

Regulation 18 East London Joint Waste Plan

Integrated Impact Assessment

East London Waste Authorities of Barking and Dagenham, Havering, Newham and Redbridge

Final report

Prepared by LUC

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Chapter 1

Introduction

1.1 LUC was commissioned in October 2023 to undertake an Integrated Impact Assessment, comprising Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA), Health Impact Assessment (HIA), Equalities Impact Assessment (EqIA), and Habitats Regulations Assessment (HRA) for the new East London Joint Waste Plan (ELJWP).

1.2 The ELJWP is a joint venture between the London Borough of Barking and Dagenham, London Borough of Havering, London Borough of Newham, and the London Borough of Redbridge.

1.3 This document is the IIA of the draft Regulation 18 ELJWP. The IIA appraises the likely effects of the vision, objectives and policies. This document will accompany the consultation on the Regulation 18 draft of the ELJWP that will be consulted on in the summer of 2024.

1.4 It should be noted that this report is in an 'Accessible format', which means it has been formatted to meet the requirements of the Public Sector Bodies (Websites and Mobile Applications) Accessibility Regulations (2018), as set out in the Web Content Accessibility Guidelines (WCAG 2.1). This means it must have larger font, larger spacing between lines and headings, less information presented in tables, 'alt text' provided for all figures and it is able to be read by screen-reading software.

Geographical context

1.5 The ELJWP area is consistent with the geography for the East London Waste Authority [See reference 1] formed by the four most easterly London Boroughs north of the Thames: London Borough of Barking and Dagenham,

London Borough of Havering, London Borough of Newham, and the London Borough of Redbridge. The ELJWP also includes the area covered by the London Legacy Development Corporation (LLDC) within the London Borough of Newham. The LLDC does not have a separate waste apportionment within the London Plan 2021, and therefore waste is planned for by the London Borough of Newham.

1.6 The plan area is bordered within London by the London Borough of Waltham Forest, London Borough of Hackney and the London Borough of Tower Hamlets to the west, and the London Borough of Greenwich and the London Borough Bexley to the south of the river Thames. To the north and east, outside of the Greater London area, are the Districts of Epping Forest and Brentwood and the unitary area of Thurrock, respectively – all within the county of Essex.

1.7 The administrative geography of London is overseen at a regional level by the Greater London Authority (GLA). There are thirty-three administrative areas within London: twelve inner boroughs, twenty outer boroughs, and the City of London. LB Newham is the only inner borough within the East London Joint Waste Local Plan area.

1.8 The population of the ELJWP Area has grown from 772,900 in the 2011 Census to 1,142,300 in the 2021 Census. The London Plan predicts that the population of London is projected to increase by 70,000 every year, reaching 10.8 million in 2041, and East London will play a large role in providing for this growth [\[See reference 2\]](#)

1.9 The London Borough of Barking and Dagenham (LBBD) is located between the City of London to the West, and the M25 motorway which circles the capital, to the East with the River Thames immediately to the South. Barking has been designated as a Metropolitan Centre in the London Plan (2021). LBBD includes many of capital's largest stretches of undeveloped riverside frontage, and the most affordable premises for large and small businesses in London. One third of the LBBD is green open space, amounting to 463 hectares. Barking

Riverside Overground station, opened in 2022, connects passengers to Barking in seven minutes, and to central London in twenty-two minutes.

1.10 The London Borough of Havering (LBH) includes Romford, identified as a Metropolitan centre within the London Plan 2021. LBH is bordered to the south by part of the London Riverside Opportunity Area, containing Rainham and Beam Park. Part of the LBH extends beyond the M25 to the east, with the A12, A123, A1306 and A13 forming key routes across the borough. Over half the LBH is identified as Metropolitan Green Belt.

1.11 The London Borough of Newham (LBN) includes Stratford and East Ham, identified as major centres within the London Plan 2021. The borough is home to London City Airport. The newly opened Elizabeth Line on the London rail network provides direct train services to Heathrow and Reading via Paddington station. Royal Docks is within the Thames Gateway, and is identified within the London Plan as one of the largest regeneration opportunities within the greater London area. The recently adopted Royal Docks and Beckton Riverside Opportunity Area Planning Framework (OAPF) [\[See reference 3\]](#) guides emerging and ongoing development in the area, and sets the context for the proposed extension of the DLR to Thamesmead via Beckton Riverside. The OAPF identifies the potential to provide 38,600 new homes and create 55,800 new jobs. LBN includes part of the area of the London Legacy Development Corporation which covers Queen Elizabeth Park and part of its surroundings.

1.12 The London Borough of Redbridge (LBR) sits approximately 7 miles east of the City of London, adjoining LB Waltham Forest, LB Newham, LBBD, and between two strategic growth corridors. The Thames Gateway runs to the south and east, and the London-Stansted-Cambridge growth corridor covers the western half of the Borough and beyond, extending south to the river Thames and north, through Hertfordshire, towards Cambridge. There are four Elizabeth Line stations within the borough. LBR includes the Metropolitan centre of Ilford. Just under half of the borough is considered to be green space, and around one third of the borough is designated Metropolitan Green Belt.

1.13 There are three European protected wildlife sites within 5km of the four Boroughs; Epping Forest Special Area of Conservation (SAC), Lee Valley Special Protection Area (SPA) and Lee Valley Ramsar. The south edge of Epping Forest crosses into the northern boundary of Redbridge. Downstream from the river Thames, which forms the southern boundary of the Plan area are Thames Estuary & Marshes Ramsar and SPA and the Benfleet and Southend Marshes SPA.

1.14 Due to the location of the plan area within Greater London, the four boroughs benefit from strategic transport links including access to the M11 and M25 motorways via the A12, A13, A1020 and the A406. There is water transport connectivity for leisure and freight on the river Thames, good connectivity to rail hubs in central London, as well as good access to London City Airport and London Stanstead.

East London Joint Waste Plan

1.15 The current version of the ELJWP was adopted in 2012 [\[See reference 4\]](#) and set out to meet the requirements of the national policy and the London Plan at that time, to plan effectively for waste across the four London Boroughs. There have been four iterations of the London Plan since 2011: the London Plan (2016), the Revised Early Minor Alterations to the London Plan (2013) to align within the NPPF, the Further Alterations to the London Plan (2015), and the current adopted London Plan (2021).

1.16 The ELJWP (2012) predates the original National Planning Policy Framework (2012) and instead considered the requirements of Planning Policy Statement 10: Planning for Waste and Planning Policy Statement 12: Local Development Framework. The PPS system has been replaced and current national policy requirements are set out in the National Planning Policy Framework (NPPF, 2023), the National Planning Policy for Waste (NPPW, 2014) and the accompanying Planning Practice Guidance (PPG, 2014).

1.17 The new ELJWP will provide the local planning policy framework for all waste planning matters across London Borough of Barking and Dagenham, London Borough of Havering, London Borough of Newham, and London Borough of Redbridge. The LLDC will transfer planning powers back to LBN by the end of 2024.

1.18 The East London Waste Authority published a new Joint Strategy for East London Resources and Waste in 2023 [See reference 5]. The strategy focuses on waste prevention to meet the GLA objective of London becoming a zero-waste city by 2050.

Sustainability appraisal and strategic environmental assessment

1.19 Under the amended Planning and Compulsory Purchase Act 2004 [See reference 6], SA is mandatory for Development Plan Documents. For these documents it is also necessary to conduct an environmental assessment in accordance with the requirements of the Strategic Environmental Assessment (SEA) Directive (European Directive 2001/42/EC) as transposed into law in England by the SEA Regulations [See reference 7], which currently remain in force despite the UK exiting the European Union in January 2020. Therefore, it is a legal requirement for the ELJWP to be subject to SA and SEA throughout its preparation.

1.20 The requirements to carry out SA and SEA are distinct, although it is possible to satisfy both using a single appraisal process (as advocated in the national Planning Practice Guidance [See reference 8]), whereby users can comply with the requirements of the SEA Regulations through a single integrated SA process – this is the process that is being undertaken for the ELJWP. From here on, the term ‘SA’ should therefore be taken to mean ‘SA incorporating the requirements of the SEA Regulations’.

1.21 The SA process comprises a number of stages:

Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope.

Stage B: Developing and refining options and assessing effects.

Stage C: Preparing the Sustainability Appraisal Report.

Stage D: Consulting on the Waste Local Plan and the SA Report.

Stage E: Monitoring the significant effects of implementing the ELJWP.

Health impact assessment

1.22 Although not a statutory requirement, Health Impact Assessment (HIA) aims to ensure that health-related issues are integrated into the plan-making process. The HIA of the ELJWP has been carried out as part of the SA by ensuring that the SA objectives against which the Plan is appraised address relevant health issues. Recommendations have been made in relation to how the health-related impacts of the Plan can be optimised.

Equalities impact assessment

1.23 The requirement to undertake formal Equalities Impact Assessment (EqIA) of development plans was introduced in the Equality Act 2010 but was abolished in 2012. Despite this, authorities are still required to have regard to the provisions of the Equality Act, namely the Public Sector Duty which requires public authorities to have due regard for equalities considerations when exercising their functions.

1.24 The EqIA of the ELJWP has been carried out as part of the SA by ensuring that the SA objectives against which the Plan is appraised address relevant Equalities issues. Recommendations have been made in relation to how the equality-related impacts of the Plan can be optimised.

Habitats regulations assessment

1.25 The requirement to undertake Habitats Regulations Assessment (HRA) of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010 and again in 2012 and 2017 [See reference 9]. The Regulations translate Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) and 79/409/EEC (Birds Directive) into UK law and currently remain a legal requirement despite the UK exiting the European Union.

