Newham Borough Council

LOCAL PLAN 2023 – 2038 HABITATS REGULATIONS ASSESSMENT

HRA Supporting Information for Submission (Regulation 22)

APRIL 2025

PUBLIC

Newham Borough Council

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WSP

Canon Court West
Abbey Lawn
Shrewsbury
SY2 5DE

Phone: +44 1743 342 000

WSP.com

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Prepared by	Mike Frost	Mike Frost	Mike Frost	
Checked by	Sean Nicholson	Sean Nicholson	Alastair Peattie	
Authorised by	Andrew Brooks	Andrew Brooks	Paul Joyce	

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1 INTRODUCTION

1.1 BACKGROUND

1.1.1. London Borough of Newham's (LBN's) Local Plan currently comprises the Local Plan (2018), Gypsy and Traveller Accommodation DPD (2017) and the Joint Waste Plan (2012). The London Borough of Newham Council (the Council) has commenced a refresh of the Local Plan in response to updated Newham objectives and strategies; changes in the development context and market trends; and updated national and regional planning requirements. Consultation on Issues and Options was undertaken between October and December 2021.

1.1.2. The Council engaged Wood Environment & Infrastructure Solutions UK Ltd to undertake an Integrated Impact Assessment (IIA) of the Local Plan. In September 2022 Wood Environment & Infrastructure UK Ltd became part of WSP. IIA incorporates Sustainability Appraisal (SA), Strategic Environmental Assessment (SEA), Health Impact Assessment (HIA), Equalities Impact Assessment (EqIA) and Habitats Regulations Assessment (HRA).

1.1.3. Consultation on the draft Scoping Report for the IIA (which contained the approach to the assessments) took place at the same time as the consultation on the Issues and Options. Consultation on the Regulation 18 Local Plan and a HRA Information Report took place between January and February 2023. Consultation on the Regulation 19 Local Plan and a HRA information Report took place between July to September 2024.

1.2 THE NEWHAM BOROUGH LOCAL PLAN

1.2.1. The Town and Country Planning (Local Planning) (England) Regulations 2012 set out the regulatory requirements for developing and adopting a Local Plan. Before adoption, this involves preparing and consulting on what the local plan should contain (Regulation 18), producing a Publication Draft Local Plan (Regulation 19), submitting the Local Plan to the Secretary of State for Housing, Communities and Local Government (Regulation 22) and subjecting the Local Plan to public examination (Regulation 24).

1.2.2. The Newham Local Plan sets out the spatial strategy for Newham for a fifteen-year period between 2023 and 2038. At the heart of the Local Plan refresh are the delivery of the Council's core strategies. These include:

- Building a Fairer Newham: Corporate Plan 2022-2026
- Building Newham's Creative Future
- Towards a Better Newham: COVID-19 Recovery and Reorientation Strategy
- Just Transition Plan
- Tackling Racism, Inequality and Disproportionality
- 50 steps Health and Wellbeing Strategy
- Social Integration Strategy
- The Newham Young People's Charter

1.2.3. The spatial strategy identifies the location, scale and uses of development that will come forward in Newham and demonstrates how needs of Newham's current and future population will be met. This includes the need, set by the London Plan 2021, to deliver at least 47,600 additional homes in

Newham over the period 2019/20 to 2028/29. The Local Plan identifies potential for between 51,425 and 53,784 new homes by 2038. The Newham Local Plan also seeks to meet Newham's needs for:

- a requirement for 335,00 sqm of industrial floorspace;
- a minimum requirement for 90,000 of office floorspace; and
- 25,973sqm of retail floorspace.

1.2.4. The Borough's Local Plan is also bound to, and will be tested against, its general conformity and compliance with the London Plan 2021. The London Plan 2021 is the Spatial Development Strategy for Greater London and sets out a regional vision and policies that cover housing, transport, employment and the environment.

1.2.5. The creation of the London Legacy Development Corporation (LLDC) removed a portion of land around Stratford from the remit of the London Borough of Newham as Local Planning Authority. The LLDC's planning powers are due to be handed back to boroughs by the end of 2024. The Council is working with the LLDC, Mayor of London and other Host Boroughs to plan proactively in advance of this transition, so that a Plan which covers the whole borough is ready as soon as possible after transition. This draft Local Plan therefore covers the entirety of Newham.

1.2.6. The new Local Plan will replace the adopted Local Plan (2018). The review of the Local Plan will include three rounds of consultation and engagement. The first round of engagement on the Issues and Options document took place between the 18 October and the 17 December 2021. The second round of engagement (on the Regulation 18 draft Local Plan) took place between 9 January and the 20 February 2023. The third round of engagement (on the Regulation 19 Draft Submission Local Plan) took place between 19 July to 20 September 2024.

1.3 HABITATS REGULATIONS ASSESSMENT

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

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

land-use plan is "*(a) is likely to have a significant effect on a European site*[2] *or a European offshore marine site*[3] *(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.

1.3.2. 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.

1.3.3. The process by which Regulation 105 is met is known as Habitats Regulations Assessment (HRA)[4] . An HRA determines whether there will be any 'likely significant effects' (LSE) on any European site as a result of a plan's implementation (either on its own or 'in combination' with other plans or projects)[5] and, if so, whether there will be any 'adverse effects on site integrity'[6]. The Council has a statutory duty to prepare the Local Plan and is therefore the Competent Authority for an HRA.

1.4 THIS REPORT

1.4.1. 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 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.

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

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

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

[5] Also referred to as the 'test of significance'.

[6] Also referred to as the 'integrity test'.

1.4.2. The Council has engaged WSP to undertake an Integrated Impact Assessment (IIA) of the Local Plan refresh. The IIA will incorporate a Habitats Regulations Assessment (HRA), Sustainability Appraisal (SA), Strategic Environmental Assessment (SEA), Health Impact Assessment (HIA) and Equalities Impact Assessment (EqIA).

1.4.3. This 'Regulation 22 HRA Information Report' is intended to accompany the submission of the Local Plan and provide guidance on the HRA-related issues that will be relevant to both the plan development and the HRA. It includes:

- an outline of the approach and scope of the Local Plan HRA;
- a summary of the environmental and European site baseline, as currently understood, and any known data gaps or environmental aspects subject to ongoing or future studies;
- informal guidance for Newham Borough Council on any HRA-related issues or risks that may be relevant to the policy design or allocations selection process, and/or which may need to be considered when developing the submission version Local Plan.

1.4.4. **This report does not constitute a formal 'HRA screening' or 'Appropriate Assessment'** as the plan is still in development and so any screening or appropriate assessment conclusions would be premature; however, the principles of HRA are applied to Local Plan to (a) provide an initial assessment of the likely HRA conclusions, were the plan adopted as currently drafted and (b) identify additional data requirements and/or additional measures that may be required to ensure that the submission version plan has no adverse effects on any European sites.

1.4.5. This Regulation 22 HRA Report (this report) has been issued for submission alongside the Local Plan. The Council's website provides details of the Local Plan refresh and next stages.

1.4.6. It should be note that only minor changes have been made to the HRA Report following Regulation 19 consultation. These amendments have been made to reflect the representations received from Natural England and updated evidence relating to air quality.

2 APPROACH TO THE HRA OF THE LOCAL PLAN

2.1 OVERVIEW

2.1.1. European Commission guidance[7] and established case-practice suggests a four-stage process for addressing Articles 6(3) and 6(4), and hence Regulations 105 and 107 (see Box 1), although not all stages will necessarily be required:

Box 1 – Stages of HRA

Stage 1 – Screening or 'Test of significance'

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

Stage 2 – Appropriate Assessment (including the 'Integrity test')

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

Stage 3 – Assessment of Alternative Solutions

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

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

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

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

2.1.2. HRAs of local planning documents rarely proceed beyond Stage 2, as alternatives to policies or allocations that adversely affect the integrity of a European site[8] are almost always available.

2.1.3. The stages in Box 1 (if required) are used to ensure compliance with the Habitats Regulations and so principally reflect the stepwise legislative tests applied to the final, submitted project or plan; there is no statutory requirement for HRA (or its specific stages) to be completed for draft plans or similar developmental stages. Attempting to rigidly apply these steps to the emerging or interim stages of strategic plans is not always appropriate, and often reduces the clarity and usefulness of the HRA as a plan-shaping process for both plan-makers and consultees.

2.1.4. Consequently there is inherent flexibility for the HRA process to be run in a manner that provides maximum benefit for plan-development and sound decision-making, whilst still ultimately meeting the legislative tests.

2.1.5. The HRA of this plan therefore employs an iterative and consultative approach to HRA, with outputs tailored to each stage of the plan development and consultation process, and the requirements of the key stakeholders, rather than trying to force the guideline HRA stages on to the emerging plan. The HRA therefore contributes to the plan evidence-base, so assisting with the development of sustainable policies from the beginning of the plan-making process rather than being a purely retrospective 'test' applied towards the end.

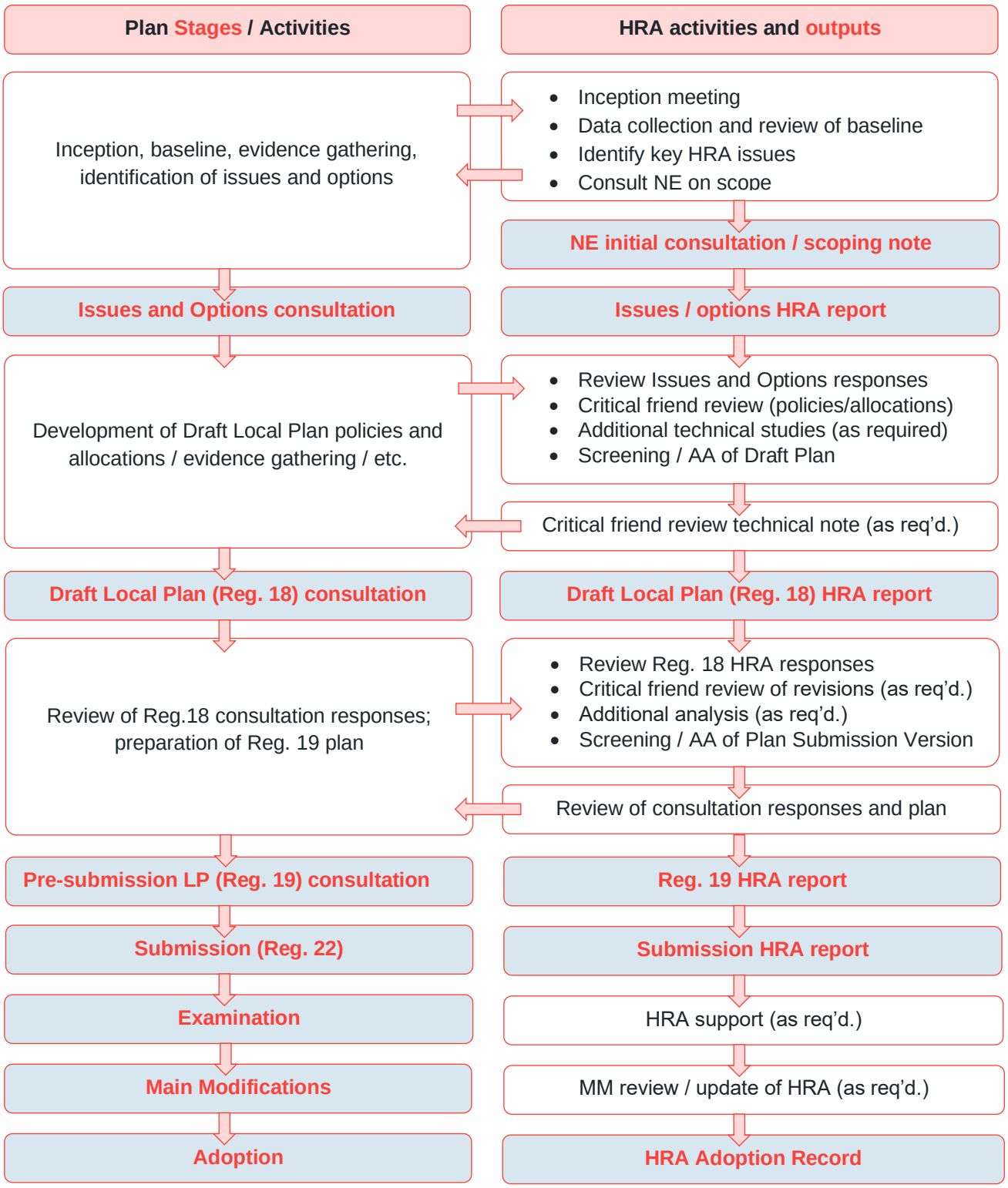
2.1.6. **Figure 2.1** below provides an overview of our preferred approach to the HRA of Local Plans, identifying the relationships between the HRA process / key outputs and the plan development / consultation points (Reg. 18 etc.). **Note, the approach to plan development varies between LPAs and so Figure 2.1 is indicative only; outputs are therefore tailored to the plan development process (see Section 2.3)**.

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, an Issues and Options HRA report typically does 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 if any options clearly present a risk of 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 later consultations typically being accompanied by a 'Draft Local Plan HRA' report that includes a more detailed '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). This report would then be updated for subsequent consultation stages to reflect consultation responses and plan amendments.

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

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:

- 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 (2019). *Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*. Available at: https://op.europa.eu/en/publication-detail/-/publication/caf47cb6-207a-11e9-8d04-01aa75ed71a1/language-en/format-PDF/source-search.
- Natural England (2020). *Guidance on how to use Natural England's Conservation Advice Packages in Environmental Assessments*. Natural England, Peterborough.
- Defra (2012). *The Habitats and Wild Birds Directives in England and its seas: Core guidance for developers, regulators & land/marine managers* [online]. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/82706/habitats-simplify-guide-draft-20121211.pdf. [Accessed October 2023].
- PINS Note 05/2018: *Consideration of avoidance and reduction measures in Habitats Regulations Assessment: People over Wind, Peter Sweetman v Coillte Teoranta*. [withdrawn].
- SNH (2019). SNH Guidance Note: *The handling of mitigation in Habitats Regulations Appraisal – the People Over Wind CJEU judgement* [online]. Scottish Natural Heritage. Available at: https://www.nature.scot/sites/default/files/2019-08/Guidance%20Note%20-%20The%20handling%20of%20mitigation%20in%20Habitats%20Regulations%20Appraisal%20-%20the%20People%20Over%20Wind%20CJEU%20judgement.pdf. [Accessed October 2023].

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

2.3 CONSULTATION AND PLAN EVOLUTION

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

2.3.2. The consultations to date are as follows:

- consultation on the Issues and Options Document and IIA Scoping Report (which included reference to HRA) between October and December 2021, to which Natural England provided a response in relation to HRA (see **Appendix B**); and
- the Regulation 18 consultation between January and February 2023.
- the Regulation 19 consultation HRA document between July and September 2024.

2.3.3. Appropriate HRA reports will be produced to accompany any future consultation on the Local Plan; 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 this plan therefore considers:

- all European sites within 20km of the Local Plan boundary (see **Table 3-2, Section 3**);
- any additional sites that may be hydrologically linked[9] to the Local Plan's zone of influence; and
- any additional sites identified by Natural England following the Issues and Options 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[10], 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
- designated or non-designated 'functional habitats' (if identified).

[9] Typically downstream sites that are receptors for pollutants (etc.) although other sites might be considered depending on the linkages – for example, upstream sites with migratory fish that would utilise rivers within the LPA area.

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

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

- the most recent JNCC-hosted GIS datasets;
- the Standard Data forms for SACs and SPAs and Information Sheets for Ramsar sites;
- Article 12 and 17 reporting;
- the published site Conservation Objectives;
- Supplementary Advice to the conservation objectives (SACO) where available[11];
- Site Improvement Plans (SIPs);
- Core Management Plans (Wales only); and
- the supporting Site of Special Scientific Interest's favourable condition tables where relevant and where no SACOs applicable to the features are available.

2.5.3. Note:

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

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

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

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

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

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[12]).

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

2.6 REVIEWING THE EMERGING PLAN

2.6.1. The principles[13] 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.

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

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

2.7 SCREENING / ASSESSMENT OF THE DRAFT PLANS

2.7.1. The draft Local Plans produced at Regulation 18 and 19 are accompanied by HRA documents that include a 'screening' and 'appropriate assessment', setting out the HRA-related evidence and the anticipated conclusion (if the plan were to be adopted as drafted, recognising that the HRA can only be completed for the final, adopted plan).

2.7.2. The 'screening' in these HRAs identifies the following aspects and excludes them from the scope of the appropriate assessment:

- those European sites that are **not** vulnerable (i.e. both exposed and sensitive) to the outcomes of the plan); and
- the policies and allocations that cannot have significant effects, alone or in combination, or which cannot be assessed at the plan level (e.g. policies that support development or other changes but which are too general to allow any specific assessments of effects (i.e. the locations, scale, quantum etc. are not specified below the geographical level of the plan, assuming that the type of development proposed is not such that significant effects would be unavoidable regardless of these aspects).

2.7.3. **The 'screening' does not take into account 'mitigation', in accordance with 'People over Wind'** (see below).

2.7.4. The '**appropriate assessment**' determines whether any aspect of the plan will have 'adverse effects on integrity' for any European sites, taking into account the sites' conservation objectives and conservation status. Site integrity (in HRA terms) is "*the coherent sum of the site's ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated*" (EC Guidance '*Managing Natura 2000*' (2018)).

2.7.5. Where a site or interest feature has a 'favourable' conservation status then a 'no adverse effects on integrity' conclusion can be reached provided that this status will not be undermined by the plan or project at hand; if the conservation status is 'unfavourable' then the plan or project must not reduce the conservation status further or create conditions that would make it more difficult for the site or feature to reach 'favourable' conservation status. It should be noted that this is not simply a test of whether there are negative effects; an effect may be negative but not undermine the site's conservation objectives. The integrity test incorporates the precautionary principle, whereby plans or projects should not be approved unless there is no reasonable scientific doubt that adverse effects on site integrity will not occur[14] .

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 where a mitigation measure requires examination.

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

The 'appropriate assessment' stage may therefore conclude that the proposals are likely to have an adverse effect on the integrity of a site (in which case they should be abandoned or modified); or that the effects will be 'significant' in HRA terms, but not adverse (i.e. an effect pathway exists, but those effects will not undermine site integrity, perhaps due to mitigation proposed for inclusion within the plan); or that the effects would, if screening were re-visited, be 'not significant' (i.e. the anticipated effect is subsequently shown to be nugatory or *de minimis*[15]).

IN COMBINATION EFFECTS

2.7.7. Consideration of '**in combination**' effects is not a separate assessment but is integral to both the screening and appropriate assessment stages.

2.7.8. At the screening stage the 'in combination' assessment focuses on those Local Plan effects that are 'not significant', aiming to identify whether these effects might interact with other plans or projects to result in significant effects on a European site in combination (recognising that Local Plan effects that are effectively nil and indistinguishable from background variations cannot operate 'in combination' and so can be excluded from the in combination assessment at the screening stage). Any significant 'in combination' effects identified are then considered at the appropriate assessment stage, where the assessment aims to determine whether the residual effects of the Local Plan (after mitigation is accounted for) could nevertheless interact with aspects of other plans and projects to adversely affect the integrity of a European site.

2.7.9. There is limited guidance available on the scope of the 'in combination' element, particularly with regard to which plans or projects should be considered.

2.7.10. The assessment of in combination effects arising within the Local Plan itself, or between Local Plans (e.g. of allocations cumulatively or the overall quantum of development regionally) are fundamentally integrated into the assessments, as most effect pathways (e.g. increased recreational pressure) are inherently cumulative.

2.7.11. However, the assessment should not be limited to plans at the same level in the planning hierarchy and there is consequently a wide range of strategic plans that could have potential 'in combination' effects with the Local Plan. The plans identified by the SA provide the basis for the assessment of 'in combination' effects with strategic plans; these plans are reviewed to identify any potential effects (see **Appendix D**) and then considered (as necessary) within the screening and appropriate assessment stages. The assessment does not generally include national or regional strategies, national policy, or legislation since the Local Plan must be compliant with these. The assessment takes account of any HRAs completed for those plans, where these are freely available for review[16]. It is considered that 'in combination' effects are most likely in respect of other regional and sub-regional development plans and strategies.

2.7.12. With regard to projects, The Planning Inspectorate's National Infrastructure Projects database[17] is used to identify major projects with the potential to affect the European sites in the HRA scope,

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

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

[17] https://infrastructure.planninginspectorate.gov.uk/projects/

along with any other major projects that the Council is advised of during the plan development process. However, it should be noted that the in combination assessment can be greatly limited by the information available for other plans and projects, particularly where these are at an early stage of development.

2.7.13. It is not generally possible to produce a definitive list of existing minor planning applications near each European site, and generating a list of these is typically of little value (since many will be consented and delivered prior to the plan being adopted, and/or before developments supported by the plan are bought forward (i.e. they will form part of the baseline for future project-level HRAs); they typically must meet the policy requirements of the Local Plan also.

2.8 NOTES ON MITIGATION AND AVOIDANCE

2.8.1. The development of avoidance or mitigation measures is important to the HRA and plan development process. 'Avoidance measures' are those that are implemented during the iterative plan development process (for example, abandoning a policy or allocation that is likely to have unavoidable adverse effects if implemented)[18]; mitigation measures are used where significant effects are identified in order to prevent adverse effects on a site's integrity[19].

2.8.2. Avoidance or mitigation measures should aim to reduce the probability or magnitude of impacts on a European site until 'no likely significant effects' or 'no adverse effects on integrity' are anticipated, and they will generally involve the development and adoption of (for example) wording changes to policies, or additional safeguarding policies. Measures must be specific and targeted, and likely to work; it is not appropriate to re-state existing legislation or policy, for example by adding "*and must have no significant effect on any European site*" (or similar) to every policy. The avoidance or mitigation measures should also reflect the limited influence that the Council can exert on non-planning issues and should not generally exceed requirements set by national planning policy or guidance.

2.8.3. The 'People Over Wind' judgment creates some issues for the application of avoidance and mitigation measures in the HRA process, stating that "…*it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects [mitigation] of the plan or project on that site*"; as noted, this contrasts with established practice in this area (based on the 'Dilly Lane' judgment)

2.8.4. There is limited guidance on the practical implementation of the 'People over Wind' judgment, particularly for plan-level HRAs where the assessment process is usually concurrent with plan development and where measures are invariably incorporated into the plan before the formal 'screening' of the final version takes place. Indeed, many 'recommendations' derived from an iterative policy review process might be interpreted as 'avoidance' or 'mitigation' measures if viewed solely in terms of their implications for European sites, making it difficult to distinguish between basic good policy practice and 'mitigation'.

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

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

2.8.5. For example, generic policies promoting the use of Sustainable Drainage Systems (SuDS); or safeguarding designated sites (including European sites); or requiring that developers ensure utility provision in advance of occupation, are fairly standard inclusions in virtually all land-use plans but will all act to moderate potential environmental changes that could affect European sites. However, it would clearly be illogical to attempt to screen a hypothetical version of the plan that did not include such policies, particularly if these are included independently of the HRA results.

2.8.6. The broader context of the 'People over Wind' case suggests that the judgment is principally focusing on those instances where specific measures are included or relied on to avoid or mitigate a specific effect that has been identified, and which would otherwise be significant; the judgment argues that the effectiveness of any such measures should be examined through an appropriate assessment stage. It is therefore arguable that an exhaustive examination of a plan's genesis to see if any aspects might count as 'mitigation' for screening purposes is not necessary, or (arguably) consistent with the intent of the Habitats Directive or the 'People over Wind' judgment.

2.8.7. Therefore, the screening **does not** take account of specific measures that are included in response to a specific identified effect on a European site, and which are intended to avoid or reduce that effect. However, generic policy safeguards that would be included regardless of the presence of European sites are essentially just 'the plan' and are not considered to be 'mitigation' unless there is a specific effect or pathway that they are intended or relied on to obviate. Aspects requiring specific investigations to understand the problem (and hence the mitigation requirements), or which rely on established mitigation to avoid an effect, are subject to Appropriate Assessment.

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 generally unlikely under normal circumstances, and this will not occur as a result of the Local Plan. Indeed, local plans will generally assist the safeguarding of European sites through their protective policies. However, there will be a number of areas where the direction, controls or influence provided by a plan can result in outcomes that can affect European site interest features.

3.1.2. Most potential effect pathways are associated with broad 'quantum of development' or population growth aspects, and whilst a local plan is not necessarily the main driver of these effects, they do have a key role in managing them locally through the site allocation process. In this context, the main aspects through which the Local Plan could affect European sites in the study area are:

- through individual allocations or supported developments that are 'directed' to a specific location or area; or
- through 'in combination' effects resulting from the cumulative impacts of development associated with the Local Plan and with the plans and programmes of external authorities (such as neighbouring LPAs).

3.1.3. These aspects could affect European sites on their own, through typical development-related mechanisms operating at the local scale in relation to specific allocations (e.g. noise, lighting, etc.; see **Table 3-1**); or collectively by exacerbating regional pressures (e.g. pressures on water supply).

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

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

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

3.1.4. Significant effects or significant adverse effects as a result of individual allocations 'alone' are typically unlikely as most environmental changes have a limited 'zone of influence' (for example, noise effects on species will rarely be significant over 500m from the source based on natural rates of attenuation alone), and most allocations will not be located particularly close to a European site. However, the Local Plan HRA must also consider the potential for development supported by the plan to operate 'in combination' both internally (e.g. between allocations) or with external plans and programmes (e.g. cumulative housing growth regionally). 'In combination' changes are often of an inherently larger scale or operate over larger areas.

3.1.5. There is obviously a wide range of potential mechanisms and pathways for 'in combination' effects depending on the European sites and features. However, there are a few key mechanisms by which local plans (etc.) most commonly operate cumulatively to affect European sites; these are noted below, and provide the broad framework for assessing potential 'in combination' effects associated with the Local Plan:

- **Recreational pressure**: Many European sites will be vulnerable to some degree of impact as a result of recreational pressure, although the effects of recreational pressure are complex and very much dependent on the specific conditions and interest features at each site. Local plans can influence recreational pressure through their allocations and associated controls.
- **Urbanisation**: Urbanisation is generally used as a collective term covering a suite of often disparate risks and impacts that occur due to increases in human populations near protected sites. This would include varied aspects such as fly-tipping or vandalism, predation by cats, or the dispersal of invasive species, although the effects of these aspects depend on proximity, accessibility and the interest features of the sites. This is generally only realised where allocations are close to a designated site.
- **Atmospheric pollution**: The most relevant air pollutants to habitats and species (particularly plant species) are the primary pollutants sulphur dioxide (SO_2, typically from combustion of coal and heavy fuel oils), nitrogen oxides (NOx, mainly from vehicles) and ammonia (NH_3, typically from agriculture). These pollutants affect habitats and species mainly through acidification and eutrophication. Local Plans will generally have few specific point-sources for air emissions and

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

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

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

3.1.7. It should be noted that LBN is completing various reports and studies to update the environmental baseline for the Local Plan, some of which will be relevant to the HRA. These are available at https://www.newham.gov.uk/planning-development-conservation/newham-local-plan-refresh/4.

3.2 EUROPEAN SITE SUMMARIES

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

- all European sites within 20km of the Council's administrative area (see **Table 3-2**);
- any additional sites that may be hydrologically linked to the Local Plan's zone of influence; and
- any additional sites identified by Natural England following the Issues and Options consultation.

3.2.2. This is considered to be a suitably precautionary starting point for the assessment of the Local Plan. This scope therefore includes the following sites[20]:

Table 3-2 - European sites within scope

Site	Summary and location relative to the LPA boundary
Epping Forest SAC	Woodland site approximately 2km north of the LBN boundary.
Lee Valley SPA	Wetland site approximately 3.5km north-west of the LBN boundary.
Lee Valley Ramsar	Wetland site approximately 3.5km north-west of the LBN boundary.
Wimbledon Common SAC	Woodland site approximately 17km south-west of the LBN boundary.
Richmond Park SAC	Woodland site approximately 18km south-west of the LBN boundary.
Thames Estuary and Marshes Ramsar	Downstream coastal site approximately 23 km east of the LBN area (note, the Ramsar site is not entirely coincident with the Thames Estuary and Marshes SPA).
Thames Estuary and Marshes SPA	Downstream coastal site approximately 24 km east of the LBN area.

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

3.2.4. With regard to downstream receptors, marine and coastal sites at or beyond the mouth of the Thames estuary at Canvey Island[21] are not considered to be exposed to environmental changes that may be associated with the local plan. Note that the coastal and estuarine European sites that are down-catchment from the LBN area have not been identified as sites that are in unfavourable condition due to excessive nutrients in recent NE advice to LPAs[22] (such that 'nutrient neutrality'[23] is being deployed or considered as mitigation).

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

- a contextual overview of each site;

[20] 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.

[21] e.g. Thames Estuary and Marshes SPA/Ramsar; Benfleet and Southend Marshes SPA/Ramsar; Outer Thames Estuary SPA.

[22] 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.

[23] 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.

- their interest features;
- their condition; and
- the current pressures and threats identified for each site[24].

3.2.6. These are based on the citations, the Site Improvement Plans (SIPs), information on the condition of the underlying SSSIs, and any supplementary advice provided by Natural England[25].

3.2.7. The potential mechanisms by which the Local Plan could affect these sites are discussed in **Section 3.1**. There are many factors currently affecting the European sites over which the Local Plan 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.).

CONSERVATION OBJECTIVES

3.2.8. The Conservation Objectives and Supplementary advice documents for the SACs and SPAs benchmark Favourable Conservation Status (FCS) for each feature. Guidance[26] 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*".

3.2.9. 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:

3.2.10. 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;*

[24] 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.

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

[26] 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].

- *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*.

3.2.11. 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*.

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

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

3.3 IN COMBINATION PLANS AND PROJECTS

PLANS

3.3.1. The plans identified by the SA provide the basis for the assessment of 'in combination' effects with strategic plans (see **Appendix D**).

PROJECTS

3.3.2. The assessment currently takes into account the following major projects identified by the Planning Inspectorate (PINS) or otherwise identified within approximately 20km of the relevant European sites (**Table 3-3**). It should be recognised that many of these projects inherently have an extremely low risk of interacting directly with the LBN Local Plan to affect any European sites (i.e. spatially coincident impacts, etc.).

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

Project	Summary	Status	European sites in LP HRA scope potentially exposed to i/c effects*
Tilbury2	A new port facility acting alongside the existing Port of Tilbury. Extension of existing jetty facilities and the dredging of berth pockets in the River Thames.	Decided (2020)	■ Thames Estuary and Marshes Ramsar ■ Thames Estuary and Marshes SPA ■ Note, project HRA identified no adverse effects for any European sites
Lower Thames Crossing (Recommendation)	New road crossing connecting Kent and Essex between Gravesham and East Tilbury.	Recommendation	■ Thames Estuary and Marshes Ramsar ■ Thames Estuary and Marshes SPA
Silvertown Tunnel	New road tunnel under the River Thames between Silvertown and north Greenwich, in London, connecting to the A1020 Silvertown Way/Lower Lea Crossing on the north side with A102 Blackwall Tunnel Approach on the south side.	Determined (2018)	■ Final HRA for scheme not available online; available PEIR documents indicate that a 'no significant effects' conclusion was reached for sites within London including Epping Forest SAC.

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

3.4 2018 LOCAL PLAN REVIEW HRA

3.4.1. The main HRA document for the current Local Plan was completed in 2018[27]. This HRA concluded that the Local Plan would have no significant effects on any European sites, alone or in combination, although it should be noted that this assessment pre-dated the 'People over Wind' case and so accounted for mitigation at the screening stage. Evidence from this HRA is used where still relevant.

[27] Available at: https://www.newham.gov.uk/downloads/file/1033/habitat-regulations-assessment

4 HRA REVIEW OF THE LOCAL PLAN

4.1 PLAN SUMMARY

4.1.1. The Newham Local Plan sets out the spatial strategy for Newham for a fifteen-year period between 2023 and 2038. The spatial strategy identifies the location, scale and uses of development that will come forward in Newham and demonstrates how needs of Newham's current and future population will be met. This includes the need, set by the London Plan 2021, to deliver at least 47,600 additional homes in Newham over the period 2019/20 to 2028/29. The Local Plan identifies potential for between 51,425 and 53,784 new homes by 2038. The Newham Local Plan also seeks to meet Newham's needs for:

- a requirement for 335,00 sqm of industrial floorspace;
- a minimum requirement for 90,000 of office floorspace; and
- 25,973sqm of retail floorspace.

4.1.2. The Borough's Local Plan is also bound to, and will be tested against, its general conformity and compliance with the London Plan 2021. The London Plan 2021 is the Spatial Development Strategy for Greater London and sets out a regional vision and policies that cover housing, transport, employment and the environment.

4.1.3. The creation of the London Legacy Development Corporation (LLDC) removed a portion of land around Stratford from the remit of the London Borough of Newham as Local Planning Authority. The LLDC's planning powers are due to be handed back to boroughs by the end of 2024. The Council is working with the LLDC, Mayor of London and other Host Boroughs to plan proactively in advance of this transition, so that a Plan which covers the whole borough is ready as soon as possible after transition. This draft Local Plan therefore covers the entirety of Newham.

4.1.4. These aspects could affect European sites on their own, through typical development-related mechanisms operating at the local scale in relation to specific allocations (e.g. noise, lighting, etc.; see Table 3.1); or collectively by exacerbating regional pressures (e.g. pressures on water supply or sewerage treatment).

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

SCREENING AT THE REGULATION 18/19 STAGE

4.2.1. 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 be 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 LBN (see below); however, it does indicate those aspects that may require specific consideration when designing policy and selecting preferred options, and those that would appear to have a low probability of affecting European sites or features.

4.2.2. It should be noted that LBN 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 including:

- Green Infrastructure Study (inc. Water);
- Sustainable Alternative Natural Greenspace (SANGs) Strategy;
- Employment Land Review;
- Community Facilities Needs Assessment;
- Climate Change Evidence Base;
- Characterisation Study;
- Leisure Needs Assessment;
- LPR Sustainable Transport Strategy (inc. Transport modelling);
- Retail and Leisure Study;
- Strategic Flood Risk Assessment;
- Strategic Housing Market Assessment; and
- Gypsy and Traveller Accommodations Needs Assessment.

4.2.3. 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.

