone is formed by the reaction of other pollutants (e.g. NO<sub>x</sub> or volatile organic compounds) with UV light; ammonia reacts with SO<sub>4</sub><sup>2-</sup> and NO<sub>2</sub><sup>-</sup> to form ammonium (NH<sub>4</sub><sup>+</sup>).

<sup>62</sup> Nitrogen that is in a form that can be absorbed and used by plants.

electric vehicles. 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.

- 4.3.20. The effect of SO<sub>x</sub> and NO<sub>x</sub> 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.
- 4.3.21. The Local Plan Update 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 Update will be related to changing patterns of vehicle use due to the promotion of new development (since the Local Plan Update does not provide for any new significant point-sources).
- 4.3.22. The Department of Transport's *Transport Analysis Guidance*<sup>63</sup> states that "*beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant*" and therefore this distance is typically 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*".
- 4.3.23. 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 1000.
- 4.3.24. 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 roads<sup>64</sup> within 200m of a European site, with case law<sup>65</sup> indicating that changes in AADT on particular roads should be determined 'in combination' with other plans and projects.

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<sup>63</sup> See <http://www.dft.gov.uk/webtag/documents/expert/unit3.3.3.php#013>; accessed 15/06/14.

<sup>64</sup> 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).

<sup>65</sup> *Wealden District Council v. Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority* [2017] EWHC 351.

4.3.25. GIS analysis suggests that the following European sites have units within 200m of an A-road that is within 15km of the BDBC area:

**Table 4-5 - European sites (and component SSSIs) within 15km of the BDBC area with A-roads within 200m**

European site(s)	Relevant SSSIs and A roads
Salisbury Plain SPA / Salisbury Plain SAC	<ul style="list-style-type: none"> <li>■ Salisbury Plain SSSI               <ul style="list-style-type: none"> <li>● A338 (Tidworth)</li> </ul> </li> </ul>
Woolmer Forest SAC	<ul style="list-style-type: none"> <li>■ Woolmer Forest SSSI               <ul style="list-style-type: none"> <li>● A272 (Bordon)</li> </ul> </li> </ul>
River Itchen SAC	<ul style="list-style-type: none"> <li>■ River Itchen SSSI               <ul style="list-style-type: none"> <li>● A24 / A33 / M3 (Winchester)</li> <li>● A272 (Cheriton)</li> <li>● A31 (New Alresford)</li> </ul> </li> </ul>
Wealden Heaths Phase 2 SPA	<ul style="list-style-type: none"> <li>■ Broxhead and Kingsley Commons SSSI               <ul style="list-style-type: none"> <li>● A272 (Bordon)</li> </ul> </li> <li>■ Woolmer Forest SSSI               <ul style="list-style-type: none"> <li>● A272 (Bordon)</li> </ul> </li> </ul>
Kennet and Lambourn Floodplain SAC	<ul style="list-style-type: none"> <li>■ Kennet and Lambourn Floodplain SSSI               <ul style="list-style-type: none"> <li>● A4 / A338 (Hungerford)</li> <li>● A34 (Newbury)</li> </ul> </li> </ul>
River Lambourn SAC	<ul style="list-style-type: none"> <li>■ River Lambourn SSSI               <ul style="list-style-type: none"> <li>● A4 / A34 / A339 (Newbury)</li> </ul> </li> </ul>
Thursley, Ash, Pirbright and Chobham SAC / Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1) SPA	<ul style="list-style-type: none"> <li>■ Thursley, Hankley &amp; Frensham Commons SSSI               <ul style="list-style-type: none"> <li>● A287 (Frensham)</li> </ul> </li> </ul>

European site(s)	Relevant SSSIs and A roads
<p><b>Thames Basin Heaths SPA</b></p>	<ul style="list-style-type: none"> <li>■ Castle Bottom to Yateley and Hawley Commons SSSI               <ul style="list-style-type: none"> <li>● A30 / A327 (west of Blackwater)</li> </ul> </li> <li>■ Bramshill SSSI               <ul style="list-style-type: none"> <li>● A30 / A327 (west of Blackwater)</li> </ul> </li> <li>■ Sandhurst to Owlsmoor Bogs and Heaths SSSI               <ul style="list-style-type: none"> <li>● A3095 (Sandhurst)</li> </ul> </li> <li>■ Broadmoor to Bagshot Woods and Heaths SSSI               <ul style="list-style-type: none"> <li>● A3095 (Sandhurst)</li> </ul> </li> <li>■ Bourley and Long Valley SSSI               <ul style="list-style-type: none"> <li>● A323 (Fleet)</li> </ul> </li> <li>■ Eelmoor Marsh SSSI               <ul style="list-style-type: none"> <li>● A323 (Fleet)</li> </ul> </li> <li>■ Heath Brow SSSI               <ul style="list-style-type: none"> <li>● A325 (Aldershot) / A287 (Hale)</li> </ul> </li> </ul>

4.3.26. The remaining sites (**East Hampshire Hangers SAC, Shortheath Common SAC, Hartslock Wood SAC, The Solent and Southampton Water SPA, The Solent and Southampton Water Ramsar, Solent Maritime SAC, and Solent and Dorset Coast SPA**) are **screened out** from further assessment as they will not be exposed to significant effects from air quality changes associated with the Local Plan Update on the basis of the 15km / 200m criteria.

4.3.27. Preliminary assessment of the likely AADT increases has been undertaken, based on the emerging transport model being completed for the plan. It should be noted that this model does not cover all of the roads identified in **Table 4.2** above, but does cover roads closest to the BDBC area which provides a reasonable benchmark for screening the more distant roads. In summary the preliminary assessment suggests the following:

- AADT will increase by >1000 for the A34 (**Kennet and Lambourn Floodplain SAC / River Lambourn SAC**) due to the Local Plan ‘alone’ (traffic from the BDBC area will contribute around a third of the total increase ‘in combination’).
- AADT will increase by >1000 for the roads associated with the **Thames Basin Heaths SPA** due to the Local Plan operating ‘in combination’ with other local plans, although the contribution of the BDBC area to this increase is <10%).
- AADT will increase by >1000 for the A33 (**River Itchen SAC**) due to the Local Plan operating ‘in combination’ with other local plans (traffic from the BDBC area will contribute around a third of the total increase ‘in combination’).
- For all other locations the distance and / or connectivity and orientation of the relevant road relative to the BDBC area will ensure that BDBC’s contribution to any ‘in combination’ increases in AADT over 1000 will be negligible (for example, the A338 near Salisbury Plain SPA / SAC

does not pass through the BDBC area, nor provide a key commuting route for traffic originating from the BDBC area).

- 4.3.28. With regard to the sensitivity of the sites to air quality changes associated with traffic, for most aquatic sites (notably, in this case, the **River Lambourn SAC**, **River Itchen SAC** and **Kennet and Lambourn Floodplain SAC**) 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, and the Air Pollution Information Service (APIS) does not always provide critical loads for habitats where available-N is not a limiting factor. Consequently, the aquatic habitats and species of these sites are considered to have a low sensitivity to eutrophication from air pollution, and so any changes associated with increased traffic volumes would not significantly affect these sites. It should be noted that, for the **River Itchen SAC**, the supporting habitats for the **Southern damselfly** feature (old water meadow ditch systems) are considered sensitive, but these habitats are not present within 200m of the A roads noted above (based on NE data on the distribution of interest features within the SSSI units). These sites are therefore **screened out** from further assessment.

**Table 4-6 - Summary of European site issues in relation to air quality**

Site	Notes	Screen in?
<b>River Itchen SAC</b>	Eutrophication via agricultural run-off and flood water is overwhelmingly more significant than air pollution, and available-N is rarely a limiting factor in river ecosystems. Consequently, the aquatic habitats and species of this river are considered to have a low sensitivity to eutrophication or acidification from air pollution, and so any changes associated with increased traffic volumes would not significantly affect this site. It should be noted that, for the <b>River Itchen SAC</b> , the supporting habitats for the <b>Southern damselfly</b> feature (old water meadow ditch systems) are considered sensitive, but these habitats are not present within 200m of the A roads noted above (based on NE data on the distribution of interest features within the SSSI units).	No
<b>Kennet and Lambourn Floodplain SAC</b>	Eutrophication via agricultural run-off and flood water is overwhelmingly more significant than air pollution, and available-N is not thought to be a limiting factor for these floodplain ecosystems. The 'supplementary advice' suggests that the supporting habitat for the feature is sensitive to changes in air quality, although critical loads and levels are not provided for the site habitats and in practice the sensitivity to eutrophication from air pollution is low (any increase or decrease in N-inputs from air would be negligible relative to the inputs from the river and agricultural sources), and so any changes associated with increased traffic volumes would not significantly affect this site.	No
<b>Kennet Valley Alderwoods SAC</b>	Site units not within 15km / 200m of an A-road.	No

Site	Notes	Screen in?
<b>River Lambourn SAC</b>	Eutrophication via agricultural run-off and flood water is overwhelmingly more significant than air pollution, and available-N is rarely a limiting factor in river ecosystems. Consequently, the aquatic habitats and species of this river are considered to have a low sensitivity to eutrophication or acidification from air pollution, and so any changes associated with increased traffic volumes would not significantly affect this site.	No
<b>Thames Basin Heaths SPA</b>	Supporting habitats for the qualifying features are considered sensitive; site units within 200m of a road likely subject to an AADT increase of >1000 in combination.	Yes
<b>East Hampshire Hangers SAC</b>	Site units not within 15km / 200m of an A-road.	No
<b>Shortheath Common SAC</b>	Site units not within 15km / 200m of an A-road.	No
<b>Wealden Heaths Phase 2 SPA</b>	The distance and / or connectivity and orientation of the relevant road relative to the BDBC area will ensure that BDBC's contribution to any 'in combination' increases in AADT over 1000 will be negligible in relative and absolute terms.	No
<b>Hartslock Wood SAC</b>	Site units not within 15km / 200m of an A-road.	No
<b>Woolmer Forest SAC</b>	The distance and / or connectivity and orientation of the relevant road relative to the BDBC area will ensure that BDBC's contribution to any 'in combination' increases in AADT over 1000 will be negligible in relative and absolute terms.	No
<b>Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1) SPA</b>	The distance and / or connectivity and orientation of the relevant road relative to the BDBC area will ensure that BDBC's contribution to any 'in combination' increases in AADT over 1000 will be negligible in relative and absolute terms.	No
<b>Thursley, Ash, Pirbright and Chobham SAC</b>	The distance and / or connectivity and orientation of the relevant road relative to the BDBC area will ensure that BDBC's contribution to any 'in combination' increases in AADT over 1000 will be negligible in relative and absolute terms.	No
<b>Salisbury Plain SPA</b>	The distance and / or connectivity and orientation of the relevant road relative to the BDBC area will ensure that BDBC's contribution to any 'in combination' increases in AADT over 1000 will be negligible in relative and absolute terms.	No

Site	Notes	Screen in?
Salisbury Plain SAC	The distance and / or connectivity and orientation of the relevant road relative to the BDBC area will ensure that BDBC's contribution to any 'in combination' increases in AADT over 1000 will be negligible in relative and absolute terms.	No
The Solent and Southampton Water SPA	Site units not within 15km / 200m of an A-road.	No
The Solent and Southampton Water Ramsar	Site units not within 15km / 200m of an A-road.	No
Solent Maritime SAC	Site units not within 15km / 200m of an A-road.	No
Solent and Dorset Coast SPA	Site units not within 15km / 200m of an A-road.	No

## WATER RESOURCES

- 4.3.29. 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 Update; 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 Update.
- 4.3.30. It is clear that development supported or managed by the Local Plan Update 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.
- 4.3.31. Potable water in the BDBC area is supplied predominantly by South East Water and Southern Water, with small parts within the Thames Water supply area. The broad characteristics of the supply areas that coincide with BDBC are summarised in **Table 4.4**.