1.26 The purpose of HRA is to assess the impacts of a land-use plan against the conservation objectives of a European Site and to ascertain whether it would adversely affect the integrity of that site.

1.27 The HRA has been undertaken separately but the findings have been taken into account in the IIA where relevant (for example to inform judgements about the likely effects of potential development locations on biodiversity).

Approach to integrated impact assessment

1.28 The methodology for this IIA report is set out in Chapter 2. The framework for the appraisal process is set out in Chapter 5. In accordance with the Government's Planning Practice Guidance on SEA/SA, the IIA Report is proportionate and relevant to the ELJWP, focussing on what is needed to assess likely significant effects [See reference 16]. It also takes account of the

National Planning Policy Framework (NPPF) and the emphasis it places on achieving sustainable development.

1.29 This IIA Report follows key legislation, policy and guidance including:

- Directive 2001/42/EC on the assessment of the effects of certain plans, and programmes on the environment i.e., the SEA Directive [\[See reference 10\]](#);
- The Environmental Assessment of Plans and Programmes Regulations 2004 (SI 2004/1633) as amended by the Environmental Assessments and Miscellaneous Planning (Amendment) (EU Exit) Regulations 2018 (SI 2018/1232) [\[See reference 11\]](#);
- Strategic Environmental Assessment and Sustainability Appraisal National Planning Practice Guidance [\[See reference 12\]](#);
- A Practical Guide to the Strategic Environmental Assessment Directive [\[See reference 13\]](#);
- Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment [\[See reference 14\]](#);
- Guidance on Strategic Environmental Assessment / Sustainability Appraisal and the Historic Environment [\[See reference 15\]](#);
- Strategic Environmental Assessment: Improving the effectiveness and efficiency of Strategic Environmental Assessment / Sustainability Appraisal for land use plans [\[See reference 16\]](#);
- Draft Guidance on Assessing Health Impacts in Strategic Environmental Assessment [\[See reference 17\]](#); and
- Health Impact Assessment in spatial planning: A guide for local authority public health and planning teams [\[See reference 18\]](#)

Where the SEA Regulations are addressed in this IIA

1.30 The text in this section signposts the relevant sections of the IIA Report that are considered to meet the SEA Regulations requirements (the remainder will be met during subsequent stages of the IIA of the ELJWP). This section will be updated and included in the full IIA Report at each stage of the IIA to show how the requirements of the SEA Regulations have been met through the IIA process.

Regulation 12 and Schedule 2

1.31 The SEA Regulations require the responsible authority to prepare, or secure the preparation of, an ‘environmental report’, which in this case will comprise the IIA report. The environmental report must identify, describe and evaluate the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives, taking into account the objectives and geographical scope of the plan or programme (Regulation 12).

Structure of the IIA

1.32 This chapter describes the background to the production of the ELJWP and the requirement to undertake IIA and other assessment processes. The remainder of this IIA Report is structured into the following sections:

- Chapter 2 sets out the methodology for the IIA.
- Chapter 3 presents the policy context for the ELJWP and the IIA.
- Chapter 4 presents the baseline and key sustainability issues in the boroughs.

- Chapter 5 presents the IIA framework against which the effects of the ELJWP will be assessed and explains how this has been developed.
- Chapter 6 appraises the appraisable vision, objectives and policies contained within the Draft ELJWP prepared for Regulation 18 consultation.
- Chapter 7 describes the next steps to be undertaken in the IIA of the ELJWP.
- Appendix A provides a more comprehensive review of relevant policy documents.
- Appendix B sets out the comments received by statutory consultees in response to the consultation on the Scoping Report, held in March and April 2024.

Chapter 2

Methodology

2.1 In addition to complying with legal requirements, the approach being taken to the IIA of the East London Joint Waste Plan (ELJWP) is based on current good practice and the guidance on SA/SEA set out in the Government's Planning Practice Guidance. This calls for the SA/SEA (in this case IIA) to be carried out as an integral part of the plan-making process. The section below sets out the main stages of the plan-making process and shows how these correspond to the SA/SEA (in this case IIA) process.

Main Stages of plan-making, SA and SEA (IIA)

Joint East London Waste Plan Evidence Gathering and Engagement

- SA/SEA/IIA Stage A – Setting the context and objectives, establishing the baseline and deciding on the scope:
 - Identifying other relevant policies, plans and programmes, and sustainability objectives.
 - Collecting baseline information.
 - Identifying sustainability issues and problems.
 - Developing the SA/IIA Framework.
 - Consulting on the scope of the SA/IIA.

Joint East London Waste Plan Production

- SA/SEA/IIA Stage B – Developing and refining options and assessing effects:
 - Testing the ELJWP objectives against the SA/IIA Framework.
 - Developing the ELJWP options.
 - Evaluating the effects of the ELJWP.
 - Considering ways of mitigating adverse effects and maximising beneficial effects.
 - Proposing measures to monitor the significant effects of implementing the ELJWP.
- SA/SEA/IIA Stage C – Preparing the Sustainability Appraisal (or IIA) Report.
- SA/SEA/IIA Stage D – Seek representations on the ELJWP and the Sustainability Appraisal (or IIA) Report:
 - Public participation on Local Plan and the SA/IIA Report.
 - Appraising significant changes.

Joint East London Waste Plan Examination

- SEA/IIA Stage D (cont.):
 - Appraising significant changes resulting from representations.

Joint East London Waste Plan Adoption and Monitoring

- SA/SEA/IIA Stage D (cont.):
 - Making decisions and providing information.

- SA/SEA/IIA Stage E: Monitoring the significant effects of implementing the ELJWP:
 - Finalising aims and methods for monitoring.
 - Responding to adverse effects.

Stage A: Scoping

2.2 The IIA process began with the production of an IIA Scoping Report for the ELJWP, prepared by LUC in February 2024. The Scoping stage of the IIA involves understanding the social, economic and environmental baseline for the Plan area, as well as the sustainability policy context and key sustainability issues.

Review other relevant policies, plans and programmes to establish policy context

2.3 The ELJWP is not prepared in isolation; rather it is prepared within the context of other policies, plans and programmes. The SEA Regulations require the Environmental Report to describe the relationship of the plan with other relevant plans and programmes. It should also be consistent with environmental protection legislation and support attainment of sustainability objectives that have been established at the international, national and regional/sub-regional levels.

2.4 The IIA Scoping Report contained a review of relevant policies, plans and programmes at the national, regional and local levels that were considered to be relevant to the scope of the Local Plan. A summary of the relevant international and national level policies, plans and programmes is provided in Chapter 3 of this IIA report, and a more detailed record can be found in Appendix A.

Collect baseline information to establish sustainability context

2.5 Information on existing environmental, social and economic conditions in the plan area provides the baseline against which the plan's effects can be assessed in the IIA and monitored during the plan's implementation. Baseline information can also be combined with an understanding of drivers of change that are likely to persist regardless of the ELJWP to understand the likely future sustainability conditions in the absence of the ELJWP.

2.6 The SEA Regulations require the Environmental Report (in this case the IIA report) to describe relevant aspects of the current state of the environment and how they are likely to evolve without the plan. An understanding of this likely future, together with the assessed effects of the plan itself, additionally allows the IIA to report on cumulative effects, another requirement of the SEA Regulations.

2.7 The SEA Regulations require assessment of effects in relation to the following 'SEA topics': biodiversity, population, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological heritage), landscape, and the inter-relationship between these. Baseline information was therefore collected in relation to the SEA topics and additional sustainability topics were also addressed, covering broader socio-economic issues such as housing, access to services, crime and safety, education and employment. This reflects the integrated approach that is being taken to the SA, SEA and other impact assessment processes. Baseline information for the Borough was presented in the IIA Scoping Report produced by LUC in February 2023. Any updates since the publication of the Scoping Report have been reflected in Chapter 3 and Chapter 4 of this IIA Report.

Identify sustainability issues

2.8 The baseline information also allows the identification of existing sustainability issues, including problems as required by the SEA Regulations. The sustainability issues and their likely evolution without the Local Plan were initially presented in the IIA Scoping Report and are set out in Chapter 3 and Chapter 4 of this IIA report.

Develop the IIA framework

2.9 The relevant sustainability objectives identified by the review of other policies, plans and programmes together with the key sustainability issues facing the Borough, identified by the collection and review of baseline information in the IIA Scoping Report, informed the development of a set of sustainability objectives (the 'IIA framework') against which the effects of the Plan would be assessed. These objectives also take into account the types of issues that are capable of being affected by the land use planning system.

2.10 Development of an assessment framework is not a requirement of the SEA Regulations but is a recognised way in which the likely sustainability effects of a plan can be transparently and consistently described, analysed and compared. The IIA framework comprises a series of sustainability objectives and supporting criteria that are used to guide the appraisal of the policies and proposals within a plan. An explanation of the development of the IIA framework for the ELJWP is set out in Chapter 5.

Consult on the scope and level of detail of the IIA

2.11 Public and stakeholder participation is an important part of the IIA and wider plan-making processes. It helps to ensure that the IIA report is robust and

has due regard for all appropriate information that will support the ELJWP in making a contribution to sustainable development.

2.12 The SEA Regulations require the statutory consultation bodies (the Environment Agency, Historic England and Natural England) to be consulted “when deciding on the scope and level of detail of the information that must be included” in the IIA Report. The scope and level of detail of the IIA is governed by the IIA framework and the statutory consultees have therefore been consulted on this when it was developed as part of the scoping process for the IIA Report. The Council undertook consultation with the statutory consultees for the IIA Scoping Report in March and April 2024.