4.2.4. Note, for European sites not identified in **Table 3.2** the final HRA will 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. Sites not noted in **Table 3.2** are not therefore considered further in this report.

REVIEW OF POLICIES IN THE LOCAL PLAN

4.2.5. 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 signficant 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.

Broad Policy Type	Notes
External plans / projects	Plans or projects that are proposed by other plans or permissions regimes and which are referred to in the plan being assessed for completeness (for example, Highways Agency road schemes; specific waste development proposals promoted by a County Minerals and Waste Plan; DCO applications being advanced separately from the plan at hand); however, these would be considered as part of the plan-level 'in combination' assessment.
Environmental protection policies	Policies designed to protect the natural or built environment will not usually have signifcant or adverse effects (although they may often require modification if relied on to provide sufficient safeguards for other policies).
Policies which make provision for change but which could have no conceivable effect	Policies or proposals that cannot affect a European site (due to there being no impact pathways and hence no effect; for example, proposals for new cycle path several kilometres from the nearest European site; criteria for a development's appearance; etc.) or which cannot undermine the conservation objectives, either alone or in combination, if impact pathways exist.

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

4.2.6. 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.

4.2.7. The criteria in **Table 4.1** have been applied to a review of the policies within the Local Plan to identify the following broad policy groups:

- '**No effect**' policies: policies that will have 'no effect' (i.e. policies that, if included as drafted, self-evidently would not have any effect on a European site due to the type of policy or its operation; for example, a policy controlling town centre shop signage; a policy setting out sustainable development criteria that developments must meet). Note that 'no effect' policies cannot have in-combination effects.
- '**No likely significant effect**' policies: policies where impact pathways exist but the effects will not be significant (alone or in-combination).
- '**Likely significant effect**' policies: policies where the precise effects on European sites (either alone or in combination) are uncertain or significant, or where measures have been incorporated into the policy to mitigate potential effects, and hence require additional investigation (appropriate assessment). Note that further investigation will often demonstrate that there is no significant effect or allow the suitability of any incorporated mitigation measures to be confirmed.

4.2.8. Reflecting these policy groups, a colour coding system (see **Table 4.2**) has been used for the review and initial 'screening' of the Local Plan policies in **Appendix C.**

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 Appropriate Assessment.
	Policies that have potential pathways for effects that require examination through appropriate assessment; note, this does not imply such policies will have adverse effects or even (potentially) significant effects; rather it is an assessment flag.

4.2.15. 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).

4.2.16. 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.

4.2.17. In summary, the vast majority of the planning policies contained in the Local Plan are categorised as 'no effect' or 'no significant effect' policies (see **Appendix C**). 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
BFN1: Spatial Strategy	The policy establishes the Spatial Strategy for development within Newham in the plan period, seeking to achieve economic growth and community benefits. It also sets out the level of growth that is planned for in terms of housing, jobs, retail, leisure, open space and infrastructure. There are in-combination issues that may need consideration through Appropriate Assessment.
CE1: Environmental design and delivery	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 Appropriate Assessment.

Policies	Screening rationale
CE6: Air Quality	The policy requires development to mitigate its effects on Newham's air quality and result in an improvement to Newham's 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 could help minimise effects on designated sites and which have therefore been considered as part of the Appropriate Assessment.
GWS3: Biodiversity, urban greening, and access to nature	The policy requires development to contribute towards the nature recovery and conserve and protecting biodiversity, whilst also addressing areas deficient in biodiversity. The policy protects and enhances Epping Forest SAC by ensuring that development demonstrates that, if necessary, measures are put in place to avoid or mitigate any potential adverse effects through contributions to the Strategic Access Management and Monitoring Strategy and provision of Suitable Alternative Natural Green Space. 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 management and avoidance of recreational pressures on the Epping Forest SAC.
T1: Strategic Transport	The policy includes a requirement to ensure that new strategic transport schemes unlock growth, increase public transport mode share and active travel, improve safety, accessibility and connectivity, support the delivery of a network of well-connected neighbourhoods, improve air quality and reduce carbon emissions. This policy would help mitigate potential effects in relation to air quality which would be considered as part of Appropriate Assessment.
T2: Local Transport	The policy contains a range of measures to support a network of well-connected neighbourhoods, improve air quality, maximise health benefits, improve accessibility, reduce carbon emissions and deliver sustainable growth. This policy would help mitigate potential effects in relation to air quality which would be considered as part of Appropriate Assessment.
T3: Transport Behaviour Change	The policy requires developments to be car free and encourage other forms of transport and facilitate their use. This policy would help mitigate potential effects in relation to air quality which would be considered as part of Appropriate Assessment.
T4: Servicing a development	The policy ensures development considers its potential effects from servicing and delivering to and from the development, including use of zero emission vehicles or cargo bikes. This policy would help mitigate potential effects in relation to air quality which would be considered as part of Appropriate Assessment.

4.2.18. In addition, the following policies have been considered specifically in relation to air quality (see also **Appendix E**)[28]:

- BFN1 - Spatial Strategy;
- J1 - Employment and growth;
- J2 - New employment floorspace;
- W2 - New or Improved Waste Sites;
- H1 - Meeting Housing Needs;
- H10 - Gypsy and Traveller Accommodation;
- T1 – Strategic Transport; and
- The following Neighbourhood policies (based on their location/proximity to Epping Forest SAC: N7 (Three Mills), N8 (Stratford and Maryland), and N15 (Forest Gate).

REVIEW OF SITE ALLOCATIONS

4.2.19. The allocation sites (housing, employment) proposed by the Council have been reviewed to identify those which (if developed) could result in significant effects on a European site that are not obviously avoidable with the standard project-level measures that would be required to meet existing regulatory regimes. The assessment largely focuses on the identification of specific effects that might be associated with specific allocations (and which may therefore require the inclusion of allocation-specific mitigation within the plan) rather than the broader 'quantum of development' effects[29]. 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.

4.2.20. In summary, 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. As a result, it is considered that the Newham plan only has the potential to affect European sites through 'in combination' effects associated with the overall quantum of development within this area of London, principally through recreational pressure and air quality.

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).

[28] Note, some of these are policy types that would typically be screened out based on the policy characteristics (e.g. general statements of policy / general design / guidance criteria or policies that cannot themselves lead to or trigger development. For example, Policy T1 primarily relates to the protection of the strategic transport network rather than proposing development.

[29] 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.

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 **Appendix A** and the policies and proposals of the Reg. 19 Local Plan. It should be noted that this aspect of the screening process is a 'low bar', with sites, aspects or features only 'screened out' if they will self-evidently be unaffected by the Local Plan (i.e. it is aiming to identify those aspects that will clearly have 'no effect' or 'no significant effect' (alone or in combination) due to an absence of impact pathways). It does not attempt a detailed quantification if significant effects via particular pathway cannot be simply or self-evidently excluded (this is completed at an 'appropriate assessment' stage, when mitigation is also accounted for).

4.3.3. When screening it is appropriate to assume that all relevant lower-tier consents and permissions (etc.) will be correctly assessed and controlled, and that any activities directly or indirectly supported by the Local Plan will adhere to the relevant legislative and regulatory requirements and all normal best-practice (e.g. it would be inappropriate to assume that normal controls on, for example, the installation of a new discharge to a watercourse would not be correctly followed). The screening also recognises that there are some aspects over which the Local Plan will have no control (e.g. agricultural practices).

RECREATIONAL PRESSURE

4.3.4. Many European sites will be vulnerable to some degree of impact as a result of recreational pressure, although the effects of recreational pressure are complex and very much dependent on the specific conditions and interest features at each site. For example: some bird species are more sensitive to disturbance associated with walkers or dogs than others; some habitats will be more sensitive to trampling or mechanical disturbance than others; some sites will be more accessible than others.

4.3.5. The most typical mechanisms for recreational effects are through direct damage of habitats, or disturbance of certain species. Damage will most often be accidental or incidental, but many sites are particularly sensitive to soil or habitat erosion caused by recreational activities and require careful management to minimise any effects (for example, through provision and maintenance of 'hard paths' (boardwalks, stone slabs etc.) and signage to minimise soil erosion along path margins).

4.3.6. Disturbance of species due to recreational activities can also be a significant problem at some sites, although the relationship (again) is highly variable and depends on a range of factors including the species, the time of year and the scale, type and predictability of disturbance. Most studies have focused on the effects on birds, either when breeding or foraging. For example, a long-term monitoring project by Natural England on the Thanet Coast has found that turnstones (a shoreline-feeding waterbird) are particularly vulnerable to disturbance from dogs, which interrupts their feeding behaviour and can prevent them from gaining sufficient body fat for overwintering or migration. Finney *et al*. (2005), meanwhile, noted that re-surfacing the Pennine Way significantly reduced the impact of recreational disturbance on the distribution of breeding Golden plover, by encouraging walkers to remain on the footpath.

4.3.7. In contrast, some species are largely unaffected by human disturbance (or even benefit from it) which can result in local or regional changes in the composition of the fauna. The scale, type and predictability of disturbance is also important; species can become habituated to some disturbance (e.g. noise), particularly if it is regular or continuous. Unpredictable disturbance is most problematic.

4.3.8. Most recreational activities with the potential to affect European sites are 'casual' and pursued opportunistically (e.g. walking, walking dogs, riding) rather than structured (e.g. organised group activities or trips to specific discrete attractions), which means that it can be difficult to quantify or predict either the uptake or the impacts of these activities on European sites and (ultimately) harder to control or manage effects. It also means that it is difficult to explore in detail all of the potential aspects of visitor pressure at the strategy level. However, it is possible for plans and strategies to influence recreational use of European sites through the planning process, for example by increasing the amount of green space required within or near developments if potentially vulnerable European sites are located nearby.

4.3.9. Attempts to predict the effects of increased recreation on European sites that may be associated with development or allocations derived from strategic plans typically aim to identify the distance within which a certain percentage of visits originate. These are then used to identify 'buffer zones' or 'zones of influence' within which new development would be considered likely to have significant effects on a site.

4.3.10. However, it is important to note that there is no standard method for defining the 'zone of influence' and a range of approaches have been adopted for different sites. For example, in a study for Canterbury City Council, Fearnley *et al*. (2014) suggested several possible options for a 'zone of influence' around the Thanet Coast SAC, on which mitigation proposals could be based; these ranged from 4.9km (the distance within which 75% of all 'regular visitors'[30] live) to 7.2km (the distance within which 90% of all 'regular visitors' live), to 9.8km (the distance within which 75% of all visitors live). Indeed, Fearnley et al. (2014) note that "*The identification of a 'zone of influence' is really an exercise in identifying a boundary which seems pragmatic, representative of visitor patterns to the site, the physical features of the site, infrastructure, current housing distribution and the nature of the surrounding area*". The South-East Devon European Site Mitigation Strategy (Liley *et al*. 2014) identifies several alternative approaches for determining the a 'zone of influence' around the Exe Estuary SPA (and hence the appropriate area for seeking developer contributions towards mitigation); these ranged from 7.8km from the SPA boundary to 14.3km, with a distance of 10km ultimately selected for the purposes of seeking developer contributions.

4.3.11. Probably the most common metric now used for 'buffer zones' or 'zones of influence' is the distance within which approximately 75% of visitors live. This is obviously strongly influenced by the location of the nearest large population centres (i.e. sites that are further from population centres will inevitably have larger 75% distances) but based on various surveys over recent years the distance within which 75% of visitors live is typically less than 7km (although coastal sites are often more attractive, with correspondingly larger distances). Some visitor surveys (particularly for sites that are regional attractions, hence likely to attract occasional visitors travelling relatively far) use the area within which 90% of 'regular visitors' (i.e. once a week or more) live; this results in smaller ZoIs (vs the 75% metric) that reflect the relatively greater impact of these users.

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

[30] People visiting at least once a week.

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

Site	Notes	Screen in?
Epping Forest SAC	Visitor studies undertaken for Epping Forest have identified a 6.2km 'zone of influence' for the site, within which new housing development is assumed likely to have a significant effect in combination. This area forms the basis of the Epping Forest Strategic Access Management and Monitoring Strategy (SAMM) that is relied on by councils local to the SAC as mitigation for the potential effects of housing growth in their administrative areas. Some of the neighbourhoods where growth is envisaged and some proposed allocations are within the 6.2km buffer around Epping Forest SAC and therefore likely significant effects cannot be excluded.	Yes
Lee Valley SPA / Ramsar	Most of the component SSSIs of these sites are outside the M25, almost 15km from the Newnham area, and so substantially beyond the zone within which new developments might be expected to contribute to visitor pressure. Effects on these units will self-evidently be 'not significant'. The closest SPA/Ramsar unit to the LBN area is the Walthamstow Reservoirs SSSI, which is ~3.5km from the closest point of the borough, and this is therefore the only unit potentially exposed to the recreational pressures associated with growth in the LBN area (in combination). However, recreational pressure is not understood to be a substantive issue at Walthamstow Reservoirs due to the closely managed nature of this site; indeed Thames Water recently (2017) opened its Walthamstow Wetlands project which aims to substantially increase public access to these reservoirs, and it is reasonable to assume that this would not have been permitted if increasing public access would risk adverse effects on the SPA. Access to the reservoirs is therefore well-managed, and growth within the LBN area would not alter this. The 'supplementary advice' does note the potential for recreational pressure to affect undesignated waterbodies that may provide 'functional land' near the Walthamstow units, such as the King George V reservoir, although these are further from the LBN area and are also highly managed (with recreational pressure primarily related to on-water activities such as sailing). The Southwark Plan HRA highlights the initiatives by landowners/managers to promote public access to the SPA indicating that recreational pressure would not cause significant effects to this site[31].	No

[31] Southwark Council, 2020 Available at: https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjz1c3qjaL7AhVST3wKHVjPDJYQFnoECCYQAQ&url=https%3A%2F%2Fwww.southwark.gov.uk%2Fassets%2Fattach%2F12576%2FEIP23-Habitats-Regulation-Assessment-April-2020-.pdf&usg=AOvVaw3txqZyhX2MUvf8-6lpghHS [Accessed: September 2022]

Site	Notes	Screen in?
Wimbledon Common SAC	Public access / disturbance is not identified as a threat or pressure at the site. The site is over 17km from the Newham Borough Council area and so significant effects due to visitors originating from new development in the Newham Borough Council area would not be expected, alone or in combination.	No
Richmond Park SAC	Public access / disturbance is not identified as a threat or pressure at the site. The site is over 17km from the Newham Borough Council area and so significant effects due to visitors originating from new development in the Newham Borough Council area would not be expected, alone or in combination.	No
Thames Estuary and Marshes SPA / Thames Estuary and Marshes Ramsar	This site is a substantial distance from the Newnham area and so significant effects due to visitors originating from new development in the Newham Borough Council area would not be occur, alone or in combination.	No

URBANISATION

4.3.13. Urbanisation is generally used as a collective term covering a suite of often disparate risks and impacts that occur due to increases in human populations near protected sites. Typically, this would include aspects such as fly-tipping or vandalism, although the effects of these aspects again depend on the interest features of the sites: for example, predation of some species by cats is known to be sizeable (Woods *et al*. 2003) and can be potentially significant for some European sites. Recreational pressure is arguably one type of effect associated with urbanisation, although this is usually considered separately as it is less closely associated with proximity; as a broad guide, urbanisation effects are more likely when developments (etc.) are within a few hundred metres of a designated site, whereas people will typically travel further for recreation.

4.3.14. Where sensitive sites are involved, development buffers of around 400m are typically used to minimise the effects of urbanisation: for example, Natural England has identified a 400m zone around the Chichester and Langstone Harbours SPA within which housing development should not be located due to the potential effects of urbanisation (particularly, the risk of chick predation by cats, which cannot be mitigated). Similarly, LPAs near the Thames Basin Heaths SPA have adopted a 400m zone around the SPA boundary where there is a presumption against new residential development as the impact on the SPA is considered likely to be adverse. For screening purposes therefore it is assumed that proximate urbanisation effects will not occur over 1km from a site.

4.3.15. Urbanisation effects as a result of the Local Plan will not occur for any European sites due to 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_2, typically from combustion of coal and heavy fuel oils although this has declined substantially), nitrogen oxides (NOx, mainly from vehicles) and ammonia (NH_3, principally from agriculture, although catalytic converters are a significant source), which (together with secondary

aerosol pollutants[32]) 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)[33]. 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 SOx and NOx emissions in recent years and a consequential decrease in acid deposition. In England, SOx and NOx have declined by 97% and 72% respectively since 1970 (Defra, 2018) which is the result of a switch from coal to gas, nuclear and renewables for energy generation, and increased efficiency and emissions standards for cars. These emissions are generally expected to decline further in future years. In contrast, emissions of ammonia have remained largely unchanged; they have declined by 10% in England since 1980 (Defra, 2018), but since 2008 have started to increase slightly.

4.3.20. The effect of SOx and NOx 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. In practice, the principal source of air pollution associated with the Local Plan will be related to changing patterns of vehicle use due to the promotion of new development (since the Local Plan does not provide for any new significant point-sources). The Department of Transport's *Transport Analysis Guidance*[34] states that "*beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant*" and therefore this distance is used to determine the potential exposure of the European sites to any local effects associated with the Local Plan. Environment Agency (EA) guidance (EA, 2007) also states that "*Where the concentration within the emission footprint in any part of the European site(s) is less than 1% of the relevant long-term benchmark (EAL, Critical Level or Critical Load), the emission is not likely to have a significant effect alone or in combination irrespective of the background levels*".

4.3.22. 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

[32] Secondary pollutants are not emitted, but are formed following further reactions in the atmosphere; for example, SO_2 and NOx are oxidised to form SO_4^{2-} and NO_2^- compounds; ozone is formed by the reaction of other pollutants (e.g. NOx or volatile organic compounds) with UV light; ammonia reacts with SO_4^{2-} and NO_2- to form ammonium (NH_4+).

[33] Nitrogen that is in a form that can be absorbed and used by plants.

[34] See http://www.dft.gov.uk/webtag/documents/expert/unit3.3.3.php#013; accessed 15/06/14.

a quantitative air quality assessment may be required if a European site is within 200m of an affected road and the predicted change in annual average daily traffic (AADT) is over 1,000.

4.3.23. 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 or strategic roads[35] within 200m of a European site, with case law[36] indicating that changes in AADT on particular roads should be determined 'in combination' with other plans and projects.

4.3.24. Recent JNCC guidance[37] recommends that "*For the purpose of decision-making, unless local circumstances support a wider zone, plan HRA should take account of the potential effects of traffic emissions on European sites located within 10 km of the plan boundary. This zone is based on professional judgment recognising that the effects of growth from development beyond 10 km will have been accounted for in the Nitrogen Futures [refer to Refer https://jncc.gov.uk/our-work/nitrogen-futures] modelling work business as usual scenario*."

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

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

Site	Notes	Screen in?
Epping Forest SAC	Air quality has been shown to have negatively affected the epiphytic lichen communities[38] of the Epping Forest SAC near the roads that cross the site. This is primarily an issue for the councils local to the site (most London councils that are a similar distance from the SAC as the Council is have historically screened this aspect out of the HRAs of their Local Plans) although NE has requested traffic studies for more distant councils (e.g. Chelmsford) in the recent past and therefore this site is considered in more detail on a precautionary basis.	Yes

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

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

[37] JNCC (2021). *Guidance on Decision-making Thresholds for Air Pollution* [online]. JNCC, Peterborough. Available at: https://data.jncc.gov.uk/data/6cce4f2e-e481-4ec2-b369-2b4026c88447/JNCC-Report-696-Main-FINAL-WEB.pdf

[38] Epiphyte richness is a key factor in defining hyper-Atlantic forms of the Atlantic acidophilous beech forests Annex I type.

Site	Notes	Screen in?
Lee Valley SPA / Ramsar	The units of this site that are within 20km of the borough area (Walthamstow reservoirs) are within central London, with six A- and one B-roads within 200m; however, traffic associated with growth in the borough area is unlikely to contribute substantially to future traffic growth on these roads, given their location and negligible value as through-routes to or from the borough area. Furthermore, the habitats of these units (principally managed open water) are eutrophic and for most wetland habitats (particularly waterbodies) eutrophication via run-off (in this instance supply from surface water sources) and flood water is overwhelmingly more significant than air pollution, and available-N is rarely a limiting factor in these ecosystems. Therefore, the air quality changes anticipated as a result of traffic growth associated with the LBN plan will not be of sufficient magnitude to significantly affect the wetland and wetland margin habitats of the SPA/Ramsar, alone or in combination with other plans or projects.	No
Wimbledon Common SAC	There are two A-roads within 200m of this site, the A3 and A219. This location is over 17km from the borough area by road and will not be subject to potentially significant traffic growth as a result of the Local Plan; the site will not therefore be exposed to potentially significant air quality changes associated with traffic originating in the borough area, alone or in combination with other plans or projects.	No
Richmond Park SAC	There are three A-roads and two B-roads within 200m of the site. This location is over 18km from the borough area by road and will not be subject to potentially significant traffic growth as a result of the Local Plan refresh; the site will not therefore be exposed to potentially significant air quality changes associated with traffic originating in the borough area, alone or in combination with other plans or projects. given their location and negligible value as through-routes to or from the borough area. The site will not therefore be exposed to potentially significant air quality changes associated with traffic originating in the borough area, alone or in combination with other plans or projects.	No
Thames Estuary and Marshes SPA/Ramsar	No roads within 200m of site likely to receive potentially significant additional traffic volumes associated with the LBN Local Plan (distance, orientation).	No

WATER RESOURCES

4.3.26. The exploitation and management of water resources is connected to a range of activities, most of which are not directly controlled or influenced by the Local Plan; for example, agriculture, flood defence, recreation, power generation, fisheries and nature conservation. Much of the water supply to water-resource sensitive European sites is managed through specific consenting regimes that are independent of the Local Plan.

4.3.27. Development supported or managed by the Local Plan is likely to increase demand for water, which could indirectly affect some European sites in the study area. When assessing the potential effects

of increased water demand it is important to understand how the public water supply (PWS) system operates and how it is regulated with other water resource consents.

4.3.28. Potable water in the borough is supplied by Thames Water as part of its London Water Resource Zone (WRZ). The London WRZ is supplied primarily from surface water resources of the River Thames and River Lee (80%), either directly or via storage reservoirs, with the remainder comprising groundwater abstractions. The London WRZ is an integrated system and so direct and specific supply relationships cannot necessarily be made – i.e. 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 borough cannot necessarily be identified or quantified.

4.3.29. 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[39]. The calculations account for any reductions in abstraction that are required to safeguard European sites[40] 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[41].

4.3.30. Thames Water has accounted for the growth supported by the London Plan in forecasting for the 2024 WRMP, and has predicted future deficits; this is due to the projected increase in population and the effects of climate change. Thames Water plans to meet these deficits through demand-reduction, new resource development and water transfers into the WRZs using new and existing infrastructure.

4.3.31. The 2024 WRMP has been subject to HRA, which has concluded that it will have no adverse effects on any European sites, including those water-resource sensitive sites and features within the borough HRA study area (i.e. Lee Valley SPA/Ramsar and Thames Estuary and Marshes

[39] 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.

[40] 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.

[41] 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.

SPA/Ramsar). The WRMPs provide the best estimate of future water resource demand, and therefore **it is reasonable to assume that the growth predicted within the Local Plan can be accommodated without significant effects on any European sites due to PWS abstractions**. Furthermore, since the WRMPs explicitly account for the growth predicted by the London Plan[42], '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.

Table 4-6 - Summary of European site screening in relation to water resources

Site	Notes	Screen in?
Epping Forest SAC	The site features are not considered 'water resource sensitive', and will not be vulnerable to changes in abstraction (etc.) that may be associated with the growth supported by the Local Plan refresh.	No
Lee Valley SPA / Ramsar	This site is water resource sensitive and part of it (e.g. Walthamstow reservoirs) form part of the PWS system in London. However, the WRMP HRA has demonstrated that there will be no adverse effects on this site as a result of the WRMP options. Local water-level management is critical to site integrity, although this is closely managed and the Local Plan will not affect the flooding / water management regime employed within the SPA / Ramsar.	No
Wimbledon Common SAC	This site is water resource sensitive although the groundwater bodies feeding the marshes do not form part of the London WRZ system, and are not relied on to supply London as part of the WRMP. The WRMP HRA has demonstrated that there will be no adverse effects on this site as a result of the WRMP options. Local water-level management is critical to site integrity, although this is locally managed by IDBs and the Local Plan will not affect the flooding / water management regime employed within the SPA / Ramsar.	No
Richmond Park SAC	The site features are not considered 'water resource sensitive', and will not be vulnerable to changes in abstraction (etc.) that may be associated with the growth supported by the Local Plan.	No
Thames Estuary and Marshes SPA / Ramsar	This site is water resource sensitive; however, the WRMP HRA has demonstrated that there will be no adverse effects on this site as a result of the WRMP options.	No

[42] 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).

WATER QUALITY

4.3.32. There are two main ways in which the new development / population growth in the borough could affect water quality:

- Alteration of surface runoff flow and quality impacting on the hydro-ecology and quality of the receiving water systems (diffuse sources).
- Increase in sewage treatment works effluent discharges (point sources) and storm-induced discharges from the sewer systems (CSOs - intermittent sources) affecting the hydroecology and quality of the receiving waters.

4.3.33. Wastewater and sewage from Newham (along with Bexley, Bromley, Croydon, Greenwich, Lambeth, Lewisham, Merton, Southwark, Sutton and Wandsworth) is treated at Beckton STW, which is located in the borough near Thamesmead. This site was recently upgraded as part of the London Tideway Tunnels programme, which aims to enhance the treatment capacity of London's five major STWs (Mogden, Crossness, Beckton, Long Reach and Riverside). The upgrade was partly driven by the Urban Waste Water Treatment Directive (UWWTD) and the need to increase the volume of storm sewage influent passing through full treatment, and increased capacity by around 44%. This upgrade, and the Tideway Tunnels, will reduce uncontrolled wastewater discharges to the Thames . The existing consenting regime accounts for effects on European sites.

4.3.34. 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.

4.3.35. 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)[43]. 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.

4.3.36. However, it should also be recognised that the water quality effects of the Local Plan are ultimately either controlled by existing consents regimes (which must undergo HRA) or have diffuse 'in 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.

[43] 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.

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

Site	Notes	Screen in?
Epping Forest SAC	There is no pathway for this site to be affected by changes in water quality associated with the proposals within the Local Plan.	No
Lee Valley SPA / Ramsar	There is no pathway for this site to be affected by changes in water quality associated with the proposals within the Local Plan.	No
Wimbledon Common SAC	There is no pathway for this site to be affected by changes in water quality associated with the proposals within the Local Plan.	No
Richmond Park SAC	There is no pathway for this site to be affected by changes in water quality associated with the proposals within the Local Plan.	No
Thames Estuary and Marshes SPA / Thames Estuary and Marshes Ramsar	Water quality is not identified as a pressure or threat for these sites. Effects from development in the borough are only possible via discharges to the Thames, and the upgrades to Beckton STW and the Thames Tideway scheme ensure that there is sufficient sewerage treatment headroom. In addition, these sites have not been identified as sites that are in unfavourable condition due to excessive nutrients in recent NE advice to LPAs, such that 'nutrient neutrality' is being deployed or considered as mitigation. Notwithstanding this, these sites are a significant distance downstream from the borough so there is no likelihood of significant effects as a result of the Local Plan implementation.	No

FLOODING / WATER LEVEL MANAGEMENT

4.3.37. 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.

4.3.38. Development supported by the Local Plan is unlikely to significantly alter regional flood risk levels, but may exacerbate the effects of local flooding. Run-off from impermeable surfaces can have considerable effects on waterbodies and watercourses, meaning that flow rates and volumes often exceed the capacity of the receiving drains or watercourses. This can lead to local water quality impacts on European sites. The effect of run-off from developed areas can be mitigated or reduced by the use of SuDS and by increasing the area of permeable surfaces (both natural and artificial) within developed areas.

4.3.39. However, no European sites are considered to be exposed to potential changes in flood risk that may result from the Local Plan as the borough lies outside the surface water catchments of the sites. There will therefore be no possibility of effects through this mechanism

EFFECTS ON FUNCTIONAL HABITATS OR SPECIES AWAY FROM EUROPEAN SITES

4.3.40. 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. 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.

4.3.41. With regard to the European sites within the study area, this is only a potential issue for Lee Valley SPA/Ramsar. However, the interest features of these sites will not be functionally linked to, or dependent on, habitats within the borough and possible functional habitats outside the borough area (e.g. the King George V reservoir, in relation to the Lee Valley SPA/Ramsar) will not be affected by the Local Plan for the same reasons that the European sites themselves will not be (i.e. distance and absence of effect pathways).

OTHER EFFECT PATHWAYS

4.3.42. No other pathways for likely significant effects as a result of the Local Plan implementation have been identified.

4.4 SCREENING SUMMARY

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

- Lee Valley SPA
- Lee Valley Ramsar
- Wimbledon Common SAC
- Richmond Park SAC
- Thames Estuary and Marshes SPA
- Thames Estuary and Marshes Ramsar

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

- Epping Forest SAC
  - Air Quality
  - Recreational Pressure

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

4.4.4. **Note also, the following assessments are necessarily preliminary and additional data or assessment may be required following the Reg. 19 consultation to provide a definitive appropriate assessment conclusion. Key uncertainties are therefore flagged as necessary.**

5 EPPING FOREST SAC

5.1 OVERVIEW

5.1.1. Epping Forest is one of the few remaining large-scale examples of ancient wood-pasture in lowland Britain, and has retained habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains and scattered wetland. The SAC covers a series of semi-natural woodland and grassland blocks between Wanstead in London (near the A12) and the M25 at Epping. The key pressures currently affecting the site (based on the SIP) are air pollution, management (undergrazing), visitor pressure and invasive species, however the only potential impact pathways from the Local Plan are through in combination contribution to changes in **air quality** or **recreational pressure**.

5.2 RECREATIONAL PRESSURE

SUMMARY OF PATHWAY

5.2.1. With regard to Epping Forest SAC, parts of the site are subject to high levels of recreational use and dog walkers make up a large proportion of visitors. Effects from recreational users can include:

- Dog fouling causing eutrophication;
- Vegetation wear, soil compaction, erosion or damage to veteran tree roots from trampling or other erosive activities (e.g. mountain biking);
- An increase in fire risk;
- Visitor and livestock interactions, which can prevent best grazing management;
- Tree climbing can cause damage to veteran trees;
- Removal of deadwood or fungi;
- Disturbance to wildlife or invertebrates;
- Spread of non-native or invasive plants;
- Spread of disease;
- Visitors breaching byelaws or vandalising areas, which can take staff time away from management; and
- Direct vandalism or damage of infrastructure.

BASELINE AND PREDICTED CHANGES

5.2.2. A visitor survey at Epping Forest SAC was conducted by Footprint Ecology[44] in 2019, which has formed the basis of strategic mitigation planning in the area. This study concluded that 75% of visitors lived within approximately 6.2km of the SAC, and that any net increase in residential dwellings within this area would have a 'likely significant effect' in combination. This study informs an agreed Strategic Access Management and Monitoring (SAMM) Strategy for the SAC[45], which

[44] Liley D., 2020. Epping Forest Visitor Survey (2019). Unpublished report by Footprint Ecology for Epping Forest District Council online at: https://www.efdclocalplan.org/wp-content/uploads/2021/02/EB716-Epping-Forest-visitor-report-2019-030221.pdf [Accessed: September 2022]

[45] Available at: https://www.eppingforestdc.gov.uk/wp-content/uploads/2023/02/Interim-Strategic-Access-Management-and-Monitoring-Strategy-SAMMS-2021.pdf

indicated that (as of 2021) Newham was expected provide ~1.18% of the expected increase in visitor pressure associated with new development within the 6.2km 'zone of influence' for the SAC.

5.2.3. Population increases associated with the Local Plan will increase recreational pressure on the SAC as more people are likely to make use of the site for leisure. It is not possible to accurately model the likely increase in the number of visits to the site without substantial investigations into the current behaviour of residents around the site (including those that do not regularly visit the sites). However, it is reasonable to assume that new residents are likely to behave (on average) in a similar manner to existing residents.

5.2.4. The relative contribution of Newham as a result of the new Local Plan cannot be calculated precisely at this point (it will depend on housing numbers in other plans) but given that the housing numbers are consistent with the London Plan and reflected in the SAMM the relative contribution is unlikely to increase substantially over that indicated in the SAMM.

INCORPORATED MITIGATION

5.2.5. The Local Plan includes several policies that will reduce or mitigate recreational pressure on the SAC, including the policies GWS1 – GWS5. In particular:

- **Policy GWS1** requires that development provide or help to deliver easy access to a network of high-quality green spaces, and safeguards existing greenspace.
- **Policy GWS3** states that:

  The Epping Forest Special Area of Conservation will be protected and enhanced by ensuring that development within 6.2km of the boundary of Epping Forest Special Area of Conservation demonstrates that, if necessary, measures are put in place to avoid or mitigate any potential adverse effects, through:

  (a) developments of new net additional residential homes contributing towards the delivery of the agreed Strategic Access Management and Monitoring Strategy; and

  (b) developments of new net additional residential homes contributing to the provision of Suitable Alternative Natural Greenspace.

5.2.6. The SAMM was published in 2021 and adopted by Cabinet in June 2022. It notes that "*The proposed measures have been reviewed by several local authorities (in their role as competent authorities) and by Natural England (as the government's advisor for the natural environment in England). This has ensured that the measures identified in this Strategy are those necessary to mitigate the effects of future development on the Epping Forest SAC*".

5.2.7. It should be noted that mitigation delivered by the SAMM is considered fundamentally scalable to address higher housing numbers; this is consistent with NE's position on other strategic mitigation schemes (for example, in relation to the Thames Basin Heaths SPA, the Thanet Coast, or the SPAs associated with the Solent and nearby harbours).

5.2.8. In addition, the Council is developing an Epping Forest Special Area of Conservation Recreation Mitigation Strategy. Initial discussions have been held with Natural England on approaches to SANGs and possible locations for greenspace improvements within the borough. The Strategy will mitigate recreational pressure in Epping Forest SAC and will set out:

- a set of fully costed of interventions to be delivered in the London Borough of Newham (LBN).

- Newham's SAC Recreation Mitigation tariff.