**Table 4-7 - BDBC water resource zones**

Supplier	Water Resource Zone	Supply Summary
Thames Water	Kennet Valley WRZ	Predominantly supplied by groundwater abstractions (60%) with some support from local rivers (notably the River Kennet in Reading). There is minor interconnectivity with both South East Water and Southern Water to the south and east of the zone.



<b>Southern Water</b>	Hampshire Kingsclere WRZ	The northern part of this WRZ is supplied from groundwater, with minor interconnectivity with Thames water.
<b>South East Water</b>	WRZ4 (Bracknell)	The zone is comprised of a mixture of surface water (principally from the River Thames at Bray), groundwater (various boreholes) and bulk transfers (from the River Thames via Affinity Water).

- 4.3.32. 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 BDBC area cannot necessarily be identified or quantified.
- 4.3.33. 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 period<sup>66</sup>. The calculations account for any reductions in abstraction that are required to safeguard European sites<sup>67</sup> 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 sites<sup>68</sup>.
- 4.3.34. The water companies accounted for the growth predicted by BDBC and other LPAs in forecasting for their current (2019) WRMPs. The 2019 WRMPs were subject to HRA, which concluded that they

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<sup>66</sup> 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.

<sup>67</sup> 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.

<sup>68</sup> 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.

would have no adverse effects on any European sites, including those water-resource sensitive sites and features within the Local Plan Update HRA study area.

- 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, assuming that the WRMP and its HRA reach this conclusion. Furthermore, since the WRMPs explicitly account for the growth predicted by the Council and other LPAs<sup>69</sup>, ‘in combination’ effects between the Local Plan and the WRMP are unlikely to occur. Having said that, the Local Plan can obviously help manage demand and promote water efficiency measures through its policy controls.
- 4.3.36. The water companies are currently preparing their next WRMPs (2024). The WRMPs (and their HRAs) will not be finalised prior to the intended consultation on the Pre-submission Local Plan (Reg. 19) in Winter 2024/5; however, draft versions of the WRMP will have been publicly consulted on at that point, and the supply-demand deficit (as it relates to BDBC) should be evident. Based on the previous WRMP it is likely that growth within BDBC will not adversely affect any European sites through water resource pressures, although this will necessarily be reviewed as the Local Plan Update and the 2024 WRMPs are developed.
- 4.3.37. As it is not possible to identify specific effects on specific sites that are directly related to growth supported by the Local Plan Update (due to the integrated nature of the water network), the screening conclusion is not completed on a site-by-site basis.

**Table 4-8 - Summary of European site issues in relation to water resources**

Site	Notes	Screen in?
<b>River Itchen SAC</b>	Site / features considered sensitive to water resource permissions but direct linkages with Local Plan Update cannot be identified; consideration of impacts must therefore reflect the context of the WRMP and regional water resource demands.	Yes (taking into account the WRMPs)
<b>Kennet and Lambourn Floodplain SAC</b>	Site / features considered sensitive to water resource permissions but direct linkages with Local Plan Update cannot be identified; consideration of impacts must therefore reflect the context of the WRMP and regional water resource demands. Note, abstractions from the Kennet do not comprise a significant component of the water supplied to the BDBC area.	Yes (taking into account the WRMPs)

<sup>69</sup> 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).

Site	Notes	Screen in?
<b>Kennet Valley Alderwoods SAC</b>	Site / features considered sensitive to water resource permissions but direct linkages with Local Plan Update cannot be identified; consideration of impacts must therefore reflect the context of the WRMP and regional water resource demands. Note, abstractions from the Kennet do not comprise a significant component of the water supplied to the BDBC area.	Yes (taking into account the WRMPs)
<b>River Lambourn SAC</b>	Site / features considered sensitive to water resource permissions but direct linkages with Local Plan Update cannot be identified; consideration of impacts must therefore reflect the context of the WRMP and regional water resource demands. Note, abstractions from the Lambourn do not comprise a significant component of the water supplied to the BDBC area.	Yes (taking into account the WRMPs)
<b>Thames Basin Heaths SPA</b>	Site / features not considered sensitive to water resource permissions.	No
<b>East Hampshire Hangers SAC</b>	Site / features not considered sensitive to water resource permissions.	No
<b>Shortheath Common SAC</b>	Site / features not considered sensitive to water resource permissions.	No
<b>Wealden Heaths Phase 2 SPA</b>	Site / features not considered sensitive to water resource permissions.	No
<b>Hartslock Wood SAC</b>	Site / features not considered sensitive to water resource permissions.	No
<b>Woolmer Forest SAC</b>	Site / features not considered sensitive to water resource permissions.	No
<b>Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1) SPA</b>	Site / features not considered sensitive to water resource permissions.	No
<b>Thursley, Ash, Pirbright and Chobham SAC</b>	Site / features not considered sensitive to water resource permissions.	No
<b>Salisbury Plain SPA</b>	Site / features not considered sensitive to water resource permissions.	No
<b>Salisbury Plain SAC</b>	Site / features not considered sensitive to water resource permissions.	No

Site	Notes	Screen in?
<b>The Solent and Southampton Water SPA</b>	Site / features considered sensitive to water resource permissions but direct linkages with Local Plan Update cannot be identified; consideration of impacts must therefore reflect the context of the WRMP and regional water resource demands.	Yes (taking into account the WRMPs)
<b>The Solent and Southampton Water Ramsar</b>	Site / features considered sensitive to water resource permissions but direct linkages with Local Plan Update cannot be identified; consideration of impacts must therefore reflect the context of the WRMP and regional water resource demands.	Yes (taking into account the WRMPs)
<b>Solent Maritime SAC</b>	Site / features considered sensitive to water resource permissions but direct linkages with Local Plan Update cannot be identified; consideration of impacts must therefore reflect the context of the WRMP and regional water resource demands.	Yes (taking into account the WRMPs)
<b>Solent and Dorset Coast SPA</b>	Features not considered sensitive to water resource permissions.	No

## WATER QUALITY

- 4.3.38. Approximately 52% of the BDBC area drains to the River Thames, mainly via watercourses in the River Kennet or River Loddon catchments, with ~40% within the River Test catchment and the remainder (~8%) within the River Itchen catchment. The Test and Itchen both ultimately discharge into Southampton Water. It should be noted the European sites associated with the Thames Estuary (Thames Estuary and Marshes SPA and Thames Estuary and Marshes Ramsar) have not 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 LPAs<sup>70</sup>).
- 4.3.39. Most waterbodies and watercourses in the county 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 Update. 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 Update is likely to increase demand on wastewater treatment works and potentially increase non-agricultural run-off.

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<sup>70</sup> 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.

- 4.3.41. Sewerage and wastewater treatment for the BDBC area is provided by Southern Water and Thames Water. Wastewater from the BDBC area is treated at 17 wastewater treatment works (WwTW) located in the Thames and Test catchments; none are located within the Itchen catchment.
- 4.3.42. BDBC updated its Water Cycle Study in May 2022 (AECOM 2022); this concluded that:
- 12 of the 17 WwTWs are likely to receive additional wastewater as a result of housing growth within the BDBC area (seven within the Thames catchment and five within the Test catchment).
  - Four of the 12 WwTWs do not currently have capacity to treat the predicted additional wastewater flows from BDBC and (where applicable) neighbouring authorities (one within the Thames catchment and three within the Test catchment).
- 4.3.43. 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)<sup>71</sup>. 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.
- 4.3.44. With regard to European sites, the principal water quality concerns relate to the River Itchen SAC and the sites associated with Southampton Water, which have been identified as sites where ‘nutrient neutrality’ is required for developments within the catchment. However, it should also be recognised that the water quality effects of the Local Plan Update are ultimately either controlled by existing consents regimes (which must undergo HRA) or have diffuse ‘in 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 4-9 - Summary of European site issues in relation to water quality**

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<sup>71</sup> 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.

Site	Notes	Screen in?
<b>River Itchen SAC</b>	Site / features considered sensitive to eutrophication associated with development pressure, although the exposure of the site to development in BDBC will be small (no allocations within the Itchen catchment; catchment within the BDBC area largely rural; none of the WwTWs within the BDBC area discharge to this catchment, although a small number of properties may be served by WwTWs outside the BDBC area that discharge to the Itchen).	Yes
<b>Kennet and Lambourn Floodplain SAC</b>	Not exposed to water quality changes associated with the plan; site units are hydrologically upstream of the BDBC area (confluence of River Enbourne with the Kennet is downstream of this site).	No
<b>Kennet Valley Alderwoods SAC</b>	Not exposed to water quality changes associated with the plan; site units are hydrologically upstream of the BDBC area (confluence of River Enbourne with the Kennet is downstream of this site).	No
<b>River Lambourn SAC</b>	Not exposed to water quality changes associated with the plan; site units are hydrologically upstream of the BDBC area (confluence of River Enbourne with the Kennet is downstream of this site).	No
<b>Thames Basin Heaths SPA</b>	Not exposed to water quality changes associated with the plan.	No
<b>East Hampshire Hangers SAC</b>	Not exposed to water quality changes associated with the plan.	No
<b>Shortheath Common SAC</b>	Not exposed to water quality changes associated with the plan.	No
<b>Wealden Heaths Phase 2 SPA</b>	Not exposed to water quality changes associated with the plan.	No
<b>Hartslock Wood SAC</b>	Not exposed to water quality changes associated with the plan.	No
<b>Woolmer Forest SAC</b>	Not exposed to water quality changes associated with the plan.	No
<b>Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1) SPA</b>	Not exposed to water quality changes associated with the plan.	No
<b>Thursley, Ash, Pirbright and Chobham SAC</b>	Not exposed to water quality changes associated with the plan.	No
<b>Salisbury Plain SPA</b>	Not exposed to water quality changes associated with the plan.	No

Site	Notes	Screen in?
Salisbury Plain SAC	Not exposed to water quality changes associated with the plan.	No
The Solent and Southampton Water SPA	Site is downstream receptor for which 'nutrient neutrality' has been advocated by NE.	Yes
The Solent and Southampton Water Ramsar	Site is downstream receptor for which 'nutrient neutrality' has been advocated by NE.	Yes
Solent Maritime SAC	Site is downstream receptor for which 'nutrient neutrality' has been advocated by NE.	Yes
Solent and Dorset Coast SPA	Site is downstream receptor for which 'nutrient neutrality' has been advocated by NE.	Yes

## FLOODING / WATER LEVEL MANAGEMENT

- 4.3.45. 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.
- 4.3.46. Development supported by the Local Plan Update 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 mitigated or reduced by the use of SuDS and by increasing the area of permeable surfaces (both natural and artificial) within developed areas. However, no European sites are considered to be exposed to potential changes in flood risk that may result from the Local Plan Update.

## EFFECTS ON FUNCTIONAL HABITATS OR SPECIES AWAY FROM EUROPEAN SITES

- 4.3.47. 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 Update. 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.