2.13 Appendix B contains the comments that were received during this period of consultation.

Stage B: Developing and refining options and assessing effects

2.14 Developing options for a plan is an iterative process, usually involving a number of consultations with the public and stakeholders. Consultation responses and the IIA help to identify where there may be ‘reasonable alternatives’ to the options being considered for a plan.

2.15 In relation to the IIA report that needs to be prepared for the ELJWP, Part 3 of the SEA Regulations 12 (2) requires that:

“The (environmental or SA/IIA) report must identify, describe and evaluate the likely significant effects on the environment of—

- Implementing the plan or programme; and

- Reasonable alternatives, taking into account the objectives and the geographical scope of the plan or programme.”

2.16 Schedule 2 (h) of the SEA Regulations requires that the Environmental (or SA/IIA) Report includes a description of:

“(h) an outline of the reasons for selecting the alternatives dealt with”

2.17 The SEA Regulations therefore require that when considering the policies and site allocations for inclusion in a plan, any alternative policy approaches or site option that are ‘reasonable’ must be subject to appraisal. Therefore, alternatives that are not reasonable do not need to be subject to appraisal. Examples of unreasonable alternatives could include policy options that do not meet the objectives of the plan or national policy (e.g. the NPPF) or site allocation options that are unavailable or undeliverable.

2.18 The IIA findings are not the only factors taken into account when plan-makers are determining a preferred option to take forward in a plan. Indeed, there will often be an equal number of positive or negative effects identified by the IIA for each option, such that it is not possible to rank them based on sustainability performance in order to select a preferred option. Factors such as public opinion, deliverability and conformity with national policy will also be taken into account by plan-makers when selecting preferred options for the plan.

2.19 The consideration of reasonable alternatives has been a key focus of attention within the IIA process.

Issues and Options of the East London Joint Waste Plan (Regulation 18)

2.20 This IIA report considers the Regulation 18 draft of the ELJWP which will be subject to consultation in the summer of 2024.

2.21 The results of LUC's appraisal of draft plan is set out in Chapter 6, along with justification for why each potential option was appraised or not appraised. As the ELJWP develops, its contents and any additional reasonable alternatives will be subject to further IIA.

Stage C: Preparing the IIA report

2.22 This IIA report describes the process that has been undertaken to date in carrying out the IIA of the Draft ELJWP. It contains an appraisal of the vision and objectives for the plan, and six policies. The focus of the appraisal has been the identification of significant effects, whether positive or negative, in accordance with the SEA Regulations.

2.23 This IIA report is intended to meet all the reporting requirements of Schedule 1 of the SEA Regulations.

Stage D: Consultation on the Joint Waste Plan and this IIA report

2.24 The four Boroughs are inviting comments on the Draft ELJWP (Regulation 18 draft) and this IIA report. These documents will be published on the East London Joint Waste Plan website for consultation in the summer of 2024.

Stage E: Monitoring and implementation of the Joint Waste Plan

2.25 Chapter 7 sets out a number of suggested indicators for monitoring the potential sustainability effects of implementing the ELJWP.

Appraisal methodology

2.26 The SEA Regulations, Schedule 2(8) require the Environmental Report to include:

“...a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.”

IIA Framework

2.27 The development of a set of IIA objectives (known as the IIA framework) is a recognised way in which the likely environmental and sustainability effects of a plan and reasonable alternatives can be described, analysed and compared. The IIA framework for the IIA of the ELJWP is presented in Chapter 5 and was developed by LUC from the analysis of national, regional and local policy objectives, baseline information, and key sustainability issues identified in the Plan area.

2.28 The IIA framework comprises a series of IIA objectives, each accompanied by a set of guide questions that are used to appraise the performance of the ELJWP and its reasonable alternatives against the IIA objectives. The relationship between the key sustainability issues, the IIA objectives and the

SEA Topics, Equality Act 2010 protected characteristics is set out within Chapter 5.

Key to IIA effects symbols

2.29 The findings of the IIA are presented as colour coded symbols showing an effect for each option against each one of the IIA objectives along with a concise justification for the effect given, where appropriate. The colour coding is shown in **Table 2.1** below.

Table 2.1: IIA effects symbols

Symbol	Effect
++	Significant positive effect likely
++/-	Mixed significant positive and minor negative effects likely
+	Minor positive effect likely
+/-	Mixed minor effects likely
++/--	Mixed significant effects likely
-	Minor negative effect likely
--/+	Mixed significant negative and minor positive effects likely
--	Significant negative effect likely
0	Negligible effect likely
?	Likely effect uncertain
N/A	Not applicable or relevant

2.30 Where a potential positive or negative effect is uncertain, a question mark was added to the relevant symbol (e.g. +? Or -?) and the symbol has been colour coded as per the potential positive, negligible or negative effect (e.g. green, white, yellow, pink, etc.). Negligible effects are recorded where a policy or site allocation is considered to have no effect in contributing to achievement of the IIA objective. This is usually the case when an objective or policy is focused on a very narrow topic and would only affect two or three IIA objectives.

2.31 The likely effects of options and policies need to be determined and their significance assessed, which inevitably requires a series of judgments to be made. The appraisal has attempted to differentiate between the most significant effects and other more minor effects through the use of the symbols shown above. The dividing line in making a decision about the significance of an effect is often quite small. Where either (++) or (--) has been used to distinguish significant effects from more minor effects (+ or -) this is because the effect of an option or policy on the IIA objective in question is considered to be of such magnitude that it will have a noticeable and measurable effect taking into account other factors that may influence the achievement of that objective. However, effects are relative to the scale of proposals under consideration.

2.32 Mixed effects have only been presented where directly opposing effects (i.e. positive and negative) have been identified through the appraisal (e.g. +/-, ++/-, -/+ and ++/--). For some IIA objectives, it is possible that a policy might have a minor positive effect in relation to one aspect of the policy and a significant positive effect in relation to another aspect (giving a score of +/++). However, in these instances, only the significant score is shown in the appraisal tables. Similarly, if a policy could have a minor and significant negative effect (-/--) for the same IIA objective, only the significant negative score is shown in the appraisal tables. The justification text relating to the appraisal describes where the various elements of the policy or site being appraised might have potential to result in effects of differing magnitude.

2.33 The likely sustainability effects of the ELJWP and its reasonable alternatives are summarised in Chapter 6. Potential cumulative impacts are also set out within Chapter 6.

Difficulties encountered

2.34 To date, the main difficulties encountered or limitations of the IIA process include:

- Many effects of development are dependent on the exact location, layout and design of development, so it may be possible to mitigate some of the effects highlighted in this IIA. However, given the inherent uncertainties about these details, the IIA focuses on identifying potential significant effects of the options considered, without making assumptions about detailed design or mitigation measures that might be implemented.
- The number of strategies, plans, programmes, policy documents, advice and guidance produced by a range of statutory and non-statutory bodies means that it has not been possible within the resources available to consider every potentially relevant document in detail (see Chapter 3 and Appendix A). Strategies, plans and programmes will be newly prepared or updated throughout the preparation of the ELJWP and each iteration of the IIA will take account of those changes, where it is appropriate.
- The IIA of future iterations of the ELJWP and associated new reasonable alternatives will continue to benefit from the more recent, accurate and consistent evidence available.

2.35 All waste planners in England rely on the Environment Agency Waste Data Interrogator and it is considered the best available source of data available for waste planning purposes. It is not possible to obtain entirely accurate estimates of waste arisings, or imports and exports due to limitations of available data. It is acknowledged that not all waste arising in, or imported to, or exported from, East London may be represented in the data; and not all data may be accurately attributed. A particular issue is the tonnage of waste not attributed down to WPA level in the Waste Data Interrogator. This is due to reporting practices of some site operators and means that a tonnage of around 13 million tonnes of waste is only attributed to London as a whole rather than a specific WPA and would otherwise be 'orphaned' i.e. not provided for. In order to address this, an attempt has been made to allocate arisings of Construction, Demolition and Excavation (C,D & E) waste attributed to London. This has been

done by applying London wide construction sector employment statistics. However as the arising value has been arrived at partially through applying this statistical computation it is not possible to be certain what fate this reattributed waste followed.

Chapter 3

Policy Context

3.1 Schedule 2 of the SEA Regulations requires the SA Report to describe:

(e) “the environmental protection objectives established at International, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation”

3.2 To establish a clear scope for the IIA it is necessary to review and develop an understanding of the environmental, social and economic policy objectives that the East London Joint Waste Plan (ELJWP) should seek to conform with. This chapter summarises the international and national policy objectives that should be taken into consideration during preparation of the plan. These objectives have been considered when drafting the IIA Framework in Chapter 5.

There is an extensive range of policy documents that are of potential relevance to the Local Plan preparation and IIA process. A pragmatic and proportionate approach has been taken to the review of the policy context, seeking to identify key sustainability (i.e. environmental, social or economic) objectives that have the potential to be influenced by a local plan. A summary of the relevant objectives of key policy documents is provided in this chapter with a wider and more detailed review provided in Appendix A.

Implications of ‘Brexit’

3.3 As of the end of January 2020 the UK has left the EU. Principally, the UK’s environmental law is derived from EU law or was directly effective EU law. As a result of Brexit, the European Union (Withdrawal) Act 2018 converts existing EU law which applied directly in the UK’s legal system (such as EU Regulations and EU Decisions) into UK law and preserves laws made in the UK to implement EU obligations (e.g., the laws which implement EU Directive). This body of law is known as retained EU law and is could be subject to future, post-Brexit amendments.