5.2.9. All new homes built within the Zone of Influence (ZOI) will be required to make a financial contribution to the delivery of these interventions. The Strategy will be taken to Cabinet for adoption in Summer 2025.

ASSESSMENT OF EFFECTS

5.2.10. The majority of the proposed Local Plan allocations will have little or no influence on visitor pressure at the SAC due to their distance from this site. In considering the potential effects of increased recreational pressure on this site due to the Local Plan, the following aspects are relevant:

- The Local Plan incorporates the agreed and accepted strategic mitigation for recreational effects on the Epping Forest SAC, i.e. the SAMM and the associated requirement for SANGs. The Council also intends to work with Natural England to develop a strategy for the provision for SANGS in the borough, including an assessment of need and the potential for existing green spaces, their ability to provide SANGS, delivery and funding. An Epping Forest Special Area of Conservation Recreation Mitigation Strategy will be taken to Cabinet for adoption in Summer 2025. The Strategy will mitigate recreational pressure in Epping Forest SAC and will set out a set of fully costed of interventions to be delivered in the London Borough of Newham (LBN) and Newham's SAC Recreation Mitigation tariff. All new homes built within the Zone of Influence (ZOI) will be required to make a financial contribution to the delivery of these interventions.
- The SAMM is considered fundamentally scalable to address higher housing numbers, and extendable to cover the revised plan period. The SAMM is subject to regular monitoring, which will inform future amendments to ensure its continued effectiveness.
- With regard to monitoring the effectiveness of the SAMM, provision is made within the SAMM for monitoring; results from these surveys are not currently available, however there is evidence of the effectiveness of the measures (notably ranger provision) from similar programmes such as that associated with the Solent[46] which have reported significant differences in measures of disturbance.

5.2.11. On this basis it can be reasonably concluded that the renewed plan will have no adverse effects on the integrity of the Epping Forest SAC through this mechanism due to (inter alia) the inclusion of the SAMM in policy[47]. There are no substantive data gaps in relation to this aspect and NE confirmed they agreed with this conclusion (by email 17 March 2025).

5.3 AIR QUALITY

SUMMARY OF PATHWAY

5.3.1. Air quality has negatively affected the epiphytic lichen communities[48] of the Epping Forest SAC near the roads that cross the site. The SAC is approximately 2km from the Council's Administrative Area

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

[47] Since this is the point of the SAMM, and if it were not sufficient to ensure no adverse effects in combination then no Local Plan could place any reliance on it.

[48] Epiphyte richness is a key factor in defining hyper-Atlantic forms of the Atlantic acidophilous beech forests Annex I type.

boundary at its closest point, and so the Local Plan proposals may indirectly contribute to local air pollution and wider diffuse pollution 'in combination' with other plans. In practice, the principal source of air pollution associated with the Local Plan will be related to changing patterns of vehicle use due to the promotion of new development (since the Local Plan does not provide for any new significant point-sources).

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[49] within 200m of a European site, with case law[50] indicating that changes in AADT on particular roads should be determined 'in combination' with other plans and projects.

BASELINE AND PREDICTED CHANGES

Site Condition

5.3.4. The features of the SAC considered sensitive to air quality impacts (specifically, based on the SIP, atmospheric nitrogen deposition) are:

- Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)
- Northern Atlantic wet heaths with Erica tetralix; and
- European dry heaths

5.3.5. Several studies in recent years have demonstrated that AADT increases associated with Local Plans 'in combination' are likely to be over 1000 on roads within 200m of the Epping Forest SAC, including several relatively minor roads, and it is certain (even without specific transport modelling) that LBN will contribute vehicles to these increases, particularly near the southernmost units of the SAC. In addition, the critical levels and critical loads for N-deposition are all exceeded at the site.

5.3.6. The 'Supplementary Advice' provides a broad target for air quality, specifically to "*Restore as necessary the concentrations and deposition of air pollutants at or below the site-relevant Critical Load or Level values given for the feature at this site on the Air Pollution Information System*". The 'Supplementary Advice' also notes that "*It is recognised that achieving this target may be subject to the development, availability and effectiveness of abatement technology and measures to tackle diffuse air pollution, within realistic timescales*".

[49] 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).

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

5.3.7. With regard to the broader contextual baseline, recent air quality modelling for LPAs closer to the SAC have demonstrated that N deposition is likely to remain over the minimum critical load for the site habitats in the short- to medium-term, declining with the shift away from internal combustion engine (ICE) vehicles. The local authorities immediately around Epping Forest SAC, plus Essex County Council, Hertfordshire County Council, Highways England, NE and the Corporation of London, have agreed to work collaboratively to reduce air quality impacts on the SAC, putting in place a memorandum of understanding to support this. Epping Forest District Council has recently published an interim air pollution mitigation strategy[51] to address the effects of traffic on the SAC, which includes a requirement to establish a Clean Air Zone around the SAC by 2025.

Traffic

5.3.8. There are a number of trunk, A and B roads within 200m of Epping Forest SAC; the most relevant to traffic movements to and from LBN are those running from the LBN area north towards Woodford and Epping including:

- A114 Whipps Cross Road
- A113 New Wanstead
- A1199 Holly Bush Hill
- A104 Lea Bridge Road / Woodford New Road / Epping New Road
- A1009 Chingford Lane
- A12 Eastern Avenue near Wanstead
- A1069 Chingford Lane
- A406 North Circular Road
- A503 Forest Road
- A110 Whitehall Road

5.3.9. The interest features are present across the SAC and are all likely to occur, to some extent, within 200m of the above roads. The critical load, critical levels and current range of N-deposition for the key junctions (i.e. busiest locations) for these roads are summarised in **Table 8.1**. The units in these locations are in 'favourable', 'unfavourable recovering' or 'unfavourable no change' condition, with air quality being the principal reason for 'unfavourable no change' condition.

5.3.10. It should be noted that the APIS source attribution data for the site suggest that road transport is responsible for 10.8% of the local contributions to N deposition (compared with, for example, livestock and fertiliser application which account for 20.89% of local contributions to N deposition).

[51] Available at: https://www.eppingforestdc.gov.uk/planning-and-building/efsac-guidance-for-applicants/

Table 5-1 – APIS data for nutrient nitrogen

Nutrient N component	Critical Load / Critical Level		Current deposition at each location (2020)*	
Total N Deposition (kg/N/ha/yr)	Atlantic acidophilous beech forests Northern Atlantic wet heaths European dry heaths	10 – 15 5 – 15 5 – 15	A12 near Wanstead A406 North Circular near Woodford A104 Epping New Road west of Theydon Bois	31.8 32 28.2
Ammonia (µg/m3)	Atlantic acidophilous beech forests Northern Atlantic wet heaths European dry heaths	1 or 3 1 1	A12 near Wanstead A406 North Circular near Woodford A104 Epping New Road west of Theydon Bois	2 2 1.5
NOx (µg/m3)	Atlantic acidophilous beech forests Northern Atlantic wet heaths European dry heaths	30 30 30	A12 near Wanstead A406 North Circular near Woodford A104 Epping New Road west of Theydon Bois	33.3 40 19.7
SO2 (µg/m3)	Atlantic acidophilous beech forests Northern Atlantic wet heaths European dry heaths	10 – 20 10 10	A12 near Wanstead A406 North Circular near Woodford A104 Epping New Road west of Theydon Bois	1.2 2.1 2.4

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

5.3.11. A traffic model for LBN has not been developed and so it is not possible to calculate the precise change in vehicle trips on roads within 200m of Epping Forest SAC that may be due to specific allocations in the LBN Local Plan (although it should be noted that modelling has been previously completed for other local plans in the area (e.g. Epping Forest), which provides proxy data). Potential trip generation has therefore been calculated using land-use information for the relevant allocations and utilising the benchmark trip rates for Inner London outlined in the London Air Quality Neutral (AQN) Guidance[52]; these data are presented in **Appendix E**, which also summarises other qualitative and contextual data relating to anticipated traffic changes around Epping Forest SAC.

5.3.12. In summary, the AADT trip-rates between relevant LBN allocations and the London Borough of Waltham Forest (LBWF) and Epping Forest District Council (EFDC) areas (i.e. to the council area that contain units of the SAC) will be around 4390 and 809 respectively in total (see **Section 6 of Appendix E**). These will exceed the JNCC's Decision Making Thresholds (DMTs) for changes to be considered '*de minimis*' (i.e. not significant).

5.3.13. However, when considering the potential for 'adverse effects on integrity' due to these changes it is important to note that these numbers are highly conservative:

- The increases are not specific to roads within 200m of the SAC – whilst a proportion of these trips will utilise roads close to the SAC the majority will not.
- Data limitations prevent quantification of the likely net change in trips between the existing and proposed uses of the allocation sites. As the existing uses of the proposed allocation sites cannot be robustly accounted for the model essentially assumes that all trips are 'new trips', which significantly overestimates traffic growth[53].
- Trip rates assume that all of the ~3,800 windfall site dwellings will be located within the ZoI of the SAC; this is highly precautionary as many of these will sit within the Royal Docks and Beckton Opportunity Area, where there is no identified receptor pathway, or outside of the identified ZoI based on land use.
- The calculations are likely to significantly overestimate retail trips as (a) the worst-case trip rate (convenience retail) was applied notwithstanding that the plan has not identified a need for additional convenience retail over the plan period and (b) all retail floorspace is treated as 'new' floorspace due to data limitations.
- It should also be noted that the majority of shortlisted site allocations that trigger an exceedance of the DMT on roads within LBWF are located in and around Stratford where the Public Transport Accessibility Level (PTAL) rating (a measure which rates locations by distance from frequent public transport services) is 6B (i.e. the best possible rating) making it easier for future occupants/users of these developments to travel via public transport. On this basis, the calculated trip generation is again considered to be an overestimation. The London Legacy

[52] Mayor of London (February 2023) London Plan Guidance. Air Quality Neutral.

[53] It should be noted that LBWF were able to demonstrate an overall reduction in traffic with the implementation of their Submission Local Plan and de-minimis effects on Epping Forest SAC by comparing the proposed and existing/consented use of their site allocations. At a regional level, the LBN and LBWF are bound by the same planning framework (namely the London Plan) and its policies around car parking and EV provision.

Development Corporation (LLDC) Local Plan also concludes that site allocations in Stratford will have no significant effects on this SAC through air quality changes.

5.3.14. Consequently, whilst precise quantification of predicted traffic changes on specific roads close to the SAC as a result of the LBN allocations cannot be made with the available data, the results of the modelling undertaken are consistent with the existing models for traffic change and air quality that have been developed in relation to the SAC for other, adopted, Local Plans – i.e. there is nothing to suggest that the traffic growth that may be attributable to the LBN plan is outside the ranges previously predicted by the traffic assessments of other plans and assessed by their HRAs. Therefore the existing studies provide a reasonable proxy where data gaps exist for the LBN plan; these are considered in the 'Assessment' section below.

5.3.15. Following the Regulation 19 consultation, and in discussion with NE, further work was carried out by the Council to provide quantitative data to support the qualitative data summarised above and presented in Air Quality Information Report presented in Appendix E of this report. The Post Regulation 19 Update Report (February 2025) to the air quality information is available separately. Further information is provided in the 'Assessment' section below.

INCORPORATED MITIGATION

5.3.16. Whilst the Local Plan's ability to influence out-of-district travel will be limited, sustainable travel principles (including support for public transport, cycle and pedestrian routes, car clubs, etc.) are woven throughout the proposed Local Plan policies, particularly with regards to the strategic allocations.

5.3.17. In particular, LBN's Sustainable Transport Strategy sets out a series of short-term and long-term actions that will be taken to support the overall objectives of the Local Plan and help to support growth within the Borough and guide sustainable transport schemes. This includes measures relating to EVs, private car use, public transport and behaviour change (see **Section 8 of Appendix E**). Newham is aligning with the Mayor's Transport Strategy, which targets having 80% of all trips undertaken by Public Transport, walking, and cycling by 2030.

5.3.18. Mitigating measures are therefore present within several plan policies, including:

- **CE6: Air quality** (requires developments mitigate and improve air quality).
- **T2: Local transport** (supports car-free development and improved local connectivity to neighbourhood facilities).
- **T3: Transport behaviour change** (includes provisions intended to reduce car use).

ASSESSMENT OF EFFECTS

5.3.19. Nitrogen deposition is likely to remain over the minimum critical load for the site habitats to 2038 irrespective of the Local Plan contribution; however, it is expected that emission factors will decrease in future years with the shift away from ICE vehicles and as Local and London Plan policies on air quality and transport begin to have traction.

5.3.20. The available traffic data (see **Appendix E**) suggests that LBN will contribute to the anticipated growth in traffic around Epping Forest SAC, which is consistent with other transport studies undertaken for this site. However, the assessment is highly conservative (i.e. overestimates the likely contribution of LBN) and it should be noted that a similar modelling approach for the LBWF plan resulted in much lower estimates for trip-rates once information on existing land-use was applied (sufficient to demonstrate that effects on the SAC would be 'de minimis' (i.e. not significant);

there is no reason to assume that this would not be replicated for LBN if the modelling accounted for net change (which it is currently unable to do due to data limitations).

5.3.21. The contribution of LBN will therefore be relatively small, and there are much contextual and qualitative data available from other studies relating to transport and air quality in London that support this position (see **Table 7.1** of **Appendix E**). Therefore, whilst precise quantification of LBN's contribution is not possible it is evident that it will (a) be within the range predicted by other studies and (b) will not undermine or compromise the mitigation agreed for other Local Plans.

5.3.22. Further work carried out by the Council in relation to traffic and air quality information following the Regulation consultation, concluded that the air quality information report presented in Appendix E substantially overestimated the number of vehicle trips that would affect the Epping Forest SAC. Despite this, the Post Regulation 19 Update Report (produced by the Council and available separately) identified four site allocations as exceeding the precautionary Decision-Making Threshold (DMT) of 50 trips per day near the Epping Forest SAC.

5.3.23. The Council interrogated the 4 sites that exceed the precautionary DMT in more detail, using planning application data, travel plan data and other information. For the site at Stratford Central, the Post Regulation 19 Update Report concluded that the high quality of public transport is likely to mean that the estimated trip rate at Stratford Central is substantially higher than it will be in actuality and that as the exceedance of the precautionary DMT is by 1 trip only, LSE from this site can be ruled out.

5.3.24. For the sites at Stratford Waterfront South and Pudding Mill Lane, the Post Regulation 19 Update Report concluded that the estimated trip rate is substantially higher than it will be in actuality - in light of their location and land uses proposed, and supporting data of travel plan and existing planning permissions available. Furthermore, as the Proposed Submission Local Plan does not propose any growth above that already permitted, proposals in the Plan will not lead to trips beyond those already approved and that LSE from these sites can be ruled out.

5.3.25. For the site at Rick Roberts Way, the Post Regulation 19 Update Report concluded that the number of trips will not exceed the precautionary DMT in light of the well-connected location of Rick Roberts Way and the in-borough catchment of the SEND school and therefore LSE from this site can be ruled out.

5.3.26. The potential for effects on European sites outside an LPA boundary due to air quality is difficult for a Local Plan to specifically mitigate, since the decision to travel by car to locations 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 in T2 (Local Transport) and T3 (Transport Behavioural Change). This will help moderate the effects of the plan, and is consistent with the mitigation proposed for other LPAs that are located a similar distance from the SAC (for example, the Air Quality Mitigation Strategy developed for LBWF includes measures such as limits on car parking in new developments, support for increased electric car use and promotion of a modal shift to walking and cycling).

5.3.27. The London Plan 2021, as the Spatial Development Strategy for Greater London, provides additional policy to help address potential significant negative effects. These include the requirement for new development to be at least air quality neutral (London Plan 2021 Policy SI1) and for development to be net zero-carbon (London Plan 2021 Policy SI2). It should also be noted that the

local authorities immediately around Epping Forest SAC, plus Essex County Council, Hertfordshire County Council, Highways England, NE and the Corporation of London, have agreed to work collaboratively to reduce air quality impacts on the SAC, putting in place a memorandum of understanding to support this. Furthermore, other overarching strategies and policies including the London Mayor's Transport Strategy and the London Environment Strategy are (with the transition to electric vehicles) expected to result in a significant net improvement in air quality in the Epping Forest are London over the plan period and beyond.

5.3.28. It should be noted that Local Plans for several London boroughs have been recently adopted or submitted for EiP; these include plans for Hackney (adopted 2020), Tower Hamlets (adopted 2020) and Waltham Forest (adopted 2024). These boroughs are a similar distance or closer to Epping Forest SAC and/or better connected by road than the Borough. The HRAs for all of these plans concluded that there would be no adverse effects on Epping Forest SAC due to air quality changes (without necessarily identifying the precise relative contributions to AADT on roads near the SAC), invariably due to incorporated measures that are the same as, or consistent with, those proposed for the Newham plan.

5.3.29. It should be noted that the background rate of N-deposition from vehicles has been declining for some years and is expected to decrease substantially over the plan period with the shift to electric vehicles, based on the UK Air Quality Plan for Nitrogen Dioxide and government predictions[54]; incorporating allowances for expected background air quality improvements into any assessments is in accordance with IAQM guidance (IAQM 2020)[55].

5.3.30. The Local Plan manages the air quality aspects that are within its control, although as noted the Local Plan's ability to influence out-of-district travel is limited. The presence of air quality mitigation plans for LPAs adjacent to the SAC (which have been developed to prevent the Local Plans of these LPAs having adverse effects) are likely to be effective for reducing impacts on the SAC due to vehicle emissions, and the impacts of the LBN Local Plan are not substantive enough to prevent the achievement or maintenance of favourable conservation status if these mitigation plans are delivered as proposed. Therefore, it is reasonable to conclude that that the LBN Local Plan will not adversely affect the integrity of this SAC via this mechanism.

5.4 IN COMBINATION EFFECTS

5.4.1. No pathways 'in combination' effects (other than through air quality changes and recreational pressure) on Epping Forest are present with other plans or projects.

5.5 LOCAL PLAN CONCLUSION

5.5.1. Based on the available data including recent air quality modelling from other LPAs and the Air Quality Information Report to Inform Habitats Regulations Assessment, produced by Newham Borough Council (February 2025), it is considered that the Local Plan will have no adverse effects

[54] 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

[55] 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*"

on the integrity of **Epping Forest SAC**, alone or in combination. NE confirmed that they agreed with this conclusion (by email 17 March 2025) following a review of the Post Regulation 19 Update Report (February 2025) to the air quality information carried out by the Council.

6 SUMMARY AND CONCLUSIONS

6.1 SUMMARY

6.1.1. The Newham Local Plan sets out the spatial strategy for Newham for a fifteen-year period between 2023 and 2038. The spatial strategy identifies the location, scale and uses of development that will come forward in Newham and demonstrates how needs of Newham's current and future population will be met. This includes the need, set by the London Plan 2021, to deliver at least 47,600 additional homes in Newham over the period 2019/20 to 2028/29. The Local Plan identifies potential for between 51,425 and 53,784 new homes by 2038. The Newham Local Plan also seeks to meet Newham's needs for:

- a requirement for 335,00 sqm of industrial floorspace;
- a minimum requirement for 90,000 of office floorspace; and
- 25,973sqm of retail floorspace

6.1.2. Regulation 105 of the Habitats Regulations states that if a land-use plan is "(*a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and (b) is not directly connected with or necessary to the management of the site*" then the plan-making authority must "…*make an appropriate assessment of the implications for the site in view of that site's conservation objectives*" before the plan is given effect. The process by which Regulation 105 is met is known as HRA. An HRA determines whether there will be any 'likely significant effects' (LSE) on any European site as a result of a plan's implementation (either on its own or 'in combination' with other plans or projects) and, if so, whether these effects will result in any adverse effects on the site's integrity. The Council has a statutory duty to prepare the Local Plan and is therefore the Competent Authority for an HRA.

6.1.3. There is no statutory requirement for HRA to be undertaken on draft plans or similar developmental stages (e.g. issues and options; preferred options). However, it is accepted best-practice for the HRA of strategic planning documents to be run as an iterative process alongside plan development, with the emerging policies or options reviewed during development to ensure that potentially adverse effects on European sites can be identified at an early stage, and avoided or mitigated through the plan development process.

6.1.4. This report therefore accompanies the Local Plan on submission to the Secretary of State for independent examination. **It does not constitute a formal 'HRA screening' or Appropriate Assessment** as the plan is still in development and so any screening or appropriate assessment conclusions would be premature; however, the principles of HRA are applied to the Local Plan to (a) provide an initial assessment of the likely HRA conclusions, were the plan adopted as currently drafted and (b) identify additional data requirements and/or additional measures that may be required to ensure that the adopted version of the plan has no adverse effects on any European sites.

6.1.5. The HRA of the Local Plan has considered potential effects on:

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

6.1.6. The assessment completed to date indicates that the majority of the Preferred Option Local Plan policies and proposed site allocations will have 'no effect' (either alone or in combination) on any European sites, typically because either they are policy types that do not make provision for changes or because they relate to sites that are a considerable distance from the European sites (with no known pollutant or effect pathway).

6.1.7. The initial 'screening' assessment has concluded that **significant effects on the following sites are not anticipated, alone or in combination**; this is principally due to their distance from the LBN area and the absence of reasonable pathways by which environmental changes associated with the Local Plan could undermine the conservation objectives for the sites:

- Lee Valley SPA
- Lee Valley Ramsar
- Wimbledon Common SAC
- Richmond Park SAC
- Thames Estuary and Marshes SPA
- Thames Estuary and Marshes Ramsar

6.1.8. Further examination of potential effects through an 'appropriate assessment' stage was completed for the following sites and pathways:

- Epping Forest SAC
  - Air Quality
  - Recreational Pressure

6.1.9. These aspects have been examined through an 'appropriate assessment' stage to ensure that proposals coming forward under the Local Plan either avoid affecting designated sites entirely (no significant effect) or will not adversely affect site integrity where potential effect pathways cannot be excluded with additional data collection. 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)).

6.1.10. In summary:

- **Air Quality**: Development within the LBN 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 Epping Forest SAC. The available traffic data (see **Appendix E**) suggests that LBN will contribute to the anticipated growth in traffic around Epping Forest SAC, which is consistent with other transport studies undertaken for this site. However, the assessment is highly conservative (i.e. overestimates the likely contribution of LBN) and it should be noted that a similar modelling approach for the LBWF plan resulted in much lower estimates for trip-rates once information on existing land-use was applied (sufficient to demonstrate that effects on the SAC would be 'de minimis' (i.e. not significant); there is no reason to assume that this would not be replicated for LBN if the modelling accounted for net change (which it is currently unable to do due to data limitations). The contribution of LBN will therefore be relatively small, and there are much contextual and qualitative data available from other studies relating to transport and air quality in London that support this position (see **Table 7.1** of **Appendix E**). Therefore, whilst precise quantification of LBN's contribution is not possible it is evident that it will (a) be within the range predicted by other studies and (b) will not undermine or compromise the mitigation agreed

for other Local Plans. The mitigating policies included in the Local Plan (such as requirements for car-free development) are consistent with those included in adopted Local Plans for nearby councils (including LBWF) that have allowed a conclusion of 'no adverse effects' to be reached; therefore, it is reasonable to reach the same conclusion (i.e. the LBN plan will have no adverse effects on this SAC due to changes in air quality). Following the Regulation 19 consultation, and in discussion with NE, further work was carried out by the Council to provide quantitative data to support the qualitative data summarised above and presented in Air Quality Information Report presented in **Appendix E** of this report. The Post Regulation 19 Update Report (February 2025) to the air quality information is available separately and concluded that the air quality information presented in **Appendix E** substantially overestimated the number of vehicle trips that would affect the Epping Forest SAC. It found that only four site allocations are likely to exceed the precautionary Decision-Making Threshold (DMT) of 50 trips per day near the Epping Forest SAC. Further analysis was undertaken it was concluded that likely significant effects can be ruled out for each of these sites.

- **Visitor/Recreational Pressures**: The screening has indicated that the interest features of Epping Forest SAC may be vulnerable (i.e. sensitive) to environmental changes associated with increased visitor pressure. However, the draft Local Plan adopts mitigation in Policy GWS3 and so it can be reasonably concluded that the renewed plan will have no adverse effects on the integrity of the Epping Forest SAC through this mechanism due to (inter alia) the inclusion of the SAMM in policy[56] and the emerging SANGs strategy.

6.2 CONCLUSIONS

6.2.1. Overall, the assessment of the Local Plan has concluded that most aspects of the plan will have no significant effects on any European sites, alone or in combination due to the absence of effect pathways.

6.2.2. Appropriate assessments have been undertaken for those aspects where effect pathways are present (in combination air quality and visitor pressure effects), taking into account specific and cross-cutting policy-based mitigation and avoidance measures that have been incorporated into the plan. These appropriate assessments have employed additional analyses and data to resolve uncertainties present at the initial screening, and have concluded that (as currently drafted) **the Local Plan will have no adverse effects on the integrity of any European sites, alone or in combination**.

6.2.3. This conclusion is obviously preliminary: it will be necessary to review any changes that are made to the Local Plan as it proceeds to ensure that these initial HRA conclusions remain applicable, and the HRA will also be reviewed and updated as the Local Plan and its evidence base is developed further.

[56] Since this is the point of the SAMM, and if it were not sufficient to ensure no adverse effects in combination then no Local Plan could place any reliance on it.

Appendix A

EUROPEAN SITE SUMMARIES

APPENDIX A – EUROPEAN SITE SUMMARIES

Notes

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

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

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

Note:

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

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

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

EPPING FOREST SAC	
Site Code	UK0012720
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0012720.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5908284745711616?category=6581547796791296
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5908284745711616?category=6581547796791296
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012720.pdf
Associated SSSIs	Epping Forest SSSI
Site Overview	Epping Forest is one of the few remaining large-scale examples of ancient wood-pasture in lowland Britain, and has retained habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains and scattered wetland. The SAC covers a series of semi-natural woodland and grassland blocks between Wanstead in London (near the A12) and the M25 at Epping. The site supports a mosaic of high-value habitats including ancient semi-natural beech woodlands (which dominate the site), unimproved acid grasslands, wet and dry heath, as well as small rivers, streams and bogs. The long history of grazing (formerly) and management has produced habitats (including large numbers of veteran trees) that are important for a range of associated species and species groups, including rare epiphyte[57] communities, fungi, and saproxylic[58] invertebrates. The forest is London's largest open space and so is a significant resource for recreation, being used for a range of activities including walking, dog walking, running, cycling, wildlife watching and horse-riding. Indeed, the Epping Forest Act 1878 stipulates that it "*shall at all times* [be kept]...*as an open space for the recreation and enjoyment of the people*".

[57] Ephiphytes are plants (typically non-parasitic) that grow on other plants – for example, mosses or ferns growing on tree trunks.

58 Species dependent on dead or decaying wood.

EPPING FOREST SAC	
Qualifying Features / Ramsar criteria	- H4010: Northern Atlantic wet heaths with *Erica tetralix* - H4030: European dry heaths - H9120: Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*) - S1083: Stag beetle *Lucanus cervus*
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice provides guidance on the 'typical species' considered to be associated with the site; these include: - The constant and preferential plant species of the M16 and H1 NVC vegetation types which comprise the Northern Atlantic wet heaths with Erica tetralix feature of the SAC; - The constant and preferential plant species of the M16 and H1 NVC vegetation types which comprise the European dry heaths feature of the SAC; - The constant and preferential plant species associated with W10, W14 and W15 NVC vegetation types which comprise the Atlantic acidophilous beech forests feature; - The key species of ground flora associated with W10, W14 and W15 NVC vegetation types which comprise the Atlantic acidophilous beech forests feature; - Key species of epiphytic bryophytes including the endangered Schedule 8 Knothole moss Zygodon forsteri and notable species; - Key species of epiphytic lichens including: Pinheads, Southern Oceanic Species and threatened species; and - The assemblage of saproxylic invertebrates.
Functional Land	No specific areas of functional land are identified, although a permeable landscape of woodland blocks will support the integrity of the stag beetle population.
Condition, Pressures, Threats	The key pressures currently affecting the site (based on the SIP) are air pollution, management (undergrazing), and visitor pressure. All of the SSSI units where air pollution is identified as a key issue in an 'unfavourable' condition assessment are in the southern area of the Forest, between Chingford and Wanstead, rather than those areas near the M25.

LEE VALLEY SPA

Site Code	UK9012111
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9012111.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5670650798669824?category=6581547796791296
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5670650798669824?category=6581547796791296
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9012111.pdf
Associated SSSIs	Amwell Quarry SSSI; Rye Meads SSSI; Turnford & Cheshunt Pits SSSI; Walthamstow Reservoirs SSSI
Site Overview	The Lee Valley SPA comprise a series of man-made and semi-natural waterbodies (reservoirs, lagoons and gravel pits) along the River Lea in North London. The closest units to the borough area are a group of reservoirs around Walthamstow constructed in the late 19th century; the remainder of the SPA/Ramsar is located north of the M25 and substantially beyond the zone of influence of the Local Plan. Parts of the sites are managed as nature reserves. The Walthamstow reservoirs are operated by Thames Water and are used for fishing and birdwatching, but watersports are not permitted. There are however a number of well-used public paths around the reservoir margins. Other units of the SPA are used for recreational watersports.
Qualifying Features / Ramsar criteria	- A021w: **Great bittern** Botaurus stellaris - A051w: **Gadwall** Anas strepera - A056w: **Northern shoveler** Anas clypeata
Other interest features (SAC typical species, SPA supporting habitats, etc.)	Two broad supporting habitats at the site are considered important for the SPA waterbird assemblage and its component species; these are: - Open standing water and canals; and - Fen, marsh and swamp.

LEE VALLEY SPA	
Functional Land	Possible areas of 'functional land' are identified away from the SPA/Ramsar, specifically King George V Reservoir and Holyfield Lake for gadwall; and King George V Reservoir, William Girling Reservoirs and Ponders End Lake for shoveler. The qualifying features of the sites may make use of other habitats outside the site boundary, although most of the features are strongly associated with the wetland and open water habitats of the SPA / Ramsar rather than exclusively terrestrial habitats, and are primarily attracted to the site for this reason.
Condition, Pressures, Threats	The SSSI units underpinning the SPA are currently in 'favourable' or 'unfavourable recovering' condition, and the SIP does not identify any pressures currently affecting site integrity. The SIP identifies several threats, principally: - Water pollution (principally related to the need for clear open water and moderately eutrophic conditions); - Water level management (principally relating to the operation of the reservoirs for water abstraction); - Public access / disturbance (recreational watersports (not within Walthamstow reservoirs), angling and dog-walking); - Inappropriate scrub control (relating to reedbed management and marginal habitats); - Fish stocking (relating to recreational angling and the need to balance this against the interest feature requirements); - Invasive species (the wetlands are periodically colonised by *Azolla*); - Inappropriate cutting / mowing (rotational management of reedbed for bittern) - Air pollution (principally relating to potential effects on reedbeds supporting bittern, although it should be noted that for most wetland habitats eutrophication via run-off and flood water is overwhelmingly more significant than air pollution, and available-N is rarely a limiting factor in these ecosystems). The nearest units of the SPA to the Borough area (Walthamstow Reservoirs SSSI) are in 'unfavourable recovering' condition, due primarily to decreases in shoveler numbers, but this is not thought to be associated with the management (including recreational use) of the reservoirs, instead reflecting wider population trends or changes in site preferences.

LEE VALLEY RAMSAR

Site Code	UK11034
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11034.pdf
Conservation Objectives	As per associated SAC / SPA, or underpinning SSSI(s)
Site Improvement Plan	As per associated SAC / SPA, or underpinning SSSI(s)
Supplementary advice	As per associated SAC / SPA, or underpinning SSSI(s)
Associated SSSIs	Amwell Quarry SSSI; Rye Meads SSSI; Turnford & Cheshunt Pits SSSI; Walthamstow Reservoirs SSSI
Site Overview	As per Lee Valley SPA.
Qualifying Features / Ramsar criteria	- Crit. 2 - supports vulnerable, endangered, or critically endangered species or threatened eco. communities - Crit. 6 - regularly supports 1% of the individuals in a population of one species/subspecies of waterbirds
Other interest features (SAC typical species, SPA supporting habitats, etc.)	As per Lee Valley SPA.
Functional Land	As per Lee Valley SPA.
Condition, Pressures, Threats	As per Lee Valley SPA.

WIMBLEDON COMMON SAC

Site Code	UK0030301
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030301.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5706571287887872?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5706571287887872?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030301.pdf
Associated SSSIs	Wimbledon Common SSSI
Site Overview	Wimbledon Common is approximately 350 ha. in size and supports the most extensive area of open, wet heath on acidic soil in Greater London. It supports a mosaic of other habitats including broadleaved woodland, acid grassland, dry and wet heath, scrub and mire. It has numerous old trees and a great quantity of fallen decaying timber which supports an important stag beetle population and other invertebrate species.
Qualifying Features / Ramsar criteria	- H4010: Northern Atlantic wet heaths with Erica tetralix - H4030: European dry heaths - S1083: Stag beetle Lucanus cervus

WIMBLEDON COMMON SAC	
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice provides guidance on the 'typical species' considered to be associated with the site; these include: - The constant and preferential plant species of the H1 and H2 NVC vegetation types which comprise the European dry heaths feature of the SAC; - The constant and preferential plant species of the M16 and M25 NVC vegetation types which comprise the Northern Atlantic wet heaths with Erica tetralix feature of the SAC; - Other species: Heather *Calluna vulgaris*, Bell heather *Erica cinerea*, dwarf gorse *Ulex minor*, pill sedge *Carex pilulifera*, heath bedstraw *Galium saxatile*, petty whin *Genista anglica*, *Hypochaeris radicata*, tormentil *Potentilla erecta*, sheep's sorrel *Rumex acetosella*, *Myrica gale*, *Salix repens*, *Eleocharis* spp., *Eriophorum angustifolium*, *Molinia caerulea*, *Trichophorum cespitosum*, *Anagallis tenella*, *Drosera* spp., *Narthecium ossifragum*. - Mosses *Hypnum jutlandicum*, *Dicranum scoparium*, *Polytrichum juniperinum*.
Functional Land	No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity, although the need to maintain or restore the connectivity of the site to its wider landscape through features such as habitat patches, hedges, watercourses and verges is noted.
Condition, Pressures, Threats	The SSSI underpinning the SAC is mostly in 'unfavourable recovering' condition. The primary reason for SSSI units being in this condition is the low structural and age diversity of the heath. Accordingly, the SIP identifies the following pressures and threats affecting site integrity: - Public access/ Disturbance (high visitor use) - Habitat fragmentation (which affects the Stag beetle) - Invasive species (Oak processionary moth) - Air pollution (impact of atmospheric nitrogen (N) deposition)

RICHMOND PARK SAC	
Site Code	UK0030246
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0030246.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/5279688851193856?category=6528471664689152
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/5279688851193856?category=6528471664689152
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030246.pdf
Associated SSSIs	Richmond Park SSSI
Site Overview	Richmond Park has been managed as a royal deer park since the seventeenth century and it supports a mosaic of habitats including acid grassland, marshy grassland and neutral grassland as well as open parkland and wood pasture. This site is designated for the population of Stag beetle associated with ancient trees and deadwood
Qualifying Features / Ramsar criteria	- S1083: Stag beetle Lucanus cervus
Other interest features (SAC typical species, SPA supporting habitats, etc.)	No 'typical species' are identified.
Functional Land	No specific non-designated areas of land outside the site boundary are identified as being functionally important to the maintenance of site integrity although the need to maintain or restore the connectivity of the site to its wider landscape through features such as habitat patches, hedges, watercourses and verges is noted.
Condition, Pressures, Threats	The SSSI underpinning the SAC is in 'favourable' condition and there are no current pressures or threats for the SAC according to the SIP.