- 4.3.48. With regard to the European sites within the study area, this is only a potential issue for the **River Itchen SAC**, which supports species that may utilise non-designated sections of the Candover Stream (notably, bullhead, otter and white-clawed crayfish; Atlantic salmon are not thought to make significant use of the upper reaches of the Candover Stream). However the effects of this can be addressed through the water quality assessments for this SAC (i.e. if the plan has no adverse effects on water quality then no other pathways are likely to be realised).

## 4.4 SCREENING SUMMARY

- 4.4.1. It is anticipated (based on the available data and the plan as currently conceived) that a formal screening would conclude that there will be either no effects or no significant effects alone or in combination on the interest features of the following sites:

- Kennet and Lambourn Floodplain SAC
- Kennet Valley Alderwoods SAC
- River Lambourn SAC
- East Hampshire Hangers SAC
- Shortheath Common SAC
- Wealden Heaths Phase 2 SPA
- Hartslock Wood SAC
- Woolmer Forest SAC
- Thursley, Hankley and Frensham Commons (Wealden Heaths Phase 1) SPA
- Thursley, Ash, Pirbright and Chobham SAC
- Salisbury Plain SPA
- Salisbury Plain SAC

- 4.4.2. The interest features of the following European sites may be exposed and sensitive to effects from the Local Plan Update 'in combination' with other plans and programmes:

- River Itchen SAC (water quality and nutrient neutrality);
- Solent and Southampton Water SPA (water quality and nutrient neutrality);
- Solent and Southampton Water Ramsar (water quality and nutrient neutrality);
- Solent Maritime SAC (water quality and nutrient neutrality);
- Solent and Dorset Coast SPA (water quality and nutrient neutrality);
- Thames Basin Heaths SPA (visitor pressure and air quality).

- 4.4.3. These potential effects are examined through more detailed 'appropriate assessments' (Sections 5 – 6) which provide indicative conclusions and identify potential data gaps (based on the available data and the plan as currently drafted).



## 5 APPROPRIATE ASSESSMENT: THAMES BASIN HEATHS SPA

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### 5.1 OVERVIEW

- 5.1.1. The screening has indicated that the interest features of Thames Basin Heaths SPA may be vulnerable (i.e. exposed and sensitive) to environmental changes associated with the implementation of the Local Plan, principally in relation to **visitor pressure** and **air quality** affecting the site itself. The qualifying features will not be exposed to development-related effects associated with the Local Plan Update when away from the site.
- 5.1.2. These changes are assessed in the following sections; this includes consideration of effects that may be associated with individual allocations or specific policies as well as the broader cumulative and ‘in combination’ effects that may arise as a result of the overall quantum of development both within the BDBC area and regionally. Other plans have been considered for their potential ‘in combination’ effects (see **Appendix C**) and this assessment is referred to as necessary.

### 5.2 VISITOR PRESSURE

#### SUMMARY OF PATHWAY

- 5.2.1. 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.
- 5.2.2. 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.
- 5.2.3. With regard to Thames Basin Heaths SPA, parts of the site are subject to high levels of recreational use and dog walkers make up a large proportion of visitors. This is thought to be affecting the distribution, overall numbers and breeding success of the qualifying features (all ground-nesting birds).

#### BASELINE

- 5.2.4. Visitor access patterns at Thames Basin Heaths SPA were investigated by Natural England in 2005 (NE 2005) and have been subject to a number of studies since then (e.g. NE 2014).
- 5.2.5. Some of these studies were designed to establish a ‘zone of influence’ for the site (i.e. the distance within which a certain proportion of visitors originated) which has been subsequently interpreted as the distance within which new housing developments are considered likely to have a significant effect on the site. In summary, any net increase in residential dwellings within 5km of the SPA is considered likely to have a significant adverse effect on the SPA either alone or in combination with other plans, with larger developments (over 50 or more dwellings) within 5 – 7km considered on a case-by-case basis.

- 5.2.6. All of the component SSSIs within 5km of the BDBC area (Bramshill SSSI, Hazeley Heath SSSI, and Castle Bottom to Yateley and Hawley Commons SSSI) are considered to be affected by visitor pressure.

### **INCORPORATED MITIGATION**

- 5.2.7. The Thames Basin Heaths Joint Strategic Partnership Board (JSPB) was established in 2009 to agree a strategy for delivering housing development whilst ensuring the long-term protection of the SPA and compliance with the Habitats Regulations. The JSPB developed the Thames Basin Heaths Special Protection Area Delivery Framework<sup>72</sup> which was endorsed by NE and which requires provision of Suitable Alternative Natural Greenspace (SANG) for all new developments within 5km of the SPA (provided either by the developer directly or through developer contributions), with the SANG requirements for larger developments between 5 – 7km from the SPA considered on a case by case basis.
- 5.2.8. **Policy ENV3** reflects the Thames Basin Heaths Special Protection Area Delivery Framework and states that *“For all net additional residential development within a 5km straight line distance of the SPA, relevant mitigation measures will be required in line with the Thames Basin Heaths Delivery Framework. This will include the provision of, or contributions towards, Suitable Alternative Natural Green Space (SANGS), and contributions towards Strategic Access Management and Monitoring (SAMM). Applications for large scale residential development (over 50 new dwellings) within 5-7km of the SPA will be assessed individually and, if needed, bespoke mitigation will be required in accordance with Natural England guidance”*.

### **ASSESSMENT**

- 5.2.9. The mitigation set out in Policy ENV3 reflects the best data currently available and is considered to be a fundamentally scalable approach (i.e. sufficient to mitigate proposed housing figures that may be higher than those proposed when the Delivery Framework was developed). Furthermore, the Delivery Framework is regularly reviewed and so the mitigation requirements for housing development in the BDBC area will always be consistent with the contemporary evidence base and requirements of the Framework.
- 5.2.10. On this basis, it can be concluded that the overall housing growth associated with the Local Plan and the individual allocations will have no adverse effects on the integrity of the sites due to increased recreational pressure, alone or in combination, due to the mitigation provided by Policy ENV3.

## **5.3 AIR QUALITY**

### **SUMMARY OF PATHWAY**

- 5.3.1. 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

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<sup>72</sup> Available at: <https://www.woking2027.info/allocations/sadpdexam/spadelivery.pdf>

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).

- 5.3.2. 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 1000.
- 5.3.3. 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 roads<sup>73</sup> within 200m of a European site, with case law<sup>74</sup> indicating that changes in AADT on particular roads should be determined 'in combination' with other plans and projects.
- 5.3.4. An initial review of likely AADT increases associated with the Local Plan has indicated that several A-roads roads within 200m of the **Thames Basin Heaths SPA** may have AADT increases over 1000 'in combination' with other plans, to which the Local Plan Update will contribute (see **Table 4.2**). Other minor roads within 200m of the SPA are not explicitly considered as any increases in traffic volumes will be substantially less than the 1000 AADT threshold or the Local Plan Update is unlikely to contribute significantly due to the distance and position of the roads on the network relative to the BDBC area.

## BASELINE SUMMARY

### Traffic Data

- 5.3.5. BDBC has commissioned a transport assessment for the Local Plan Update evidence base, which is currently being completed. This utilises existing models of the Basingstoke area but does not extend fully to 15km from the BDBC boundary in all directions (as it reflects the principal transport corridors and routes). This model was used to derive estimates of AADT increases for sections of road within 200m of a European site, and indicated that the Local Plan Update is likely to contribute to AADT increases of >1000 'in combination' with other local plans on the following roads near the Thames Basin Heaths SPA:
  - A30 / A327 west of Blackwater (adjacent to Castle Bottom to Yateley and Hawley Commons SSSI);
  - A30 / A327 west of Blackwater (adjacent to Bramshill SSSI);

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<sup>73</sup> 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).

<sup>74</sup> Wealden District Council v. Secretary of State for Communities and Local Government, Lewes District Council and South Downs National Park Authority [2017] EWHC 351.

- A3095 at Sandhurst (adjacent to Sandhurst to Owlsmoor Bogs and Heaths SSSI and Broadmoor to Bagshot Woods and Heaths SSSI);
- A323 at Fleet (adjacent to Bourley and Long Valley SSSI and Eelmoor Marsh SSSI);
- A325 at Aldershot (adjacent to Heath Brow SSSI);
- A287 at Hale (adjacent to Heath Brow SSSI).

5.3.6. In summary, the predicted contribution of the BDBC Local Plan to AADT increases in these locations is less than 10%.

5.3.7. Recent traffic and air quality modelling data completed for Hart District Council (HDC) (AECOM 2018) has also been used to provide contextual information, since this area covers the key locations noted above.

#### Interest feature sensitivity and exposure

5.3.8. The qualifying features of the SPA are not directly sensitive to air quality changes under normal scenarios; rather, any sensitivity is related to changes that might occur in the supporting habitats, principally in relation to N-deposition and hence eutrophication from traffic sources (**see Section 4**).

5.3.9. As noted above (see Section 3.3), two broad supporting habitats at the site are considered important for the SPA species; these are:

- open dry heath and scrub; and
- coniferous woodland.

5.3.10. Information on the air quality baseline for the site can be obtained from the Air Pollution Information Service (APIS) in the absence of site-specific monitoring data. The APIS critical load and critical level data for the site habitats are provided in **Tables 5.3 and 5.4**, where available, although it should be noted that APIS uses proxies for some habitats and does not always provide critical loads for habitats where available-N is not a limiting factor (e.g. most lowland aquatic systems).

**Table 5-1 - Summary of N-deposition and critical loads for Thames Basin Heaths SPA, based on APIS**

SPA Habitat	APIS Broad Habitat Class	Critical Loads (kg N/ha/yr)	Current N-deposition (kg N/ha/yr)		
			Max	Min	Mean
Open heath and scrub	Dry heath / dwarf shrub heath	10-20	17.9	13.3	15.8
Coniferous woodland	Coniferous woodland	5-15	31.3	24	27.7

**Table 5-2 - Summary of NOx concentrations and critical levels for Thames Basin Heaths SPA, based on APIS**

SPA / Ramsar Habitat	APIS Broad Habitat Class	Critical Levels (µg/m3)	Current NOx concentration (µg/m3)		
			Max	Min	Mean
Open heath and scrub	Dry heath / dwarf shrub heath	30 (annual); 75 (24hr)	30.51	11.73	14.79
Coniferous woodland	Coniferous woodland	30 (annual); 75 (24hr)	30.51	11.73	14.79

- 5.3.11. With regard to exposure, all of these features occur within 200m of an A-road. However, it should be noted that concentrations and deposition of traffic-generated pollutants do not decline linearly with distance from the road; typically, air pollution levels fall sharply within the first 20 – 30m before declining more slowly with increased distance. Concentrations and deposition will also be affected by physical parameters, such as local topography or vegetation structure.
- 5.3.12. It should also 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 predictions<sup>75</sup>; incorporating allowances for expected background air quality improvements into any assessments is in accordance with IAQM guidance (IAQM 2020)<sup>76</sup>.

### INCORPORATED MITIGATION

- 5.3.13. 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 Local Plan, particularly via the following policies:

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<sup>75</sup> 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>

<sup>76</sup> 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*”

- Policy CLC1 (A carbon neutral climate adapted Borough); promotes (inter alia) significant modal shifts by discouraging the use of the private car and minimising emissions from transport by ensuring the design, layout and location of new development minimises the need to travel.
- Policy SPS3 (Sites Allocated for Residential/Mixed Use Development); seeks to minimise emissions from transport by ensuring the design, layout and location of new development minimises the need to travel.
- Policy COM2 (Transport); promotes significant modal shifts by discouraging the use of the private car and encouraging emission-free forms of transport.