3.4 As set out in the Explanatory Memorandum accompanying the Brexit amendments to the SEA Regulations [\[See reference 19\]](#), the purpose of the Brexit amendments is to ensure that the law functions correctly after the UK has left the EU.

3.5 No substantive changes have been made to the UK regulations to date; however, the Government does intend to reform the planning system, including replacing SEA and SA with a new requirement for an Environmental Outcomes Report. No further information is known at the time of writing. Any changes to the legal framework for carrying out SA/SEA will be addressed as appropriate as the ELJWP is prepared. The government has set a deadline for plans created under the current system to be submitted by June 2025 and adopted by the end of 2026.

International plans, policies and programmes

3.6 Relevant international plans and policy (including those at the EU level) are transposed into national plans, policy and legislation and these have been considered.

3.7 At the international level, Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the ‘SEA Directive’) and Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the ‘Habitats Directive’) have been transposed into UK Regulations. They are particularly significant given that Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA) are to be undertaken in relation to the emerging ELJWP. These assessment processes should be undertaken iteratively and integrated into the production of the plan in order to ensure that any potential negative environmental effects (including on nature conservation sites of international importance) are identified and can be mitigated.

3.8 Directive 2008/98/EC (Waste Framework Directive) is also of particular relevance. It has also been transposed into UK law and aims to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and improving the efficiency of such use.

3.9 There are a wide range of other EU Directives relating to issues such as water and air quality, most of which have been transposed into UK law through national-level policy.

3.10 Furthermore, the 2030 Agenda for Sustainable Development (2015) [\[See reference 20\]](#): This initiative, adopted by all United Nations Member States, provides a shared blueprint for peace and prosperity for people and the planet and includes 17 Sustainable Development Goals (SDGs), designed to achieve a better and more sustainable future for all. Relevant to this topic are:

- SDG 6: Clean Water and Sanitation
- SDG 08: Decent Work and Economic Growth
- SDG 09: Industry, Innovation and Infrastructure
- SDG 11: Sustainable Cities and Communities
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action

- SDG 14: Life Below Water.
- SDG 15: Life on Land.

Key national plans and programmes

3.11 The National Planning Policy Framework (NPPF) [See reference 21] is the overarching planning framework which provides national planning policy and principles for the planning system in England. The East London Waste Local Plan must be consistent with the requirements of the NPPF which sets out information about the purposes of local plan-making. It states:

“Succinct and up-to-date plans should provide a positive vision for the future of each area; a framework for addressing housing needs and other economic, social and environmental priorities; and a platform for local people to shape their surroundings”.

3.12 The NPPF does not contain specific waste policies. The detailed waste planning policies are contained in the National Planning Policy for Waste (2015). The policies state that when preparing Local Plans, waste planning authorities should take account of a number of criteria including:

- Driving waste management up the waste hierarchy;
- Identifying the need for waste management facilities
- Working jointly and collaboratively with other planning authorities to provide a network of facilities to deliver sustainable waste management; and,
- Identifying suitable sites and areas for waste management facilities in line with the proximity principle, giving priority to the re-use of previously developed land.

3.13 The NPPF is supported by Planning Practice Guidance which includes guidance on Waste (2015) [See reference 22]. The PPG provides guidance on implementing the waste hierarchy, the preparation of local plans and sustainability appraisals for waste local plans, and determining planning applications for waste facilities. According to the guidance on flood risk and coastal change, waste treatment facilities are classified as less vulnerable and are suitable in all flood zones, excluding 3b (the functional floodplain). Landfills and sites used for waste management facilities for hazardous waste are considered to be more vulnerable and are suitable only in Flood Zones 1 and 2, and potentially 3a.

3.14 Also of particular relevance to the East London Waste Local Plan is the National Waste Management Plan for England (DEFRA, 2021) which provides an analysis of the current waste management situation in England and supports the implementation of the objectives and provisions of the Waste (England and Wales) Regulations 2011.

3.15 **Table 2.1** lists the national plans and programmes that are of greatest relevance to the emerging ELJWP. Further national plans and programmes are included in Appendix A. It should be noted that some of the documents will be updated in the timeline of preparing the IIA for the Waste Local Plan. This list will be updated at each stage of the IIA, where appropriate.

Table 3.1: Key national plans and programmes of relevance for the ELJWP

National Legislation
HM Government (1979) Ancient Monuments and Archaeological Areas Act 1979
HM Government (1981) The Wildlife and Countryside Act 1981
HM Government (1990) Planning (Listed Building and Conservation Areas) Act
HM Government (1990) Environmental Protection Act 1990

National Legislation
HM Government (2000) Countryside and Rights of Way Act 2000
HM Government (2003) Sustainable Energy Act
HM Government (2006) The Natural Environment and Rural Communities (NERC) Act
HM Government (2016) Energy Act 2016
HM Government (2008) The Climate Change Act 2008 (as amended)
HM Government (2008) The Planning Act 2008
HM Government (2021) The Environment Act 2021
HM Government (2010) Flood and Water Management Act 2010
HM Government (2014) Water Act 2014
National Regulations
HM Government (2015) Water Framework Directive (England and Wales) (amendment) Regulations 2015
HM Government (2016) Environmental Permitting (England and Wales) Regulations 2016
HM Government (2010) The Conservation of Habitats and Species Regulations 2010
HM Government (2002) The Landfill (England and Wales) Regulations 2002
HM Government (1994) Urban Waste Water Treatment (England and Wales) Regulations 1994
HM Government (2005) The Hazardous Waste (England and Wales) Regulations 2005
HM Government (2011) The Animal By-Products (Enforcement) (England) Regulations 2011
HM Government (2005) Waste Management (England and Wales) Regulations 2005
HM Government (2012) Waste (England and Wales) (Amendment) Regulations 2012

National Legislation
HM Government (2002) Air Quality (England) (Amendment) Regulations 2002
HM Government Circular 1/2003: Safeguarding, Aerodromes, Technical Sites and Military Explosive Storage Areas
HM Government (2017) The Conservation of Habitats and Species Regulations 2017 (as amended)
HM Government (2020) The Waste (Circular Economy) (Amendment) Regulations 2020
National Policies, Plans and Strategies
DCMS (2013) Scheduled Monuments & Nationally Important but Non-Scheduled Monuments Policy Statement
HM Government (2019) Clean Air Strategy 2019 Policy Paper
DEFRA (2011) Safeguarding our Soils: A Strategy for England Policy Paper
Natural England (2021) Guide to assessing development proposals on agricultural land – National Guidance
Environment Agency (2020) National Flood and Coastal Erosion Risk Management Strategy for England Policy Paper
Environment Agency (2022) Flood risk assessments: climate change allowances – National Guidance
DEFRA (2011) Future water: The Government's Water Strategy for England Policy Paper
Environment Agency (2017) Groundwater protection guides
DfT (2021) Transitioning to zero emission cars and vans: 2035 delivery plan – National Guidance
DEFRA (2013) Hazardous Waste National Policy Statement
DECC (2011) National Policy Statement for Renewable Energy Infrastructure (EN-3)
DECC (2012) Strategy for the management of solid low level radioactive waste from the non-nuclear industry
DECC (2009) The UK Renewable Energy Strategy
HM Government (2021) Net Zero Strategy: Build Back Greener

National Legislation
BEIS (2021) Industrial Decarbonisation Strategy
DEFRA (2020) Rural proofing in England 2020 Policy Paper
DLUHC (2021) National Design Guide
MHCLG (2023) National Planning Policy Framework
DCLG (2014) National Planning Policy for Waste
DLUHC National Planning Practice Guidance (living document)
DEFRA (2021) National Waste Management Plan for England
DEFRA (2013) Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in moving to a more resource efficient economy Policy Paper
DEFRA (2018) Our Waste, Our Resources: A strategy for England Policy Paper
BEIS (2022) British Energy Security Strategy Policy Paper
DfT (2022) Air quality: clean air zone framework for England Policy Paper
HM Government (2017) Litter Strategy for England Policy Paper
DfT (2022) Future of freight plan Policy Paper
DEFRA (2022) Landscapes Review (National Parks and AONBs): government response Policy Paper
DEFRA (2020) Agricultural Transition Plan 2021 to 2024 Policy Paper
DCLG (2021) National Planning Policy Framework
DCLG (2015) Planning Practice Guidance on Waste
DEFRA (2012) National Policy Statement for Waste Water
DEFRA (2013) National Policy Statement for Hazardous Waste
HM Government (2013) Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in moving to a more resource efficient economy
Our Waste, Our Resources: A strategy for England (2018)

National Legislation
British Energy Security Strategy (2022)
DEFRA (GP3): Underground, Under threat – Groundwater Protection: Policy and Practice
DLHC (2022) Flood risk and coastal change guidance
Environment Agency (2022) National Flood and Coastal Erosion Risk Management Strategy for England
DEFRA (2008) Future Water: The Government's Water Strategy for England
Environment Agency (2009) Water for People and the Environment: Water Resources Strategy for England and Wales
MHCLG (2019) Clean Air Strategy
DECC (2014) Community Energy Strategy
Government policy papers
DEFRA (2021) The Water White Paper
25 Year Environment Plan (2018)
Resources and Waste Strategy for England (2018)

3.16 The ELJWP is not being prepared in isolation but is influenced by, and influences, other policies, plans and programmes. The ELJWP needs to be consistent with international and national guidance and strategic planning policies and should contribute to the goals of a wide range of other programmes and plans. It must also conform to environmental protection legislation and the sustainability objectives established at the international, national and local levels.