THAMES ESTUARY AND MARSHES SPA

Site Code	UK9012021
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9012021.pdf
Conservation Objectives	Available at: http://publications.naturalengland.org.uk/publication/4698344811134976?category=6581547796791296
Site Improvement Plan	Available at: http://publications.naturalengland.org.uk/publication/4698344811134976?category=6581547796791296
Supplementary advice	Available at: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9012021
Associated SSSIs	Mucking Flats and Marshes SSSI, South Thames Estuary and Marshes SSSI
Site Overview	The majority of the Thames Estuary and Marshes SPA is located on the southern side of the Thames estuary. The site is dominated by extensive intertidal mudflats with fringing saltmarsh, with associated terrestrial habitats including grazing marsh; complex channels, fleets and ditches; and semi-improved grassland. A series of disused quarry pits have been transformed to create an extensive series of ponds and lakes at Cliffe Pools. These areas provide a variety of habitat types, which are important feeding and roosting sites for the large populations of bird species that use this site, including those during the spring and autumn migration periods.
Qualifying Features / Ramsar criteria	**- A082w: Hen harrier *Circus cyaneus*** **- A132w: Pied avocet *Recurvirostra avosetta*** **- A137c: Ringed plover *Charadrius hiaticula*** **- A141w: Grey plover *Pluvialis squatarola*** **- A143w: Red knot *Calidris canutus*** **- A162w: Common redshank *Tringa totanus*** **- A616w: Black-tailed godwit *Limosa limosa islandica*** **- A672w: Dunlin *Calidris alpina alpina*** **- WATR: Waterbird assemblage**
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice indicates that the within-site supporting habitats for the qualifying features are principally: coastal lagoons, coastal reedbeds, freshwater and coastal grazing marsh, intertidal mixed sediments, intertidal sand and muddy sand, *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritimae*).

THAMES ESTUARY AND MARSHES SPA	
Functional Land	Specific areas of functional land are identified for Black-tailed godwit (Holehaven Creek SSSI).
Condition, Pressures, Threats	The SSSI units underpinning the SPA and Ramsar are in 'favourable', 'favourable-recovering', 'unfavourable-no change' and 'unfavourable-declining' condition. The SIP identifies several pressures and threats to site integrity (including public access, invasive species, fisheries, illicit vehicle access and air pollution) although none of these are likely to be influenced by the Local Plan.

THAMES ESTUARY AND MARSHES RAMSAR

Site Code	UK11069
Standard data form	Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11069.pdf
Conservation Objectives	As per associated SAC / SPA, or underpinning SSSI(s)
Site Improvement Plan	As per associated SAC / SPA, or underpinning SSSI(s)
Supplementary advice	As per associated SAC / SPA, or underpinning SSSI(s)
Associated SSSIs	Mucking Flats and Marshes SSSI, South Thames Estuary and Marshes SSSI
Site Overview	This site is largely coincident with the Thames Estuary and Marshes SPA. The bird interest features of this site (Criteria 5 and 6) are essentially the same as for the Thames Estuary and Marshes SPA (see above). The site meets Criterion 2 principally though the rarer plants and invertebrates that are primarily associated with the supra-tidal and terrestrial habitats (ditches and grazing marshes).
Qualifying Features / Ramsar criteria	- Crit. 2 - supports vulnerable, endangered, or critically endangered species or threatened eco. communities - Crit. 5 - regularly supports 20,000 or more waterbirds - Crit. 6 - regularly supports 1% of the individuals in a population of one species/subspecies of waterbirds
Other interest features (SAC typical species, SPA supporting habitats, etc.)	The supplementary advice indicates that the within-site supporting habitats for the qualifying features are principally: coastal lagoons, coastal reedbeds, freshwater and coastal grazing marsh, intertidal mixed sediments, intertidal sand and muddy sand, *Salicornia* and other annuals colonising mud and sand, *Spartina* swards (*Spartinion maritimae*).
Functional Land	Specific areas of functional land are identified for Black-tailed godwit (Holehaven Creek SSSI).
Condition, Pressures, Threats	The SSSI units underpinning the SPA and Ramsar are in 'favourable', 'favourable-recovering', 'unfavourable-no change' and 'unfavourable-declining' condition. The SIP identifies several pressures and threats to site integrity (including public access, invasive species, fisheries, illicit vehicle access and air pollution) although none of these are likely to be influenced by the Local Plan.

Appendix B

NE COMMENTS

APPENDIX B – NE COMMENTS

Table B-1 - NE comments on the HRA Scoping (December 2021)

Comments	LBN response
Our comments on this section relate to the scope of the HRA, which we understand will be completed at a later stage in the process.	Noted.
We are aware that Epping Forest SAC is already an issue that Newham Council is working on at a strategic scale, and we look forward to continuing to work with the borough on this issue. Epping Forest is one of the last examples of large-scale wood pasture in lowland Britain and has retained features such as ancient and semi-ancient natural woodland, old grassland and scattered wetland. Epping Forest SAC is already subject to high levels of recreational pressures from impacts including walking, mountain biking and activities such as unmanaged fires, as well as the increase in traffic on several roads which cut through the SAC. The site is therefore particularly sensitive to further increases to recreational pressure and traffic-related air pollution, which are both predicted to escalate due to planned development in the Authorities within the Zone of Influence of the SAC. The Local Plan should give great weight to the protection of Epping Forest SAC.	Noted.
On the 6th March 2019 Natural England published interim advice detailing the emerging strategic approach on the Epping Forest SAC mitigation strategy. This outlines the avoidance and mitigation measures required for developments of different sizes and in difference Zones of Influence (ZoI) of Epping Forest SAC.	Noted.
As you are aware the discussions around moving the interim strategy forward are ongoing. Currently the oversight group is hopeful that a governance agreement and breakdown of the SAMM tariff may be able to be brought before councils in early 2022 and we would advise that this may need to be considered as the Local Plan refresh is drafted.	Noted. The SAMMs governance agreement was agreed by LB Newham cabinet in July 2022 and will be considered as part of the Local Plan review.
We note that in the interim advice, it details the need for larger developments (over 100 units) within the ZoI to mitigate the potential impacts on Epping Forest SAC through the toolbox approach. To our knowledge, Newham has not yet identified potential toolbox measures within the borough, and any mitigation would have to be agreed on a bespoke basis between the developer, NE and the LPA. In line with other boroughs in the area, Newham may wish to use the Local Plan refresh as an opportunity to put together a strategy that would allow new developments coming forward to contribute towards pre-agreed measures.	Noted. Through the Green Infrastructure Study, which has just commenced, LB Newham will be identifying suitable toolbox measures. We look forward to working with Natural England on this process.

Comments	LBN response
Natural England are working with the boroughs of Redbridge, Waltham Forest and Enfield to put together borough wide approaches to SANG style measures (the toolbox approach). We have also visited LLDC, and fed into a list of possible projects within LLDC that could fit the criteria of the toolbox approach to form mitigation. We are continuing to engage with LLDC on their approach to Epping Forest SAC mitigation. As a large part of LLDC will return to Newham at the end of 2024, we feel that it is important that Newham and LLDC have similar approaches to Epping Forest mitigation.	Noted. We will discuss this further with LLDC and Natural England.
We would be happy to arrange an initial meeting to discuss the scope of a borough wide toolbox approach for Newham, and the use of Natural England's charged Discretionary Advice Service for our input to help develop a strategy, including the possibility of a site visit to greenspaces within the borough. The Local Plan can be used as a vehicle to identify potential developer mitigation options around the borough. Having this sort of strategic approach to the avoidance and mitigation measures for Epping Forest SAC would help in the evidence base for the HRA	Noted.
We would advise the HRA will also need to consider Air Quality impacts on Epping Forest SAC, and depending on the outcome of the Appropriate Assessment, there may be a need for cross-boundary cooperation on this issue also.	Noted. We look forward to discussing this further with Natural England.

Table B-2 - NE comments on Reg. 18 consultation (March 2023)

Comments	LBN response
The Local Plan should be screened under Regulation 105 of the Conservation of Habitats and Species Regulations 2017 (as amended) at an early stage so that outcomes of the assessment can inform key decision making on strategic options and development sites. It may be necessary to outline avoidance and/or mitigation measures at the plan level, which will usually need to be considered as part of an Appropriate Assessment, including a clear direction for project level HRA work to ensure no adverse effect on the integrity of internationally designated sites. It may also be necessary for plans to provide policies for strategic or cross boundary approaches, particularly in areas where designated sites cover more than one Local Planning Authority boundary.	Noted.

Comments	LBN response
We welcome the HRA Information Report that was provided alongside the Regulation 18 consultation and agree with the designated sites that have been considered as part of this process. We have provided more detailed comments on Epping Forest SAC below and would advise that impacts of the plan on this designated site should be considered fully through the Appropriate Assessment stage of the HRA. We are happy to work with the council to further the recreational pressure and air quality considerations which are outlined in the report.	Noted.
We note that in section 4.4.3 of the HRA report, proposed Policy GWS3 is mentioned, and we would highlight the importance of this policy considering both Strategic Access Management and Monitoring (SAMM) and Suitable Alternative Natural Greenspace (SANG). Paragraph 4.4.4 outlines that a commitment to the principles of SAMM alone would allow a conclusion of no adverse effects, and we would not agree with this.	We are unclear regarding this comment as Para. 4.4.4 does refer to a commitment to the principles of the SAMM “alone”, but in the context of the wider policies in the plan; notwithstanding this, if the agreed principles of the SAMM cannot be relied on to mitigate the potential effects of recreational pressure (such that LPAs can rely on the SAMM) then it is not clear what role the SAMM is then playing in mitigation.
We note that the HRA report also highlights the need to consider Air Quality impacts on Epping Forest SAC, and that this will be considered through the appropriate assessment process. We draw your attention to Natural England’s 2018 Air Quality Guidance.	Noted.

Table B-3 - NE comments on Reg. 19 consultation (September 2024)

Comments	LBN response
Recreation – Epping Forest SAC We note that point 5.2.8 in the HRA refers to the provision of Suitable Alternative Natural Greenspace (SANG) but appears unfinished.	These modifications have been made.
Air Quality – Epping Forest SAC Natural England appreciate the work by Newham Council in modelling the potential air quality impacts of the plan on Epping Forest SAC, and we note the ongoing challenges of this work. Currently we are not able to agree with the conclusion that there will be no adverse effect on integrity of Epping Forest SAC as a result of air quality (paragraph 5.5.1). We look forward to continuing conversations with the council over these issues and would welcome the opportunity to discuss the modelling and results further as updates are made.	Further work has been carried out by the Council and presented in a Post Regulation 19 Air Quality Information Report (February 2025) (presented separately) to the air quality information. NE have confirmed (by email 17 March 2025) that they agree with the conclusion that the Local Plan will have no adverse effects on the integrity of Epping Forest SAC, alone or in combination, based on the available data including the updated Air Quality Information Report, produced by Newham Borough Council (February 2025).

Appendix C

REVIEW OF LOCAL PLAN POLICIES

APPENDIX C – REVIEW OF LOCAL PLAN 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; these are examined through Appropriate Assessment.
	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.

Table C-1 – Review of Plan Policies

Policy No.	Policy Title	Notes	Screening Summary
BFN1	Spatial Strategy	The policy establishes the Spatial Strategy for development within Newham in the plan period, seeking to achieve economic growth and community benefits. It also sets out the level of growth that is planned for in terms of housing, jobs, retail, leisure, open space and infrastructure. There are in-combination issues that may need consideration through Appropriate Assessment.	Uncertain
BFN2	Co-designed Masterplanning	The policy seeks to ensure that sites are designed and developed comprehensively, avoid piecemeal delivery and that masterplans demonstrate that development is co-ordinated.	No LSE
BFN3	Social Value and Health Impact Assessment - delivering social value, health and wellbeing	The policy establishes that development is required to create positive health and wellbeing effects for local communities proportionate to the developments size.	No LSE
BFN4	Developer Contributions and Infrastructure Delivery	The policy governs the levels of developer contributions required from development and the expected levels of infrastructure delivery.	No LSE
CE1	Environmental design and delivery	The policy requires all development to reduce its contribution to climate change and consider the ongoing 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 climate change mitigation and adaptation.	No LSE*
CE2	Zero Carbon Development	The policy ensures all development within Newham are designed and constructed to be Net Zero Carbon in operation and heat/energy efficient.	No LSE
CE3	Embodied Carbon and the Circular Economy	The policy establishes that development must consider Embodied Carbon across its lifetime and utilise Modern Methods of Construction.	No LSE

Policy No.	Policy Title	Notes	Screening Summary
CE4	Overheating	The policy requires development to ensure it is designed to reduce the likelihood of overheating, especially in regard to the changing climate.	No LSE
CE5	Retrofit and the Circular Economy	The policy allows for the retrofitting of buildings following best practices and to aid in reducing a buildings carbon emissions.	No LSE
CE6	Air Quality	The policy requires development to mitigate its effects on Newham's air quality and result in an improvement to Newham's 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 could help minimise effects on designated sites and which have therefore been considered as part of the Appropriate Assessment.	No LSE*
CE7	Managing Flood Risk	The policy creates a criteria for development to ensure it is not at risk of flooding and resilient to flooding.	No LSE
CE8	Sustainable Drainage	The policy ensures development appropriately manages its effects on the water environment and reduces the risk of surface water flooding.	No LSE
SI1	Existing Community Facilities and Health Care Facilities	The policy affords protection to Newham's existing community and health care facilities, only allowing their removal and replacement after a development meets a strict criteria.	No LSE
SI2	New and Re-provided Community Facilities and Health Care Facilities	The policy establishes a set of criteria for new and re-provided community and health care facilities to ensure such facilities are in a suitable location and size.	No LSE
SI3	Cultural facilities and Sport and Recreation Facilities	The policy ensures existing cultural and sport and recreation facilities are protected and replaced as needed, whilst also ensure new such facilities can be developed within Newham.	No LSE

Policy No.	Policy Title	Notes	Screening Summary
SI4	Education and Childcare Facilities	The policy seeks to ensure a sufficient supply of educational facilities are located within Newham to meet its needs and ensures new educational facilities meet a strict criteria.	No LSE
D1	D1: Design Standards	The policy establishes a set of criteria development must meet to be considered good design.	No LSE
D2	D2: Public Realm Net Gain	The policy ensures suitable development provides a positive contribution to Newham's public realm, whilst also ensure its existing public realm is well designed and managed.	No LSE
D3	D3 Design-led site capacity optimisation	The policy creates criteria for residential development to follow to ensure they are of a suitable capacity and well designed.	No LSE
D4	D4 Tall Buildings	The policy establishes a set of criteria governing the appropriate building heights within areas of Newham.	No LSE
D5	D5 Shopfronts and advertising	The policy governs shopfront and advertising developments and ensures these developments are well deigned and enhance the character and setting of their surroundings.	No LSE
D6	D6 Neighbourliness	The policy establishes the criterion for development to be neighbourly from the outset and maximise their social and environmental benefits for the local neighbourhood.	No LSE
D7	D7 Conservation Areas and Areas of Townscape Value	The policy affords protection to Newham's Conservation Areas and Areas of Townscape Value, ensuring development enhances these important assets.	No LSE
D8	D8 Archaeological Priority Areas	The policy creates criteria that ensures Newham's Archaeological Priority Areas are protected.	No LSE
D9	D9 Designated and non-designated buildings, ancient monuments and historic parks and gardens	The policy affords protection to Newham's designated and non-designated heritage assets, ancient monuments and historic parks and gardens, ensuring development protects these important assets.	No LSE

Policy No.	Policy Title	Notes	Screening Summary
J1	Employment and growth	The policy requires developments, where appropriate, to support diverse, inclusive, and green economic growth. May contribute to traffic growth.	Uncertain (i/c)
J2	New employment floorspace	The policy governs development within strategic sites to ensure they provide economic development where appropriate in industrial and mixed use areas, to ensure they provide economic benefits. May contribute to traffic growth.	Uncertain (i/c)
J3	Protecting employment floorspace	The policy affords protection to Newham's existing employment floorspace, only allowing its lost if there is not further use for said employment floorspace.	No LSE
J4	Delivering Community Wealth Building and Inclusive Growth	The policy requires employment generating developments to create high quality economic opportunities and commit to delivering a greener economic future.	No LSE
GWS1	Green Spaces	The policy seeks to ensure development provides high quality green spaces and does not compromise the quality and provision of existing green spaces.	No LSE
GWS2	Water Spaces	The policy creates a set of criteria that affords protection to Newham's water spaces and encourages the creation of a network of high-quality water spaces.	No LSE
GWS3	Biodiversity, urban greening, and access to nature	The policy requires development to contribute towards the nature recovery and conserve and protecting biodiversity, whilst also addressing areas deficient in biodiversity. The policy protects and enhances Epping Forest SAC by ensuring that development demonstrates that, if necessary, measures are put in place to avoid or mitigate any potential adverse effects through contributions to the Strategic Access Management and Monitoring Strategy and provision of Suitable Alternative Natural Green Space. 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 management and avoidance of recreational pressures on the Epping Forest SAC.	No LSE*
GWS4	Trees and Hedgerows	The policy affords protection to Newham's trees and hedgerows and seeks to expand the number of trees and hedgerows within Newham.	No LSE

Policy No.	Policy Title	Notes	Screening Summary
GWS5	Play and informal recreation for all ages	The policy ensures development provides play and informal recreation spaces when appropriate and ensure such spaces are well designed.	No LSE
HS1	Newham's Town Centres Network	The policy protects existing town centres within Newham and ensure there are sufficient town centres/parades of shops within Newham to meet local needs.	No LSE
HS2	Managing New and Existing Town and Local Centres	The policy creates a set of criteria for development within town/local centres to ensure they are an appropriate use and do not compromise the purpose of the town/local centre.	No LSE
HS3	Edge-of-Centre and Out-of-Centre Retail, Restaurants, Cafes, and Services	The policy creates a set of criteria for edge-of-centre and out-of-centre retail, restaurants, cafes, and services to ensure such uses are appropriately located and designed.	No LSE
HS4	Markets, and events/pop-up spaces	The policy governs spaces for markets, events and pop-up spaces, protecting such spaces from being lost unless the space is no longer required. It also allows for the creation of such spaces.	No LSE
HS5	Visitor, Evening and Night Time Economy	The policy seeks to ensure Newham's existing and emerging town centres are supported to become Evening and Night Time Economy Zones that are of a suitable scale and design.	No LSE
HS6	Health and Wellbeing on the High Streets	The policy requires development of the high street to have positive effects, seeking to ensure there is not a consolidation of the same type of development that could cause negative effects.	No LSE
HS7	Delivery-led businesses	The policy creates criteria to ensure delivery-led business are well designed and sited.	No LSE
HS8	Visitor Accommodation	The policy allows for the creation of new hotels/visitor accommodation in suitable locations.	No LSE
H1	Meeting Housing Needs	The policy seeks to ensure Newham's housing needs are met, with housing developments maximising their potential density. Policy sets overall quantum of development.	Uncertain (i/c)

Policy No.	Policy Title	Notes	Screening Summary
H2	Protecting and Improving Existing Housing	The policy requires existing housing to be protected and improved, with any loss of housing replaces by high quality housing.	No LSE
H3	Affordable Housing	The policy requires 50% of all homes delivered over the lifetime of the updated Local Plan to be affordable.	No LSE
H4	Housing Mix	The policy requires residential developments to deliver a mix and balance of housing types (as appropriate).	No LSE
H5	Build to Rent Housing	The policy establishes a criteria built to rent housing has to meet for such developments to be permitted.	No LSE
H6	Supported and Specialist Housing	The policy protects existing housing that is for specialist housing and encourages the development of further specialist housing.	No LSE
H7	Specialist housing for older people	The policy supports specialist housing for older people in suitable locations that have access to the necessary facilities and services.	No LSE
H8	Purpose Built Student Accommodation	The policy requires purpose built student housing to meet a strict criteria in order to be deemed acceptable whilst also requiring it to deliver various bands of affordable housing.	No LSE
H9	Houses in Multiple Occupation and Large-Scale Purpose-Built Shared Living	The policy supports HMOs for family use but also supports the loss of HMO's in certain circumstances.	No LSE
H10	Gypsy and Traveller Accommodation	The policy provides a site for Gypsy and Traveller accommodation and further allows for the creation of such accommodation over the updated Local Plan's lifetime. Allocates a site; possible effects in combination.	Uncertain (i/c)
H11	Housing Design Quality	The policy creates a long and strict criteria for housing within Newham to ensure housing is high quality.	No LSE

Policy No.	Policy Title	Notes	Screening Summary
N1	North Woolwich	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls outside of the buffer zone for Epping Forest. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N2	Royal Victoria	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls outside of the buffer zone for Epping Forest. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N3	Royal Albert North	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls outside of the buffer zone for Epping Forest. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N4	Canning Town 4	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls partly within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N5	Custom House	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls partly within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N6	Manor Road	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls partly within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N7	Three Mills	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development. Screened in to the air quality assessment due to proximity to Epping Forest.	Uncertain (i/c)

Policy No.	Policy Title	Notes	Screening Summary
N8	Stratford and Maryland	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development. Screened in to the air quality assessment due to proximity to Epping Forest.	Uncertain (i/c)
N9	West Ham	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N10	Plaistow	The policy sets out the vision, and key development considerations for the neighbourhood. Most of the neighbourhood falls within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N11	Beckton	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls outside of the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N12	East Ham South	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls partly within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N13	East Ham	The policy sets out the vision, and key development considerations for the neighbourhood. Most of the neighbourhood falls within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N14	Green Street	The policy sets out the vision, and key development considerations for the neighbourhood. Most of the neighbourhood falls within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE

Policy No.	Policy Title	Notes	Screening Summary
N15	Forest Gate	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development. Screened in to the air quality assessment due to proximity to Epping Forest.	Uncertain (i/c)
N16	Manor Park and Little Ilford	The policy sets out the vision, and key development considerations for the neighbourhood. Most of the neighbourhood falls within the buffer zone for Epping Forest. See N1. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
N17	Gallions Reach	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls outside of the buffer zone for Epping Forest. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
T1	Strategic Transport	The policy affords protection to Newham's existing strategic transportation network and allows for its expansion. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE*
T2	Local Transport	The policy encourages the creation of a network of well-connected neighbourhoods by developments achieving a set of criteria.	No LSE*
T3	Transport Behaviour Change	The policy requires developments to be car free and encourage other forms of transport and facilitate their use. This policy would help mitigate potential effects in relation to air quality which would be considered as part of Appropriate Assessment.	No LSE*
T4	Servicing a development	The policy ensures development considers its potential effects from servicing and delivering to and from the development.	No LSE*
T5	Airport	The policy details the type of development that will be supported at London City Airport (e.g. consolidation of ancillary airport infrastructure). General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE

Policy No.	Policy Title	Notes	Screening Summary
W1	Waste Management Capacity	The policy affords protection to Newham's waste management sites and for such facilities to follow the principles of a circular economy. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
W2	New or Improved Waste Management Facilities	The policy creates a list of criteria that allows for the creation of waste management facilities to ensure they are well designed. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
W3	Waste Management in Developments	The policy ensures all development within Newham minimises the amount of waste they would produce and appropriately manage it. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE
W4	Utilities and Digital Connectivity Infrastructure	The policy requires developments to be appropriately connected to the required utilities and provide a good level of digital connectivity. General statement of policy / General design / guidance criteria or policies that cannot lead to or trigger development.	No LSE

Table C-2 – Allocations Review

Reference number	Site name	Proposed uses	Summary	Screening Summary
N1.SA1	North Woolwich Gateway	Mixed-use residential with industrial and employment uses, prioritising light industrial to complement adjacent Strategic Industrial Location to the west of the site and open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE
N1.SA2	Rymill Street	Comprehensive redevelopment to provide residential, retail, community floorspace in the form of a health centre, and provision of open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality	No LSE
N2.SA1	Silvertown Quays	Residential development, industrial and employment uses, community, education and sports and recreation facilities, open space and town centre uses.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality..	No LSE
N2.SA2	Lyle Park West	Residential, employment uses, open space (extension to Lyle Park), main town centre uses and social infrastructure, including community facilities.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE
N2.SA3	Connaught Riverside	Residential development, industrial and employment uses, open space, community and education facilities and town centre uses. Residential development should be located outside the boundaries of the Local Industrial Location.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE

Reference number	Site name	Proposed uses	Summary	Screening Summary
N2.SA4	Thameside West	Residential development, industrial and employment uses, new DLR station, community and education uses, open space and main town centre uses.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE
N2.SA5	Excel Western Entrance	Residential development, community facility and open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE
N3.SA1	Royal Albert North	Residential development, employment uses, open space, main town centre uses and social infrastructure, including community facilities, higher education facilities and sports and recreation facilities.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE
N4.SA1	Canning Town East	Residential development, community facilities and open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE
N4.SA2	Silvertown Way East	Residential development, industrial and employment uses and community uses.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE

Reference number	Site name	Proposed uses	Summary	Screening Summary
N4.SA3	Canning Town Holiday Inn	Residential development, employment uses, open space and main town centre uses and social infrastructure, including community facilities.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE
N4.SA4	Limmo	Residential development and open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE
N4.SA5	Canning Town Riverside	Residential, employment uses and open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE
N5.SA1	Custom House Land surrounding Freemasons Road	Residential, open space, main town centre uses and social infrastructure, including community facilities and a health centre.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	Uncertain (i/c)
N5.SA2	Custom House Coolfin North	Residential development, education and open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	Uncertain (i/c)

Reference number	Site name	Proposed uses	Summary	Screening Summary
N5.SA3	Custom House Land between Russell Road and Maplin Road	Residential development and open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	Uncertain (i/c)
N5.SA4	Land at Royal Road	Education, residential and open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)
N7.SA1	Abbey Mills	Residential development, open space and social infrastructure, including community facilities.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)
N7.SA2	Twelvetrees Park and Former Bromley by Bow Gasworks	Residential development, employment uses, main town centre uses and social infrastructure including community facilities, health centre, education uses, and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N7.SA3	Sugar House Island	Residential development, main town centre uses and social infrastructure, including community facilities, and employment uses and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)

Reference number	Site name	Proposed uses	Summary	Screening Summary
N8.SA1	Stratford Central	Residential, main town centre uses and social infrastructure, including community facilities and health centre, and civic uses, employment uses, and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N8.SA2	Stratford Station	Increased capacity at Stratford Station to be provided through the redevelopment of the ticket hall and new and improved station entrances from Montfichet Road and the Carpenters estate along with residential, employment uses, main town centre uses and social infrastructure including, community facilities and education facilities, and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N8.SA3	Greater Carpenters District	Residential, including refurbishment, employment uses, main town centre uses and social infrastructure including education, health centre, community facilities, and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)
N8.SA4	Stratford High Street Bingo Hall	Residential development with employment floorspace. The employment floorspace should be consistent with Local Plan Policy J1 and should provide space for light industrial uses and business workspaces and complement the offer at Stratford Workshops on Burford Road.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)

Reference number	Site name	Proposed uses	Summary	Screening Summary
N8.SA5	Stratford Town Centre West	Residential, employment, other main town centre uses, particularly ground floor active frontages and social infrastructure including community facilities, and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N8.SA6	Stratford Waterfront South	Higher education campus development for UCL East comprising academic floorspace, employment uses small-scale retail and residential. The employment uses should be consistent with Local Plan Policy J1 and prioritise office and commercial research space associated with the higher academic campus.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N8.SA7	Rick Roberts Way	Residential, employment uses, sports and recreation uses, education and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N8.SA8	Bridgewater Road	Residential and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)

Reference number	Site name	Proposed uses	Summary	Screening Summary
N8.SA9	Pudding Mill	Residential, employment uses, main town centre uses and social infrastructure including community facilities and health centre, and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N8.SA10	Chobham Farm North	Residential and employment uses.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N9.SA1	Plaistow North	Residential, main town centre uses and social infrastructure including community facilities, and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)
N10.SA1	Balaam Leisure Centre	Residential.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)

Reference number	Site name	Proposed uses	Summary	Screening Summary
N10.SA2	Newham 6th Form College	Residential development and open space. Residential development should enable improvements in the wider education campus with any lost education floorspace re-provided in the education site as part of a masterplan approach.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)
N10.SA3	Newham Leisure Centre	Reconfiguration of leisure centre, car park and open space to provide a new leisure centre, residential and the enhancement of the open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)
N10.SA4	Balaam Street Health Complex	Re-configuration and reprovision of the health centre with residential development.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)
N11.SA1	East Beckton Town Centre	Reconfiguration of part of East Beckton District Centre to provide residential, main town centre uses and social infrastructure, including community facilities, health centre, sports and recreation facilities, and open space. Sports and recreation facilities should include a leisure centre unless a new leisure centre for the area has already been delivered at N1.SA1.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	No LSE

Reference number	Site name	Proposed uses	Summary	Screening Summary
N11.SA2	Cyprus	Residential and open space provision.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	No LSE
N11.SA2	Alpine Way	Residential, employment uses and open space.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	No LSE
N13.SA1	East Ham Western Gateway	Residential, sports and recreation facilities and community facilities.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)
N13.SA2	East Ham Primark	Residential, retail and social infrastructure, including community facilities.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)

Reference number	Site name	Proposed uses	Summary	Screening Summary
N13.SA3	Former East Ham Gasworks	Residential open space and community facility.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N14.SA1	Shrewsbury Road health complex	Re-configuration and reprovision of the health complex with residential development.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. Site falls outside of the identified ZOI for air quality (considering its proposed land use). Therefore, there is no identified receptor pathway in relation to air quality.	Uncertain (i/c)
N15.SA1	Lord Lister Health Centre	Re-configuration and reprovision of the health centre with residential development and open space.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N15.SA2	Woodgrange Road West	Residential with main town centre uses and social infrastructure including retail floorspace and reprovision of community facility, and employment uses.	Site is within the 6.2km buffer zone for recreational pressure on Epping Forest. It is also within the identified ZOI for air quality (considering its proposed land use). Potential in-combination issues in relation to recreational pressure and air quality.	Uncertain (i/c)
N17.SA1	Beckton Riverside	Residential development, industrial and employment uses, community and education uses, leisure uses, open space and town centre uses. Two scenarios presented based on whether or not new DLR station provided.	Site falls outside of the 6.2km buffer zone for recreational pressure on Epping Forest. Site lies within the OAPF and, therefore, there is no identified receptor pathway for air quality.	No LSE

Appendix D

REVIEW OF PLANS AND PROGRAMMES

APPENDIX D – REVIEW OF PLANS AND PROGRAMMES

Table D-1 - Plans and programmes considered for potential 'in combination' effects with the Local Plan

Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Thames Water (2024) Emerging Water Resources Management Plan	The Thames Water WRMP demonstrates how in the medium to long new resources intend to be developed, leakage tackled and sensible water use promoted through metering and water efficiency campaigns. The long term strategy is to increase the robustness of the water resources network to climate change and reduce unsustainable abstractions.	No adverse effect.	No	TW's WRMP for the next 25 years explicitly accounts for any reductions in abstraction that are required to safeguard European sites (see **Section 3**) and for the growth predicted by the Local Plan and other LPA local plans in its forecasting. Therefore, the future water resource requirements of LBN are factored into the abstraction regime, such that they will not affect European sites (i.e. the growth provided for by the Local Plan is in line with predictions and will not increase water resources pressure on any European sites, alone or in combination).
Environment Agency (2022) Thames River Basin Management Plan	The updated Thames RBMP provides a summary of the extent of Significant Water Management Issues (SWMIs). The RBMP does not specify exactly where or how measures to manage SWMIs should be implemented, this will be determined at either a lower-tier plan or project level.	No significant effect	No	The plans will be complementary and the policies within both plans do not create a scenario where there is insufficient flexibility at the project stage to allow significant effects to be avoided. All development plans utilise information from the RBMPs and other plans concerning the natural environment and biodiversity, including green infrastructure plans and Nature Recovery Networks.

Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
The London Plan 2021	The London Plan is legally part of each of London's Local Planning Authorities' Development Plan and must be taken into account when planning decisions are taken in any part of Greater London. Planning applications should be determined in accordance with it, unless there are sound planning reasons (other material considerations) which indicate otherwise. All Development Plan Documents and Neighbourhood Plans have to be 'in general conformity' with the London Plan.	No significant effects	No	Local Plan must be consistent with London Plan.
Mayor's Transport Strategy 2018	Principal policy tool through which TfL and the Mayor exercise their responsibilities for transport planning in London.	No significant effects	No	Local Plan must be consistent with Transport Strategy.
Mayor's Transport Strategy 2022	The Mayor revised his strategy in November 2022 by adding a supplementary proposal. This proposal would allow TfL and the boroughs to seek to address the triple challenges of air quality, the climate emergency and traffic congestion through road user charging schemes, including by expanding the Ultra Low Emission Zone across London.	No significant effects	No	Local Plan must be consistent with Transport Strategy.

Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Flood Risk Management Plan (FRMP) for the Thames RBD	This document establishes several 'measures' that underpin and govern how flooding will be managed and considered within the region.	No adverse effects	No	The Local Plan is complementary and the policies within both plans do not create a scenario where specific developments cannot be delivered due to the risk of adverse effects The Local Plan contains appropriate controls to direct new development away from areas at risk of flooding and seek to reduce the risk of flooding overall.
Tower Hamlets Local Plan (2020)	The Tower Hamlets Local Plan 2031: Managing Growth and Sharing Benefits	No significant effects (with mitigation)	Yes	Potential 'quantum of development' effects through recreational pressure and air quality impacts associated with traffic movements on some sites; see **Section 5**. However, plan is consistent with London Plan and i/c effects are not expected.
Haringey Local Plan (2017)	Haringey's development plan is currently made up of the Strategic Policies, Development Management Policies, Site Allocations and Tottenham Area Action Plan, alongside the London Plan and the North London Waste Plan.	No significant effects (with mitigation)	Yes	Potential 'quantum of development' effects through recreational pressure and air quality impacts associated with traffic movements on some sites; see **Section 5**. However, plan is consistent with London Plan and i/c effects are not expected.
Haringey New Local Plan (emerging)	The council has started work on a new Local Plan, which is intended to run from 2024 to 2039. IIA does not currently include HRA findings	TBC	Yes	Potential 'quantum of development' effects through recreational pressure and air quality impacts associated with traffic movements on some sites; see **Section 5**. However, plan will be consistent with London Plan and i/c effects are not expected.

Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Enfield Core Strategy (2010)	Enfield adopted its Core Strategy in 2010. It is a strategic document providing the broad strategy for the scale and distribution of development and the provision of supporting infrastructure. It contains core policies for guiding patterns of development	No significant effects (with mitigation)	No	Potential 'quantum of development' effects through recreational pressure and air quality impacts associated with traffic movements on some sites; see **Section 5**. However, plan is being superseded by the New Enfield Local Plan, which will operate alongside the planning period for the LBN plan.
New Enfield Local Plan (emerging)	Reg. 19 consultation started in March 2024. The Local Plan sets out the amount and types of new development required in the Borough to meet the needs of local residents and businesses, allocates sites to accommodate this growth and includes a range of policies and guidance to manage the form and quality of new development.	No adverse effects (not finalised)	Yes	Potential 'quantum of development' effects through recreational pressure and air quality impacts associated with traffic movements on some sites; see **Section 5**. HRA identifies residual uncertainties re. air quality (Epping Forest SAC; Lee Valley SPA/Ramsar) and recreational pressure (Epping Forest SAC) that will be resolved as the plan develops.
Waltham Forest Local Plan (2024)	The Local Plan (Part 1) (2020-2035) shapes developments and guides neighbourhood plans, regeneration and decisions on the location, amount and types of development the Borough requires to meet local needs and accommodate sustainable growth. It does not allocate development sites.	No adverse effects	Yes	Potential 'quantum of development' effects through recreational pressure and air quality impacts associated with traffic movements on some sites; see **Section 5**. However, plan is consistent with London Plan and i/c effects are not expected. Note that the HRA ultimately concluded that the plan would have no significant effects on Epping Forest SAC due to air quality, following additional analysis consistent with that presented in Appendix E.

Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Epping Forest Local Plan (2023)	The Epping Forest District Local Plan sets out the strategy for meeting the District's needs from 2011 up to 2033. It sets out: • the Council's vision and objectives for the District's development over the Plan period; • policies to ensure that development delivers high quality and sustainable homes, built to a high quality of design that maintains the built and natural environment; • the future distribution for housing growth and requirements for affordable homes; • policies for jobs and the economy; • policies to maintain and enhance the vibrancy and vitality of our town centres; • policies to support a sustainable transport and road infrastructure network; and • proposals for delivery, including Infrastructure Delivery Plans (IDPs), to demonstrate the infrastructure requirements necessary to support the site allocations and the delivery of the Harlow and Gilston Garden Town.	No adverse effects	Yes	Potential 'quantum of development' effects through recreational pressure and air quality impacts associated with traffic movements on some sites; see **Section 5**. However, plan is consistent with London Plan and i/c effects are not expected. Includes mitigation measures for air quality and recreational pressure that the LBN is consistent with (i.e. LBN plan will not reduce the effectiveness of these measures).
Redbridge Local Plan (2018)	The Redbridge Local Plan 2015-2030 sets out the Council's vision and plan for how the borough will grow and develop over the next 15 years.	No significant effects	Yes	Potential 'quantum of development' effects through recreational pressure and air quality impacts associated with traffic movements on some sites; see **Section 5**. However, plan is consistent with London Plan and i/c effects are not expected.

Plan	Summary	Plan HRA conclusions*	Potential for i/c effects?	Notes / Assessment
Barking and Dagenham Local Plan (2010)	Current plan; shortly to be superseded	No significant effects (with mitigation)	No	However, plan is being superseded by the New Barking and Dagenham Local Plan, which will operate alongside the planning period for the LBN plan.
Barking and Dagenham New Local Plan (post-EiP)	The Local Plan sets out the strategy for delivering the Council's vision and objectives by 2037. The plan includes strategic policies and site allocations. There are several policies within the Barking and Dagenham Local Plan that allude to the provision of a minimum of 40,000 houses within the borough between 2019 and 2037.	No adverse effects	Yes	Potential 'quantum of development' effects through recreational pressure and air quality impacts associated with traffic movements on some sites; see **Section 5**. However, plan is consistent with London Plan and i/c effects are not expected. Appropriate Assessment only considered recreational pressure on Epping Forest SAC as a potential issue (which the LBN plan mitigates through policy).

Appendix E

TRAFFIC / AIR QUALITY REPORT

APPENDIX E – TRAFFIC / AIR QUALITY REPORT

London Borough of Newham Council

NEWHAM NEW LOCAL PLAN (REGULATION 19)

AIR QUALITY INFORMATION REPORT TO INFORM HABITATS REGULATIONS ASSESSMENT

MAY 2024

PUBLIC

London Borough of Newham Council

NEWHAM NEW LOCAL PLAN (REGULATION 19)

AIR QUALITY INFORMATION REPORT TO INFORM HABITATS REGULATIONS ASSESSMENT

TYPE OF DOCUMENT (VERSION) PUBLIC

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London Borough of Newham Council

NEWHAM NEW LOCAL PLAN (REGULATION 19)

AIR QUALITY INFORMATION REPORT TO INFORM HABITATS REGULATIONS ASSESSMENT

WSP

Matrix House
Basing View
Basingstoke, Hampshire
RG21 4FF

Phone: +44 1256 318 800

WSP.com

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APPENDICES

1 INTRODUCTION

1.1 OVERVIEW

1.1.1 WSP has been commissioned by London Borough of Newham Council (LBN) to carry out an air quality appraisal to inform the Habitat Regulations Assessment (HRA) being undertaken for Newham's emerging Local Plan.

1.1.2 The current Local Plan was adopted in 2018 and covers the period up to 2033[1]. Under the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended), Councils are required to regularly review and update their Local Plans to ensure that they are fit for purpose. Therefore, the LBN is currently undertaking a review and preparing a new Local Plan to guide development within the borough up to 2038. The Local Plan will identify the location, scale and uses of development that will come forward within the borough and demonstrate how the needs of Newham's current and future population will be met. This includes the need, set by the London Plan (2021)[2], to deliver at least 47,600 homes in Newham over the period 2019/20 to 2028/29. In fact, the LBN plan to deliver between 51,425 and 53,784 additional new homes over the Local Plan period (i.e. in excess of the London Plan requirement). A significant amount of Newham's housing target will be delivered in the medium to long term (2028 - 2037) phases of the Local Plan. This is because a large proportion of housing delivery numbers will be on large, complex site allocations, many of which require associated infrastructure delivery to facilitate high density housing development.

1.1.3 Prior to adoption, the new Local Plan must go through several stages of review, consultation and engagement. This includes: initial preparation and consultation on what the Local Plan should contain (Regulation 18), production of a Publication Draft Local Plan (Regulation 19), submission of the Local Plan to the Secretary of State for Housing, Communities and Local Government (Regulation 22), and finally public examination (Regulation 24). Consultation on the Regulation 18 version on the Local Plan took place between January and February 2023 and the Council are currently preparing the Regulation 19 Consultation Draft.

1.1.4 The air quality appraisal presented herein is therefore based on the Regulation 19 Consultation Draft of the new Local Plan. The purpose of appraisal is to provide an evidence base to demonstrate whether the planning policies and site allocations included within the new Local Plan have the potential to result in likely significant (adverse) air quality effects (LSE) on the integrity of identified nature conservation sites / designations (hereafter referred to as 'Habitat sites'). Where the potential for LSE cannot be screened out (Stage 1 of HRA), further qualitative evidence is provided to inform Appropriate Assessment (AA) (Stage 2 of HRA).

1.2 REPORT FRAMEWORK

1.2.1 This report presents the available evidence and associated considerations where applicable, of the air quality effects of the Local Plan on the integrity of relevant Habitats sites.

1.2.2 In summary this report details:

[1] London Borough of Newham (2018) Newham Local Plan. Available at: newham-local-plan-2018-pdf-
[2] Mayor of London (2021) The London Plan. Available at the_london_plan_2021.pdf

- the HRA process and methodology for assessment, including legislative background;
- the relevant Habitats sites within identified Zone of Influence (ZOI) for the Local Plan;
- the relevant policies contained within the draft Local Plan with potential to cause or contribute towards LSE upon Habitats sites due to changes in air quality;
- Traffic data analysis to understand whether forecast growth under the Local Plan can be considered ‘de-minimis’ or whether further assessment is required; and
- Qualitative evidence to inform the HRA that cannot be taken account of at Stage 1 (Screening) but which is relevant for AA.

1.2.3 The above information has been used to inform the HRA being undertaken for LBN’s emerging Local Plan.

2 LEGISLATION, POLICY AND GUIDANCE

2.1 HABITATS REGULATIONS

2.1.1 Under The Conservation of Habitats and Species Regulations 2017 (as amended) (the 'Habitats Regulations') 'Competent Authorities' must assess plans and projects for their potential to cause LSE on Habitats sites. Where the plan or project may lead to LSE it must be subject to an AA to determine whether there will be adverse effects to any Habitats sites. Any plan or project that would lead to adverse effects on the integrity of Habitats site(s) cannot be permitted without meeting strict additional tests.

2.1.2 Defra guidance[3] states that Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in the UK no longer form part of the EU's Natura 2000 ecological network. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 have created a National Site Network (NSN) on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes:

- existing SACs and SPAs; and
- new SACs and SPAs designated under these Regulations.

2.1.3 Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new NSN.

2.1.4 It is a matter of Government policy (NPPF paragraph 118) that sites designated under the 1971 Ramsar Convention for their internationally important wetlands (commonly known as Ramsar sites) are also considered in the same way as Habitats sites. Together, these sites are referred to as 'Habitats sites' in the National Planning Policy Framework (NPPF) and in this report.

2.1.5 Other site designations of national or local importance are not assessed by the HRA process, but with respect to Sites of Special Scientific Interest (SSSI) these designations largely overlap with European or Ramsar sites.

2.1.6 Maintaining a coherent network of protected sites with overarching conservation objectives is still required in order to:

- fulfil the commitment made by government to maintain environmental protections; and
- continue to meet our international legal obligations, such as the Bern Convention, the Oslo and Paris Conventions (OSPAR), Bonn and Ramsar Conventions.

2.1.7 Further detail regarding HRA, and its respective stages, is provided within the Local Plan HRA (WSP, May 2024) and within the following guidance published by both the European Commission[4] (2000) and Defra[5] (February 2021).

[3] Defra Policy Paper Changes to the Habitats Regulations 2017 **(**Published 1 January 2021). Available online: https://www.gov.uk/government/publications/changes-to-the-habitats-regulations-2017/changes-to-the-habitats-regulations-2017

[4] European Commission (2000). Managing Natura 2000 Sites, the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC4. Available at: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision_of_art6_en.pdf.

[5] Defra Guidance: Habitats regulations assessments: protecting a Habitats site. How a competent authority must decide if a plan or project proposal that affects a Habitats site can go ahead. Feb 2021. Available online: https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site

2.2 AIR QUALITY STRATEGY

2.2.1 The Government's policy on air quality within the UK is set out in the Air Quality Strategy (AQS) for England, Scotland, Wales and Northern Ireland (AQS) which provides a framework for reducing air pollution in the UK.

2.2.2 The AQS sets standards and objectives for nine key air pollutants to protect health, vegetation and ecosystems. The standards and objectives for the pollutants relevant to the protection of vegetation and ecosystems are given in **Table 2.1** below.

Table 2-1 - Relevant Air Quality Objectives and Standards (Source: AQS, 2007)

Pollutant	Concentration (µg/m^3)	Measured As	Exceedances Allowed
Nitrogen oxides (NO_X)	30	Annual mean	-
Sulphur dioxide (SO_2)	20	Calendar year and winter (1st October to 31st March)	-

2.2.3 The AQS was updated in 2023[6] to reflect the Government's newly introduced targets for fine particulate matter ($PM_{2.5}$) (see **Section 2.3** below).

2.2.4 The AQS fulfils the statutory requirement of the Environment Act 1995[7] as amended by the Environment Act 2021[8] (see **Section 2.4** below) to publish an Air Quality Strategy setting out air quality standards, objectives, and measures for improving ambient air quality every 5 years.

2.3 AIR QUALITY REGULATIONS

2.3.1 The Air Quality Standards Regulations 2010[9] transpose the European Union Ambient Air Quality Directive (2008/50/EC) into law in England, including the limit values for NO_X and SO_2 as set out with Annex XIII of the Directive. The limit values for NO_X and SO_2 are the same concentration levels as the relevant AQS objectives for these pollutants (as shown in **Table 2.1** above).

2.3.2 Regulation 2 of the Environment (Miscellaneous Amendments) (EU Exit) Regulations 2020[10] updates the Air Quality Standards Regulations 2010, following the withdrawal of the UK from the European Union, and includes a limit value for $PM_{2.5}$ from 2020. These updates make no changes to the legal objectives established in relation to protection of vegetation and ecosystems.

2.4 OTHER AIR QUALITY LEGISLATION

2.4.1 Whilst not specific to the protection of vegetation and ecosystems, the following air quality legislation is relevant in that it will drive overall improvements in air quality:

[6] Department for Environment, Food and Rural Affairs (Defra) and the Devolved Administrations (2023). The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (Volumes 1 and 2)
[7] UK Government (1995) Environment Act 1995. [Online] https://www.legislation.gov.uk/ukpga/1995/25/contents
[8] UK Government (2021) Environment Act 2021. [Online] https://www.legislation.gov.uk/ukpga/2021/30/contents
[9] The Air Quality Standards Regulations 2010 - Statutory Instrument 2010 No. 1001
[10] The Environmental (Miscellaneous Amendments) (EU Exit) Regulations 2020 - Statutory Instrument 2020 No.000

- **Environment Act 1995** - Under Part IV of the Environment Act 1995, local authorities must review and document local air quality within their area by way of staged appraisals and respond accordingly, with the aim of meeting the air quality objectives defined in the Regulations. Where the objectives are not likely to be achieved, an authority is required to designate an Air Quality Management Area (AQMA). For each AQMA the local authority is required to draw up an Air Quality Action Plan (AQAP) to secure improvements in air quality and show how it intends to work towards achieving air quality standards in the future.
- **The Environment Act 2021**[11] - Published in 2021, this provides a new framework for environmental protection within the UK. It aims to ensure that environmental standards are maintained and that improvements are achieved (specifically in relation to air quality, water, waste and resources, nature and biodiversity) and bridges the gaps in legislation resulting from the UK's departure from the EU. The Environment Act 2021 does not replace the Environment Act 1995, but it does make amendments in order to strengthen environmental protections.

2.5 POLICY

NATIONAL PLANNING POLICY

National Planning Policy Framework

2.5.1 The National Planning Policy Framework (NPPF)[12] sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans (including Local Plans) and other development can be produced. The core underpinning principle of the Framework is the presumption in favour of sustainable development, defined as:

> '… meeting the needs of the present without compromising the ability of future generations to meet their own needs.'

2.5.2 One of the three overarching objectives of the NPPF is that the planning system should seek '*to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.*'

2.5.3 The NPPF contains a host of policies targeted towards both identifying, mapping and safeguarding designated ecological sites and managing air quality, particularly the impacts of new development.

2.5.4 The following paragraphs are of particular relevance to this air quality study:

- Paragraph 180, which states:
  "*Planning policies and decisions should contribute to and enhance the natural and local environment by*:

  a. *preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans…'*

[11] UK Government (2021) Environment Act 2021. [Online] https://www.legislation.gov.uk/ukpga/2021/30/contents
[12] Ministry of Housing, Communities and Local Government (December 2023) National Planning Policy Framework. Available online: National Planning Policy Framework (publishing.service.gov.uk

- Paragraph 188 which states:
  "The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.'
- Paragraph 185, which states:
  "Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development...".

Clean Air Strategy

2.5.5 Defra published the Government's Clean Air Strategy in 2019[13]. This sets out measures, which aim to reduce emissions from all sources of air pollution, making air healthier to breathe, protecting nature and boosting the economy. In particular, Section 3.7 lists a number of actions proposed to reduce environmental damage from air pollution including:

- Setting a target for the reduction of damaging deposition of reactive forms of nitrogen;
- Establishing a programme of measures to reduce ammonia (NH_3) emissions from agriculture (as presented in Chapter 7 of the Clean Air Strategy);
- Establishing a programme of measures to reduce emissions of the ozone precursors NO_X and volatile organic compounds (VOCs) (as presented in Chapters 5 and 6 of the Clean Air Strategy);
- Monitoring the impacts of air pollution on natural habitats and reporting these annually; and
- Publishing guidance for local authorities explaining how cumulative impacts of nitrogen deposition on natural habitats should be mitigated and assessed through the planning system.

REGIONAL PLANNING POLICY

LONDON PLAN

2.5.6 The London Plan 2021[14] sets out the strategic plan for London over the next 20 to 25 years and sets out policies to guide sustainable growth and development in London. Chapter 10 of the London Plan contains those policies that relate to transport and that aim to encourage modal shift and promote the use of more active and sustainable modes of transport i.e., walking, cycling, and public transport. These policies therefore aim to reduce dependency on car use (in particular private car and single-occupancy vehicle trips), and therefore limit vehicle trip generation from new development.

2.5.7 Part 1 of Policy T1 'Strategic approach to transport' states that "*Development plans should support, and development proposals should facilitate: …the delivery of the Mayor's strategic target of 80 per cent of all trips in London to be made by foot, cycle or public transport by 2041."*

2.5.8 Policy T6 subsequently sets out the maximum parking standards for different development types (i.e., office, residential, retail, hotel and leisure, non-residential disabled etc), depending on their scale and/or location in London. Typically, developments within the Central Activities Zone, Inner London Opportunity Areas, and Inner London are required to be car-free or offer only very limited

[13] Defra (January, 2019). Clean Air Strategy 2019. [Online] Clean Air Strategy 2019 - GOV.UK (www.gov.uk)
[14] Mayor of London (March 2021) The London Plan: Spatial Development Strategy for Greater London [Online] The London Plan 2021 | London City Hall

parking (depending on their Public Transport Accessibility Level [PTAL] score). Furthermore, those developments that include car parking must allocate a proportion of spaces to electric vehicle recharging.

2.5.9 Chapter 9 of the London Plan relates to Sustainable Infrastructure and contains a number of policies designed to minimise emissions to air and/or reduce exposure to it (including Policies SI 1, SI 3, D3 and GG3). Notably, Policy SI 1 states that:

2.5.10 "… *Development Plans, through relevant strategic, site-specific and area-based policies, should seek opportunities to identify and deliver further improvements to air quality and should not reduce air quality benefits that result from the Mayor's or boroughs' activities to improve air quality…"*

2.5.11 Policy SI 1 also states that:

- Development proposals must be at least Air Quality Neutral.
- Major development proposals must be submitted with an Air Quality Assessment.
- Masterplans and development briefs for large-scale development proposals subject to an Environmental Impact Assessment should consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach.

London Plan HRA

2.5.12 The London Plan HRA presented an analysis of every policy on the London Plan with regard to whether likely significant effects would result. The Draft HRA (November 2017)[15] concluded that, for the majority of policies, a conclusion of no LSE could be reached on the basis of no receptor pathway. Only two policies were taken forward to AA: Policy SD1 (Opportunity Areas) and Policy H1 (Increasing Housing Supply), the latter being the main focus of the AA.

2.5.13 The HRA concluded that several amendments to policy or matters of direction to boroughs (particularly those around Epping Forest SAC) were required. However, once these matters were addressed, the HRA report could be updated to conclude that sufficient protective mechanisms are in place to ensure that the growth objectives of the London Plan can be delivered without a likely significant effect on European sites, either alone or in combination with other plans and projects.

2.5.14 These amendments/matters of direction included the following recommendations with respect to Epping Forest SAC:

- *"Individual local authorities are best-placed to devise the mitigation strategy and per dwelling tariffs to address both recreational pressure and traffic-related air quality in a manner that both mitigates for any effect on the SAC and works most appropriately with the circumstances of their populations. However, there is a role for the Greater London Authority and London Plan in the process: The London Plan should encourage the London Boroughs (particularly Waltham Forest and Redbridge and possibly Newham and Enfield) to participate as necessary in the recreation management and air quality mitigation strategies that are already being devised for the Epping Forest area.*
- *The London Plan already recognises that the housing targets set for the London Boroughs are challenging. While boroughs must make every endeavour to deliver those targets, the London Plan should acknowledge that Epping Forest SAC, its sensitivity to recreational pressure and the high level of protection it receives represent a factor for the London Boroughs of Redbridge and*

[15] Combined HRA Report.pdf (london.gov.uk)

Waltham Forest that does not exist for most other London boroughs. There is no a prior reason to believe that the recreation management strategy being devised for the SAC would not be able to address the impacts of the housing growth planned for both authorities, but monitoring of progress with the delivery of these housing targets in parallel with the success of the mitigation solution may trigger a need to revise them in the future. It would be appropriate to reflect this potential need for future revision in the London Plan text."

2.5.15 The subsequent HRA[16], dealing with changes in response to Secretary of State Modifications, concluded:

"Following the assessment of the modification to the London Plan in response to the Secretary of State's directions (as well as the Mayor's changes to those directions) it can be concluded that they will not lead to likely significant effects on European sites and do not undermine the conclusions of the HRA of the London Plan."

The London Environment Strategy

2.5.16 The London Environment Strategy[17] sets out a vision for improving London's environment, including aspects such as air quality, green infrastructure and climate change. As such, it contains non-binding elements (such as targets, proposals, objectives and ambitions) that require action to both progress and achieve the end goals. However, elements have been implemented and this includes the expanded Ultra Low Emission Zone (ULEZ).

2.5.17 The air quality aim of the London Environment Strategy is that *"London will have the best air quality of any major world city by 2050, going beyond the legal requirements to protect human health and minimise inequalities*".

2.5.18 Among the strategy's air quality actions are:

- Policy 4.2.1: "Reduce emissions from London's road transport network by phasing out fossil fuelled vehicles, prioritising action on diesel, and enabling Londoners to switch to more sustainable forms of transport". This includes:
  - *"The Mayor, through TfL, will clean up the bus fleet by phasing out fossil fuels, prioritising action on diesel, and switching to zero emission technologies"* and *"the whole bus fleet will be fully zero emission by 2037 at the latest".*
  - "*The Mayor aims to reduce emissions from private and commercial vehicles by phasing out and restricting the use of fossil fuels, prioritising action on diesel*". The associated actions include the expanded ULEZ.
  - *"The Mayor aims to reduce emissions from freight through encouraging a switch to lower emission vehicles, adopting smarter practices and reducing freight movements through better use of consolidated trips".*
- Policy 4.3.2*: "The Mayor will encourage the take up of ultra-low and zero emission technologies to make sure London's entire transport system is zero emission by 2050 to further reduce levels of pollution and achieve WHO air quality guidelines"*. This includes:

[16] Report Habitat Regulations Assessment 2020-12-01 (london.gov.uk)
[17] Mayor of London (May 2018) London Environment Strategy. Available online: https://www.london.gov.uk/sites/default/files/london_environment_strategy_0.pdf

- *"The Mayor, through TfL, will ensure all taxis and private hire vehicles are zero emission capable by 2033 and the bus fleet is entirely zero emission by 2037".*
- *"The Mayor, working with government, TfL, the London boroughs and industry will aim for London's entire transport system to be zero emission by 2050, with work towards this including using regulatory and pricing incentives to support the transition to the usage of Ultra Low Emission Vehicles".*
- *"The London Plan includes policies so that all new large-scale developments in London are 'Air Quality Positive' and maintain Air Quality Neutral requirements for all other developments".*

The Mayor's Transport Strategy

2.5.19 The Mayor's Transport Strategy[18], published in March 2018, sets out the Mayor's intentions to transform the streets of London, by improving public transport and encouraging sustainable and active travel. An addendum[19] to the Strategy was also published in 2022 to address the triple challenges associated with air pollution, the climate emergency and traffic congestion, by extending road user charging schemes including expanding the Ultra Low Emission Zone London-wide. This would therefore seek to increase the proportion of cleaner vehicles on London's roads.

2.5.20 One of the key fundamental aims of the Strategy is for "*80% of all trips in London to be made on foot, by cycle or using public transport by 2041*.

2.5.21 The Strategy is supported by a several action plans including:

- Action on Inclusion: Creating an Inclusive Workforce;
- Bus Action Plan;
- Cycling Action Plan;
- Freight and Servicing Action Plan;
- Vision Zero Action Plan (eliminating all deaths and serious injuries on London's transport system);
- Walking Action Plan; and
- Leisure Walking Action Plan.

LOCAL PLANNING POLICY

Royal Docks and Riverside Opportunity Area

2.5.22 Within the London Plan, Opportunity Areas (OAs) are identified as key (brownfield) locations within London that have the potential for large scale development, including residential and employment use and infrastructure of all types. They are often associated with existing or possible improvements in public transportation and typically have the capacity for at least 2,500 new homes, 5,000 new jobs, or a combination of both. Successful delivery of the OAs will be largely dependent upon infrastructure and collaborative planning. Often, the OAs will require significant investment in transportation, as well as proper planning for utilities, social infrastructure and digital connectivity.

2.5.23 The Royal Docks and Beckton Riverside OA is located within the southern part of the borough of Newham and represents the largest OA (and the only Enterprise zone) in London. It encompasses areas of Docklands, Silvertown and Canning Town, and also includes City Hall and London City

[18] Mayor of London (March 2018) Mayor's Transport Strategy
[19] Mayor of London (2022) Addendum to the Mayor's Transport Strategy (MTS): Proposal 24.1

Airport. It is estimated that the Royal Docks and Beckton OA could provide around 30,000 new homes and 41,500 new job and represents approximately 60-70% of the total growth for Newham borough between 2018-2033.

2.5.24 An Opportunity Area Planning Framework (OAPF) has been prepared as a long-term planning framework to support and guide emerging development in the Royal Docks and Beckton Riverside Opportunity Area. It responds directly to the requirements in Policy SD1 of the London Plan (2021).

2.5.25 The OAPF has been accompanied by its own HRA. The conclusions of the OAPF HRA are summarised in **Section 3.3.**

London Borough of Newham's Emerging Local Plan

2.5.26 The emerging Local Plan contains a number of policies (that are summarised in **Table 4.1**). These policies support well-connected neighbourhoods, reducing the need to travel and consolidating and enhancing existing district and local centres. They also include:

- Policy CE6 (Air Quality) which requires development to mitigate its effects on Newham's air quality and result in an improvement to Newham's air quality; and
- Policy T3 (Transport and Behaviour Change) that requires all new development to be car free and encourage other forms of transport and facilitate their use, apart from limited provision which meets specified standards (i.e., relating to blue badge and mobility scooter parking, specified short-term operational bays for specific uses, and employment/town centre uses).

London Borough of Newham's Sustainable Transport Strategy

2.5.27 This document sets out the sustainable transport strategy for the LBN for the period 2023 to 2038 and has been prepared in support of the new Local Plan review. It sets out a series of short-term and long-term actions that will be taken to support the overall objectives of the Local Plan and help to support growth within the borough and guide sustainable transport schemes, some of which will require support from developers and the neighbouring boroughs.

2.5.28 The Sustainable Transport Strategy references the ambitious target set by LBN to provide between 46,633 and 52,133 homes in the borough, and employment space for 10,000 new jobs between 2021 and 2038. It notes that such growth *"can only be accommodated without placing a severe impact on the operation of the highway network through the development of a comprehensive strategy which sets out sustainable travel policies and infrastructure investments, widening people's travel options, and making it increasingly possible to travel to, from and within Newham on foot, by bike and on public transport."*

3 METHODOLOGY / APPROACH TO ASSESSMENT

3.1 POTENTIAL EFFECTS

CRITICAL LEVELS

3.1.1 Emissions of NO_X from vehicles using the local road network, both now and in the future, can have both a direct and indirect effect on sensitive ecological receptors.

3.1.2 NO_X may directly enter a plant via the stomata (as NO or NO_2), where it can have phytotoxic effects. Lower plants such as lichens and bryophytes are particularly vulnerable to direct damage from NOx[20], as they often receive the majority of their nitrogen inputs directly from the atmosphere; many of such species are adapted to living in low-nutrient habitats with no soil, such as on rocks or trees. NO_x can also deposit onto soil and, following transformation, enrich the soil as a nitrate, leading to eutrophication, as discussed later. The role of NO_x in causing direct harm to vegetation vs its potential role as a precursor to nitrogen deposition is not distinguished in the Air Quality (England) Regulations described in **Section 2.**

3.1.3 The negative effects of ammonia (NH_3) on vegetation occur though direct damage and death of sensitive species, increase in vulnerabilities to environmental conditions (drought, desiccation and frost) or pest and pathogen attack, and reduced root growth and mycorrhizal infection leading to reduced nutrient uptake[21]. NH_3 can put understorey species at risk (such as mosses and lichens) through shading from the increases in dominant overstorey nitrophiles. This is compounded as nitrogen enrichment favours fast growing, taller species with rapid N assimilation rates leading to changes in species assemblages to favour N loving species.

3.1.4 The Critical Levels above which direct adverse effects on vegetation and ecosystems may occur are shown in **Table 3.1** below. These are applicable to both the Habitats sites and SSSIs. The Critical Level for NO_X is the same as the AQS objective for this pollutant.

Table 3-1 - Critical Levels relevant to Vegetation and Ecosystems

Pollutant	Objective		Averaging period
Nitrogen oxides (NO_X)	30µg/m^3		Annual mean
	75µg/m^3		24-hour mean
Ammonia (NH_3)	3µg/m^3 (with uncertainty of 2-4 µg/m^3)	Higher Plants	Annual mean
	1µg/m^3	Lichens and Bryophytes	Annual mean

[20] http://www.apis.ac.uk/node/1071 (Accessed 27/11/20)

[21] http://www.apis.ac.uk/overview/pollutants/overview_nh3.htm (Accessed 27/11/20)

3.1.5 There is limited published evidence for any directly toxic effect of NO_x and NH_3 on animals and therefore direct effects on animals are not usually included in ecological impact assessments, which focus on the effects on vegetation. The effects on animals are sometimes indirectly included in an assessment where species are dependent on particular habitats for their survival; an assessment may therefore focus on effects on supporting habitat[22].

N DEPOSITION AND CRITICAL LOADS

3.1.6 In addition to the direct effect of gaseous emissions, vegetation and ecosystems can also be affected by N deposition. The impacts of increased N deposition can vary, dependant on the existing habitat (e.g. whether it is nutrient rich or nutrient poor), however can include changes in species composition (especially in nutrient poor ecosystems with a shift towards species associated with higher nitrogen availability), reduction in species richness, increases in plant production, a decrease or loss of species better adapted to low-nutrient conditions and increases in nitrate leaching. Nitrogen deposition can also contribute to the acidification of habitats, although the effects are less pronounced than comparable levels of sulphur deposition. Both NO_X and NH_3 emissions from road traffic contribute towards N deposition in the vicinity of the road edge (up to circa 200m).

3.1.7 In the UK, Critical Loads are used to assess the potential impact of changes in N deposition at designated wildlife sites as a result of new development. Critical Loads have been established for a range of habitat types, reflecting the variation in ecosystem response, and have been based on empirical evidence, mainly observations from experiments and gradient studies. These include assessments of 'dose-response relationships' whereby the effects of experimentally altering levels of nitrogen deposition on a range of habitats are observed and assessed. Further details regarding Critical Loads relevant Epping Forest SAC are provided in **Appendix B.**

3.2 SCOPE OF THE ASSESSMENT

3.2.1 The approach to the assessment and associated methodology is presented below. It builds upon the Newham Local Plan (Regulation 18) HRA Information Report produced by WSP on behalf of the LBN (December 2022)[23] which 'screened in' Epping Forest SAC but 'screened out' all other Habitats sites within a 20km radius of LBN's administrative boundary[24].

3.2.2 The approach is a multi-stage evidence-based approach which is considered proportionate to the potential impacts on Habitats sites, specifically Epping Forest SAC, as a result of LBN's emerging Local Plan, taking into account the level of detail available when plan making (as opposed to when submitting a planning application).

SCREENED IN HABITATS SITES

3.2.3 Based on the above, the assessment presented herein has focused on the potential effects at Epping Forest SAC as a result of changes in air quality. The nature of the road network around Epping Forest SAC is such that journeys between a number of key settlements around the Forest effectively necessitate traversing the SAC. In addition, lengthy queues are known to build up around most arms of Wake Arms Roundabout.

[22] English Nature Research Reports Number 580. The ecological effects of diffuse air pollution from road transport. A report prepared for English Nature by Keeley Bignal, Mike Ashmore and Sally Power (2004).
[23] WSP (December 2022) Newham Local Plan (Regulation 18) Habitats Regulations Assessment Information Report

3.2.4 Epping Forest SAC comprises an area of approximately 1,600 hectares, the majority of which consists of broadleaved deciduous woodland. It is one of the few remaining large-scale ancient woodland pastures in lowland Britain and supports an outstanding array of invertebrates, amphibians, and breeding bird community. The primary reasons for its designation include the presence of Atlantic acidophilous beech trees and the stag beetle *Lucanus cervus*. The SAC also includes examples of northern Atlantic wet heaths with Erica tetralix and European dry heaths.