5.3.14. In addition, Policy ENV14 (Pollution and Air Quality) provides safeguards in relation to air quality and developments, including in relation to cumulative effects.

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

## ASSESSMENT

5.3.16. The EA-accepted threshold for 'significant effects' on habitats to be possible is an increase of >1% of the minimum critical load<sup>77</sup>; in this instance, for 'dry heath' this would be approximately 0.1 kg/ha/yr, and approximately 0.05 kg/ha/yr for 'coniferous woodland'. Although it is not simple to apply 'rule of thumb' estimates to relationships between traffic volumes and N-deposition (as this is influenced by a number of factors), it is worth noting that the DMRB guidance regarding air quality thresholds is based on the assumption that 1,000 extra vehicles is equivalent to ~0.01 kg N/ha/yr (this is obviously a coarse figure and there are other factors that come into play such as the emissions factors used for opening year/ wind direction / number of HGVs / speed etc.). Furthermore, there are numerous published traffic and air quality modelling studies that provide proxy data or context; for example:

- Recent air quality modelling by Wood of a new link road at an MoD establishment in the UK found that an AADT increase of ~7,000 increased nitrogen deposition by 0.21 kg N/ha/yr at the worst receptor point (at the immediate kerbside), and that by 25m from the road the increase in N-deposition was zero.

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<sup>77</sup> The 1% threshold is used as it is accepted that levels below this are difficult to measure and not typically distinguishable from background fluctuations. An exceedance of 1% of the critical load should be seen as a 'starting point' for assessing the significance of any effects; the Institute of Air Quality Management (IAQM) position statement on air quality effects notes that "*it is the position of the IAQM that the use of a criterion of 1% of an assessment level in the context of habitats should be used only to screen out impacts that will have an insignificant effect. It should not be used as a threshold above which damage is implied and is therefore used to conclude that a significant effect is likely.*"

- Traffic and air quality studies for the B5036 undertaken in connection with the Derbyshire Dales (DDDC) Local Plan<sup>78</sup> determined that nitrogen deposition would increase by ~0.003 kg N/ha/yr as a result of an estimated increase in AADT of 1,020.
- 5.3.17. At the time of writing bespoke traffic and air quality modelling for the roads adjacent to the SPA has not been undertaken for the Local Plan Update, and so conclusions on the impacts of the Local Plan Update cannot yet be made.
- 5.3.18. However, the relevant sections of road have been subject to recent modelling in association with other local plans which (by definition) would include ‘in combination’ assessments that would reflect (if not precisely) anticipated growth within the BDBC area, and these assessments can provide an indication of the likely effects of the Local Plan Update.
- 5.3.19. For example, air quality modelling undertaken for the Hart Local Plan (AECOM 2018) included locations that coincide with (or are reasonably close) to the following locations identified in the screening assessment:
- A30 / A327 west of Blackwater (adjacent to Castle Bottom to Yateley and Hawley Commons SSSI, and Bramshill SSSI);
  - A323 at Fleet (adjacent to Bourley and Long Valley SSSI and Eelmoor Marsh SSSI);
- 5.3.20. With regard to the A3095 at Sandhurst (adjacent to Sandhurst to Owlsmoor Bogs and Heaths SSSI and Broadmoor to Bagshot Woods and Heaths SSSI) and the A325 at Aldershot (adjacent to Heath Brow SSSI), the locations are further from the BDBC area and less directly accessible by road, and traffic from BDBC at these locations would almost certainly have passed one of the locations noted above beforehand; any effects here associated with growth in the Local Plan Update will therefore be less than for the locations noted above. The A287 at Hale (adjacent to Heath Brow SSSI) was not identified in AECOM (2018) although locations close to this were.
- 5.3.21. It should be noted that all of these locations are within the HDC area. In summary, for all transects modelled by AECOM (2018) ‘in combination’ NO<sub>x</sub> concentrations and nitrogen deposition rates were predicted to improve substantially over the plan period notwithstanding increased traffic volumes due to the expected reductions in vehicle emissions as the fleet composition changes. The growth associated with the Hart Local Plan (in combination with other local plans) was predicted to have a negligible (‘not significant’) effect on the predicted improvement at the modelled locations.
- 5.3.22. Whilst these data must be used cautiously, this evidence (and from similar assessments in other local plans) suggests that adverse effects on integrity will not occur (although this can only be confirmed with additional investigation). However, it should also be recognised that the minimum critical load for the SPA habitats is still likely to be exceeded in spite of the predicted improvement in air quality, and that this is contrary to the conservation objectives for the site.

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<sup>78</sup> Clearlead (2016). Derbyshire Dales Local Plan – Submission Habitats Regulations Report. Report for Derbyshire Dales District Council. Clearlead, Devon)



5.3.23. NE recognises the role that LPAs can play in reducing air pollution, particularly in relation to behavioural measures, shifts in transport choices, and traffic management. The mitigating policies included in the Local Plan Update reflect these aspects, and are consistent with policies included in other local plans for LPAs near this SPA that have allowed a conclusion of ‘no adverse effects’ to be reached.



## 6 APPROPRIATE ASSESSMENT: RIVER ITCHEN SAC AND SOUTHAMPTON WATER SITES

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### 6.1 OVERVIEW

- 6.1.1. The screening has indicated that the interest features of the **River Itchen SAC** and the Southampton Water sites (**Solent and Southampton Water SPA**, **Solent and Southampton Water Ramsar**, **Solent Maritime SAC**, and **Solent and Dorset Coast SPA**) may be vulnerable (i.e. exposed and sensitive) to environmental changes associated with the implementation of the Local Plan in relation to water quality, specifically with regard to the need for ‘**nutrient neutrality**’.

### 6.2 WATER QUALITY AND NUTRIENT NEUTRALITY

#### SUMMARY OF PATHWAY

- 6.2.1. 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). The principal concern in relation to the Local Plan is increased nutrient discharges from wastewater.
- 6.2.2. NE has identified freshwater and estuarine European sites that it considers to be in unfavourable condition due to excessive nutrients<sup>79</sup>; these include the River Itchen SAC (N and P) and the European sites within the Solent (N only) of which only those associated with Southampton Water are relevant to the Local Plan Update (there are no hydrological linkages to other sites in the Solent, such as Portsmouth Harbour SPA). As noted, approximately 48% of the BDBC area is within the catchments of the River Test or River Itchen, both of which ultimately discharge into Southampton Water.
- 6.2.3. 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 Officers, there remains some uncertainty over the future approach to this aspect, and 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 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).

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<sup>79</sup> 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.

## BASELINE

### River Itchen SAC

- 6.2.4. The SSSI underpinning the SAC is predominantly in 'favourable' or 'unfavourable recovering' condition (~66% based on NE data<sup>80</sup>), with the remaining units being in 'unfavourable no change' or 'unfavourable declining' condition principally due to local land management issues.
- 6.2.5. Approximately 8% of the BDBC area is within the River Itchen catchment, although it should be noted that there are no substantial settlements within this area. In addition, the water supply to the Itchen from this area is predominantly from groundwater rather than surface water, and the surface water tributaries of the Itchen within the BDBC area are very minor watercourses.
- 6.2.6. None of the WWTWs within the BDBC area discharge to the Itchen catchment, based on the BDBC Water Cycle Study (AECOM 2022); the closest WWTW (North Waltham) discharges to ground (not to a watercourse) and is considered to be within the River Test ground- and surface-water catchments. However, the Water Cycle Study recognises that there may be a small number of properties within the BDBC area and the Itchen catchment that may be served by private package treatment plants, which are likely to discharge to ground. In broad terms, therefore, the exposure of the Itchen to development within the BDBC area will be small.

### Southampton Water European Sites

- 6.2.7. The SSSIs underpinning the terrestrial components of the SPAs and SAC that are associated with Southampton Water (Solent and Southampton Water SPA / Ramsar, Solent Maritime SAC, Solent and Dorset Coast SPA) are almost entirely in 'favourable' or 'unfavourable recovering' condition. The SSSI condition assessments indicate that most of the units that are in 'unfavourable no change' condition have this status due to local land management issues (although NE's advice on nutrient neutrality identifies the sites associated with the Solent as being "*in unfavourable condition due to excessive nutrients*").
- 6.2.8. Approximately 40% of the BDBC area is within the River Test catchment, with the principal settlements within the catchment being Whitchurch, Overton, and Oakley. The BDBC Water Cycle Study identifies five WWTWs that treat sewerage from the BDBC area that discharge to the Test catchment:
- Barton Stacey (discharges to the River Dever);
  - Oakley (discharges to ground (River Test chalk));
  - Overton (discharges to ground (River Test chalk));
  - North Waltham (discharges to ground (River Test chalk));
  - Whitchurch (discharges to ground (River Test chalk)).

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<sup>80</sup> [River Itchen SSSI Condition Summary](#)

## INCORPORATED MITIGATION

- 6.2.9. The provision of wastewater treatment capacity in the Itchen and Test catchments is a statutory obligation on Southern Water, and it is required to comply with all relevant discharge consents. The Local Plan Update 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 Local Plan Update therefore adopts a policy-led mitigation approach to this aspect, to ensure that this potential issue is appropriately considered at the site level when developments are brought forward.
- 6.2.10. The draft Local Plan Update therefore includes policies that are designed to prevent or moderate impacts on receptors due to changes in water quality, and which reflect NE guidance; these include the following:
- ENV4 (Nutrient Neutrality): This requires that “New dwellings and development resulting in a net increase in population (including student accommodation, and tourist attractions and accommodation) served by a wastewater system that will discharge into the River Test and Itchen catchment will be required to demonstrate nutrient neutrality through the submission of a nutrient budget(s) in order to ensure that there is no adverse impact on the integrity of the [River Itchen SAC or the Southampton Water sites]”.
  - ENV9 (Water Quality): This requires that “potentially contaminating development proposals on principal aquifers or within Source Protection Zones will need to demonstrate that groundwater and surface water is adequately protected to prevent a deterioration of water quality and pollution of the water source”. In addition, the policy requires that “Where new water supply or wastewater infrastructure is required or proposed in support of new development, the development will be phased alongside the provision of the infrastructure to ensure... Compliance with the Habitats Regulations”.
  - SPS5.5 (Popham Garden Village): This requires that this allocation “Demonstrate, via a nutrient neutrality mitigation strategy, that nutrient neutrality can be achieved in perpetuity in order to protect the Solent nature conservation sites. This should be via on-site mitigation measures unless it can be robustly demonstrated that this is not achievable, in which case off-site mitigation would be required”.
  - SPS5.10 (Overton Mill): This requires that this allocation “Demonstrate, via a nutrient neutrality mitigation strategy, that nutrient neutrality can be achieved in perpetuity in order to protect the Solent nature conservation sites. This should be via on-site mitigation measures unless it can be robustly demonstrated that this is not achievable, in which case off-site mitigation would be required”.