3.17 Schedule 2 of the SEA Regulations requires:

(1) “an outline of the...relationship with other relevant plans or programmes”;
and

(5) “the environmental protection objectives established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation”

3.18 In order to establish a clear scope for the IIA it is necessary to review and develop an understanding of the environmental, social and economic objectives contained within international and national plans and programmes that are of relevance to the emerging ELJWP. The review is not exhaustive, and an exhaustive approach would not be proportionate or be useful in understanding the policy environment that the ELJWP must be prepared within. Instead, the review focuses on a limited number of key policy documents that are of particular importance of setting the parameters of what the ELJWP should and should not do. It should be noted that the policy context within which the ELJWP and its IIA are being prepared is inherently uncertain given the following key factors:

- **UK economy** – The UK economy contracted by 0.3% in the fourth quarter of 2023 which was the second successive fall in GDP. However, quarter four of 2023 was 1.0% above its pre-pandemic level of Q4 2019 [See [reference 23](#)] Whilst the UK is in a technical recession, the Organisation for Economic Co-operation and Development (OECD) forecasts UK GDP to grow by 0.7% in 2024 and by 1.2% in 2025 (unchanged from its previous forecast made in November). The International Monetary Fund (IMF) forecasts UK GDP to grow by 0.6% in 2024 (unchanged from its previous forecast made in October) and by 1.6% in 2025. The UK is currently experiencing a cost-of-living crisis and for the first time in four decades, the Confederation of British Industry (CBI) expects real household incomes to drop for a second consecutive year (-1.3%), before recovering in 2024 (1.1%). Brought on by high inflation and low wage growth, the economy is underperforming compared to its G7 peers. As the UK's economy continues to take a downturn, the potential implications for planning and development include Government spending cuts impacting on support available for services and facilities, and new infrastructure.
- **‘Brexit’** – Following the UK's departure from the European Union on 31st January 2020, it entered a transition period which ended on 31st

December 2020. From 1st January 2021, directly applicable EU law no longer applies to the UK and the UK is free to repeal EU law that has been transposed into UK law. Where EU law has been transposed into UK law and not repealed, the relevant EU and UK legislation is still referred to in this report.

- **COVID-19** – The COVID-19 pandemic has led to far-reaching changes to society in the UK and around the world. Which of these changes will continue in the long term is unknown. However, emerging evidence suggests that there has been an increase in remote working, reduced commuting and related congestion and air pollution, and increased prioritisation of walking and cycling over private transport in towns and cities.
- **The Levelling Up and Regeneration Act** – Published on 11th May 2022, and received Royal Assent on 26th October 2023, the Act introduces several reforms to the planning system. It sets out the Government's plans to drive local growth and empower local leaders to regenerate their areas. The Act introduces a new Infrastructure Levy, new powers for councils to bring vacant properties back into use, a new approach to environmental assessments, and changes to neighbourhood planning including digitisation of the system.

Regional, sub-regional and local plans and programmes

3.19 It is not a requirement of the SEA Regulations to describe the relevance of policy objectives established at sub-national scale for the ELJWP. However, since they provide further context for the ELJWP, those considered of most relevance (e.g. relating to the economy, transport, climate change and green infrastructure) are listed below.

Table 3.2: Key GLA policies, strategies and guidance

Key Greater London Authority (GLA) policies, strategies and guidance
The London Plan (2021)
Climate Action Strategy 2020-2027 (2020)
London Environment Strategy (2022)
Local Nature Recovery Strategy (in progress)
Accessible London SPG (2014)
Optimising Site Capacity: A Design - Led Approach LPG (2023)
Characterisation and Growth Strategy (2023)
Air quality positive LPG (2023)
Air quality neutral LPG (2023)
Be Seen energy monitoring LPG (2021)
Circular economy statements LPG (2022)
Energy Planning guidance (2022)
The control of dust and emissions in construction SPG (2014)
Whole life carbon LPG (2022)
Sustainable Transport, Walking and Cycling (2022)
Urban Green Factor LPG (2023)
London Sustainable Drainage Action Plan (2015)
Thames Estuary 2100 (TE2100) (2023)

3.20 There are also a wide range of plans and programmes at the district / local authority scale. While such local plans do not set policy objectives that the Waste Local Plan must follow, the ELJWP may nevertheless need to take into account development provided for by those local plans. This section therefore also lists local plan documents considered of greatest potential relevance to the ELJWP. The table includes plans adopted or that have reached Regulation 19

stage at the date this document was published. The table includes document relating to the London Legacy Development Corporation. Planning powers for the area covered by the London Legacy Development Corporation will return to Newham, Hackney, Tower Hamlets and Waltham Forest, by the end of December 2024. Chapter 3 setting out the baseline of the ELJWP area, draws from these local plans, programmes and policies to highlight future trends relevant to waste management in East London, such as the scale and distribution of each London Borough’s housing and employment growth.

Table 3.3: Key Local plans, programmes and policies

Key Local plans, programmes and policies
East London wide
Joint Waste Development Plan for the East London Waste Authority Boroughs (2012)
A Joint Strategy for East London’s Resources and Waste 2027 – 2057 (2022)
Evidence Base for the East London Joint Waste Plan (and appendices) (2022)
East London Waste Prevention Action Plan 2023-24 (2023)
East London Integrated Waste Management Services Procurement and Contract Expiry (PACE) Outline Business Case (OBC) (2023)
London Borough of Barking and Dagenham
New Local Plan (Regulation 19 draft, 2021) and Proposed Site Allocations (2021)
LBBD Local Plan Sustainability Appraisal (2021)
Climate Emergency Declaration (2020)
Barking and Dagenham Inclusive Growth 2022 to 2026 draft (2022)
Barking and Dagenham Authority Monitoring Report 2021-2022 (2023)
Barking and Dagenham Air Quality Action Plan 2020-2025 (2020)
Be First Waste Needs Assessment (2021)

Key Local plans, programmes and policies
London Borough of Barking and Dagenham Industrial Land Strategy (2021)
Barking and Dagenham Wide Transport Priorities 2021-2037 (2021)
Planning Advice Note (PAN3) – Waste and Recycling Provisions (updated 2021)
Barking and Dagenham Reduction and Recycling Plan April 2023 to March 2025 (2023)
London Borough of Havering
Havering Local Plan 2016 – 2031 (2021)
Havering Local Plan 2016 – 2031 – Policies Map (North & South 2021)
Sustainability Appraisal for the Havering Local Plan (2021)
Climate Change Action Plan (2021)
Havering Inclusive Growth Strategy 2020-2045 (2020)
Havering Local Implementation Plan: Transport strategy (2019)
Havering Authority Monitoring Report 2022-2023 (2023)
Havering Reduction and Recycling Plan April 2023 to March 2025 (2022)
Climate Emergency Declaration (2021)
Havering Nature Conservation and Biodiversity Strategy (2014)
Romford Area Action Plan Development Plan Document (2008)
Site Specific Allocations Development Plan Document (Romford) (2008)
London Borough of Newham
Newham Local Plan (2018)
Newham Local Plan Policies Map (2018)
Climate Emergency Action Plan Climate Emergency Statement (2020)
Newham's Climate Emergency Annual Report (2021-2022)
Newham's Climate Action Just Transition Plan (2023)

Key Local plans, programmes and policies
AMR: Waste, Energy and Infrastructure Delivery Monitoring Bulletin (2013-2018)
AMR: Sustainability and Climate Monitoring Bulletin (2013-2018)
Waste Management Guidelines for Developers(2014)
Equalities and the Local Plan (2017)
Air Quality Action Plan (2019)
London Borough of Newham Draft Submission Local Plan (Regulation 19) will be published in July 2024
London Borough of Redbridge
Redbridge Local Plan 2015-2030 (2018)
Climate Action Plan (2021)
Climate Change Annual report (2022)
Redbridge Reduction and Recycling Plan 2023-2025 (2022)
Redbridge Biodiversity Action Plan (2006)
Redbridge Third Implementation Plan (2019)
Waste Reduction Strategy (2019)
London Legacy Development Corporation
Local Plan 2020-2036 (2020)
Getting to Net Zero SPD (2022)

Chapter 4

Baseline Information

4.1 Baseline information provides the basis for predicting and monitoring the likely sustainability effects of a plan and helps to identify key sustainability issues.

4.2 Schedule 2 of the SEA Regulations requires information to be provided on:

1. The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.
2. The environmental characteristics of areas likely to be significantly affected.
3. Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive [92/43/EEC].

4.3 The environmental, social and economic baseline for the East London Joint Waste Plan (ELJWP) is organised under the following topic headers:

- Waste.
- Climate change, adaptation and mitigation.
- Population, health and wellbeing.
- Economy.
- Transport.
- Historic environment.

- Landscape and townscape.
- Biodiversity.
- Air, land and water quality.

4.4 Analysis of baseline information and the policy context has informed identification of sustainability issues facing Barking and Dagenham, Havering, Newham and Redbridge Boroughs that are of relevance to the ELJWP, in line with the requirements of Schedule 2 of the SEA Regulations. The key sustainability issues that have been identified are set out underneath each baseline topic section, along with an outline of their relevance, i.e. how the Plan could avoid exacerbating these issues or help to solve them.

4.5 Maps illustrating the spatial dimension of some of the baseline conditions are described below are presented at the end of this chapter.