3.2.5 The Regulation 18 HRA[25] information states that *"air quality has been shown to have negatively affected the epiphytic lichen communities of the Epping Forest SAC near the roads that cross the site"* and air quality is listed as a pressure within Natural England's Site Improvement Plan (SIP) for Epping Forest SAC (a copy of which is provided within **Appendix A**).

3.2.6 A number of subsequent HRA's were undertaken in preparation and following submission of EFDC's Local Plan:

- EB206 Habitats Regulations Assessment 2017[26]
- EB206A Habitats Regulations Assessment 2017 Non-technical summary[27]
- EB209 Habitats Regulations Assessment January 2019[28]
- EB211A Habitats Regulations Assessment June 2021[29]
- EB211B Habitats Regulations Assessment: Appendix E June 2021[30]
- ED149 Habitats Regulations Assessment October 2022[31]
- ED149A Habitats Regulations Assessment: Appendix E October 2022[32]

3.2.7 The October 2022 HRA supported the consultation on further Main Modifications to the Submission Version of the Epping Forest District Local Plan 2011–2033 and supersedes all the previous HRAs. It concluded:

- There is a clear receptor pathway with respect to atmospheric pollution and some of EFDC's Local Plan policies and site allocations. Therefore, LSE could not be discounted and there was a requirement for AA to be undertaken.
- The potential for in-combination effects at Epping Forest SAC as a result of changes in air quality, again pointing to the need for an AA.

[24] Further rationale regarding the Habitats sites 'screened out' of further assessment are provided in Table 4.6 (Summary of initial European site screening in relation to air quality) of the Regulation 18 HRA Information Report.
[25] EFDC (November 2016) Habitats Regulations Assessment Screening of Epping Forest District Council Regulation 18 Local Plan [Online] Epping Forest HRA November 2016 (efdclocalplan.org)
[26] EFDC (2017) EB206 Habitats Regulations Assessment [Online] Isla Hoffmann Heap Report Habitats Regulations Assessment Screening of Epping Forest District Council Regulation 19 Local Plan 2017-11-10 (efdclocalplan.org)
[27] EFDC (2017) EB206A Habitats Regulations Assessment Non-Technical Summary [Online] EB206A-Habitats-Regulations-Assessment-Non-Technical-Summary-AECOM-November-2017.pdf (eppingforestdc.gov.uk)
[28] EFDC (January 2019) EB209 Habitats Regulations Assessment [Online] Microsoft Word - Epping Forest Local Plan HRA 2019.docx (eppingforestdc.gov.uk)
[29] EFDC (June 2021) 211A Habitats Regulations Assessment [Online] Epping Forest Local Plan HRA June 2021 final for issue_CH v2.docx (eppingforestdc.gov.uk)
[30] EFDC (June 2021) 211A Habitats Regulations Assessment: Appendix E [Online] Epping Forest Local Plan HRA June 2021 final for issue_CH v2.docx (eppingforestdc.gov.uk)
[31] EFDC (October 2022) ED149 Habitats Regulations Assessment [Online] Microsoft Word - Draft final Epping Forest Local Plan HRA 2022.docx (efdclocalplan.org)
[32] EFDC (October 2022) ED149 Habitats Regulations Assessment: Appendix E [Online] ED149A-Appendix-E-Epping-Forest-SAC_Summary-Air-Quality-Modelling-Results.xlsx (live.com)

3.2.8 The AA (in relation to air quality) was underpinned by modelling which utilised site specific traffic and air quality data and reflected the proposed main modifications to the Submission Version Local Plan. It concluded that relevant policies contained with the Local Plan, together with the appropriate monitoring and mitigation measures identified in EFDC's Interim Air Pollution Mitigation Strategy (IAPMS)[33], was such that there would no adverse effect on the SAC either alone, or 'in-combination' with other plans and projects.

3.2.9 The key measures within the IAPMS (adopted 8th February 2021) include:

- Introduction of a Clean Air Zone in 2025;
- Conversion of petrol cars to Ultra-Low Emission Vehicles (ULEV's); and
- Requirement for on-going air quality and traffic monitoring (so that the data can be used to help understand the effectiveness of the IAQMS measures).

SCOPE SUMMARY

3.2.10 The scope of the assessment has comprised:

- Screening of the Local Plan policies, with specific reference to potential impacts on air quality and subsequent effects on Epping Forest SAC.
- Screening of the proposed site allocations to determine which allocations could, based on proximity, result in changes in traffic (and therefore air quality) in the vicinity of Epping Forest SAC;
- Calculation of likely trips for the 'screened in' site allocations and likely distribution across road network to determine the likely change in traffic on roads within 200m of Epping Forest SAC as a result of the emerging Local Plan;
- Comparison of these trips against the JNCC's Decision Making Thresholds (DMT's) to consider whether trips arising due to the Local Plan are 'de-minimis' such that further consideration, including consideration of 'in-combination effects', is not required;
- Consideration of further 'qualitative' evidence that could be used to support Appropriate Assessment (Stage 2 of HRA).

3.3 SCREENING OF PROPOSED SITE ALLOCATIONS

LOCAL PLAN SITE ALLOCATIONS

3.3.1 The new draft Local Plan identifies 45 proposed site allocations across the borough. A summary of the proposed allocations is provided in **Table 5.1.**

3.3.2 Each of the proposed allocations within the emerging Local Plan has the potential to generate new or additional traffic movements on the local road network. Exhaust emissions from these vehicles may impact on local air quality which can subsequently lead to adverse effects on sensitive habitats within the identified Habitat site (Epping Forest SAC). Whilst Local Plan Policy (T3) requires development to be 'car free', even 'car free' developments have a degree of trips associated with them (e.g. from servicing trips, trips by users of disabled parking pays, deliveries etc). The Air Quality Neutral and Air Quality Positive London Plan Guidance Consultation Summary Report

[33] EFDC (December 2020) Interim Air Pollution Mitigation Strategy [Online] Microsoft Word - Final Interim APM Strategy for EFSAC 101220 .docx (eppingforestdc.gov.uk)

(February 23)[34] states that "Car-free developments" should not be excluded from transport emission assessment.

3.3.3 The effects (as outlined in **Section 3.1** above) primarily relate to an increase in NO_x, nutrient N deposition and NH_3. However, significant adverse effects are only likely to arise where there is a significant change in traffic flow (i.e., volume and/or composition) on roads located within 200m of the SAC.

3.3.4 Average journey length can be used to assess the likelihood for significant changes in traffic flow on any given road link. The Newham Local Plan (Regulation 18) HRA Information Report applied a 20km study area whereas the JNCC's de-minimis guidance states that *"for the purpose of decision-making, unless local circumstances support a wider zone, plan HRA should take account of the potential effects of traffic emissions on European sites located within 10 km of the plan boundary."*

3.3.5 However, due to the location of the borough (within inner London), and policy framework (for largely car free development), average trip length and the associated ZOI will likely be smaller than 10km (and 20km) ZOI mentioned above. Instead, average journey lengths from the London Air Quality Neutral (AQN) Guidance[35] have been applied as these are judged to be more reflective of Newham's location within Inner London.

3.3.6 The AQN guidance provides average distance travelled (see **Table 3.2**) for key land uses based on their location within London. For the LBN, the applicable values will be those set for 'Inner London'. These average distances have been used to calculate a bespoke ZOI for each of the site allocation, based on their proposed land use/the development description, with the distance applied from the boundary of the site allocation. This approach was discussed and agreed during consultation with Natural England.

3.3.7 The average distances travelled are based upon observed data from the London Travel Demand Surveys (LTDS) 2008 – 2010, that have subsequently been factored using data extracted from Figure 6.2 of TfL's Travel in London Report (Issue 9) for the period 2010 – 2015.

Table 3-2 - Average distance (km) travelled by car per trip

Land Use	CAZ	Inner London	Outer London
Residential	4.2	3.4	11.4
Office	3.0	7.2	10.8
Retail	9.2	5.5	5.4

3.3.8 To ensure a conservative approach to the assessment, where a development is mixed-use, a precautionary approach has been applied whereby the worst-case (i.e. longest) average distance travelled of 7.2km (for office use in Inner London) has been applied.

3.3.9 Proposed allocations located outside of these bespoke ZOI were subsequently screened out of the assessment as they are considered unlikely to generate traffic near the Epping Forest SAC (i.e.

[34] Air Quality Neutral and Air Quality Positive Consultation Summary Report.pdf
[35] Mayor of London (February 2023) London Plan Guidance. Air Quality Neutral.

there is no identified receptor pathway). Similarly, site allocations within the Royal Docks and Beckton Riverside Opportunity Area have also been screened out on this basis (see below).

3.3.10 For the purposes of the assessment, a two-step approach was adopted where the distance bands were initially applied:

1) 'As the crow flies' applied from the boundary of the site allocation; and
2) Via road, which was estimated using the route planner within Google Maps to identify the shortest route from the proposed site allocations to a road within 200m of Epping Forest SAC.

3.3.11 The outcomes of the site allocation screening are presented in **Section 5 (notably Table 5.1).**

ROYAL DOCKS AND RIVERSIDE OPPORTUNITY AREA

3.3.12 The Royal Docks and Beckton Riverside OAPF was adopted in May 2023. A Screening Assessment (Stage 1 of HRA) was undertaken for the OAPF which considered potential effects on the Epping Forest SAC and the Lee Valley SPA/Ramsar. This concluded:

> *"…the distance between the OA and the sites (8km approximately respectively), their position to the north of OA, and the existing open space within and close to the OA all lead to an assessment that the Royal Docks and Beckton Riverside OAPF will not have a likely significant effect on any European Site.*
>
> *In addition, individual schemes within the OA will be subject to wider London Plan and more specific policies set out in the OAPF on air quality, water management, sustainable transport and open space enhancements that aim to minimise adverse effects of development."*

3.3.13 On this basis, there is no identified receptor pathway for site allocations within the Royal Docks and Riverside OA (i.e. 16 of the 45 site allocations) and growth within the OA will not result in LSE at Epping Forest SAC due to changes in air quality. Site allocations within the OA have therefore been screened out of further assessment (i.e. traffic data analysis).

3.3.14 It should be noted that since the OAPF screening assessment was undertaken, an additional 6,125 dwellings have been targeted by LBN, representing a further growth of 12.65% (48,388 homes modelled compared to a total revised growth trajectory of 54,513 homes). However, this additional growth is not considered to alter the conclusions of the OAPF HRA as it does not undermine the rationale upon which the conclusions of the OAPF HRA are based (i.e. that there is no likely receptor pathway).

3.4 CALCULATION OF TRIPS FOR THE 'SCREENED IN' SITE ALLOCATIONS

3.4.1 Suitable traffic modelling was not available to allow the change in vehicle trips on roads that fall within 200m of Epping Forest SAC to be assessed. Therefore, in the first instance, potential trip generation has been calculated using land use information for each of the 'screened in' allocations, utilising the benchmark trip rates for Inner London outlined within Table 4.1 of the AQN guidance. These are replicated in **Table 3.3** below. These are one-way trip rates and are benchmarks based on data from the Trip Rate Information Computer System (TRICS).

Table 3-3 Benchmark Trip Rates from the AQN Guidance for Inner London

Land use	Annual trips per	Inner London (excluding CAZ)
Residential (including student accommodation and large-scale purpose-built shared living development)	Dwelling	114
Offices/light industrial	m^2 Gross Internal Area (GIA)	1
Retail (superstore)	m^2 (GIA)	73
Retail (convenience)	m^2 (GIA)	139
Restaurants/cafés	m^2 (GIA)	137
Drinking establishments	m^2 (GIA)	8
Hot food takeaway	m^2 (GIA)	32.4
Industrial	m^2 (GIA)	5.6
Storage and distribution	m^2 (GIA)	5.5
Hotels	m^2 (GIA)	1.4
Care homes and hospitals	m^2 (GIA)	1.1
Schools, nurseries, doctors' surgeries, other non-residential institutions	m^2 (GIA)	30.3
Assembly and leisure	m^2 (GIA)	10.5

3.5 ASSIGNMENT OF TRIPS FOR THE 'SCREENED IN' SITE ALLOCATIONS

3.5.1 The total number of trips calculated for each of the 'screened in' site allocations (see **Section 3.4** above) have been used, along with distribution data extracted from TfL's MoTION model, to determine the likely number of trips travelling towards LBWF and EFDC's administrative areas, both of which contain parts of Epping Forest SAC.

3.5.2 The MoTION data provides details of the number of vehicles travelling from each of the MoTION demand zones to the PDAT2[36] zones within the model (and vice versa), specifically the PDAT2

[36] PDAT2 refers to local authority areas within TfL's MoTION model.

zones for LBWF and EFDC. These vehicle numbers have been converted to percentages which have then subsequently been applied to the total trip numbers calculated for each of the 'screened in' site allocations, following a matching of the site allocations (within GIS) to the appropriate MoTION demand zone. The percentages that have been applied are shown in **Table 3.4.**

3.5.3 The data extracted from the MoTION model represents the 2019 baseline case. Whilst it is acknowledged that the distribution of vehicle trips could potentially change in the future, the 2019 baseline case represents the best data available at the time of assessment regarding likely assignment of generated trips. Furthermore, within Newham, the Local Plan policies seek to consolidate and diversify the existing town centres and maintain the core retail functions of the metropolitan, major and district centres. In this regard, key destinations within Newham (and therefore the proportion of trips likely to remain within Newham) are likely to remain broadly similar.

Table 3-4 - Percentage of trips travelling to/from Newham

'Screened in' site allocation	MoTION Demand Zone[37]	Uses other than residential	To/from LBWF (%)		To/from EFDC (%)	
			From Newham	To Newham	From Newham	To Newham
Former East Ham Gasworks	1385	Yes	5.4	**5.6**	1.0	**1.1**
Lord Lister Health Centre	458	Yes	**13.2**	12.7	0.8	**0.9**
Pudding Mill	953	Yes	**11.3**	11.2	1.5	**2.1**
Rick Roberts Way	1350	Yes	**7.6**	**7.6**	1.1	**1.3**
Stratford High Street Bingo Hall	955	Yes	**6.6**	6.5	1.2	**1.5**
Stratford Station	1351	Yes	9.8	**9.9**	2.9	**3.8**
Stratford Town Centre West	753	Yes	9.9	**12.6**	3.6	**4.4**
Sugar House Island	1350	Yes	**7.6**	**7.6**	1.1	**1.3**
Stratford Central	954	Yes	**12.2**	**12.2**	1.7	**2.1**
Woodgrange Road West	859	Yes	**9.0**	8.7	1.2	**1.3**

[37] Where a site allocation covers more than one MoTION Demand Zone, the Zone within which the majority of the site allocation falls has been selected for use.

'Screened in' site allocation	MoTION Demand Zone[37]	Uses other than residential	To/from LBWF (%)		To/from EFDC (%)	
			From Newham	To Newham	From Newham	To Newham
Stratford Waterfront South	953	Yes	**11.3**	11.2	1.5	**2.1**
Twelvetrees Park and Former Bromley By Bow Gasworks	751	Yes	13.6	**14.3**	2.3	**2.7**
Chobham Farm North	858	Yes	5.4	**5.7**	1.1	**1.3**
Windfall Sites	N/A (Average applied)	N/A	9.5	**9.7**	**1.6**	**2.0**

3.5.4 For residential land use, the 'from' percentages have been applied (i.e. from the requested MoTiON zone to the identified PDAT2 zones for Waltham Forest and Epping Forest).

3.5.5 For other land uses, such as retail or commercial floorspace, it is acknowledged that whilst a large number of trips will be internal (i.e. will travel from an existing address within Newham to the proposed site allocation), some trips will originate outside of Newham. Therefore, for all other land uses the percentage of trips 'from' Newham have been compared against the percentage of trips 'to' Newham (i.e. from the PDAT2 zones for Waltham Forest and Epping Forest to the identified MoTION zones within Newham). Overall, this showed little variance between the 'from' and 'to' percentages. In cases where a variation in values is observed, the highest of the two values has been applied (as dictated in bold in **Table 3.4** above).

3.5.6 These trip rates have subsequently been doubled to estimate total two-way traffic that could occur on any one road link to allow comparison against the DMT (see **Section 3.6** below). This assumes that all trips travelling to LBWF/EFDC travel along the same road upon return.

3.6 COMPARISON AGAINST JNCC'S DECISION MAKING THRESHOLDS

3.6.1 The calculated trips for each of the shortlisted site allocations (plus windfall sites) have been compared against the JNCC's Decision Making Threshold (DMT).

3.6.2 The JNCC guidance defines the DMT as *"a quantifiable contribution from an individual source, below which associated effects can properly be ignored for the purpose of decision-making. The cumulative effects of proposals excluded by it will not undermine the achievement of the conservation objectives. Further assessment would not change the outcome of the decision to be taken."*

3.6.3 The DMT for road traffic emissions is 0.15% of the existing baseline traffic flow on any road (excluding trunk roads). Therefore, the actual number of vehicles above which effects are no longer considered 'de-minimis' varies depending on the existing level of traffic on the road in question.

3.6.4 Traffic data from the London Atmospheric Emissions Inventory[38] has been obtained for the major roads traversing Epping Forest SAC in order to obtain a 'worst case' DMT that can be applied to the trip generation calculations for the shortlisted site allocations. These calculations are provided in **Table 3.5**.

Table 3-5 - DMT calculations utilising LAEI data

Road	2019 LAEI AADT	DMT	DMT
A104 Epping New Rd - South of Cross Roads/Earl's Path	17,659	0.15% of the baseline traffic flow.	26
A104 Epping New Rd - North of Cross Roads/Earl's Path	8,697		13
Cross Roads (west of A104)	9,542		14
Earls Path (east of A104)	12,127		18
A1096 Rangers Road (As it joins the A104)	8,541		13
A104 Woodford New Road	25,522		38

3.6.5 Due to the limitations associated with the assessment, notably that there is no way of distributing traffic due to the Local Plan to specific roads, only to PTAL2 zones (i.e. to WFDC and EFDC), a precautionary DMT of 13 (see **Table 3.5** above) has been applied to the trip generation calculations for each of the shortlisted allocation sites (see **Tables 6.1** and **6.2**). The change relative to this DMT has also been considered for all the shortlisted allocations sites collectively, including the quantum of development associated with windfall development.

3.7 CONSIDERATION OF QUALITATIVE EVIDENCE

3.7.1 The screening of the policies, site allocations and traffic data (for the shortlisted sites) has been used to provide an indication of the potential for LSE due to the implementation of LBN's emerging Local Plan. However, the traffic data calculations are high level and extremely precautionary, adopting conservative assumptions wherever ambiguity was present. In addition, there is significant qualitative evidence available that should be taken into account when determining the potential for LSE including, but not limited to, information on trip length, trip destination, modal shift, cycling provision/uptake and car ownership.

3.7.2 This additional qualitative information is not easily quantifiable but is evidence that should be used when forming a decision regarding the potential for LSE and whether further assessment and/or mitigation is required.

The additional qualitative evidence presented has been obtained from the following documents:

- The London Plan;
- Newham's Sustainable Transport Strategy;

[38] London Atmospheric Emissions Inventory (LAEI) 2019 - London Datastore

- EFDC's Local Plan HRA[39];
- EFDC's Interim Air Pollution Mitigation Strategy (IAPMS)[40];
- LBWF's Local Plan Air Quality Study 2[41];
- Travel in London Report (2023)[42];
- The OAPF HRA[43]; and
- Newham's Cycle Strategy[44] .

[39] Microsoft Word - Draft final Epping Forest Local Plan HRA 2022.docx (efdclocalplan.org)
[40] EB212-Final-Interim-APM-Strategy-for-EFSAC-101220.pdf (efdclocalplan.org)
[41] LPE35_Air Quality Study 2.pdf (walthamforest.gov.uk)
[42] Travel in London reports - Transport for London (tfl.gov.uk)
[43] rdbr_oapf_iia_hra_screening_issued_14022022.pdf (london.gov.uk)
[44] newham.gov.uk/downloads/file/168/london-borough-of-newham-cycling-strategy-2017-18-2024-25

3.8 ASSUMPTIONS AND LIMITATIONS

3.8.1 The key assumptions and limitations in the assessment are summarised in this section.

TRIP LENGTH

3.8.2 The average distances travelled are based upon observed data from the London Travel Demand Surveys (LTDS) 2008 – 2010, that have subsequently been factored using data extracted from Figure 6.2 of TfL's Travel in London Report (Issue 9) for the period 2010 – 2015. This data pre-dates the London Plan (2021) and its policies for largely car free development, and for large scale development proposals, air quality positive design.

GROSS INTERNAL AREA

3.8.3 At this stage the potential trip generation from each of the 'screened in' site allocations represent an estimate only. This is because the exact GIA (m^2) of the various land uses/the number of residential units being proposed within each of the site allocations is still subject to change. However, these estimates are a useful indicator and are considered proportionate to the stage of assessment (i.e. a Local Plan level assessment).

3.8.4 Where GIA is not known, Gross External Area (GEA) has been utilised. This is considered precautionary as GIA is typically 91% of GEA[45].

TRIP RATES

3.8.5 Residential trip rates are based on the number of dwellings rather than floorspace (in m^2). For one of the proposed site allocations, where student accommodation is proposed but the number of units is not available, these have been calculated by dividing the floorspace (given in GEA not GIA) by 13.4 which represents the average size (in m^2) of student accommodation within Central London[46].

3.8.6 Trip rates have been applied directly for the following land uses: residential; offices/light industrial; industrial and assembly/leisure. Trip rates for retail land use have been bundled up to comprise retail (superstore and convenience), restaurants/cafes, drinking establishments and hot food takeaway. A worst-case trip rate per annum of 139 trips per m^2 has been assumed (the trip rate for convenience retail).

3.8.7 Where the proposed site allocation contains a land use that does not directly align with one of the above categories, a worst-case trip rate for the remaining AQN categories has been applied (i.e. application of the 30.3 trips per annum used for 'Schools, nurseries, doctors' surgeries, other non-residential institutions').

TRAFFIC CHANGE

3.8.8 The number of trips associated with each of the shortlisted site allocations assumes that these are all new developments and does not take into account the existing use of the site (and level of traffic generated). The majority of the shortlisted site allocations are not greenfield sites and have an

[45] Assessing building areas: it's easy, anyone can do it! — Practical Architecture
[46] Student housing: average size of en-suite and studios UK | Statista

existing use. New development is subject, through the London Plan and Local Plan policies, to tight controls with respect to parking/car usage such that, in some instances, the level of traffic generated for the proposed use will be less than for the existing/consented use of the site. The calculated change in traffic is, therefore, considered worst case and highly conservative.

RETAIL FLOORSPACE

3.8.9 With respect to retail floorspace, LBN's Retail and Leisure Study (2022)[47] concluded that there is only a small need for additional comparison floorspace in the borough over the plan period under the conservative population growth scenario and no need for additional convenience goods floorspace. Instead, the focus is on consolidating and diversifying existing town centres and maintaining the core retail functions of the metropolitan, major and district centres.

3.8.10 Irrespective of population growth, market trends combined with average town centre floorspace data generated by Experian Goad, highlight the decline of comparison goods floorspace within Newham and the wider UK in recent years. Within this market context, proposals for comparison goods led schemes within the LBN are unlikely over the plan period and there is no need to allocate sites outside of town centres for comparison floorspace.

3.8.11 On this basis, treating the proposed retail floorspace within the site allocations as 'new' development is considered unrealistic and likely to result in an overestimation of retail trips arising due to the emerging Local Plan. On this basis and following a discussion with Urban Shape (LBN's retail consultant), trip generation data is also presented for each of the site allocations, excluding the retail trips (see **Table 6.2**), on the basis that the overall level of traffic generated by retail use in LBN is unlikely to change significantly.

MoTION MODEL BASELINE YEAR

3.8.12 The data extracted from the MoTION model represents the 2019 baseline case. The 2019 baseline case represents the best data available at the time of assessment regarding likely assignment of generated trips. The distribution could change in future years as it is dependent on a host of factors including the location of employment floorspace and the capacity on the road network.

JNCC DECISION MAKING THRESHOLD

3.8.13 As there is no way of distributing traffic due to the Local Plan to specific roads, except PTAL2 zones (i.e. to WFDC and EFDC), a precautionary DMT of 13 has been applied to the trip generation calculations for each of the shortlisted allocation sites.

[47] Newham-retail-leisure-study-final-4-8-2022

4 SCREENING OF LOCAL PLAN POLICIES

4.1.1 **Table 4.1** outlines a summary of the Regulation 19 Local Plan policies, commentary regarding their potential for LSE, both 'alone' and/or 'in-combination' with other plans and projects.

4.1.2 The following policies have been 'screened in' based on their potential for LSE:

- BFN1 - Spatial Strategy;
- J1 - Employment and growth;
- J2 - New employment floorspace;
- W2 - New or Improved Waste Management Facilities;
- H1 - Meeting Housing Needs;
- H10 - Gypsy and Traveller Accommodation;
- T1 – Strategic Transport; and
- The following Neighbourhood policies (based on their location/proximity to Epping Forest SAC: N7 (Three Mills), N8 (Stratford and Maryland), and N15 (Forest Gate).

4.1.3 On the basis of the above, it has not been possible to 'screen out' potential LSE due to the Local Plan policies. Further analysis is required to better understand the neighbourhoods and proposed site allocations, the level of trips they are likely to generate and subsequent distribution across the local road network (and into LBWF and EFDC's administrative areas). This further analysis is presented within Sections 5 (Screening of Site Allocation), 6 (Calculation of trips for the 'screened in' Site Allocations) and 7 (Review of Qualitative Evidence).

Table 4-1 - Screening of Local Plan Policies

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
Building a Fairer Newham Policies					
BFN1	Spatial Strategy	The policy establishes the Spatial Strategy for development within Newham in the plan period, seeking to achieve economic growth and community benefits. It also sets out the level of growth that is planned for in terms of housing, jobs, retail, leisure, open space and infrastructure.	The potential for LSE is linked to where in Newham development will take place,	Depending on the location of development, and level of traffic generated, there is the potential for 'in-combination' effects.	In
BFN2	Co-designed Masterplanning	The policy seeks to ensure that sites are designed and developed comprehensively, avoid piecemeal delivery and that masterplans demonstrate that development is co-ordinated.	No LSE - policy will not directly affect Habitats Sites. Delivering co-ordinated schemes offers potential benefits for delivering strategic transport measures, thereby reducing any associated air quality effects. Similarly, the policy requires that masterplanning must consider the delivery of key walking and cycling connections within a site to and from key local facilities.	No	Out
BFN3	Social Value and Health Impact Assessment - delivering social	The policy establishes that development is required to create positive health and wellbeing effects for local communities proportionate to the developments size.	No LSE - policy will not directly affect Habitats Sites.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
	value, health and wellbeing	Policy sets out the requirement for screening for major developments for the need for a Social Value and Health Impact Assessment.			
BFN4	Developer Contributions and Infrastructure Delivery	The policy governs the levels of developer contributions required from development and the expected levels of infrastructure delivery.	No LSE - policy will not directly affect Habitats Sites.	No	Out
Climate Emergency					
CE1	Environmental Design and Delivery	The policy requires all development to reduce its contribution to climate change and consider the ongoing climate emergency.	No LSE - design policy that will not directly affect Habitats Sites. Positive in-direct effects for overall air quality (as many measures to meet the climate change agenda have co-benefits for air quality).	No	Out
CE2	Zero Carbon Development	The policy ensures all development within Newham are designed and constructed to be Net Zero Carbon in operation and heat/energy efficient.	No LSE - policy will not directly affect Habitats Sites. Positive in-direct effects for overall air quality (as many measures to meet the Net Zero agenda have co-benefits for air quality).	No	Out
CE3	Embodied Carbon and the Circular Economy	The policy establishes that development must consider Embodied Carbon across	No LSE - policy will not directly affect Habitats Sites.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		its lifetime and utilise Modern Methods of Construction.			
CE4	Overheating	The policy requires development to ensure it is designed to reduce the likelihood of overheating, especially in regard to the changing climate.	Policy will not affect Habitats Sites. No LSE	No	Out
CE5	Retrofit and the Circular Economy	The policy allows for the retrofitting of buildings following best practices and to aid in reducing a building's carbon emissions and extending the lifespan of a building.	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE	No	Out
CE6	Air Quality	The policy requires development to mitigate its effects on Newham's air quality and result in an improvement to Newham's air quality. The policy sets out general criteria for the avoidance of pollution and protection of air quality.	Protective policy; no pathway for effects. Policy will not adversely affect air quality in the vicinity of Habitats Sites. No LSE. In fact, the policy seeks to avoid/mitigate effects on air quality due to development and could result in an overall improvement in Newham's air quality.	No	Out
CE7	Managing Flood Risk	The policy creates criterion for development to ensure it is not at risk of flooding and resilient to flooding.	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE.	No	Out
CE8	Sustainable Drainage	The policy ensures development appropriately manages its effects on the	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		water environment and reduces the risk of surface water flooding.			
Design					
D1	Design Standards	The policy establishes a set of criteria development must meet to be considered good design.	No LSE - design policy that will not directly affect Habitats Sites.	No	Out
D2	Public Realm Net Gain	The policy ensures suitable development provides a positive contribution to Newham's public realm, whilst also ensure its existing public realm is well designed and managed.	No LSE - design policy that will not directly affect Habitats Sites.	No	Out
D3	Design-led site capacity optimisation	The policy creates criteria for all new-build development to follow to ensure they are of a suitable capacity and well designed. Additional criteria are provided for major residential developments with a density of 250units/ha or more.	No LSE - design policy that will not directly affect Habitats Sites.	No	Out
D4	Tall Buildings	The policy establishes a set of criteria governing the appropriate building heights within areas of Newham.	No LSE - design policy that will not directly affect Habitats Sites.	No	Out
D5	Shopfronts and advertising	The policy governs shopfront and advertising developments and ensures these developments are well deigned and enhance the character and setting of their surroundings.	No LSE - design policy that will not directly affect Habitats Sites.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
D6	Neighbourliness	The policy establishes the criterion for development to be neighbourly from the outset and maximise their social and environmental benefits for the local neighbourhood. The policy also established the 'Agent of Change' principle to ensure change brought about by development does not cause problems for existing lawful neighbours.	Social policy that will not affect Habitats Sites. No LSE	No	Out
D7	Conservation Areas and Areas of Townscape Value	The policy affords protection to Newham's Conservation Areas and Areas of Townscape Value, ensuring development enhances these important assets.	No LSE - policy will not directly affect Habitats Sites.	No	Out
D8	Archaeological Priority Areas	The policy creates criteria that ensures Newham's Archaeological Priority Areas are protected.	No LSE - policy will not directly affect Habitats Sites.	No	Out
D9	Designated and non-designated buildings, ancient monuments and historic parks and gardens	The policy affords protection to Newham's designated and non-designated heritage assets, ancient monuments and historic parks and gardens, ensuring development protects these important assets.	No LSE - policy will not directly affect Habitats Sites.	No	Out
Inclusive Economy					