## ASSESSMENT

### Predicted Housing Growth and WwTW Headroom

- 6.2.11. Currently there are no allocations within the **River Itchen SAC** catchment, and none of the WwTWs likely to receive wastewater from allocations promoted by the Local Plan Update (see above and **Table 6.1**) discharge to the Itchen. Development within the Itchen catchment is therefore likely to be small-scale (including a neighbourhood plan housing requirement of 10 dwellings in Preston Candover) or windfall development, for which meeting the requirements of Policy ENV4 may be challenging (particularly as on site mitigation may not be available for space reasons). The closest

WwTW to the Itchen catchment (North Waltham) appears likely to have some available headroom, although there is obviously some uncertainty in relation to this aspect that cannot necessarily be determined at this stage (notably Southern Water’s intended approach to sewerage provision in this area, or whether development would be connected to mains sewerage at all). However, it should also be noted that NE recognises<sup>81</sup> that some discharges to ground from small-scale septic tank systems or package treatment plants may be ‘insignificant’ (alone and in combination) in relation to phosphorus (this is because most of the discharged phosphorus is naturally removed from the effluent as it percolates through the soil body). Furthermore, some new package treatment plants (PTPs) are efficient at P removal.

6.2.12. With regard to the **Southampton Water European sites**, **Table 6.1** provides an estimate of the number of homes expected to come forward during the plan period in the current catchments of the WwTWs that are within the **Test** (hence Southampton Water) catchment (i.e. those which would likely need to meet the nutrient neutrality requirements). Note, this does not necessarily mean that wastewater from these developments will be treated at these locations<sup>82</sup>, since this is an operational decision for Southern Water, but indicates the likely additional housing that may impact the Test. The numbers in **Table 6.1** include allocations proposed by the draft Local Plan, outstanding allocations in Neighbourhood Plans, the proposed Neighbourhood Plan figure, and a windfall allowance based on historical windfall provision (2011-2021).

**Table 6-1 – Housing growth within catchments of WwTWs that discharge to the Test**

<b>WwTW</b>	<b>Proposed NP Figure</b>	<b>Proposed LP Allocations</b>	<b>Windfall Allowance</b>	<b>Total</b>
<b>Barton Stacey</b>	10		57	67
<b>Oakley</b>	0		74	74
<b>Overton</b>	0	340	29	369
<b>North Waltham</b>	20		30	80
<b>Whitchurch</b>	220	1400 (excl. Popham)	69	3404

<sup>81</sup> Letter to Chief Planning Officers, March 2022.

<sup>82</sup> For example, the proposed Manydown allocation is partly within the Test catchment but wastewater from this development will be treated at Basingstoke WwTW (hence discharging to the Thames catchment).

- 6.2.13. The Water Cycle study (WCS) considers the likely headroom of these WwTWs under various planning scenarios (see **Tables 4-3 and 4-4 of the WCS<sup>83</sup>**).
- 6.2.14. With regard to the scenarios, the Water Cycle study notes that *“Since the final housing target for the borough is not yet finalised, BDBC have outlined two different growth scenarios to be tested within the WCS (excluding the existing commitments which will be the same for both scenarios). Growth scenario 2 is a potentially maximum growth scenario for different areas and settlements which are for testing purposes only and to give a worst-case position from a WCS perspective. The scenarios provided reflect sites that have been promoted to the council, potential overall housing requirements, and previous testing levels from sustainability appraisal related work. Lower levels of growth have also been tested in growth scenario 1 to consider the impacts of potentially more realistic growth levels, depending on the outcomes of other evidence base studies”*.
- 6.2.15. The headroom predicted for the WwTWs noted in Table 6.1 by the WCS under the two planning scenarios is summarised in **Table 6.2**.

**Table 6-2 - Approximate headroom in Test catchment WwTWs based on growth scenarios (after AECOM 2022).**

WwTW	No. of housing units		~Headroom after 2039 (no. housing units)	
	Scenario 1	Scenario 2	Scenario 1	Scenario 2
<b>Barton Stacey</b>	200	200	-153	-492
<b>Oakley</b>	590	880	-132	-494
<b>Overton</b>	390	630	23	-277
<b>North Waltham</b>	134	134	256	256
<b>Whitchurch</b>	2881	3871	-1765	-3002

- 6.2.16. It should be noted that the WCS scenarios pre-dated the Local Plan Update and so were necessarily precautionary for some catchments (e.g. anticipated growth in Barton Stacey and Oakley under the Local Plan Update is substantially lower than under WCS Scenarios 1 or 2). Although the relationship between headroom and housing numbers is not linear (and factors other than housing

<sup>83</sup> <https://www.basingstoke.gov.uk/content/doclib/3509.pdf>

numbers also affect predicted headroom), 2039 headroom is only likely to be exceeded for Overton and Whitchurch.

### Assessment – River Itchen SAC / Southampton Water European Sites

6.2.17. The following is relevant to the assessment for the **Southampton Water European sites**:

- The **Southampton Water sites** are considered primarily vulnerable to available N rather than available P; this has some relevance as the mitigation requirements for N are generally more achievable through relatively simple land-use change measures (i.e. removing land proportionately from cultivation) than they are for P (the equivalent land requirements for P are substantially greater). Furthermore, Natural England have advised that in principle, mitigation for N may be acceptable across the identified river catchment, therefore increasing the opportunities for strategic mitigation solutions that can be used for development in the borough.
- There are two proposed housing allocations within the River Test:
  - The largest is Popham Garden Village allocation (3,000 homes), for which the draft policy (Policy SP3.5) requires the delivery of on site nutrient neutrality mitigation that the site promoter has indicated is achievable; consequently the requirements for strategic or alternative mitigation for the additional housing will be relatively modest.
  - Overton Mill has until recently comprised an active paper mill and associated wastewater treatment works. This use has now ceased, and the site is proposed for redevelopment for approximately 340 dwellings. As it is a brownfield site, achieving nutrient neutrality through on-site mitigation is likely to be difficult therefore an off-site solution, or use of strategic mitigation may be necessary.

6.2.18. The first five years of nutrient budget is most important in identifying whether there is sufficient mitigation capacity available to ensure deliverability of the Local Plan as every Local Plan is reviewed every five years in any event. The annual nutrient budget (N) for the first five years of the Plan is estimated at 51.26 kg/TN/yr, therefore there would need to be sufficient mitigation delivered over the first five years of the plan period to offset this figure. The mitigation would also need to be provided in a timely manner i.e. for each development site the mitigation would need to be secure and in place before the development could be occupied. It should be noted that those parts of the borough within the Test and Itchen catchment comprise smaller market towns and rural areas therefore the housing sites around Basingstoke are not affected by the requirement to achieve nutrient neutrality.

6.2.19. Furthermore, given the character of the affected area, most sites expected to come forward in this area are expected to be greenfield and usually agricultural – which reduces the nutrient surplus and can make mitigation easier to achieve onsite. However, given that, other than the two Local Plan Update allocations, the remaining development will be windfall or coming forward through neighbourhood planning, the current land use is unknown and therefore this has not been taken into account in the estimation of projected nutrient budget (in line with a precautionary approach).

6.2.20. With regards to Phosphorus (more relevant to the **River Itchen SAC**), the annual nutrient budget (P) for the first five years of the Plan is estimated at 2 kg/TP/yr based on windfall and a housing figure to be delivered through neighbourhood planning (10 dwellings).

- 6.2.21. While mitigation to offset the identified nutrient budget (N and P) does not need to be secured at this stage (provided it is identified before the affected sites are given consent), there does need to be some confidence that sufficient mitigation is likely to be available.
- 6.2.22. The requirement for nutrient neutrality has now been in place since 2019, and other than an initial backlog in the first few years, planning consents have since been granted for new development in the Test and Itchen catchment, particularly for those needing to demonstrate N neutrality (Basingstoke and Deane Borough Council AMR 2022 and 2023). This has been through a number of means including:
- the change of use of agricultural land to a land with less intensive nutrient inputs (either onsite or offsite on neighbouring or nearby land);
  - the provision of efficient package treatment plants; and
  - the purchase of nitrogen 'credits' from a number of strategic mitigation schemes across the catchment.
- 6.2.23. In particular, the council has signed two overarching legal agreements with providers of offset mitigation schemes to help enable developments in the borough to address any nutrient surplus through credit purchase.
- 6.2.24. The council has been working with the Partnership for South Hampshire (PfSH) through the water quality working group and liaises with their dedicated Strategic Environmental Planning Officer Team to specifically address this issue. Their work includes monitoring the demand and supply of nutrient mitigation across the catchment and has resulted in some of the strategic mitigation schemes coming forward. There is regular reporting to the PfSH joint committee on the situation regarding nutrient mitigation across the catchment- in the last report in September 2023, whilst there was then availability of 3351 kg/TN/Yr of strategic mitigation in the Test and Itchen catchment, the current supply is expected to be exhausted in the Spring/Summer of 2024.
- 6.2.25. There was some uncertainty created by the government's suggestion in summer 2023 that the requirement for nutrient neutrality should be removed (proposed Levelling Up and Regeneration Bill (LURB) amendment that was subsequently defeated) hence there has been some stalling in supply, but this work is ongoing and it is expected that further strategic mitigation schemes will come forward across the catchment.
- 6.2.26. There is also the wider Natural England mitigation scheme which could provide mitigation in the future, as well as the Solent Catchment market which is a trading platform being developed by Entrade<sup>84</sup>. At this stage, there are no strategic mitigation schemes which offer suitable Phosphorus mitigation for development in the borough.

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<sup>84</sup> Solent Catchment Market: <https://www.solentnutrientmarket.org.uk/>

- 6.2.27. It is expected that the relevant wastewater treatment works in the borough will benefit from the proposed upgrades anticipated to take place through the LURB in 2030. Whilst this will not impact on nutrient budgets and mitigation in the short term (first five years of the plan), it will reduce the surplus from 2030.
- 6.2.28. As set out above, policy ENV4 ensures that any new development within the Test and Itchen catchment will have to demonstrate nutrient neutrality and that this is secured in perpetuity to ensure that there will be no significant effect on the proposed sites. It has also been demonstrated that over the last few years, nutrient neutrality can be achieved through a number of means as set out in the draft policy, including on larger and smaller sites both brownfield and greenfield. The currently available evidence therefore suggests that the quantum of development proposed within the Test and Itchen catchment (which is a relatively small proportion of the overall housing supply) is deliverable and achievable without adverse effects on the protected sites.
- 6.2.29. From an HRA perspective the incorporated mitigation is appropriate for effects that cannot be precisely determined at the Local Plan level, since it prevents adverse effects occurring by requiring that developers demonstrate nutrient neutrality (either through specific mitigation measures, or by demonstrating (for some small-scale schemes) that NE's conditions for discharging to ground can be met). Currently, therefore, it can be stated that the incorporated mitigation is sufficient to prevent adverse effects occurring on the **River Itchen SAC** or the **Southampton Water sites (Solent and Southampton Water SPA / Ramsar, Solent Maritime SAC, Solent and Dorset Coast SPA)** based on the development anticipated within the catchment.