Waste

Policy Context

The London Plan

4.6 The London Plan 2021 states that London should manage the equivalent of London's waste within its boundaries, aiming to achieve waste net self-sufficiency by 2026 in all waste streams except for excavation waste. To meet this aim, the Plan requires boroughs to:

1. plan for identified waste needs;
2. identify how waste will be reduced, in line with the principles of the Circular Economy and how remaining quantum's of waste will be managed; and,

3. allocate sufficient sites, identify suitable areas, and identify waste management facilities to provide the capacity to manage the apportioned tonnages of waste, and tonnages of waste not apportioned by the London Plan.

4.7 The London Plan also sets out management targets for waste generated in London in Policy SI 7 Reducing waste and supporting the circular economy as follows:

- ensure that there is zero biodegradable or recyclable waste to landfill by 2026;
- meet or exceed the municipal waste recycling target of 65 per cent by 2030 **[See reference 24]**;
- meet or exceed the targets for each of the following waste and material streams:
 - construction and demolition – 95 per cent reuse/recycling/recovery; and,
 - excavation – 95 per cent beneficial use **[See reference 25]**.

4.8 In addition in connection with hazardous waste management capacity Paragraph 9.8.18 of the London Plan identifies "*..a need to continue to identify hazardous waste capacity for London.*"

Waste Streams

Current baseline information

4.9 Information within this section is taken from the ELJWP evidence base 2024 **[See reference 26]** Future iterations of the IIA will be updated in line with the emerging evidence for the new ELJWP.

4.10 The exercise has not be applied to Household, Industrial and Commercial (HIC) [See reference 27] waste tonnages because the London Plan apportionments already determine the tonnage of this waste type for which the ELJWP is to provide management capacity. The types of capacity considered to count towards the management of apportioned waste (hereinafter referred to as "qualifying capacity") is defined in Paragraph 9.8.4 of the London Plan [See reference 28] as follows:

- energy recovery in London;
- production of solid recovered fuel (SRF) and refuse derived fuel (RDF) in London;
- sorting or bulking for re-use or recycling including anaerobic digestion. The reuse or recycling may take place within or outside London providing the sorting and bulking capacity is located within London; and
- reuse or recycling including anaerobic digestion within London.

Waste arisings

4.11 The London Plan sets out both waste arising forecasts and apportionments for the management of HIC waste for each borough. The combined apportionment for East London is significantly higher than the area's projected arisings of HIC waste, so the London Plan envisages that East London would be a major contributor to London's target of net self-sufficiency by 2026. The estimated arisings and forecasts of HIC waste for the East London Boroughs are set out below.

Table 4.1: Comparison of estimated arisings and apportionments for the East London Boroughs (thousand tonnes)

London Borough	Waste Arising 2021	Waste Arising 2041	Apportionment 2021	Apportionment 2041
Barking and Dagenham	214	230	505	537
Havering	229	249	370	393
Newham	244	260	383	407
Redbridge	196	216	151	160
Total	883	955	1,409	1,497

Net Self Sufficiency Balance

4.12 Table 4.2 shows the tonnages of waste attributed to East London in the WDI 2022 and managed at permitted facilities within East London.

Table 4.2: Tonnages of East London arisings managed inside and outside East London

East London Waste	Tonnes
Waste managed inside East London	931,768
Waste managed outside of East London	859,030
Total	1,790,798

4.13 **Table 4.3** shows the amount of waste managed within East London and the split between East London waste and waste imported from outside of the plan area.

Table 4.3: Amount of waste managed within East London by origin

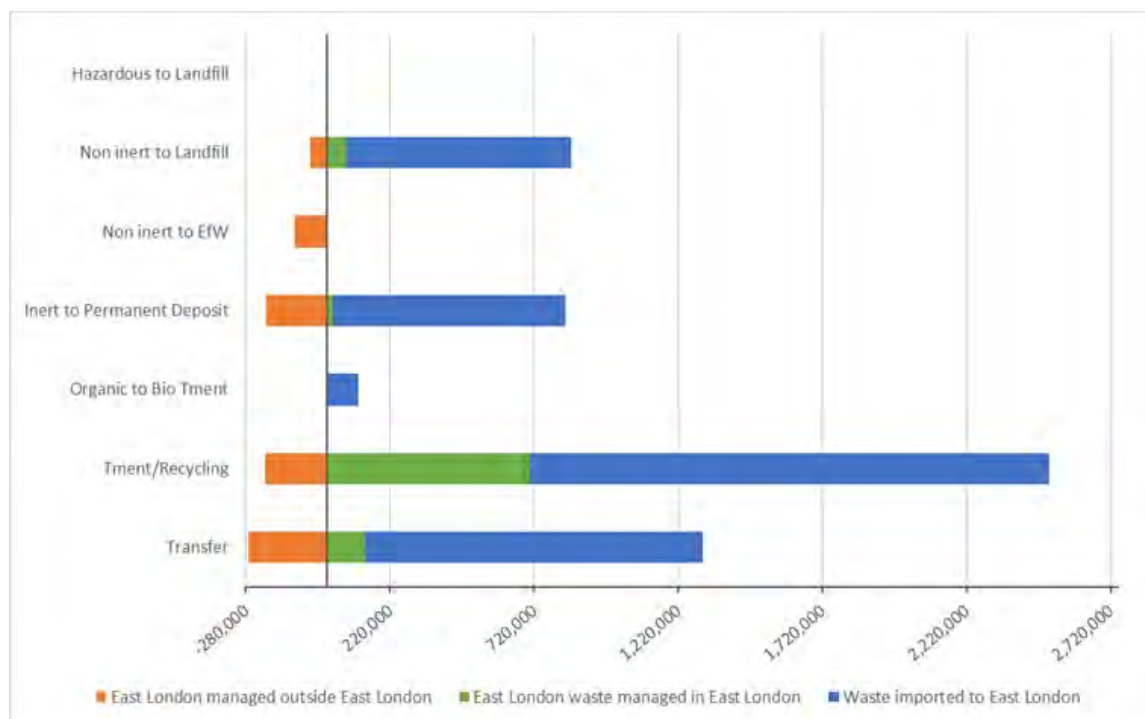
Origin of waste	Tonnes
East London waste managed in East London	931,768
Waste imported to East London	4,671,537
Total managed within East London	5,603,305

4.14 As set out in the table above, it is estimated that of the c1.79 million tonnes of waste produced in East London in 2022:

- 0.93 million tonnes was managed at permitted facilities located within East London;
- 0.86 M tonnes was managed outside of East London; and
- 4.67 million tonnes of waste was imported into East London permitted facilities.

4.15 From this snapshot, it is clear that East London provides for the management of greater imports of waste than it exports to other areas. Figure 4.1 displays the balance between imports and exports by waste management method and waste type. It should be noted that the data is a snapshot of a single year. It only includes waste managed at permitted sites in England and does not include any waste exported to Wales, Scotland or further afield as this is not reported in the WDI. It is not necessarily a true representation of net -self-sufficiency as actual inputs to facilities in 2022 may not be reflective of potential capacity of sites operating in East London (as in most cases inputs will be lower than actual site capacity).

Figure 4.1: Imports and exports in East London by waste type



4.16 Of the waste arising within East London, 57% of Local Authority Collected Waste (LACW) and Commercial and Industrial (C&I) waste arisings and 58% of Construction and Demolition (C&D) waste is managed within East London. Seven percent of East London's LACW and C&I, and 19% of C&D waste, is managed elsewhere in London. Exports account for 36% and 23% of these waste streams respectively. A higher proportion of hazardous waste and excavation waste is exported outside of London, which is to be expected due to the specialist nature of facilities dealing with these waste streams.

Table 4.4: East London's waste arisings and management destinations 2022

Waste Stream	Amount Managed in East London	Amount Managed Elsewhere in London	Amount exported outside London
LACW/C&I	57%	7%	36%

Waste Stream	Amount Managed in East London	Amount Managed Elsewhere in London	Amount exported outside London
C&D	58%	19%	23%
Hazardous (HWDI)	18%	5%	77%
Excavation	17%	2%	81%

Construction, demolition and excavation waste current baseline

4.17 It is estimated that arisings of C,D&E waste from East London in 2022 was in the order of c2.1 million tonnes. The total C&D waste was around 800,000 tonnage per annum (tpa), and that of excavation waste was 1.3 million tonnes. The distinction is important as the London Plan sets different targets for C&D waste ads compared with excavation waste.

4.18 Of the tonnages arising with known management routes, of the total C,D&E waste:

- 45% was managed at recycling facilities;
- 3% was recovered (either through incineration or recovery to land);
- 23% was managed at permitted landfills (possibly for use in restoration or operational needs);
- 26% was managed at intermediate sites prior to going on to its final fate (transferred); and
- 3% was managed via mobile plant (normally for recycling or reuse).

Table 4.5: Estimated C,D&E waste baseline arisings in East London

Waste Stream	Inert	Non-inert	Hazardous	Total
C&D	653,333	151,700	693	805,726
Excavation	1,302,370	15,816	8,952	1,327,137
Total	1,955,703	167,516	9,645	2,132,863

Waste management routes

4.19 The management routes for East London's waste in 2019 are set out in the **Table 4.6** below. The table shows an estimated 42% of LACW/C&I waste was recycled in 2019 but nearly a third of these two waste streams are still being disposed of to landfill. The target for LACW and (part of) C&I waste streams is 65% recycling, composting or reuse by 2030.