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
J1	Employment and growth	The policy requires developments, where appropriate, to support diverse, inclusive, and green economic growth. A number of locations are specified within which employment and growth is proposed, some of which will fall within the ZOI for Epping Forest SAC.	Potential for LSE, depending on the location, scale and nature of growth proposed.	Yes - depending on the location, scale and nature of growth proposed and relationship to other cumulative schemes.	In
J2	New employment floorspace	The policy governs development within strategic sites to ensure they provide economic development where appropriate in industrial and mixed-use areas, to ensure they provide economic benefits. Notably, the policy supports development within Strategic Industrial Locations (SILs) and Local Industrial Locations (LILs) and within specified site allocations. Where development is outside of these locations, specific threshold criteria must be met.	Potential for LSE, depending on the location, scale and nature of growth proposed.	Yes - depending on the location, scale and nature of growth proposed and relationship to other cumulative schemes.	In
J3	Protecting employment floorspace	The policy affords protection to Newham's existing employment floorspace, only allowing its loss if there is not further use for said employment floorspace and endeavours are made to relocate/ reprovision use elsewhere within Newham.	Policy will not directly affect Habitats Sites. Should relocation of employment floorspace (including industrial) be proposed (which is only permitted following meeting a series of criterion), further	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
			assessment would be required as part of any future planning application. No LSE		
J4	Delivering Community Wealth Building and Inclusive Growth	The policy requires employment generating developments to create high quality economic opportunities and commit to delivering a greener economic future.	Policy will not affect Habitats Sites. No LSE	No	Out
Green and Water Spaces					
GWS1	Green Spaces	The policy seeks to ensure development provides high quality green spaces and does not compromise the quality and provision of existing green spaces.	No LSE - design policy that will not directly affect Habitats Sites. Provision of high-quality greenspaces has the potential to reduce travel from Newham towards Epping Forest SAC, with associated benefit.	No	Out
GWS2	Water Spaces	The policy creates a set of criteria that affords protection to Newham's water spaces and encourages the creation of a network of high-quality water spaces.	Policy will not affect Habitats Sites. No LSE	No	Out
GWS3	Biodiversity, urban greening, and access to nature	The policy requires development to contribute towards the nature recovery and conserve and protecting biodiversity, whilst also addressing areas deficient in biodiversity.	Protective policy as includes 'mitigating' elements / criteria that would need to be met in relation to the management and avoidance of recreational	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		The policy protects and enhances Epping Forest SAC by ensuring that development demonstrates that, if necessary, measures are put in place to avoid or mitigate any potential adverse effects through contributions to the Strategic Access Management and Monitoring Strategy and provision of Suitable Alternative Natural Green Space.	pressures on the Epping Forest SAC. No LSE.		
GWS4	Trees and Hedgerows	The policy affords protection to Newham's trees and hedgerows and seeks to expand the number of trees and hedgerows within Newham.	Policy will not affect Habitats Sites. No LSE	No	Out
GWS5	Play and informal recreation for all ages	The policy ensures development provides play and informal recreation spaces when appropriate and ensure such spaces are well designed.	Policy will not affect Habitats Sites. No LSE	No	Out
High Street					
HS1	Newham's Town Centres Network	The policy protects existing town centres within Newham and ensure there are sufficient town centres/parades of shops within Newham to meet local needs. Policy requires all homes in Newham to be within a maximum 400 metre radius of at least one designated centre or parade; or be within a 15 minute walking distance of at least two designated	Policy will not affect Habitats Sites. In fact, the focus on consolidating town centre uses and requiring all homes to be within a 400m radius will reduce the need to travel by car with likely benefits for air quality. No LSE.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		centres or parades. This will reduce the need to travel by car for convenience retail trips.			
HS2	HS2 Managing New and Existing Town and Local Centres	The policy creates a set of criteria for development within town/local centres to ensure they are an appropriate use and do not compromise the purpose of the town/local centre.	Policy will not affect Habitats Sites. In fact, the focus on consolidating town centre uses will reduce the need to travel by car with likely benefits for air quality. No LSE.	No	Out
HS3	Edge-of Centre and Out of Centre Retail, Restaurants, Cafes, and Services	The policy creates a set of criteria for edge-of-centre and out-of-centre retail, restaurants, cafes, and services to ensure such uses are appropriately located and designed.	Policy will not directly affect Habitats Sites and rather provides criteria to manage development in edge of centre and out of centre locations. No LSE.	No	Out
HS4	Markets, and events/pop-up spaces	The policy governs spaces for markets, events and pop-up spaces, protecting such spaces from being lost unless the space is no longer required. It also allows for the creation of such spaces.	Policy will not directly affect Habitats Sites. Markets and events/pop-up spaces will need to demonstrate that there are no adverse transport effects. No LSE.	No	Out
HS5	Visitor, Evening and Night Time Economy	The policy seeks to ensure Newham's existing and emerging town centres are supported to become Evening and Night Time Economy Zones that are of a suitable scale and design.	Policy will not directly affect Habitats Sites. Where major development is proposed, contributions to night time public	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
			transport enhancements will be required. No LSE.		
HS6	Health and Wellbeing on the High Streets	The policy requires development of the high street to have positive effects, seeking to ensure there is not a consolidation of the same type of development that could cause negative effects.	Policy will not directly affect Habitats Sites. Policy gives criteria for managing undesirable effects on health and wellbeing from uses such as gambling premises and hot food takeaways. No LSE	No	Out
HS7	Delivery-led businesses	The policy creates criteria to ensure delivery-led business are well designed and sited. Policy seeks to support dark kitchens, dark shops and micro-fulfilment centres in areas identified as suitable for employment or along high streets where their impacts on the town and local centres network can be managed. Includes the requirement for a Site Options Test, responding to the need to balance transport or amenity impacts of the business with the optimal catchment for its operation.	Policy creates criteria to ensure that delivery-led businesses are well designed and sited. Policy itself will not directly affect Habitats Sites. Furthermore, supporting micro-fulfilment centres will help to facilitate low-emission last mile deliveries (especially cargo-bike delivery). Furthermore, the policy outlines its requirement for the establishment of Travel Plans.	No	Out
HS8	Visitor Accommodation	The policy provides criteria for the creation of new hotels/visitor	Policy creates criteria to ensure that the location and scale of visitor accommodation is	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		accommodation in suitable locations.	managed, with a focus on siting accommodation within existing town and local centres within easy accessibility (via walking) of key tourist attractions. Policy itself will not directly affect Habitats Sites.		
Homes					
H1	Meeting Housing Needs	The policy seeks to ensure Newham's housing needs are met, with housing developments maximising their potential capacity. Policy includes support for development on windfall sites (unless other policies within the Local Plan direct otherwise).	Windfall sites will deliver circa 3,800 homes. Some of these may be located within a ZOI of Epping Forest SAC and, therefore, have the potential to result in changes in traffic on roads which traverse the SAC. Potential for LSE, depending on the location, scale and nature of growth proposed.	Yes - depending on the location, scale and nature of growth proposed and relationship to other cumulative schemes.	In
H2	Protecting and Improving Existing Housing	The policy requires existing housing to be protected and improved, with any loss of housing replaces by high quality housing. It also manages the potential impacts of subdividing additional dwelling houses, including distance criterion to the nearest town/local centre.	Policy will not directly affect Habitats Sites. No LSE.	No	Out
H3	Affordable Housing	The policy requires 60% of all new residential units delivered over the	Policy will not directly affect Habitats Sites.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		lifetime of the updated Local Plan to be affordable.	No LSE.		
H4	Housing Mix	The policy requires residential developments to deliver a mix and balance of housing types (as appropriate).	Policy will not directly affect Habitats Sites. No LSE.	No	Out
H5	Build to Rent Housing	The policy establishes a criteria built to rent housing has to meet for such developments to be permitted.	Policy will not directly affect Habitats Sites. No LSE.	No	Out
H6	Supported and Specialist Housing	The policy protects existing housing that is for specialist housing and encourages the development of further specialist housing.	Policy will not directly affect Habitats Sites. No LSE.	No	Out
H7	Specialist housing for older people	The policy supports housing for older people in suitable locations that have access to the necessary facilities and services.	Policy will not directly affect Habitats Sites. Ensuring that housing is placed in locations with access to the necessary facilities and services will support journeys via more active modes of travel. No LSE.	No	Out
H8	Purpose Built Student Accommodation	The policy requires purpose-built student housing to meet a strict criterion in order to be deemed acceptable whilst also requiring it to deliver 60% affordable accommodation.	Policy will not directly affect Habitats Sites. No LSE.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
H9	Houses in Multiple Occupation and Large-Scale Purpose-Built Shared Living	The policy seeks to ensure shared accommodation is delivered in suitable locations and contributes to the supply of affordable accommodation in the Borough.	Policy will not directly affect Habitats Sites. No LSE.	No	Out
H10	Gypsy and Traveller Accommodation	The policy provides a site for Gypsy and Traveller accommodation and further allows for the creation of such accommodation over the updated Local Plan's lifetime.	Potential for LSE, depending on the location and scale of any future sites for Gypsy and Traveller accommodation.	Yes - depending on the location and scale of any future sites for Gypsy and Traveller accommodation and relationship to other cumulative schemes.	In
H11	Housing Design Quality	The policy seeks to deliver high quality housing and sets out requirements for homes to ensure long-term comfort, flexibility, and ease of maintenance.	Policy will not directly affect Habitats Sites. No LSE.	No	Out
Neighbourhoods					
N1	North Woolwich	The policy sets out the vision, and key development considerations for the neighbourhood. The following site allocations are part of this neighbourhood: N1.SA1 North Woolwich Gateway N1.SA2 Rymill Street	The neighbourhood falls within the OAPF area. There is no identified receptor pathway between development within the OAPF and Epping Forest SAC. No LSE	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		All of the above site allocations have been screened out because they are within the OAPF area.			
N2	Royal Victoria	The policy sets out the vision, and key development considerations for the neighbourhood. The following site allocations are part of this neighbourhood: N2.SA1 Silvertown Quays N2.SA2 Lyle Park West N2.SA3 Connaught Riverside N2.SA4 Thameside West N2.SA5 Excel Western Entrance All of the above site allocations have been screened out because they are within the OAPF area.	The neighbourhood falls within the OAPF area. There is no identified receptor pathway between development within the OAPF and Epping Forest SAC. No LSE	No	Out
N3	Royal Albert North	The policy sets out the vision, and key development considerations for the neighbourhood. Site allocation N3.SA1 Royal Albert North is located in this neighbourhood. This has been screened out as it also sits within the OAPF area.	The neighbourhood falls within the OAPF area. There is no identified receptor pathway between development within the OAPF and Epping Forest SAC. No LSE	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
N4	Canning Town	The policy sets out the vision, and key development considerations for the neighbourhood. The following site allocations are part of this neighbourhood: N4.SA1 Canning Town East N4.SA2 Silvertown Way East N4.SA3 Canning Town Holiday Inn N4.SA4 Limmo N4.SA5 Canning Town Riverside All of the above site allocations have been screened out because they are within the OAPF area.	The site allocations within the neighbourhood fall within the OAPF area. There is no identified receptor pathway between development within the OAPF and Epping Forest SAC. No LSE	No	Out
N5	Custom House	The policy sets out the vision, and key development considerations for the neighbourhood. The following site allocations are part of this neighbourhood: N5.SA1 Custom House Land surrounding Freemasons Road N5.SA2 Custom House Coolfin North N5.SA3 Custom House Land between Russell Road and Maplin Road. N5.SA4 Royal Road	The allocated sites fall within the OAPF area. There is no identified receptor pathway between development within the OAPF and Epping Forest SAC. No LSE.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		Whilst the neighbourhood sits partly outside of the OAPF area, all of the above allocations are within the OAPF and therefore have been screened out.			
N6	Manor Road	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls partly within the 7.2km buffer zone for Epping Forest. No site allocations are proposed in this neighbourhood.	No site allocations are proposed in this neighbourhood. Therefore, there is no identified receptor pathway between development within the neighbourhood and Epping Forest SAC. No LSE	No	Out
N7	Three Mills	The policy sets out the vision, and key development considerations for the neighbourhood. The following site allocations are part of this neighbourhood: N7.SA1 Abbey Mills N7.SA2 Twelvetrees Park and Former Bromley By Bow Gasworks N7.SA3 Sugar House Island	Both N7.SA3 and N7.SA1 are located within the ZOI of Epping Forest SAC. Therefore, the neighbourhood has the potential for LSE.	Yes - depending on the location and scale of any future	In
N8	Stratford and Maryland	The policy sets out the vision, and key development considerations for the neighbourhood. The following site allocations are part of this neighbourhood:	N8.SA1, N8.SA2, N8.SA4, N8.SA5, N8.SA6, N8.SA7, N8.SA9 and N8.SA10 are all located within the ZOI of Epping Forest SAC.	Yes - depending on the location and scale of any future	In

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		N8.SA1 Stratford Central N8.SA2 Stratford Station N8.SA3 Greater Carpenters District N8.SA4 Stratford High Street Bingo Hall N8.SA5 Stratford Town Centre West N8.SA6 Stratford Waterfront South N8.SA7 Rick Roberts Way N8.SA8 Bridgewater Road N8.SA9 Pudding Mill N8.SA10 Chobham Farm North	Therefore, the neighbourhood has the potential for LSE.		
N9	West Ham	The policy sets out the vision, and key development considerations for the neighbourhood. Site allocation N9.SA1 Plaistow North is located in this neighbourhood.	N9.SA1 is not located within the ZOI of Epping Forest SAC. No LSE	No	Out
N10	Plaistow	The policy sets out the vision, and key development considerations for the neighbourhood. The following site allocations are part of this neighbourhood:	None of the site allocations within the neighbourhood are located within the ZOI of Epping Forest SAC. No LSE.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		N10.SA1 Balaam Leisure Centre N10.SA2 Newham 6th Form College N10.SA3 Newham Leisure Centre N10.SA4 Ballam Street Health Complex			
N11	Beckton	The policy sets out the vision, and key development considerations for the neighbourhood. The following site allocations are part of this neighbourhood: N11.SA1 East Beckton Town Centre N11.SA2 Cyprus N11.SA3 Alpine Way	None of the site allocations within the neighbourhood are located within the ZOI of Epping Forest SAC. No LSE.	No	Out
N12	East Ham South	The policy sets out the vision, and key development considerations for the neighbourhood. The neighbourhood falls largely within the 7.2km buffer zone for Epping Forest. No site allocations are proposed within this neighbourhood.	No site allocations are proposed in this neighbourhood. Therefore, there is no identified receptor pathway between development within the neighbourhood and Epping Forest SAC. No LSE	No	Out
N13	East Ham	The policy sets out the vision, and key development considerations for the neighbourhood.	None of the site allocations within the neighbourhood are located within the ZOI of Epping Forest SAC.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
		The following site allocations are part of this neighbourhood: N13.SA1 East Ham Western Gateway N13.SA2 East Ham Primark N13.SA3 Former East Ham Gasworks	No LSE.		
N14	Green Street	The policy sets out the vision, and key development considerations for the neighbourhood. Site allocation N14.SA1 Shrewsbury Road Health Complex is located within this neighbourhood.	N14.SA1 is not located within the ZOI of Epping Forest SAC. No LSE.	No	Out
N15	Forest Gate	The policy sets out the vision, and key development considerations for the neighbourhood. The following site allocations are part of this neighbourhood: N15.SA1 Lord Lister Health Centre N15.SA2 Woodgrange Road West	Both allocations are located within the ZOI of Epping Forest SAC. Therefore, the neighbourhood has the potential for LSE.	Yes	In
N16	Manor Park and Little Ilford	The policy sets out the vision, and key development considerations for the neighbourhood. However, no site allocations are proposed in this neighbourhood.	No site allocations are proposed in this neighbourhood. Therefore, there is no identified receptor pathway between development within the	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
			neighbourhood and Epping Forest SAC. No LSE		
N17	Gallions Reach	The policy sets out the vision, and key development considerations for the neighbourhood. Site allocation N17.SA1 Beckton Riverside falls within this neighbourhood. Whilst the neighbourhood sits partly outside of the OAPF area, the above allocation falls within the OAPF and therefore has been screened out.	The allocation site falls within the OAPF area. There is no identified receptor pathway between development within the OAPF and Epping Forest SAC. No LSE	No	Out
Social Infrastructure					
SI1	Existing Community Facilities and Health Facilities	The policy affords protection to Newham's existing community facilities, only allowing their removal and replacement after a development meets strict criterion.	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE.	No	Out
SI2	New and Re-provided Community Facilities and Health Facilities	The policy establishes a set of criteria for new and re-provided community facilities to ensure such facilities are in a suitable location and size.	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
SI3	Cultural Facilities and Sport and Recreation Facilities	The policy ensures existing cultural and sport and recreation facilities are protected and not lost unless Local Plan Policy requirements are met and it can be demonstrated they are no longer required. The policy also sets criteria for new and reconfigured facilities within Newham.	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE.	No	Out
SI4	Education and Childcare Facilities	The policy seeks to ensure a sufficient supply of educational facilities are located within Newham to meet its needs and ensures new educational facilities meet strict criterion.	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE.	No	Out
SI5	Burial Space and Related Facilities	The policy protects existing in-use cemeteries and crematoria to meet Newham's burial needs and supports proposals for increase provision in communities for whom burial is the only option. The policy also sets out criteria for new burial spaces and related facilities.	Policy will not directly affect air quality in the vicinity of Habitats Sites. States that development will only be supported providing that it: • Will not cause unacceptable amenity or highways impacts; and • Adequately address environmental risks. Therefore, No LSE.	No	Out
Transport					

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
T1	Strategic Transport	The policy affords protection to Newham's existing strategic transportation network and allows for its expansion. Policy supports the safeguarding of land for future strategic transport schemes. Part 2 of the policy states that "*Proposals for new strategic transport schemes must:* *a) unlock growth, increase public transport mode share and active travel, improve safety, accessibility and connectivity, support the delivery of a network of well connected neighbourhoods, improve air quality and reduce carbon emissions.* *b) minimise social, economic and environmental impacts, while balancing the cost and technical feasibility of a project.*	Potential for LSE, depending on the location, scale and nature of any expansions to the strategic transportation network. Much of the policy is targeted at protecting Newham's existing strategic transportation network which largely supports travel by sustainable modes.	Yes - depending on the location, scale and nature of any expansions to the strategic transportation network and relationship to other cumulative schemes.	Yes
T2	Local Transport	The policy encourages the creation of well-connected neighbourhoods by developments achieving a set of criteria.	No LSE – this policy is targeted at enhancing the local environment to encourage walking and cycling and improving the reliability, accessibility, attractiveness of public transport services.	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
T3	Transport Behaviour Change	The policy requires all new development to be car free and encourage other forms of transport and facilitate their use, apart from limited provision which meets specified standards (i.e., relating to blue badge and mobility scooter parking, specified short-term operational bays for specific uses, and employment/town centre uses). The policy also states that developments proposing a drive-through would not be supported but development that would result in the loss of existing parking or exceed road space, would be supported. The policy also sets out requirements in relation to Electric Vehicle charging points. This policy would help mitigate potential effects in relation to air quality.	No LSE – Policy targeted at mitigating air quality effects due to the Local Plan.	No	Out
T4	Servicing a development	The policy ensures development considers its potential effects from servicing and delivering to and from the development.	No LSE - the policy itself does not result in development. Rather the policy seeks to manage development by seeking to minimise any impacts (emissions) associated with servicing a development.	No	Out
T5	Airport	The policy details the type of development that will be supported at London City Airport (e.g. consolidation of ancillary airport infrastructure) .	No LSE - the policy itself does not result in development. Instead, it seeks to manage development at the airport, minimising its impacts and	No	Out

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
			encouraging development that reduces car parking and/or makes improvements to public transport and active travel access to the airport.		
Waste & Utilities					
W1	Waste Management Capacity	The policy affords protection to Newham's waste management sites and for such facilities to follow the principles of a circular economy.	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE.	No	Out
W2	New or Improved Waste Management Facilities	The policy creates a list of criteria that allows for the creation of waste management facilities to ensure they are well designed. This includes demonstrating that they minimise emissions to air and, where feasible, they prioritise rail and water transport over use of the principal road network. Requirement for development to provide an appropriately detailed and resourced waste operator management plan to manage its effects. Supporting text references the Joint East London Waste Plan (2012), which is being updated, and which will set out in detail which existing waste sites in Newham will be safeguarded to meet this target.	Potential for LSE, depending on the location, scale and nature of the new/improved waste management facilities.	Yes - depending on the location, scale and nature of any new/improved waste management facilities and relationship to other cumulative schemes.	Yes

Policy	Policy Title	Summary of Policy	Commentary on Likely Significant Effects (LSE)	In-Combination	Screened in / out?
W3	Waste Management in Developments	The policy ensures all development within Newham minimises the amount of waste they would produce and appropriately manage it.	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE.	No	Out
W4	Utilities and Digital Connectivity Infrastructure	The policy requires developments to be appropriately connected to the required utilities and provide a good level of digital connectivity.	Policy will not affect air quality in the vicinity of Habitats Sites. No LSE.	No	Out

5 SCREENING OF SITE ALLOCATIONS

5.1.1 The results of the screening of the site allocations are presented in **Table 6.1** below. For each of the site allocations, the proposed land use is given which has been used to determine the applicable average trip length/refined ZOI (based on the average journey lengths provided within the Air Quality Neutral Guidance). These distances have then been applied both 'as the crow flies' and via road (more realistic) to determine which site allocations lie within the refined ZOI, and which therefore require further assessment, and those that lie outside of the refined ZOI and which can be screened out.

5.1.2 **Table 6.1** indicates that the majority of site allocations can be screened out of further assessment because there is no identified receptor pathway. This is due to these site allocations sitting outside of the ZOI both 'as the crow flies' and via road (with the ZOI based on the proposed land uses).

5.1.3 Sites within the OA have been screened out on the basis that these have already been assessed within the OAPF HRA (which concluded that there was no identified receptor pathway between development within the OA and Epping Forest SAC).

5.1.4 The screening does not allow for windfall sites (unallocated or undesignated) which will deliver circa 3,800 homes over the Local Plan period. These have been automatically screened in, applying the precautionary principal. However, many of these will be located either within the Royal Docks and Beckton Riverside Opportunity Area (where there is no identified receptor pathway) or outside of the identified ZOI.

5.1.5 The following 13 site allocations have been identified as being within the ZOI where there is a potential receptor pathway (based on average trip lengths for different types of development):

- Twelvetrees Park and Former Bromley By Bow Gasworks
- Sugar House Island
- Stratford Central
- Stratford Station
- Stratford High Street Bingo Hall
- Stratford Town Centre West
- Stratford Waterfront South
- Rick Roberts Way
- Pudding Mill
- Chobham Farm North
- Former East Ham Gasworks
- Lord Lister Health Centre
- Woodgrange Road West

5.1.6 It should be noted that the majority of the 13 'screened in' sites are located in or around Stratford which is served by an extensive public transport network with a high PTAL score (with PTAL 6b, the highest score available, covering much of the central area of Stratford). It is these 13 site allocations that have been taken forward to the next stage of assessment (calculation of trip rates and assignment across the network).

Table 5-1 – Screening of the proposed site allocations

Site Ref	Site Name	Proposed Land Use	Allocation Lies Within OAPF area?	Applicable / Refined ZoI	Habitat Site within Refined ZOI? (Distance Measured as Crow Flies)	Habitat Site within Refined ZOI? (Estimated Distance Measured 'on road')	Screened in/out
N1.SA1	North Woolwich Gateway	Mixed-use residential with industrial and employment uses, prioritising light industrial to complement adjacent Strategic Industrial Location to the west of the site and open space.	Yes – screened out	N/A	N/A	N/A	Screened Out
N1.SA2	Rymill Street	Comprehensive redevelopment to provide residential, retail, community floorspace in the form of a health centre, and provision of open space.	Yes – screened out	N/A	N/A	N/A	Screened Out
N2.SA1	Silvertown Quays	Residential development, industrial and employment uses, community, education and sports and recreation facilities, open space and town centre uses.	Yes – screened out	N/A	N/A	N/A	Screened Out
N2.SA2	Lyle Park West	Residential, employment uses, open space (extension to Lyle Park), main town centre uses and social infrastructure, including community facilities.	Yes – screened out	N/A	N/A	N/A	Screened Out
N2.SA3	Connaught Riverside	Residential development, industrial and employment uses, open space, community and education facilities and town centre uses. Residential	Yes – screened out	N/A	N/A	N/A	Screened Out

Site Ref	Site Name	Proposed Land Use	Allocation Lies Within OAPF area?	Applicable / Refined ZoI	Habitat Site within Refined ZOI? (Distance Measured as Crow Flies)	Habitat Site within Refined ZOI? (Estimated Distance Measured 'on road')	Screened in/out
		development should be located outside the boundaries of the Local Industrial Location.					
N2.SA4	Thameside West	Residential development, industrial and employment uses, new DLR station, community and education uses, open space and main town centre uses.	Yes – screened out	N/A	N/A	N/A	Screened Out
N2.SA5	Excel Western Entrance	Residential development, community facility and open space.	Yes – screened out	N/A	N/A	N/A	Screened Out
N3.SA1	Royal Albert North	Residential development, employment uses, open space, main town centre uses and social infrastructure, including community facilities, higher education facilities and sports and recreation facilities.	Yes – screened out	N/A	N/A	N/A	Screened Out
N4.SA1	Canning Town East	Residential development, community facilities and open space.	Yes – screened out	N/A	N/A	N/A	Screened Out
N4.SA2	Silvertown Way East	Residential development, industrial and employment uses and community uses.	Yes – screened out	N/A	N/A	N/A	Screened Out

Site Ref	Site Name	Proposed Land Use	Allocation Lies Within OAPF area?	Applicable / Refined ZoI	Habitat Site within Refined ZOI? (Distance Measured as Crow Flies)	Habitat Site within Refined ZOI? (Estimated Distance Measured 'on road')	Screened in/out
N4.SA3	Canning Town Holiday Inn	Residential development, employment uses, open space and main town centre uses and social infrastructure, including community facilities.	Yes – screened out	N/A	N/A	N/A	Screened Out
N4.SA4	Limmo	Residential development and open space.	Yes – screened out	N/A	N/A	N/A	Screened Out
N4.SA5	Canning Town Riverside	Residential, employment uses and open space.	Yes – screened out	N/A	N/A	N/A	Screened Out
N5.SA1	Custom House Land surrounding Freemasons Road	Residential, open space, main town centre uses and social infrastructure, including community facilities and a health centre.	Yes – screened out	N/A	N/A	N/A	Screened Out
N5.SA2	Custom House Coolfin North	Residential development, education and open space.	Yes – screened out	N/A	N/A	N/A	Screened Out
N5.SA3	Custom House Land between Russell Road and Maplin Road	Residential development and open space.	Yes – screened out	N/A	N/A	N/A	Screened Out
N5.SA4	Royal Road	Education, residential and open space.	No	3.4km	No (7.2km)	N/A	Screened Out

Site Ref	Site Name	Proposed Land Use	Allocation Lies Within OAPF area?	Applicable / Refined ZoI	Habitat Site within Refined ZOI? (Distance Measured as Crow Flies)	Habitat Site within Refined ZOI? (Estimated Distance Measured 'on road')	Screened in/out
N7.SA1	Abbey Mills	Residential development, open space and social infrastructure, including community facilities.	No	3.4km	No (4.9km)	N/A	Screened Out
N7.SA2	Twelvetrees Park and Former Bromley By Bow Gasworks	Residential development, employment uses, main town centre uses and social infrastructure including community facilities, health centre, education uses, and open space.	No	7.2km	**Yes (5.2km)**	**Yes (6.9km)**	**Screened In**
N7.SA3	Sugar House Island	Residential development, main town centre uses and social infrastructure, including community facilities, and employment uses and open space.	No	7.2km	**Yes (4.9km)**	**Yes (7.0km)**	**Screened In**
N8.SA1	Stratford Central	Residential, main town centre uses and social infrastructure, including community facilities and health centre, and civic uses, employment uses, and open space.	No	7.2km	**Yes (3.4km)**	**Yes (4.7km)**	**Screened In**
N8.SA2	Stratford Station	Increased capacity at Stratford Station to be provided through the redevelopment of the ticket hall and new and improved station entrances from Montfichet Road and the Carpenters estate along with	No	7.2km	**Yes (3.6km)**	**Yes (6.1km)**	**Screened In**

Site Ref	Site Name	Proposed Land Use	Allocation Lies Within OAPF area?	Applicable / Refined ZoI	Habitat Site within Refined ZOI? (Distance Measured as Crow Flies)	Habitat Site within Refined ZOI? (Estimated Distance Measured 'on road')	Screened in/out
		residential, employment uses, main town centre uses and social infrastructure including, community facilities and education facilities, and open space.					
N8.SA3	Greater Carpenters District	Residential, including refurbishment, employment uses, main town centre uses and social infrastructure including education, health centre, community facilities, and open space.	No	3.4km	No (4.0km)	N/A	Screened Out
N8.SA4	Stratford High Street Bingo Hall	Residential development with employment floorspace. The employment floorspace should be consistent with Local Plan Policy J1 and should provide space for light industrial uses and business workspaces and complement the offer at Stratford Workshops on Burford Road.	No	7.2km	**Yes (4.2km)**	**Yes (7.2km)**	**Screened In**
N8.SA5	Stratford Town Centre West	Residential, employment, other main town centre uses, particularly ground floor active frontages and social infrastructure including community facilities, and open space.	No	7.2km	**Yes (3.4km)**	**Yes (4.2km)**	**Screened In**

Site Ref	Site Name	Proposed Land Use	Allocation Lies Within OAPF area?	Applicable / Refined ZoI	Habitat Site within Refined ZOI? (Distance Measured as Crow Flies)	Habitat Site within Refined ZOI? (Estimated Distance Measured 'on road')	Screened in/out
N8.SA6	Stratford Waterfront South	Higher education campus development for UCL East comprising academic floorspace, employment uses small-scale retail and residential. The employment uses should be consistent with Local Plan Policy J1 and prioritise office and commercial research space associated with the higher academic campus.	No	7.2km	**Yes (4.1km)**	**Yes (6.1km)**	**Screened In**
N8.SA7	Rick Roberts Way	Residential, employment uses, sports and recreation uses, education and open space.	No	7.2km	**Yes (4.6km)**	**Yes (6.7km)**	**Screened In**
N8.SA8	Bridgewater Road	Residential and open space.	No	3.4km	No (4.5km)	N/A	Screened Out
N8.SA9	Pudding Mill	Residential, employment uses, main town centre uses and social infrastructure including community facilities and health centre, and open space.	No	7.2km	**Yes (4.7km)**	**Yes (6.3km)**	**Screened In**
N8.SA10	Chobham Farm North	Residential and employment uses.	No	7.2km	**Yes (3.0km)**	**Yes (5.9km)**	**Screened In**
N9.SA1	Plaistow North	Residential, main town centre uses and social infrastructure	No	5.5km	**Yes (4.6km)**	No (6.3km)	Screened Out

Site Ref	Site Name	Proposed Land Use	Allocation Lies Within OAPF area?	Applicable / Refined ZoI	Habitat Site within Refined ZOI? (Distance Measured as Crow Flies)	Habitat Site within Refined ZOI? (Estimated Distance Measured 'on road')	Screened in/out
		including community facilities, and open space.					
N10.SA1	Balaam Leisure Centre	Residential.	No	3.4km	No (5.6km)	N/A	Screened Out
N10.SA2	Newham 6th Form College	Residential development and open space. Residential development should enable improvements in the wider education campus with any lost education floorspace re-provided in the education site as part of a masterplan approach.	No	3.4km	No (5.9km)	N/A	Screened Out
N10.SA3	Newham Leisure Centre	Reconfiguration of leisure centre, car park and open space to provide a new leisure centre, residential and the enhancement of the open space.	No	3.4km	**Yes (6.1km)**	No (7.3km)	Screened Out
N10.SA4	Balaam Street Health Complex	Re-configuration and reprovision of the health centre with residential development.	No	3.4km	No (5.4km)	N/A	Screened Out
N11.SA1	East Beckton Town Centre	Reconfiguration of part of East Beckton District Centre to provide residential, main town centre uses and social infrastructure, including	No	7.2km	**Yes (7.0km)**	No (10.2km)	Screened Out

Site Ref	Site Name	Proposed Land Use	Allocation Lies Within OAPF area?	Applicable / Refined ZoI	Habitat Site within Refined ZOI? (Distance Measured as Crow Flies)	Habitat Site within Refined ZOI? (Estimated Distance Measured 'on road')	Screened in/out
		community facilities, health centre, sports and recreation facilities, and open space. Sports and recreation facilities should include a leisure centre unless a new leisure centre for the area has already been delivered at N1.SA1.					
N11.SA2	Cyprus	Residential and open space provision.	No	3.4km	No (7.9km)	No (10.9km)	Screened Out
N11.SA3	Alpine Way	Residential, employment uses and open space.	No	7.2km	**Yes (7.0km)**	No (10.0km)	Screened Out
N13.SA1	East Ham Western Gateway	Residential and community facility	No	5.5km	**Yes (5.2km)**	No (6.1km)	Screened Out
N13.SA2	East Ham Primark	Residential and retail	No	5.5km	**Yes (4.9km)**	No (5.7km)	Screened Out
N13.SA3	Former East Ham Gasworks	Residential, community facility and open space	No	7.2km	**Yes (4.8km)**	**Yes (6.5km)**	**Screened In**
N14.SA1	Shrewsbury Road Health Complex	Residential and health	No	3.4km	No (4.3km)	N/A	Screened Out
N15.SA1	Lord Lister Health Centre	Residential, health and open space	No	3.4km	**Yes (2.6km)**	**Yes (3.1km)**	**Screened In**

Site Ref	Site Name	Proposed Land Use	Allocation Lies Within OAPF area?	Applicable / Refined ZoI	Habitat Site within Refined ZOI? (Distance Measured as Crow Flies)	Habitat Site within Refined ZOI? (Estimated Distance Measured 'on road')	Screened in/out
N15.SA2	Woodgrange Road West	Residential, community, retail and industrial and employment	No	7.2km	**Yes (2.8km)**	**Yes (3.2km)**	**Screened In**
N17.SA1	Beckton Riverside	Residential development, industrial and employment uses, community and education uses, leisure uses, open space and town centre uses. Two scenarios presented based on whether or not new DLR station provided.	Yes – screened out	N/A	N/A	N/A	Screened Out

6 CALCULATION OF TRIPS FOR THE 'SCREENED IN' SITE ALLOCATIONS AND CONPARISON WITH THE DMT

6.1 CALCULATION OF TRIPS FOR THE 'SCREENED IN' SITE ALLOCATIONS

6.1.1 Trip rates have been calculated for the 13 shortlisted site allocations where there is an identified receptor pathway. As discussed in **Section 3.4**, these have been based on the benchmark trip rates provided within Table 4.1 of the Air Quality Neutral Guidance for Inner London. These trip rates have been doubled to estimate total two-way traffic that could occur on any one road link to allow comparison against the 'worst case' DMT (N.B this assumes all trips travelling to LBWF/EFDC travel along the same road upon return). The predicted two-way increases for each of the site allocations are presented in **Table 6.1** below, along with the predicted number of trips travelling to/from LBWF (which contains the nearest part of Epping Forest SAC) and EFDC (which contains the majority of Epping Forest SAC).

6.1.2 Trip rates (and subsequently two-way traffic) have also been calculated for the circa 3,800 dwellings likely to occur on windfall sites over the Local Plan period (up to 2038). This is considered highly precautionary as many of these will sit within the Royal Docks and Beckton Opportunity Area, where there is no identified receptor pathway, or outside of the identified ZOI based on land use.

6.1.3 Furthermore, retail trips are likely to have been overestimated. This is because:

- Retail trips have the highest trip rate associated with them, when compared to other land uses specified within the AQN guidance (with convenience retail having higher trip rates than those associated with superstores). In some instances, the exact nature of the retail use was not known and, in these instances, a worst-case trip rate (for convenience retail) was applied to the calculations.
- As noted within **Section 3.4,** there is no identified need for additional convenience floorspace over the plan period, and proposals for comparison goods led schemes within the LBN are unlikely to be required. In most instances, the Local Plan will result in the replacement or consolidation of existing retail floorspace. Therefore, treating all retail floorspace as new floorspace is likely to result in a significant overestimation of vehicle trips from retail floorspace allocated within the emerging Local Plan.

6.1.4 To address this, a sensitivity test has been done where retail trips have been excluded from the traffic calculations. This data is presented in **Table 6.2** below.

6.2 COMPARISON WITH THE DMT'S

WITHIN LBWF'S ADMINISTRATIVE AREA

6.2.1 The calculated trip rates for the shortlisted site allocations have been compared against the lowest calculated DMT for major roads travelling through Epping Forest SAC (of 13 vehicles) to determine whether effects can be screened out as 'de-minimis' or whether further assessment (including qualitative evidence) or mitigation (which could include policy wording) is required before reaching a conclusion of no LSE.

6.2.2 **Table 6.1** indicates that, based on the trip generation calculations, the most precautionary DMT (of 13 vehicles) could be exceeded on roads within 200m of Epping Forest SAC as a result of all but the following two shortlisted site allocations: Stratford High Street Bingo Hall; and Chobham Farm North.

6.2.3 Whist, overall, retail trips account for circa 60% of total trips being made by the shortlisted allocations[48], even if retail trips were not accounted for (because much of the retail development will be to replace/consolidate existing use), the allocations triggering the most precautionary DMT (of 13 vehicles), as outlined above, would remain unchanged.