## 7 SUMMARY AND CONCLUSIONS

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### 7.1 SUMMARY

- 7.1.1. Basingstoke and Deane Borough Council (BDBC) is currently reviewing its Local Plan. 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 Update and is therefore the Competent Authority for an HRA.
- 7.1.2. This ‘Regulation 18 HRA Report’ is intended to accompany the Regulation 18 consultation documentation and provide guidance on the HRA-related issues that will be relevant to both the plan development and the HRA; it provides an initial assessment of the Local Plan Update based on the best currently available data, but as the Local Plan Update is still under development it is not intended to be, or replicate, a formal ‘HRA screening’; nor is it a ‘draft HRA’ or similar. It will ultimately (with additional data and assessment) form part of the ‘draft HRA’ that is submitted alongside the Regulation 19 version of the Local Plan Update but is primarily intended to assist BDBC as it develops its plan and provide an opportunity for consultees to comment on HRA-related issues. Additional data collection is likely to be required prior to submission of the Local Plan Update for examination.
- 7.1.3. The HRA completed to date indicates that the vast majority of the draft Local Plan Update 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).
- 7.1.4. An initial ‘screening’ exercise (recognising that ‘screening’ conclusions can only be formally reached for the final plan) indicated that the interest features of the following European sites may be exposed and sensitive to effects from the Local Plan Update ‘in combination’ with other plans and programmes:
- River Itchen SAC (water quality and nutrient neutrality);
  - Solent and Southampton Water SPA (water quality and nutrient neutrality);
  - Solent and Southampton Water Ramsar (water quality and nutrient neutrality);
  - Solent Maritime SAC (water quality and nutrient neutrality);
  - Solent and Dorset Coast SPA (water quality and nutrient neutrality);
  - Thames Basin Heaths SPA (visitor pressure and air quality).
- 7.1.5. Other sites within the study scope (sites within 15km and / or downstream from the BDBC area) are unlikely to be exposed to potentially significant effects as a result of the plan.

7.1.6. The sites and aspects noted above have therefore 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)).

7.1.7. In summary:

- **Water quality:** BDBC is committed to the nutrient neutrality requirements outlined by NE and have included mitigating policies to ensure that developments are ‘nutrient neutral’ to ensure that adverse effects on the River Itchen SAC and the sites associated with Southampton Water do not occur; these policy protections will be effective, although some additional data and calculations may be appropriate to provide confidence in relation to strategic mitigation provision for small-scale and windfall developments that may not be able to provide mitigation on site.
- **Air Quality:** Development within the BDBC area and associated traffic growth will (in combination with other local plans) result in potentially significant increases in traffic (>1,000 AADT) at roads within 200m of the Thames Basin Heaths SPA. Additional modelling (traffic and potentially air quality) may be required to quantify this precisely, but evidence from recent traffic and air quality models for the affected roads in the SPA suggests that ‘in combination’ NO<sub>x</sub> concentrations and nitrogen deposition rates will improve substantially over the plan period notwithstanding increased traffic volumes due to the expected reductions in vehicle emissions as the fleet composition changes, and that traffic growth associated with local plans will not alter this trajectory substantively. It is recognised that the potential for effects on distant 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 mitigating policies included in the Local Plan Update reflect mitigation advocated by NE for these effects, and are consistent with policies included in other local plans for LPAs near this SPA that have allowed a conclusion of ‘no adverse effects’ to be reached.
- **Visitor/Recreational Pressures:** The screening has indicated that the interest features of Thames Basin Heaths SPA may be vulnerable (i.e. exposed and sensitive) to environmental changes associated with increased visitor pressure. However, the draft Local Plan adopts mitigation developed by Thames Basin Heaths Special Protection Area Delivery Framework<sup>85</sup> in Policy ENV3; this reflects the best data currently available and is considered to be a fundamentally scalable approach that will allow a conclusion of ‘no adverse effects’ to be reached.

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<sup>85</sup> Available at: <https://www.woking2027.info/allocations/sadpdexam/spadelivery.pdf>

## 7.2 CONCLUSIONS

- 7.2.1. The HRA conclusions are necessarily preliminary, being dependent on the future development of the Local Plan Update and additional data collection; however, it is likely (based on the available data and the policy protections and mitigation included in the draft plan) that a 'no adverse effects' conclusion could be reached if the Local Plan Update is adopted in its current form. It will be necessary to review any changes that are made to the Local Plan at Regulation 19 and prior to adoption (and following additional data collection in relation to air quality and nutrient neutrality) in order to ensure that the HRA conclusions remain applicable.

## BIBLIOGRAPHY

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- HWT (2020). *Solent Waders and Brent Goose Strategy*. Hampshire & Isle of Wight Wildlife Trust, Curdridge, Hants.
- AECOM (2022). *Basingstoke and Deane Water Cycle Study*. Report for BDBC, AECOM, Basingstoke.
- NE (2005). *Visitor Access Patterns on the Thames Basin Heaths* [online]. English Nature Research Report ENRR682. [Available at: <http://publications.naturalengland.org.uk/publication/4037618>].
- NE (2014). *Results of the 2012/13 visitor survey on the Thames Basin Heaths Special Protection Area (SPA)* [online]. Natural England Commissioned Report NECR136. [Available at: <http://publications.naturalengland.org.uk/publication/4514481614880768>].
- AECOM (2018). *Hart Local Plan: Proposed Submission Version 2016 – 2032. Habitats Regulations Assessment* [online]. Report by AECOM for Hart District Council. [Available at: [https://www.hart.gov.uk/sites/default/files/4\\_The\\_Council/Policies\\_and\\_published\\_documents/Planning\\_policy/Local\\_Plan/Habitats%20Regulations%20Assessment%202018.pdf](https://www.hart.gov.uk/sites/default/files/4_The_Council/Policies_and_published_documents/Planning_policy/Local_Plan/Habitats%20Regulations%20Assessment%202018.pdf)]
- IAQM (2020). *A guide to the assessment of air quality impacts on designated nature conservation sites* [online]. Institute of Air Quality Management, London. [Available at: <https://iaqm.co.uk/text/guidance/air-quality-impacts-on-nature-sites-2020.pdf>]

# Appendix A

EUROPEAN SITE TERMINOLOGY



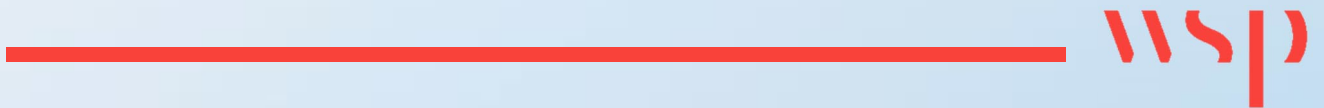
**Table A-1 - European site terminology**

<b>Name</b>	<b>Abbreviation</b>	<b>Notes</b>
<b>Special Area of Conservation</b>	SAC	Designated under the EU <i>Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora, and implemented in the UK through the Conservation of Habitats and Species Regulations 2017, and the Conservation (Natural Habitats, &amp; c.) Regulations (Northern Ireland) 1995 (as amended).</i>
<b>Sites of Community Importance</b>	SCI	Sites of Community Importance (SCIs) are sites that have been adopted by the European Commission but not yet formally designated by the government of each country. Although not formally designated they are nevertheless fully protected by <i>Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora, the Conservation of Habitats and Species Regulations 2017, and the Conservation (Natural Habitats, &amp; c.) Regulations (Northern Ireland) 1995 (as amended).</i>
<b>Candidate SAC</b>	cSAC	Candidate SACs (cSACs) are sites that have been submitted to the European Commission, but not yet formally adopted as SCIs. Although these sites are still undergoing designation and adoption they are still fully protected by <i>Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora, the Conservation of Habitats and Species Regulations 2017 and the Conservation (Natural Habitats, &amp; c.) Regulations (Northern Ireland) 1995 (as amended).</i>
<b>Possible SACs</b>	pSAC	Sites that have been formally advised to UK Government, but not yet submitted to the European Commission. As a matter of policy the Governments in England, Scotland and Wales extend the same protection to these sites in respect of new development as that afforded to SACs.
<b>Draft SACs</b>	dSAC	Areas that have been formally advised to UK government as suitable for selection as SACs, but have not been formally approved by government as sites for public consultation. These are not protected (unless covered by some other designation) and it is likely that their existence will not be established through desk study except through direct contact with the relevant statutory authority; however, the statutory authority is likely to take into account the proposed reasons for designation when considering potential impacts on them.

Name	Abbreviation	Notes
<b>Special Protection Area</b>	SPA	Designated under <i>EU Council Directive 79/409/EEC on the Conservation of Wild Birds</i> (the 'old Wild Birds Directive') and <i>Directive 2009/147/EC on the Conservation of Wild Birds</i> (the 'new Wild Birds Directive, which repeals the 'old Wild Birds Directive'), and protected by Article 6 of <i>Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora</i> . These directives are implemented in the UK through the <i>Wildlife &amp; Countryside Act 1981</i> (as amended), the <i>Conservation of Habitats and Species Regulations 2017</i> , the <i>Wildlife (Northern Ireland) Order 1985</i> , the <i>Nature Conservation and Amenity Lands (Northern Ireland) Order 1985</i> and <i>The Conservation (Natural Habitats, &amp;C.) (Northern Ireland) Regulations 1995</i> (as amended) and the <i>Offshore Marine Conservation (Natural Habitats &amp; c.) Regulations 2007</i> .
<b>Potential SPA</b>	pSPA	These are sites that are still undergoing designation and have not been designated by the Secretary of State; however, ECJ case law indicates that these sites are protected under Article 4(4) of <i>Directive 2009/147/EC</i> (which in theory provides a higher level of protection than the Habitats Directive, which does not apply until the sites are designated as SPAs), and as a matter of policy the Governments in England, Scotland and Wales extend the same protection to these sites in respect of new development as that afforded to SPAs, and they may be protected by some other designation (e.g. SSSI).
<b>Ramsar</b>		The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention or Wetlands Convention) was adopted in Ramsar, Iran in February 1971. The UK ratified the Convention in 1976. In the UK Ramsar sites are generally underpinned by notification of these areas as Sites of Special Scientific Interest (SSSIs) (or Areas of Special Scientific Interest (ASSIs) in Northern Ireland). Ramsar sites therefore receive statutory protection under the <i>Wildlife &amp; Countryside Act 1981</i> (as amended), and the <i>Nature Conservation and Amenity Lands (Northern Ireland) Order 1985</i> . However, as a matter of policy the Governments in England, Scotland and Wales extend the same protection to listed Ramsar sites in respect of new development as that afforded to SPAs and SACs.