4.20 An estimated 69% per cent of C&I waste is being recycled or recovered, but this falls short of the London Plan target which is 95%. Two thirds of excavation waste is being disposed of to landfill but some or all of this may be for restoration purposes which is a beneficial use.

Table 4.6: East London's waste management routes

Waste stream	Total tonnes	Recycling	Recovery	Landfill/ Disposal	Other including transfer
LACW	481,545	27%	45%	0.3%	28%
C&D	805,726	82%	4%	0%	14%
Excavation	1,327,137	48%	26%	0%	26%
Hazardous	57,745	10%	64%	18%	8%

Duty to Cooperate

4.21 Waste is a strategic cross-boundary issue and is subject to the duty to co-operate. In the case of waste, the duty to cooperate is a mechanism for waste planning authorities (WPAs) to engage with each other on waste movements between their plan areas so that waste streams are provided for.

4.22 The following guideline tonnages in relation to the Duty to Cooperate have been agreed by the London Waste Planning Forum (LWPF), South East Waste Planning Advisory Group (SEWPAG) and the East of England Waste Technical Advisory Board (EoEWTAB). The guideline tonnages per annum (tpa) are:

- 5,000 tpa non-hazardous waste (LACW and C&I).
- 10,000 tpa inert waste (C,D&E).
- 100 tpa hazardous waste.

4.23 Around 0.86 million tonnes of waste was reported as exported from East London in 2022. Just over half of this (52%) was excavation waste and just over a third (36%) was LACW/C&I waste.

4.24 Only 12% of waste exports were managed elsewhere in London. The majority (88%) were exported to locations in the south east and east of England.

4.25 Over half (54%) of all waste exported from East London was deposited to landfill and a further 8% was put to beneficial use in/on land.

4.26 Buckinghamshire and Thurrock received the greatest proportion of exported CD&E waste in 2019. In that year around 500,000 tonnes of CD&E waste went to landfill with a further 110,000 tonnes being put to beneficial use on/in land.

4.27 Cambridgeshire and Peterborough, Kent and Northamptonshire receive the greatest quantity of hazardous waste from East London. The data shows

that hazardous waste tends to travel further than other types of wastes, due to the specialist nature and requirements for specialist treatment. It also shows that there are a number of facilities that consistently receive quantities of hazardous waste from East London, while exports to other facilities have a more irregular pattern.

Imports to ELJWP Boroughs

4.28 Approximately 6 million tonnes of waste was reported as being imported to East London in the waste data interrogator 2019. However, it should be noted that a large proportion of this (40%) is categorised as “WPA not codeable (London)”. Around half of waste in the “WPA not codeable (London)” category is excavation waste, just over a quarter is C&D waste and just under a quarter is LACW/C&I waste. This compares with 43% LACW/C&I waste, 40% excavation and 16% C&D waste in all other categories.

4.29 In addition to the issue of uncodeable waste, 1.7 million tonnes of waste imports (29% of the total) were received by transfer stations to be sorted and bulked before its onward journey to a final destination waste treatment facility.

4.30 The largest proportion of waste recorded as imported to East London was excavation waste (43%), followed by LACW/C&I waste (35%), C&D waste (21%) and hazardous waste (1%).

4.31 Well over half of waste imports (60%) are reported as coming from other London Boroughs, although as mentioned above, this could include waste arising in East London. If the ‘non-codeable London’ category is removed, the proportion of imports recorded as originating in the rest of London reduces to 34%. Most of the remaining imports in 2019 originated from the wider south east, in particular Essex (806,000 tonnes) and Kent (214,000 tonnes). The WDI also includes other ‘non-codeable’ categories and 280,000 tonnes of waste was imported to East London from ‘WPA not codeable (South East)’ which means it is not possible to identify exactly which authorities this waste came from.

4.32 Just over a third (36%) of waste recorded as imported to East London was recycled, processed or treated, a quarter went to a transfer facility to be sorted and bulked and 21% was deposited to landfill with a further 11% put to beneficial use in/on land.

4.33 In 2019, East London received 2.1 million tonnes of LACW and C&I waste. Just under a quarter of this was deposited at Rainham landfill site and around 10% went Hitch Street Anaerobic Digestion Plant. Essex, Kent and Lewisham are the most significant users of East London waste facilities to manage their LACW and C&I waste external to the four boroughs, but as already mentioned large amounts of uncodeable waste from 'London' and the 'South East' are also received at East London Facilities.

4.34 In 2019, East London received 1.2 million tonnes of C&D and 2.6 million tonnes of excavation waste which was not identified as being generated within the four boroughs. However, 2.7 million tonnes of this (70%) was 'uncodeable' and therefore not directly attributable to specific WPAs. In addition to the uncodeable categories, Wandsworth, Essex, Tower Hamlets and Hackney were the most significant users of East London waste facilities in 2019 to manage their CD&E waste external to the four boroughs.

4.35 In 2019, East London received over 125,000 tonnes (as measured by the Hazardous Waste Data Interrogator (HWDI) [\[See reference 29\]](#)) or 48,000 tonnes (as measured by the Waste Data Interrogator (WDI) [\[See reference 30\]](#)) of hazardous waste not originating from within the four boroughs. The HWDI reports the main origins of hazardous waste received by East London in 2019 as Greenwich (25,300 tonnes), followed by Merton (13,000 tonnes) and Tower Hamlets (10,000 tonnes). The WDI reports the main origins of hazardous waste received by East London in 2019 as Hackney (14,300 tonnes), 'WPA not codeable (London)' (13,300 tonnes) and Essex (8,200 tonnes).

Projected baseline information

4.36 The London Plan sets out both waste arising forecasts and apportionments for each borough. The combined apportionments for East London are significantly higher than the area's projected arisings. The London Plan anticipates that East London could be a major contributor to London's target of net self-sufficiency by 2026, for the HIC waste stream in particular.

Waste sites

Current baseline information

4.37 There are a range of waste management facilities distributed throughout the four boroughs within the ELJWP area that support the movement of waste up the waste hierarchy. The adopted East London Joint Waste Local Plan 2012 [\[See reference 31\]](#) identified waste management infrastructure requirements needed for the period from 2012 to 2027/8. The evidence base was updated in 2022 and is currently being updated in preparation for the new East London Joint Waste Plan which will be informed by this IIA. The facilities are shown in Figure 4 of the Regulation 18 ELJWP.

4.38 Waste has historically been transported by road and river into, out of and across London and this is likely to continue based on the established network of waste management facilities. However, this activity risks contributing to amenity impacts such as noise and dust; exacerbating levels of air pollution; and increasing traffic congestion, highway maintenance and safety concerns. The haulage of waste by way of conventional, fossil-fuel powered vehicles is also a significant contributor to the local waste management sector's greenhouse gas emissions.

Projected baseline information

4.39 There is currently a surplus of supply of capacity across the ELJWP area to meet the Plan area's identified need and the apportionment from the London Plan, as set out in the updated evidence prepared in support of the update to the ELJWP [\[See reference 32\]](#). This may provide additional capacity to meet the needs of other areas of London in the future, or there may be a need for different types of waste management facilities over the plan period.

Implications for health

4.40 The provision of a network of well managed waste management facilities can ensure that impacts on health (through noise, odour, pollution and transport movements) are minimised and appropriately distributed.

Key sustainability issues and opportunities for the ELWJP to address them

4.41 Across the four boroughs, there is a low level of waste that is reused, recycled, or reclaimed and high levels of waste are sent to landfill. There are missed opportunities to achieve higher rates of recycling and the efficiency benefits associated with the transition to a circular economy. Furthermore, future economic and population growth across London and the South East is likely to put pressure on the existing network of waste management facilities. In addition, disposal to landfill is at present an unavoidable and least bad solution for some wastes.

4.42 The ELJWP will have limited influence on the amount of waste that is generated and needs to be managed each year. A key role of the ELJWP could be to make provision for the right waste management facilities, in the right locations for the purposes of implementing sustainable waste management practices that will meet waste targets and other ambitions set across the four

Boroughs, ensuring waste is dealt with as far up the waste hierarchy as possible.

4.43 The ELJWP should ensure that where waste is unavoidable, it is managed in an efficient and sustainable manner, by employing the ‘waste hierarchy’. In addition, the ELJWP could support the evolution of the four Boroughs waste infrastructure network to the most sustainable locations, where the opportunity arises. Policies could also support the most efficient and appropriate freight routes, and an accelerated transition to low and zero carbon alternatives to conventional fossil-fuel based road freight. Furthermore, opportunities to utilise efficient and more sustainable modes of transport could be promoted to achieve maximum diversion of waste away from road haulage.

Climate change adaptation and mitigation

Climate change predictions

Current baseline information

4.44 Climate change presents a global risk, with a range of different social, economic and environmental impacts that are likely to be felt within the plan area across numerous receptors. A key challenge in protecting the environment will be to tackle the causes and consequences of climate change: warmer, drier summers and wetter winters with more severe weather events all year, higher sea levels and increased river flooding. A strong reaction is required from planning to ensure appropriate action can be taken to help species and habitats adapt and to enable the agricultural sector to continue to deliver diverse, affordable and good quality produce.

4.45 There has been a general trend towards warmer average temperatures in recent years with the most recent decade (2012–2021) being on average 0.2°C warmer than the 1991–2020 average and 1.0°C warmer than 1961–1990. All the top ten warmest years for the UK in the series from 1884 have occurred this century [\[See reference 33\]](#).