6.2.4 Collectively, including contributions from windfall sites, the Local Plan is likely to exceed the most precautionary DMT (of 13 vehicles) at locations within LBWF's administrative area, with circa 100,923 trips travelling from Newham to LBWF (or vice versa).

WITHIN EFDC'S ADMINISTRATIVE AREA

6.2.5 **Table 6.1** indicates that, based on the trip generation calculations, the most precautionary DMT (of 13 vehicles) could be exceeded on roads within 200m of Epping Forest SAC as a result of all but the following shortlisted site allocations: Former East Ham Gasworks; Lord Lister Health Centre; Stratford High Street Bingo Hall; Sugar House Island and Chobham Farm North.

6.2.6 If retail trips were not accounted for (see **Table 6.2**), the number of allocations triggering the most precautionary DMT (of 13 vehicles), would reduce by one (i.e. Woodgrange Road West would no longer exceed the DMT).

6.2.7 Collectively, including contributions from windfall sites, the Local Plan is likely to exceed the most precautionary DMT (of 13 vehicles) at locations within EFDC's administrative area, with circa 809 trips travelling from Newham to EFDC (or vice versa).

DISCUSSION

6.2.8 Based on the change in trips likely to occur on roads that lie within 200m of Epping Forest SAC (both within LBWF and EFDC's administrative areas), potential effects due to the Local Plan 'alone' cannot be ruled out as de-minimis. As there are known to be potential 'in-combination' effects at Epping Forest SAC as a result of EFDC's own Local Plan, air quality cannot be screened out at Stage 1 – Screening and, instead, further information is required (see Section 8) to inform Stage 2 – Appropriate Assessment.

6.2.9 Notwithstanding, it is important to note that these numbers are highly conservative as they assume that all traffic travelling to LBWF and EFDC will travel on roads that lie within 200m of Epping Forest SAC. This will not be the case as, in reality, trips from the shortlisted site allocations will dissipate across the road network as they travel through both LBWF and EFDC. Notably, there are number of roads to the north of LBN's administrative boundary, including the A406 North Circular, A114 Centre Road, High Road (Leytonstone) and the A12, via which trips could travel from LBN to LBWF.

[48] When comparing total number of trips generated by the Local Plan with the total number of trips excluding retail uses.

6.2.10 Whilst we cannot accurately reflect this dissipation within the traffic numbers (and therefore a worst case has been presented which represents total trips entering LBWF and EFDC from the shortlisted site allocations), the significant drop in vehicle trips entering EFDC when compared to those entering LBWF's administrative area, clearly demonstrates this dissipation effect.

6.2.11 Other aspects of conservatism that should be considered when interpreting the trip calculations/ need for further work include:

- The numbers presented assume that all trips will be made by cars with tailpipe emissions. This will not be the case as, over time, an increasing proportion of vehicle fleet will be EV, with a ban on the sale of new petrol and diesel cars from 2035 (i.e. towards the end of the Local Plan period). Further details regarding this aspect are presented within **Section 8 – Qualitative Evidence.**
- Where ambiguity regarding the type of future land use exists, a worst-case has been assumed in terms of the land use (and associated vehicle trips) applied. This is likely to have resulted in an overestimation of total vehicle trips from those site allocations involved.
- The majority of the shortlisted site allocations are not greenfield sites and have an existing use. Due to lack of detail available to enable the quantification of the existing floorspace, it was assumed that all trips are new trips. This is very worst case and does not allow for quantification of the likely net change in trips between the existing and proposed uses within the shortlisted site allocations. It should be noted that LBWF were able to demonstrate an overall reduction in traffic with the implementation of their Submission Local Plan[49] and de-minimis effects on Epping Forest SAC by comparing the proposed and existing/consented use of their site allocations. At a regional level, the LBN and LBWF are bound by the same planning framework (namely the London Plan) and its policies around car parking and EV provision.

6.2.12 It should also be noted that the majority of shortlisted site allocations that triggered an exceedance of the DMT are located in and around Stratford where the PTAL rating (a measure which rates locations by distance from frequent public transport services) is 6B (i.e. the best rating) making it easier for future occupants/users of these developments to travel via public transport. On this basis, the calculated trip generation is again considered to be an overestimation.

6.2.13 Further qualitative evidence is presented within **Section 8** to inform the Stage 2 – Appropriate Assessment. This allows the semi-quantitative assessment (i.e. predicted traffic changes) to be considered within the context of the policy background and other qualitative evidence to enable the Project's Ecologist to determine the potential for LSE and subsequent requirement, or otherwise, for further assessment and/or mitigation.

Table 6-1 - Total trip rates calculated for the short-listed site allocations

Site	Estimated total trips (2 way)	Estimated total daily trips within LBWF	Potential Exceedances of the precautionary DMT (13)	Estimated total daily trips within EFDC	Potential Exceedances of the precautionary DMT (13)
Former East Ham Gasworks	320	18	Yes	3	No
Lord Lister Health Centre	305	40	Yes	3	No
Pudding Mill	11596	1315	Yes	234	Yes
Rick Roberts Way	2208	168	Yes	28	Yes
Stratford High Street Bingo Hall	102	7	No	1	No
Stratford Station	11683	1152	Yes	432	Yes
Stratford Town Centre West	31580	3926	Yes	1373	Yes
Sugar House Island	453	34	Yes	6	No
Stratford Central	7721	944	Yes	158	Yes
Woodgrange Road West	1986	179	Yes	26	Yes
Stratford Waterfront South	29607	3356	Yes	595	Yes
Twelvetrees Park and Former Bromley By Bow Gasworks	831	113	Yes	20	Yes

Site	Estimated total trips (2 way)	Estimated total daily trips within LBWF	Potential Exceedances of the precautionary DMT (13)	Estimated total daily trips within EFDC	Potential Exceedances of the precautionary DMT (13)
Chobham Farm North	155	9	No	2	No
Windfall Sites	2374	225	Yes	38	Yes
Total	**100,923**	**11,468**	**Yes**	**2917**	**Yes**

Table 6-2 - Total trip rates calculated for the short-listed site allocations (excluding retail trips)

Site	Estimated total trips (2 way)	Estimated total daily trips within LBWF	Potential exceedances of the precautionary DMT (13)	Estimated total daily trips within EFDC	Potential exceedances of the precautionary DMT (13)
Former East Ham Gasworks	320	18	Yes	3	No
Lord Lister Health Centre	305	40	Yes	3	No
Pudding Mill	2372	310	Yes	52	Yes
Rick Roberts Way	2208	168	Yes	28	Yes
Stratford High Street Bingo Hall	102	7	No	1	No
Stratford Station	848	83	Yes	24	Yes
Stratford Town Centre West	2108	212	Yes	77	Yes

Site	Estimated total trips (2 way)	Estimated total daily trips within LBWF	Potential exceedances of the precautionary DMT (13)	Estimated total daily trips within EFDC	Potential exceedances of the precautionary DMT (13)
Sugar House Island	453	34	Yes	6	No
Stratford Central	1169	143	Yes	21	Yes
Woodgrange Road West	435	39	Yes	6	No
Stratford Waterfront South	26377	2990	Yes	529	Yes
Twelvetrees Park and Former Bromley By Bow Gasworks	831	113	Yes	20	Yes
Chobham Farm North	155	9	No	2	No
Windfall Sites	2374	225	Yes	38	Yes
Total	**40,420**	**4,390**	**Yes**	**809**	**Yes**

7 REVIEW OF QUALITATIVE EVIDENCE

7.1 QUALITATIVE EVIDENCE

7.1.1 The overall conclusions of the air quality assessment undertaken to inform HRA Screening (as presented in **Chapter 6**) are further supported by a wealth of supplementary information that can be used to inform the Appropriate Assessment (AA).

7.1.2 This additional information is presented in **Table 7.1** below and includes evidence and trend data relevant to trip length, trip destination, travel demand, modal shift, car ownership, cycling and transition to a zero-emission fleet.

Table 7-1 - Qualitative Evidence

Topic	Document	Text	Commentary
Trip length	Travel in London (2023)	While the pandemic has undoubtedly affected the distance that London residents travel, the trend even before the pandemic was of trips getting shorter, which combined with declining trip rates led to London residents travelling shorter distances overall.	The ZOI's applied based on land use are considered precautionary. Based on the observed trend, if residents continue to travel shorter distances in the future, the identified ZOI could reduce and, as a result, trips on roads within 200m of Epping Forest SAC would also likely reduce.
		Most trips by London residents are short in length, with 35 per cent under one km in length and a further 18 per cent between one and two km. Only 13 per cent of all trips by London residents are longer than 10km, and almost three quarters of all trips are under five km in length. This includes trips to and from Greater London to other parts of the country.	This data appears to support the TfL data provided (derived from the MoTION model) which indicates the maximum percentage travelling from one of the shortlisted site allocations to Waltham Forest to be a maximum of 13.6%.
Trip Destination	Epping IAPMS (2020)	Paragraph 3.5 of the IAPMS states: "All other plans and projects would appear to make a negligible contribution to the in-combination effect".	Based on this statement, LBN's emerging Local Plan is likely to make a negligible contribution to in-combination effects being experienced by Epping Forest SAC.
	Epping Forest Local Plan HRA (October 2022)	Paragraph 4.13 of EFDC's Local Plan HRA states: "It was established that growth in Epping Forest District between 2014 (the year of the baseline traffic counts) and 2033 is by far the greatest source of additional ammonia and NO_x emissions on the modelled road sections and all other plans and projects make a negligible contribution to the 'in combination' effect. This is most probably because the average daily traffic flow on all the modelled sections of road is dominated by people	This supports the above statement that LBN's emerging Local Plan is likely to make a negligible contribution to in-combination effects at Epping Forest SAC. It is also supported by the TfL data (derived from the MoTION model) which indicates the maximum percentage travelling from one of the shortlisted site allocations to Waltham Forest to be 13.6%.

		who either live or work in Epping Forest District, particularly in the settlements that surround the SAC, including Epping itself."	
	London Plan HRA	Journey to work census data from 2011 indicate that the London boroughs most likely to contribute to NOx concentrations and nitrogen deposition within Epping Forest SAC, arising from road traffic, are Waltham Forest, Redbridge and possibly Enfield.	This supports that LBN's emerging Local Plan is likely to make a negligible contribution to in-combination effects at Epping Forest SAC. Whilst LBWF were highlighted as one of the London boroughs most likely to contribute to NO_X concentrations and nitrogen deposition within Epping Forest SAC, their Local Plan HRA concluded no LSE. In fact, there is expected to be an overall improvement reduction in trips within the borough due the planning policy (and the requirement for largely car free development).
		States that for the most part the opportunity areas are relatively remote from European sites and the overall focus on the role of the London Plan (and Mayor's agencies) in these opportunity areas is on improvement/delivery of sustainable public transport, which will be positive for air quality. Furthermore, the London Plan HRA did not specifically identify any issues arising due to growth within the Royal Docks and Beckton Riverside Opportunity Area.	Supports the 'screening out' of site allocations within the Royal Docks and Beckton Riverside Opportunity Area. The potential positive effects on air quality within the Royal Docks and Beckton Riverside Opportunity Area due to the delivery of new/improved sustainable transport is noted.
	OAPF HRA Screening	Within London the major points of visitor origin [to Epping Forest SAC] are Waltham Forest and Redbridge, with a small proportion from Newham.	From this statement we can infer that visitor trips from the proposed site allocations within LBN will be negligible.
		Refers to severance experienced within the borough which limits movements within the borough including: ▪ The A12 and the North Circular which border the east and the west of the borough respectively, limiting east west movements into neighbouring boroughs.	The degree of severance being experienced within the borough is likely to limit trips to/through Epping Forest SAC.

		▪ Newham Way (A13) which limits movements to and from the south of the borough. ▪ Surface rail in the north of the borough and the elevated DLR line on the south which results in severance for north-south movements. ▪ The River Thames and Docks limiting access to services north and south of the river.	
Travel demand	Travel in London (2023)	During the pandemic, trip rates reached unprecedented lows. Although trip rates have since recovered, the recovery in 2022/23 was incomplete. Average trip rates during 2022/23 were 6.2 per cent lower than in 2019/20, and 22 per cent lower than in 2006/07. This latter comparison reflects an element of incomplete pandemic recovery but also a background trend of falling demand for travel overall going back around two decades.	This supports a continued reduction in travel demand, which started before but was impacted further by the Covid-19 pandemic. The AQN guidance was updated in 2023. The corresponding 'Air Quality Neutral: Update to Benchmarks' report published by Air Quality Consultants in 2020[50] refers to the last 5 years' of data from TRICS being used to update the trip rates for the various land use classes (assumed to be 2015 – 2020). In this regard the full extent of the impact of the pandemic (and subsequent incomplete recovery) is not reflected with the AQN trip rates. Evidence suggests that trip rates (per land use class) will be lower than those assumed within the AQN guidance.
		Trip rates are down by five per cent overall compared with 2019/20.	
	Travel in London (2023)	The ability to work from home has changed since the pandemic among working London residents. The number of workers that can work from home and are actively encouraged to do so has more than doubled to 1.66 million from 0.78 million in 2019/20.	This supports an overall reduction in travel demand with respect to journeys to work. These post pandemic changes are not fully reflected within the AQN trip rates (see above).
		The main changes in 2022/23 relative to 2019/20 were a decrease in commuting (usual workplace) trip rates (down by 20.1 per cent) and	This supports that the AQN trip rates for offices/light industrial will likely be significantly lower than those presented within the latest AQN

[50] aqn_update_to_benchmarks_report.pdf (london.gov.uk)

		shopping/personal business trip rates (down by 13.7 per cent). These declines have been partially offset by an increase in leisure trip rates, which have increased by 9.2 per cent. Overall, these reflect a shift in post pandemic travel patterns of fewer work trips being partly compensated for by increased leisure trips, although again in the context of renewed cost-of-living pressures.	guidance. However, these reductions will be partially offset by the increase in leisure trips.
Modal shift	Travel in London (2023)	The key changes in travel by mode in 2022/23 compared to before the pandemic were a decrease in public transport mode share, no change in the share of trips made by private modes and an increase in the share of trips made by active modes, particularly walking, all in the context of lower overall trip rates.	This evidence supports a continued reduction in overall vehicle trips (including cars and public transport) and in increase in active travel modes, particularly walking. This supports that LBN's emerging Local Plan is likely to make a negligible contribution to in-combination effects at Epping Forest SAC.
		Figure 8 (Travel to London, 2023) shows the long-term trend in trip rates by mode over the history of the London Travel Demand Survey (LTDS). The continuous decline in car driver trips is notable, down from 0.75 trips per person per day on average in 2005/06 to 0.46 in 2019/20. The value of 0.43 trips per person per day for 2022/23 probably reflects an incomplete recovery from the pandemic, but also continues the long-term trend of decrease.	This evidence supports an overall long-term trend of a reduction in car driver trips, rather than as a direct consequence of the pandemic. There is no evidence to suggest this overall trend will change.
	Mayor's Transport Strategy Supporting Evidence Outcomes Summary Report	The Mayor's Transport Strategy Supporting Evidence Outcomes Summary Report states that 'By 2041, the number of trips made in London on an average day is expected to rise to 32 million, 5 million more than today. With the committed programme of investment but without the interventions proposed in the Mayor's Transport Strategy the sustainable mode share is expected to rise from 64 per cent to 70 per cent. … '	This evidence supports an overall long-term trend of a reduction in car driver trips and an continued increase in travel via sustainable modes of transport.

		It then goes on to conclude that by 2041, following the implementation of the Mayor's Transport Strategy 'travel will have risen by around a quarter but car travel will have fallen by around a third. There would be at least 3 million fewer car trips per day (compared to 2015) and 250,000 fewer cars owned in London. General traffic would fall by 10 to 15 per cent, a reduction of 6 million kilometres…'	
	Newham Sustainable Transport Strategy	The strategy acknowledges that travel by car is not a priority mode-share within the borough. The dominant commuter mode is rail.	This further supports that trip generation from the proposed site allocations will be minimal.
		Refers to the fact that almost two-thirds of outbound vehicle trips that originate in Newham also have a destination within Newham noting that represents a substantial opportunity for targeting modal shift through improved and targeted connections to key destinations and services within the Newham borough for both existing areas of high population and key growth areas.	This evidence further supports that car trips from the proposed site allocations will be minimal. Opportunities for targeted model shift on those site allocations within the ZOI will help reduce potential effects on Epping Forest SAC.
		Newham has started a range of programmes to become carbon neutral by 2030 and carbon zero by 2045. In order to meet the proposed carbon neutral and zero goals, significant change is required in relation to transport in Newham, and a shift in journeys made by private vehicle to those using active and sustainable modes is necessary.	The wider climate agenda will help to drive modal shift (to active and sustainable modes).
Car Ownership	Travel in London (2023)	The long-term trend in car ownership in London has been one of decline, with the proportion of households not owning a car increasing from 41 per cent in 2005/06 to 46 per cent in 2022/23, the lowest level of car ownership since the LTDS began.	This evidence suggests that future vehicular trip rates will be lower than current trip rates, assuming this long-term trend of declining car ownership continues.
		More than 60 per cent of households in inner London do not own a car, an increase of five	

		percentage points since 2005/06. Car ownership rates are higher in outer London, but the long-term trend has been a three-percentage point decrease in car-owning households since 2005/06. The proportion of households owning multiple cars has also declined in all areas of London	
	Newham Sustainable Transport Strategy	Newham has one of the lowest levels of car ownership in London and notes that more than half (52%) of all households in Newham do not own or have access to a car.	Levels of car ownership within Newham support that vehicle trips associated with the Local Plan site allocations are likely to have a negligible effect on traffic flows on roads within 200m of Epping Forest SAC HRA.
		In 2021, Newham also had the greatest reduction in the number of registered vehicles, when compared to the other London Boroughs. This demonstrates that travel by car is not a priority mode-share within the borough. The dominant commuter mode is rail.	
Cycling	Newham Cycle Strategy	Newham Cycle Strategy presents a plan to deliver greater numbers of cycling trips in Newham between 2018 and 2025, with a target of 5% of trips across the Borough being made by bike by 2025. The action plan also includes the delivery of an ambitious Strategic Cycling Network covering the entire Borough and expanded cycle parking.	Evidence suggests further modal shift, suggesting a future reduction in vehicle trips which is consistent with the other evidence presented above.
	Newham Sustainable Transport Strategy	The Strategy also acknowledges that three of the top ten cycling flows in Outer London are within Newham. These are Greenway (Manor Road); Romford Road; and Leytonstone Road. All three experienced a significant increase in use since 2019 (of between 28% and 34%). Furthermore, the Strategy cites the Propensity to Cycle Tool which indicates a high potential for an increase in cycling.	

		States that TfL's Strategic Cycle Analysis and the Propensity to Cycle Tool (PCT) both show potential for cycling routes both north-south and east-west.	
	OAPF Framework . Local Connections Strategy	States that the number of journeys made by cycle in the borough will double between 2021 and 2025. Cycle infrastructure must, as a minimum, achieve the standards set out in the London Cycling Design Guidance and Royal Docks Cycling and Walking Action Plan.	
Transition to a Zero Emission Fleet	London Plan HRA	The London Plan HRA references the Mayor's Transport Strategy and actions relating to the transition to a zero-emission fleet including, but not limited to the provision of zero emission capable taxis; town centre Zero Emission Zones; electric single-deck buses and bus charging infrastructure; delivery of 2000 EV vehicle charging points and 15 hydrogen fuelling stations in and around London plus an extended Ultra Low Emissions Zone.	The wider climate agenda is also supporting in driving modal shift/reducing journeys made by private car.

7.2 SUMMARY

7.2.1 The qualitative evidence presented within **Table 7.1** supports:

- **That most trips are short in length and that trip length has reduced over time.** On this basis, very few trips (maximum of 13.6%) will travel from Newham to LBWF, even fewer on roads that lie within 200m of Epping Forest SAC. Furthermore, if the trend towards shorter trips continues, the average trip distances listed within the AQN guidance may be reduced in the future. If this were to occur some of the shortlisted site allocations may no longer be within the identified ZOI and may be able to be screened out on the basis of no identified receptor pathway.
- **That the LBN's emerging Local Plan is likely to make a negligible contribution to in-combination effects at Epping Forest SAC.** This statement is supported by the conclusions of the London Plan HRA, EFDC's Local Plan HRA and the OAPF HRA Screening. In addition, LBWF's Air Quality Study 2 found that the effects of the Local Plan on Epping Forest SAC would be 'de-minimis'. Furthermore, the Local Plan would result in an overall reduction in vehicle trips due to its Local Plan policies (within the framework of the London Plan policies).
- **A continued reduction in travel demand,** which started before but was impacted further by the Covid-19 pandemic. Furthermore, travel by car is not a priority mode-share within the borough.
- **An increase in active travel modes, particularly walking.** This trend is expected to continue with the sustainable mode share expected to rise from 64 per cent to 70 per cent.
- **A long-term trend of declining car ownership** meaning trip rates will likely be even lower in the future. In fact, Newham has one of the lowest levels of car ownership in London and notes that more than half (52%) of all households in Newham do not own or have access to a car. Furthermore, in 2021, Newham also had the greatest reduction in the number of registered vehicles, when compared to the other London Boroughs.
- **There has been in increase in cyclists using the cycle flows with Newham and journeys via bike are predicted to double between 2021 and 2025.**
- **The wider climate change agenda will also support in facilitating modal shift.**

7.3 NEWHAM SUSTAINABLE TRANSPORT STRATEGY

7.3.1 The Newham Sustainable Transport Strategy has been prepared in support of the new Local Plan review and sets out the sustainable transport strategy for Newham for the period 2023 to 2038. It contains a series of short-term and long-term actions that will be taken to support the overall objectives of the Local Plan and help to support growth within the Borough.

7.3.2 The Sustainable Transport Strategy cannot be taken account of at Stage 1 of HRA (Screening) and, therefore, its effects were not taken into account within the traffic data calculations. However, it forms part of the evidence base and is relevant to the review of qualitative evidence and can be considered at Stage 2 (Appropriate Assessment).

7.3.3 The Sustainable Transport Strategy notes growth *"can only be accommodated without placing a severe impact on the operation of the highway network through the development of a comprehensive strategy which sets out sustainable travel policies and infrastructure investments, widening people's travel options, and making it increasingly possible to travel to, from and within Newham on foot, by bike and on public transport."*

7.3.4 Whilst Newham Sustainable Transport Strategy focuses on the delivery of measures that encourage more trips by foot, bike or public transport, it is recognised that some people will only be able to

travel using private vehicles for some of their journeys. Therefore *"it is therefore important that the Council delivers the necessary infrastructure to support the uptake of cleaner vehicles, without encouraging car travel for people that do not necessarily require it."*

7.3.5 The Borough already has a good network of EV charging points (with more than 40 dual socket fast chargers) and the Strategy seeks to expand this provision with actions to increase both on-street and off-street charging facilities.

7.3.6 Furthermore, under the Local Plan, any new development that does provide parking must provide:

- 100% EV charging for residential development, and
- 20% provision for all other types of development, with future proofing of the remaining spaces for future installation.

7.3.7 In addition, major developments with zero car parking on-site must provide contributions towards Electric Vehicle Charging Points in other parts of the borough.

7.3.8 The Sustainable Transport Strategy includes further actions relating to EV charging for taxis and private hire drivers; adaptive charging solutions; e-scooters, e-bikes, and mobility scooters.

7.4 CONCLUSIONS

7.4.1 Whist it has not been possible to demonstrate 'de-minimis' effects through the traffic data calculations alone, when taking into account the qualitative evidence, policy drivers (including London Plan and Local Plan policies which include the requirement for air quality positive design for large-scale development proposals and require largely car free development) and measures within Newham's Sustainable Transport Strategy, the supporting evidence points towards a conclusion of no LSE. This is consistent with the findings of both LBWF's Local Plan HRA, which concluded that trips through Epping Forest SAC would be 'de-minimis' when considering the net change in trips resulting from their Local Plan (e.g. due to replacing existing development with largely car free development), and the OAPF HRA, which concluded no receptor pathway.

8 CONCLUSIONS AND RECOMMENDATIONS

8.1 CONCLUSIONS

8.1.1 The air quality assessment presented above sets out the potential for LSE due to LBN's emerging Local Plan.

8.1.2 A review of the Local Plan policies indicates that all but the following policies can be screened out due to no identified receptor pathway. The screened in policies were as follows:

- BFN1 - Spatial Strategy;
- J1 - Employment and growth;
- J2 - New employment floorspace;
- W2 - New or Improved Waste Management Facilities;
- H1 - Meeting Housing Needs;
- H10 - Gypsy and Traveller Accommodation;
- T1 – Strategic Transport; and
- The following Neighbourhood policies (based on their location/proximity to Epping Forest SAC: N7 (Three Mills), N8 (Stratford and Maryland), and N15 (Forest Gate).

8.1.3 The locations of the proposed site allocations were considered relative to Epping Forest SAC. There are no identified receptor pathways for site allocations within the Royal Docks and Beckton Riverside Opportunity Area. Similarly, a number of site allocations outside of the Opportunity Area were also found to be outside of the identified ZOI (based on the identified land use and associated average distance travelled).

8.1.4 13 site allocations were shortlisted due to an identified receptor pathway. These were: Former East Ham Gasworks; Lord Lister Health Centre; Pudding Mill; Rick Roberts Way; Stratford High Street Bingo Hall; Stratford Station; Stratford Town Centre West; Sugar House Island; Stratford Central; Woodgrange Road West; Stratford Waterfront South; Twelvetrees Park and Former Bromley By Bow Gasworks and Chobham Farm North.

8.1.5 Traffic data calculations were undertaken for these 13 sites (as well as for windfall sites collectively) to determine the 'worst case' number of trips that could travel on roads within the vicinity of Epping Forest SAC (both within LBWF and EFDC's administrative areas). These figures were then compared to JNCC's DMT's to determine whether potential effects could be screed out as 'de-minimis' or whether further assessment was required to consider effects due to LBN's Local Plan, both 'alone' and 'in-combination'. This comparison exercise concluded that there is the potential for exceedances of the minimum DMT of 13 within both LBWF and EFDC's administrative areas due to the shortlisted site allocations both 'alone' and when considered collectively. The number of shortlisted site allocations causing an exceedance of the DMT within EFDC's administrative area is significantly reduced (when compared to those causing an exceedance within LBWF's administrative area), demonstrating the dissipation of traffic across the local road network with distance from the shortlisted site allocations. The largest changes in traffic are predicted to stem from the following site allocations: Stratford High Street Bingo Hall, Stratford Station, Pudding Mill, Stratford Waterfront South and Stratford Central.

8.1.6 Whilst exceedances of the DMT have been predicted, it should be noted that:

- The majority of these shortlisted sites have an existing land-use that was unable to be taken into account during the traffic data calculations. They are therefore likely to be a significant overestimation of the net change in traffic due to the emerging Local Plan. Notably, some site allocations will see a net reduction in the level of car parking on-site as a result of the Local Plan.
- These represent total change within LBWF and EFDC and not the specific change on roads that lie within 200m of Epping Forest SAC;
- These assume that all cars will have tailpipe emissions which is very worst case. The percentage of EVs is predicted and unrealistic, especially given the policy context, the expansion of the Ultra Low Emission Zone, and measures with Newham's Sustainable Transport Strategy regarding EV charging provision; and
- The majority of these shortlisted sites are located in/within the surrounds of Stratford. According to TfL's webpages[51], the majority of Stratford is identified as having the highest PTAL score (6b) meaning these sites are much more likely to utilise existing transport connections or travel by active travel modes than by private car.

8.1.7 The subsequent qualitative assessment included evidence and trend data relevant to trip length, trip destination, travel demand, modal shift, car ownership, cycling and transition to a zero emission fleet. This qualitative evidence supports:

- That most trips are short in length and that trip length has reduced over time;
- That the LBN's emerging Local Plan is likely to make a negligible contribution to in-combination effects at Epping Forest SAC;
- A continued reduction in travel demand and increase in active travel modes, particularly walking;
- A long-term trend of declining car ownership;
- That cycling within the borough has increased and this trend is forecast to continue;
- That the level of internalisation of trips within Newham presents opportunities for targeted modal shift. This will be particularly beneficial for those site allocations within the ZOI of Epping Forest SAC; and that
- The wider climate change agenda will also support in facilitating modal shift.

8.1.8 LBN's Sustainable Transport Strategy has not been quantitatively assessed but contains a series of short-term and long-term actions that will be taken to support the overall objectives of the Local Plan and help to support growth within the borough. Whilst the Newham Sustainable Transport Strategy focuses on the delivery of measures that encourage more trips by foot, bike or public transport, it is recognised that some people will only be able to travel using private vehicles for some of their journeys. Therefore, it also contains a suite of measures for supporting Newham's transition to a zero emission fleet including the provision of charging infrastructure for EVs.

8.1.9 Whist it has not been possible to demonstrate 'de-minimis' effects through the traffic data calculations alone, when taking into account the qualitative evidence, policy drivers (including London Plan and Local Plan policies) and measures within Newham's Sustainable Transport Strategy, the evidence supports that trip generation from the short listed site allocations will be minimal. This is consistent with the findings of LBWF's Local Plan HRA which concluded that trips through Epping Forest SAC would be 'de-minimis' when considering the net change in trips resulting from their Local Plan (e.g. due to replacing existing development with largely car free development).

[51] Webcat planning tool - Transport for London (tfl.gov.uk)

8.2 RECOMMENDATIONS

8.2.1 As trip generation from the short-listed sites is expected to be minimal, it is considered appropriate given the stage of plan making to conclude no LSE. However, as the Local Plan allocations come forward, project level HRA should be undertaken. The level of detail within the project level HRA will likely vary, with more detailed assessment required for the short-listed site allocations where there is an identified receptor pathway. This project level HRA should focus on the net traffic change relative to the existing use. For the majority of sites, i.e. where there is no identified receptor pathway, the Local Plan HRA can be relied upon. Whilst a number of site allocations within Stratford have been shortlisted, once further detail is available (e.g. site specific transport information contained within a Transport Assessment), it is expected that LSE will be ruled out, particularly considering that much of Stratford has the highest PTAL rating.

Appendix A

HABITATS SITES INFORMATION, INCLUDING QUALIFYING FEATURES AND CONSERVATION OBJECTIVES

Table A-1 – Detailed information for Epping Forest SAC, from Natura 2000 Standard Form and Natural England SIP

Site Name	Site Size (Ha)	Summary of reasons for designation*	Activities with greatest effect upon the site*	Pressures and threats listed within the Site Improvement Plan (NE, undated) (T=Threat, P=Pressure)	Conservation Objectives
Epping Forest SAC	1630.7	Annex I habitats that are a primary reason for selection of this site ▪ 9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*) Epping Forest represents Atlantic acidophilous beech forests in the north-eastern part of the habitat's UK range. Although the epiphytes at this site have declined, largely as a result of air pollution, it remains important for a range of rare species, including the moss *Zygodon forsteri*. The long history of pollarding, and resultant large number of veteran trees, ensures that the site is also rich in fungi and dead-wood invertebrates. **Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site** ▪ 4010 Northern Atlantic wet heaths with *Erica tetralix* ▪ 4030 European dry heaths	▪ J02 – Human induced changes in hydraulic conditions ▪ A04 – Grazing ▪ G01 – Outdoor sports and leisure activities, recreational activities ▪ H04 – Air pollution, air-borne pollutants ▪ M02 – Changes in biotic conditions[52]	▪ P – Air Pollution: impact of atmospheric nitrogen deposition ▪ P - Undergrazing ▪ P - Public Access/Disturbance ▪ T – Changes in species distributions ▪ T – Inappropriate water levels ▪ T – Water Pollution ▪ T – Invasive species ▪ T – Disease ▪ P/T – Invasive species[53]	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; ▪ The extent and distribution of qualifying natural habitats and habitats of qualifying species ▪ The structure and function (including typical species) of qualifying natural habitats ▪ The structure and function of the habitats of qualifying species ▪ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely

[52] Epping Forest SAC Natura 2000 form. Available at: https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0012720.pdf (Accessed on 19/07/2023)
[53] Epping Forest Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/file/5732004727881728 (Accessed on 19/07/2023)

Site Name	Site Size (Ha)	Summary of reasons for designation*	Activities with greatest effect upon the site*	Pressures and threats listed within the Site Improvement Plan (NE, undated) (T=Threat, P=Pressure)	Conservation Objectives
		Annex II species that are a primary reason for selection of this site ▪ 1083 Stag beetle *Lucanus cervus* Epping Forest is a large woodland area in which records of stag beetle are widespread and frequent; the site straddles the Essex and east London population centres. Epping Forest is a very important site for fauna associated with decaying timber, and supports many Red Data Book and Nationally Scarce invertebrate species.			▪ The populations of qualifying species, and, ▪ The distribution of qualifying species within the site.[54]

[54] Epping Forest SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/file/5442443424301056 (Access on 19/07/2023)

Appendix B

INFORMATION FOR EPPING FOREST SAC

Site	Species	Relevant N Critical Load			N Deposition kg N/ha/yr			NH_3 Critical Level ($\mu g/m^3$) annual mean	NH_3 Concentration $\mu g/m^3$		
		Relevant Habitat	Relevant CL Habitat	CL Range	Max	Min	Ave		Max	Min	Ave
Epping Forest SAC	*Erica tetralix*	Northern Atlantic wet heaths	Northern wet heath	5 - 15	17.9	15.3	16.8	1	2.0	1.4	1.6
	European dry heaths	European dry heaths	Dry heaths	5 - 15	17.9	15.3	16.8	1	2.0	1.4	1.6
	Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)	Atlantic acidophilous beech forests	Fagus forest on non-acid and acid soils	10 - 15	32.2	27.0	29.7	1 or 3	2.0	1.4	1.6
	Lucanus cervus	Broadleaved deciduous woodland	Broadleaved deciduous woodland	10 - 15	32.2	27.0	29.7	3	2.0	1.4	1.6
	Triturus cristatus	No comparable habitat with established critical load estimate available	No comparable habitat with established critical load estimate available	N/A	18.1	11.2	13.5	3	2.0	1.4	1.6

Matrix House
Basing View
Basingstoke, Hampshire
RG21 4FF

wsp.com

Canon Court West
Abbey Lawn
Shrewsbury
SY2 5DE

wsp.com