# Appendix B

SUMMARY OF ASSESSMENT OF  
DRAFT POLICIES







## 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; 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.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
	<b>Overarching policy</b>			
<b>CLC1</b>	A carbon neutral climate adapted Borough	N/A	No LSE	The policy sets the broad criteria that new development in will be expected to meet in relation to climate change adaptation and mitigation. 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.
	<b>Delivery of strategy and allocations</b>			
<b>SPS1</b>	Scale and Distribution of New Development	SS1	No LSE	The policy will set the overall scale of housing to be provided within the period 2021 to 2040 and provides general criterial relating to the distribution of development and its location.
<b>SPS2</b>	Regeneration	SS2	No LSE	The policy supports regeneration of existing areas where they would result in a demonstrable benefit to the local community, providing new homes and an improved local environment with enhanced facilities to meet local needs.
<b>SPS3</b>	Delivering the Basingstoke Town Centre Masterplan	N/A	No LSE	The policy sets out objectives that development within Basingstoke town centre should be consistent with and criteria for development, including the Masterplan for Basingstoke Town Centre (December 2022). General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
<b>SPS4</b>	Basingstoke Town Centre Areas of Change	N/A	No LSE	The policy identifies Areas of Change within the town centre and criteria for development that support the wider objectives for the town centre. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
<b>SPS5</b>	Sites Allocated for Housing Led Development	SS3	Uncertain (i/c)	<p>The policy identifies the sites that are proposed for allocation and provides general criteria relating to how sites will come forward, including the use of design codes.</p> <p>The examination of individual allocations is underway; however, none are likely to have adverse effects alone due to scale and location relative to the nearest European sites; however, there are 'in combination' issues in relation to nutrient neutrality, air quality and recreational pressure which are being examined through appropriate assessment (although the recreational pressure aspect will be mitigated by Policy ENV3, and it is likely that ENV4 will be sufficient to address the nutrient neutrality issues).</p>
<b>SPS5.1</b>	Northern Manydown	SS3.10	As for SPS5	The site is allocated in the ALP but the allocation is being carried forward into the LPU. The policy sets out criteria for development of the site.
<b>SPS5.2</b>	Basingstoke Golf Course	SS3.11	As for SPS5	The site is allocated in the ALP but the allocation is being carried forward into the LPU.
<b>SPS5.3</b>	Hounsome Fields	SS3.12	As for SPS5	The site is allocated in the ALP but the allocation is being carried forward into the LPU.
<b>SPS5.4</b>	Southern Manydown	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
SPS5.5	Popham Garden Village	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS5.6	East of Basingstoke	SS3.9	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS5.7	Sherfield Hill Farm	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS5.8	Land West of Marnel Park	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS5.9	Weybrook Park Golf Course	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS5.10	Overton Mill, Overton	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS5.11	Redlands Lodge	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS3.12	Land adjacent to Weybrook Golf Course	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS3.13	16 Southern Road	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS3.14	65 New Road	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.
SPS3.15	Land off Ashford Way	N/A	As for SPS5	Proposed allocation. The policy sets out criteria for development of the site.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
SPS7	Ensuring a supply of deliverable Sites	SS4	No LSE	The policy sets out the intention of maintain a five year land supply. It includes a criterion setting out measures to ensure water quality is protected.  General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
SPS6	Neighbourhood Planning	SS5	No LSE	The policy sets out the overall requirement for new homes at identified settlements and supports the neighbourhood planning process. Neighbourhood Plans would be subject to screening under the Habitats Regulations. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
SPS8	Nuclear Installations - Aldermaston and Burghfield	SS7	No LSE	The policy sets out the approach to the management of proposals for development within the land use planning consultation zones for the two nuclear installations. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
SPS9	Basing View	SS8	No LSE	The policy sets out criteria to guide development in order to ensure that Basing View will continue to be regenerated as a 21st century business location and will be protected as a high-quality strategic employment site. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
SPS10	Oakdown Farm Allocation	N/A	No LSE	Strategic employment allocation. The policy sets out criteria for development of the site. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
SPS11	Basingstoke Leisure Park	SS9	No LSE	Policy provides criteria for future use of the site and is supported by a Master Plan. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
SPS12	Chineham Railway Station	SS10	No LSE	The policy identifies land to the North West of Chineham as being reserved for the development of a new passenger railway station and associated car parking. Policy identifies location of new development but a development at this location will not affect any European sites alone or in combination.
	<b>Infrastructure, Transport and Community Facilities</b>			
INF1	Infrastructure	CN6	No LSE	The policy sets out the approach to the delivery of a wide range of infrastructure, including transport, utility services, education and health facilities. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
INF2	Transport	CN9	No LSE	The policy sets out the Council's intention to promote a safe, efficient and convenient transport system which is consistent with the Council's declared Climate Emergency. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development. 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.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
INF3	New and Improved Facilities	CN7	No LSE	The policy sets out criteria for the provision of new and improved community facilities. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
IFN4	Protecting Existing Community Facilities	CN8	No LSE	The policy sets out general criteria for the protection of existing community facilities. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
	<b>Housing</b>			
HSG1	New Housing in the Countryside	SS6	No LSE	The policy sets out the approach to the management of proposals for new housing outside of settlement boundaries and the re-use of existing buildings. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
HSG2	Affordable Housing	CN1	No LSE	The policy sets out the requirements for affordable housing in terms of the overall level of provision and tenure. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
HSG3	Rural Exception Sites and First Homes Exception Sites	CN2	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 outside Settlement Policy Boundaries on Rural Exception Sites and First Homes 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.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
HSG4	Single plot rural exception sites	N/A	No LSE	The policy sets out criteria for single plot rural exception sites for custom and self-build housing.
HSG5	Housing Mix for Market Housing	CN3	No LSE	The policy sets out the requirements for the mix of dwellings in terms of the size of dwellings. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
HSG6	Specialist accommodation for older people and those with specialised needs	CN4	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.
HSG7	Custom and self-build housing	N/A	No LSE	The policy sets out general criteria relating to the provision of custom and self-building housing. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
HSG8	Accessible and Adaptable Homes	N/A	No LSE	The policy sets out general criteria relating to the provision of accessible and adaptable homes. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
HSG9	Gypsies, Travellers and Travelling Show People	CN5		The policy sets out the proposed approach to meeting the needs of Gypsies, Travellers and Travelling Show People as part of proposed strategic allocations. Criterion for provision elsewhere or in lieu of provision on strategic sites are also provided. Existing sites are also protected. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.
	<b>Environmental Management and Climate Change</b>			





LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
ENV1	Landscape	EM1	No LSE	The policy sets out general criteria for the protection of the landscape. Safeguarding policy that cannot lead to or trigger development. General design / guidance criteria.
ENV2	Strategic Gaps	EM2	No LSE	The policy sets out general criteria for the protection of strategic gaps between settlements. Safeguarding policy that cannot lead to or trigger development. General design / guidance criteria.
ENV3	Thames Basin Heaths Special Protection Area	EM3	No adverse effects	<p>The policy requires new residential development which is likely to have a significant effect on the ecological integrity of the Thames Basin Heaths Special Protection Area (SPA) to clearly demonstrate that any potential adverse effects are fully mitigated. The policy also sets out criteria for development within 5km of the SPA.</p> <p>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 / criteria that would need to be met in relation to recreational pressure and which are intended to minimise effects on the SPA and which have therefore been considered as part of the AA.</p>



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
ENV4	Nutrient Neutrality	N/A	No adverse effects	<p>Under this policy new dwellings and development resulting in a net increase in population (including student accommodation, and tourist attractions and accommodation) served by a wastewater system that will discharge into the River Test and Itchen catchment will be required to demonstrate nutrient neutrality through the submission of a nutrient budget(s).</p> <p>The policy specifies the International nature conservation sites that it applies to.</p> <p>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 / criteria that would need to be met in relation to water discharges and which are intended to minimise effects on the European sites and which have therefore been considered as part of the AA.</p>
ENV5	River Loddon, Test and Enborne corridors	N/A	No LSE	The policy seeks to protect the river corridors from harmful development and to secure enhancement of their landscape, water environment and habitats. Protective policy; no pathway for effects.
ENV6	Biodiversity, Geodiversity and Nature Conservation	EM4	No LSE	The policy seeks to avoid significant harm to biodiversity and/or geodiversity or secure mitigation where this is not possible. Biodiversity net gain will be required on developments over 0.1ha in size. The policy also protects the integrity of designated and proposed designated sites, including international sites. Protective policy; no pathway for effects.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
ENV7	Green and Blue Infrastructure	EM5	No LSE	The policy seeks to protect existing green and blue infrastructure and ensure that major development delivers new green infrastructure. Protective policy; no pathway for effects.
ENV8	Local Green Spaces	N/A	No LSE	Local Green Spaces are shown on the Policies Map or designated through Neighbourhood Plans. The policy limits development on such sites. Protective policy; no pathway for effects.
ENV9	Water Quality	EM6	No adverse effects	<p>The policy seeks to protect water quality. Where new water supply or wastewater infrastructure is required or proposed in support of new development, the development will be phased alongside the provision of the infrastructure in order to ensure compliance with the Habitats Regulations and Water Framework Directive requirements.</p> <p>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 / criteria that would need to be met in relation to water discharges and which are intended to minimise effects on European sites and which have therefore been considered as part of the AA.</p>
ENV10	Managing Flood Risk	EM7	No LSE	The policy sets out criteria for managing development within flood risk areas and attenuation of flood risk.
ENV11	Energy Standards for New Development	N/A	No LSE	The policy sets out requirements for new development to minimise energy use, maximise fabric efficiency, on-site energy and heat and minimise embodied energy.
ENV12	Sustainable Design, Construction and Adaption	N/A	No LSE	The policy sets out a range of requirements for qualifying new developments relating to sustainable design and construction.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
ENV13	Renewable and Low Carbon Energy Generation	EM8	No LSE	The policy sets out criteria for proposals relating to renewable and low carbon energy generation. It does not allocate specific areas for such development.
ENV14	Pollution and Air Quality	EM12	No adverse effects	<p>The policy sets out general criteria for the avoidance of pollution and protection of air quality.</p> <p>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 / 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.</p>
	<b>Design and Heritage</b>			
DES1	Key Design Principles	EM10	No LSE	The policy sets out general criteria for new development and its contribution to the built environment. General statement of policy / General design / guidance criteria; no pathway for effects.
DES2	Site Design	EM10	No LSE	The policy sets out general criteria for development proposals and their relationship to the host site and surrounding area. General statement of policy / General design / guidance criteria; no pathway for effects.
DES3	Building Design	EM10	No LSE	The policy sets out general criteria relating to a range of factors including the character, scale, bulking and materials. More specific criteria relating to residential extensions are also provided. General statement of policy / General design / guidance criteria; no pathway for effects.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
DES4	Internal Space Standards for New Dwellings	N/A	No LSE	The policy confirms that development proposals for new homes must meet the Nationally Described Space Standard. General statement of policy / General design / guidance criteria; no pathway for effects.
DES5	Density of New Residential Development	N/A	No LSE	The policy sets out general criteria for the density of residential development and minimum densities for specific areas. Neighbourhood Plans can also specify density standards. General statement of policy / General design / guidance criteria; no pathway for effects.
DES6	The Historic Environment	EM11	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.
	<b>Supporting the Economy</b>			
EMP1	Economic Growth and Investment	EP1	Uncertain (i/c)	The policy sets out the target for growth in jobs over the plan period, the intention to protect existing employment sites and general criteria relating to future employment growth. General quantum of development issue that is examined for in combination effects.
EMP2	Employment Land and Premises	EP2	No LSE	The policy sets out measures to protect Strategic Employment Areas and enable their intensification for employment uses. Other employment sites may be identified through NDPs. General statement of policy / General design / guidance criteria; no pathway for effects.



LPU policy ref.	LPU Policy Name	Adopted Local Plan policy ref*	HRA Summary	Notes
<b>EMP3</b>	Town, District and Local Centres	EP3	No LSE	The policy sets out general retail planning principles that will be applicable across the whole borough. The policy sets out the hierarchy of centres within the borough. The policy sets out criteria for managing development within centres and for managing proposals for proposals outside of town centres.
<b>EMP4</b>	Rural Economy	EP4	No LSE	The policy sets out general criteria for proposals for economic uses in the countryside. General statement of policy / General design / guidance criteria; no pathway for effects.
<b>EMP5</b>	Rural Tourism	EP5	No LSE	The policy sets out general criteria for proposals for tourism related uses in the countryside. General statement of policy / General design / guidance criteria; no pathway for effects.

# Appendix C

'IN COMBINATION' REVIEW OF  
PLANS



**Table C-1 – In combination plans and programmes**

<b>Plan</b>	<b>Summary</b>	<b>Plan HRA conclusions*</b>	<b>Potential for i/c effects?</b>	<b>Notes / Assessment</b>
<b>Hart Local Plan 2032 (Adopted April 2020)</b>	Sets out the development strategy, policies and proposals, including site allocations, which will guide land use and development in the District up to 2032. Includes provision for over 7,000 homes.	Nitrogen depositions potentially affecting the TBHSPA.  No significant effects	Yes	The Hart District Local Plan identifies potential adverse effects on the TBHSPA due to an increase in nitrogen deposition over the lifetime of the plan causing a loss of species diversity.  The HRA does further state that the recreational impacts of development on European sites can be avoided and mitigated. General air quality is not expected to decrease over the lifetime of the plan and would certainly not reach levels that would hard important SPA and other assets.
<b>Wokingham Local Plan Update (ongoing) 2036</b>	Sets out the development strategy, policies and proposals, including site allocations, which will guide land use and development in the Borough up to 2036 (though not yet adopted). Currently includes provision for 13,901 homes between 2018-2036.	No adverse effects but identifies a need for further information regarding two European sites	Yes	Recreational pressure from the 4,465 homes proposed within 5km of the TBHSPA are deemed to not culminate into adverse effects on the TBHSPA due to mitigation being required through the use of Suitable Alternate Greenspace (SANG) and Strategic Access Management & Monitoring (SAMM).  The HRA notes that further air quality data and monitoring is needed for two European sites that are within 10km of the Wokingham Borough, as these sites lie in close proximity to key commuter routes in the area that would see increased use following any development.



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
<b>East Hampshire Emerging Local Plan 2036</b>	<p>East Hampshire District Council had produced a replacement plan for consultation in 2019. However, following this consultation and further consideration the Council determined to reproduce a replacement Local Plan. The Draft Local Plan 2017-2036 (now withdrawn) set out the development strategy, policies and proposals, including site allocations, which would guide land use and development in the District up to 2036, with the provision for 10,456 homes (this plan is being reconsidered/potentially significantly changed). A HRA exists for the 2019 draft Local Plan and a HRA has also been produced for the Issues &amp; Priorities stage for the latest local plan (Regulation 18).</p>	<p>2019 – No significant effects</p> <p>2022 Issues &amp; Priorities -</p>	<p>Yes</p>	<p>2019 – Identified the Local Plan had the potential for adverse effects on the integrities of Shortheath Common SAC, Solent European sites, Thames Basin Heaths SPA and associated heathland European sites (including Thursley, Hankley and Frensham Commons (Wealden Heaths Phase I) SPA and Thursley, Ash, Pirbright and Chobham SAC), Wealden Heaths Phase II SPA and Woolmer Forest SAC. This is due to recreation pressures. Further effects could be generated due to urbanisation, especially with regard to the integrity of Wealden Heaths Phase II SPA. Potential effects due to air quality, resulting from increased emissions from increased road usage, was also identified as problematic, especially for the European sites within and close to East Hampshire.</p> <p>2022 – Identifies recreational pressures from development on the Wealden Heaths complex, Thames Basin Heaths SPA and the Solent European sites, but noted any effects could be mitigated and for the emerging Local Plan to contain policies securing such mitigation. Potential affects from atmospheric pollution was also highlighted as needing to be mitigated.</p>



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
<b>Winchester Emerging Local Plan 2019-2039 (Regulation 18)</b>	Sets out the development strategy, policies and proposals, including site allocations, which will guide land use and development in the District up to 2039. Includes provision for 11,000 homes.	No significant effects	Yes	The HRA identified that several policy improvements that were needed in order to mitigate the potential effects from the following: <ul style="list-style-type: none"> <li>Physical damage and loss of habitat (effects on FLL)</li> <li>Non-physical disturbance</li> <li>Air pollution</li> <li>Changes in water quantity and quality relating to abstraction from the River Itchen</li> </ul> Recreation pressure and urban edge effects
<b>Test Valley Draft Local Plan 2040 (Regulation 18)</b>	Sets out the development strategy, policies and proposals, including site allocations, which will guide land use and development in the Borough up to 2040. Includes provision for 10,820 homes.	No HRA currently.	Unknown	No HRA currently.
<b>West Berkshire Local Plan Review 2022-2039 (Submitted)</b>	Sets out the development strategy, policies and proposals, including site allocations, which will guide land use and development in the District up to 2039. Includes provision for 8,721 to 9,146 homes.	No adverse effects	Yes	The HRA identified that any potential adverse effects resulting from the Local Plan would be mitigated due to the Plan's policies. Of particular importance are the policies relating to nutrient neutrality and water quality.



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
<b>Southern Water Water Resources Management Plan 2020-2060</b>	The WRMP identifies how Southern Water will manage its water resources to ensure people have sufficient access to water. Southern Water provides water supplies to just over 2.4 million customers across an area of 4,450 square kilometres, extending from East Kent, through parts of Sussex, to Hampshire and the Isle of Wight in the west.	No adverse effects	Yes	<p>The HRA identified that so long as the mitigation proposed within the WRMP is applied correctly, there would be no adverse effects upon the integrity of any SACs, SPAs, Ramsar sites or European sites.</p> <p>The HRA does note that as the proposed schemes of the WRMP are taken forward and undergo more detailed design, monitoring and reviewing of potential affects are needed to ensure no adverse effects occur.</p> <p>In combination effects with the Local Plan are arguably not possible in relation to water resources, as the WRMP accounts for predicted growth in Local Plan areas as part of its development.</p>



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
<b>South East Water Revised Water Resource Management Plan 2025 to 2075</b>	<p>The WRMP identifies how South East Water will manage its water resources to ensure people have sufficient access to water. The WRMP identifies that by 2050, it is estimated that South East Water's supply area will have increased its population to 2.79 million people. This population growth, continued effects of climate change and legislative changes (reduction in extraction allowances) means the supply area could suffer supply shortfalls of 188 million litres a day by 2075.</p>	<p>No adverse effects</p>	<p>Yes</p>	<p>The HRA identified that so long as the mitigation proposed within the WRMP is applied correctly, there would be no adverse effects upon the integrity of any SACs, SPAs, Ramsar sites or European sites.</p> <p>The HRA does note that as the proposed schemes of the WRMP are taken forward and undergo more detailed design, monitoring and reviewing of potential affects are needed to ensure no adverse effects occur.</p> <p>In combination effects with the Local Plan are arguably not possible in relation to water resources, as the WRMP accounts for predicted growth in Local Plan areas as part of its development.</p>
<b>Thames River Basin Management Plan: updated 2022</b>	<p>The RBMP focuses on the protection, improvement and sustainable use of the water environment. The overall objective is to ensure sufficient water supplies for future generations especially in the face of climate change, housing growth and an increase in individual water use.</p>	<p>No significant effects</p>	<p>Yes</p>	<p>The HRA identifies that in-combination effects of the updated RBMP with other plans at a strategic scale and determined that there is a prescribed degree of mutual compatibility and collaboration aimed at securing environmental protection and improvement. The HRA is limited as the RBMP does not specify where or how measures should be implemented.</p>



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
<b>South East River Basin District - River Basin Management Plan</b>	The RBMP focuses on the protection, improvement and sustainable use of the water environment. The overall objective is to ensure sufficient water supplies for future generations especially in the face of climate change, housing growth and an increase in individual water use.	No significant effects	Yes	The HRA identifies that in-combination effects of the updated RBMP with other plans at a strategic scale and determined that there is a prescribed degree of mutual compatibility and collaboration aimed at securing environmental protection and improvement. The HRA is limited as the RBMP does not specify where or how measures should be implemented.
<b>South East River Basin District Flood Risk Management Plan 2021 to 2027</b>	The plan seeks to ensure flood risk within the South East River Basin District is appropriately managed to protect both the built and natural environment.	No adverse effects	No	FRMP determined with reference to anticipated growth within region.
<b>Hart Local Plan 2032 (Adopted April 2020)</b>	Sets out the development strategy, policies and proposals, including site allocations, which will guide land use and development in the District up to 2032. Includes provision for over 7,000 homes.	Nitrogen depositions potentially affecting the TBHSPA.  No significant effects	Yes	The Hart District Local Plan identifies potential adverse effects on the TBHSPA due to an increase in nitrogen deposition over the lifetime of the plan causing a loss of species diversity.  The HRA does further state that the recreational impacts of development on European sites can be avoided and mitigated. General air quality is not expected to decrease over the lifetime of the plan and would certainly not reach levels that would hard important SPA and other assets.



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
<b>Wokingham Local Plan Update (ongoing) 2036</b>	Sets out the development strategy, policies and proposals, including site allocations, which will guide land use and development in the Borough up to 2036 (though not yet adopted). Currently includes provision for 13,901 homes between 2018-2036.	No adverse effects but identifies a need for further information regarding two European sites	Yes	<p>Recreational pressure from the 4,465 homes proposed within 5km of the TBHSPA are deemed to not culminate into adverse effects on the TBHSPA due to mitigation being required through the use of Suitable Alternate Greenspace (SANG) and Strategic Access Management &amp; Monitoring (SAMM).</p> <p>The HRA notes that further air quality data and monitoring is needed for two European sites that are within 10km of the Wokingham Borough, as these sites lie in close proximity to key commuter routes in the area that would see increased use following any development.</p>

Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
<b>East Hampshire Emerging Local Plan 2036</b>	<p>East Hampshire District Council had produced a replacement plan for consultation in 2019. However, following this consultation and further consideration the Council determined to reproduce a replacement Local Plan. The Draft Local Plan 2017-2036 (now withdrawn) set out the development strategy, policies and proposals, including site allocations, which would guide land use and development in the District up to 2036, with the provision for 10,456 homes (this plan is being reconsidered/potentially significantly changed). A HRA exists for the 2019 draft Local Plan and a HRA has also been produced for the Issues &amp; Priorities stage for the latest local plan (Regulation 18).</p>	<p>TBC</p>	<p>Yes</p>	<p>Identified the Local Plan had the potential for adverse effects on the integrities of Shortheath Common SAC, Solent European sites, Thames Basin Heaths SPA and associated heathland European sites (including Thursley, Hankley and Frensham Commons (Wealden Heaths Phase I) SPA and Thursley, Ash, Pirbright and Chobham SAC), Wealden Heaths Phase II SPA and Woolmer Forest SAC. This is due to recreation pressures. Further effects could be generated due to urbanisation, especially with regard to the integrity of Wealden Heaths Phase II SPA. Potential effects due to air quality, resulting from increased emissions from increased road usage, was also identified as problematic, especially for the European sites within and close to East Hampshire.</p> <p>Identifies recreational pressures from development on the Wealden Heaths complex, Thames Basin Heaths SPA and the Solent European sites, but noted any effects could be mitigated and for the emerging Local Plan to contain policies securing such mitigation. Potential affects from atmospheric pollution was also highlighted as needing to be mitigated.</p>



Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
<b>Winchester Emerging Local Plan 2019-2039 (Regulation 18)</b>	Sets out the development strategy, policies and proposals, including site allocations, which will guide land use and development in the District up to 2039. Includes provision for 11,000 homes.	No significant effects	Yes	The HRA identified that several policy improvements that were needed in order to mitigate the potential effects from the following: <ul style="list-style-type: none"><li>• Physical damage and loss of habitat (effects on FLL)</li><li>• Non-physical disturbance</li><li>• Air pollution</li><li>• Changes in water quantity and quality relating to abstraction from the River Itchen</li></ul> Recreation pressure and urban edge effects





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