4.46 Heavy rainfall and flooding events have been demonstrated to have increased potential to occur in the UK as the climate has generally become wetter. For example, for the most recent decade (2012–2021) UK summers have been on average 6% wetter than 1991–2020 and 15% wetter than 1961–1990 [\[See reference 34\]](#).

4.47 The Intergovernmental Panel on Climate Change (IPCC) special report on global warming outlines that, under emissions in line with current pledges under the Paris Agreement, global warming is expected to surpass 1.5°C, even if these pledges are supplemented with very challenging increases in the scale and ambition of mitigation after 2030. This increased action would need to achieve net zero CO₂ emissions in less than 15 years [\[See reference 35\]](#).

4.48 In December 2018, the London Assembly declared a climate emergency, and called on the Mayor of London to do likewise and put in place specific emergency plans so that London is carbon neutral by 2030 [\[See reference 36\]](#). The Mayor declared a climate emergency shortly after the Assembly and set a target for London to be net zero-carbon by 2030.

4.49 London Borough Barking and Dagenham declared a climate emergency in 2019 [\[See reference 37\]](#). London Borough of Havering declared a climate and ecological emergency in 2023 [\[See reference 38\]](#). London Borough of Newham declared a climate emergency in 2019 [\[See reference 39\]](#). London Borough of Redbridge have an action plan to be carbon neutral by 2030 and carbon zero by 2050 [\[See reference 40\]](#).

Projected baseline information

4.50 UK Climate Projections 18 (UKCP18) for London identify the following main changes (relative to 1981-2000) to the climate by the end of the plan period (2038) [\[See reference 41\]](#):

- Increase in mean winter temperature by 0.9°C;
- Increase in mean summer temperature by 1.3°C;
- Increase in mean winter precipitation by 8%; and
- Decrease in mean summer precipitation by -9%.

4.51 The UK Climate Risk Independent Assessment (CCEA3) identifies likely trends from climate change and sets out 61 specific risks and opportunities to the UK from climate change, including the following [\[See reference 42\]](#):

Risks

- The number of incidents of food poisoning, heat stress and heat related deaths may increase in summer.
- Domestic energy use may increase during summer months as refrigeration and air conditioning demand increases.
- Wetter winters and more intense rainfall events throughout the year may result in a higher risk of flooding from rivers.
- More intense rainstorms may in some locations result in the amount of surface water runoff exceeding the capacity of drainage systems, consequently leading to more frequent and severe localised flash flooding.
- More frequent storms and floods may cause increased damage to property and infrastructure, resulting in significant economic costs.
- Periods of drought in summer could lead to soil shrinking and subsidence, causing damage to buildings and transport networks.

Drought may also impact negatively on agriculture, industry and biodiversity.

- Warmer and drier summers are likely to affect the quantity and quality of water supply, which will need careful management.
- The changing climate will impact on the behaviour and distribution of species and may encourage the spread of invasive species.

Opportunities

- Milder winters should reduce the costs of heating homes and other buildings, helping to alleviate fuel poverty and reducing the number of winter deaths from cold.
- Domestic energy use may decrease in winter due to higher temperatures.
- Warmer and drier summers may benefit the recreation and tourism economy.

Emissions and energy

Current baseline information

4.52 Carbon Dioxide (CO₂) is the main greenhouse gas, accounting for about 80% of the UK greenhouse gas emissions. Emissions are produced when fossil fuels such as coal or gas are burnt or processed. In recent years, increasing emphasis has been placed on the role of regional bodies and local government in contributing to energy efficiency improvements, and hence reductions in carbon dioxide emissions. In line with the wider UK, London has seen a decrease in CO₂ emissions in recent years. One of the main drivers for reduced levels of emissions has been a decrease in the use of coal for electricity generation, accounting for a decrease in emissions for domestic electricity.

4.53 The Government regularly publishes local authority and regional carbon dioxide emissions national statistics [See reference 43]. The statistics are largely consistent with the UK national Greenhouse Gas Inventory and with the Devolved Administration Greenhouse Gas Inventories. In London, CO₂ emissions have fallen from 6.2 tonnes (t) per capita to 3.2t per capita (equivalent to a 52% reduction) from 2005 to 2019. Emissions in each of the four London Boroughs are like those of London, falling steadily over the same period as demonstrated in **Table 4.4** (Total Emissions) and **Table 4.5** (Per Capita Emissions). It should be noted the figures in **Table 4.4** [See reference 44] and 4.5 [See reference 45] do not account for Land Use, Land Use Change and Forestry (LULUCF) figures. In 2020, LULUCF accounted for -60.8 kilotons (Kt) CO₂ emissions in London.

Table 4.7: CO₂ emissions estimates in the ELJWP area 2005-2019 (Kt)

Year	Barking and Dagenham	Havering	Newham	Redbridge
2005	935.7	1,320.9	1,471.7	1,147.4
2006	943.1	1,334.8	1,576.2	1,141.5
2007	931.5	1,276.9	1,554.4	1,117.2
2008	907.6	1,258.3	1,561.2	1,091.2
2009	825.1	1,164.4	1,495.4	1,018.6
2010	895.3	1,245.0	1,574.7	1,080.8
2011	811.5	1,125.2	1,464.8	1,008.5
2012	848.0	1,178.2	1,499.1	1,061.2
2013	816.0	1,158.2	1,481.9	1,025.0
2014	715.5	1,046.3	1,299.9	918.8
2015	685.8	1,025.5	1,242.1	889.4
2016	633.3	992.6	1,163.1	859.2

Year	Barking and Dagenham	Havering	Newham	Redbridge
2017	605.2	958.8	1,091.6	820.7
2018	590.3	963.6	1,066.3	823.6
2019	563.6	926.6	1,021.0	790.4

Table 4.8: CO2 emissions estimates in the ELJWP area (Kt per capita)

Year	Barking and Dagenham	Havering	Newham	Redbridge
2005	5.6	5.8	5.8	4.6
2006	5.6	5.8	6.1	4.5
2007	5.5	5.6	5.8	4.3
2008	5.3	5.4	5.6	4.1
2009	4.6	5.0	5.2	3.8
2010	4.9	5.3	5.3	3.9
2011	4.3	4.7	4.7	3.6
2012	4.4	4.9	4.7	3.7
2013	4.2	4.8	4.6	3.5
2014	3.6	4.3	4.0	3.1
2015	3.4	4.1	3.7	3.0
2016	3.0	3.9	3.4	2.9
2017	2.9	3.7	3.1	2.7
2018	2.8	3.7	3.0	2.7
2019	2.6	3.6	2.9	2.6

4.54 The Department for Business, Energy & Industrial Strategy (now split into Department for Business and Trade, the Department for Energy Security and Net Zero, and the Department for Science, Innovation and Technology) produced the following consumption figures for the East London Joint Waste Plan area in 2020 **[See reference 46]**

- **Coal** – a total of 3.3 kilo tonnes of oil equivalent (ktoe) predominantly through domestic use;
- **Manufactured fuels** – a total of 4.3ktoe predominantly through domestic use;
- **Petroleum** – a total of 2,639.3ktoe predominantly through road transport;
- **Gas** – a total of 5,302.5ktoe predominantly through domestic use;
- **Electricity** – a total of 2,940.2ktoe predominantly through industrial and commercial use; and,
- **Bioenergy and wastes** – a total of 156.2ktoe, predominantly through road transport.

4.55 Between 2005 and 2020 the total reported energy consumption for London fell from 338.7 to 291.3ktoe. The changes in consumption by energy type are shown in **Table 4.6**.

Table 4.9: Energy Consumption in London by type 2005-2020

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Coal	4.5	3.3
Manufactured fuels	5.6	4.3
Petroleum	3,225.1	2,639.3
Gas	6,865.8	5,302.5
Electricity	3,562.8	2,940.2
Bioenergy and wastes	18.2	156.2

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Total	13,682	11,385.8

Table 4.10: Energy Consumption in Barking and Dagenham 2005-2020

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Coal	0.2	0.1
Manufactured fuels	0.1	0.1
Petroleum	72.1	65.3
Gas	113.2	87.4
Electricity	67.4	48.5
Bioenergy and wastes	0.4	3.4
Total	253.4	204.8

Table 4.11: Energy Consumption in Havering by type 2005-2020

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Coal	0.1	0.1
Manufactured fuels	0.2	0.2
Petroleum	132.0	128.7
Gas	183.4	143.0
Electricity	75.9	64.7
Bioenergy and wastes	0.4	7.6

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Total	392.0	344.3

Table 4.12: Energy Consumption in Newham by type 2005-2020

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Coal	0.1	0.1
Manufactured fuels	0.2	0.1
Petroleum	100.4	86.2
Gas	242.8	176.8
Electricity	92.9	108.2
Bioenergy and wastes	0.3	4.7
Total	436.7	376.1

Table 4.13: Energy Consumption in Redbridge by type 2005-2020

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Coal	0.1	0.1
Manufactured fuels	0.1	0.1
Petroleum	105.1	96.2
Gas	187.9	151.1
Electricity	64.5	53.9
Bioenergy and wastes	0.3	5.3

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Total	358.0	306.7

Projected baseline information

4.56 The Tyndall Centre for Climate Change Research has undertaken work to calculate the ‘fair’ contribution of local authorities towards the Paris Climate Change Agreement. Based on the analysis undertaken the following recommendations have been made for London [\[See reference 47\]](#):

- Stay within a maximum cumulative carbon dioxide emissions budget of 203.5 million tonnes (MtCO₂) for the period of 2020 to 2100. At 2017 CO₂ emission levels, London would use this entire budget within 7 years from 2020.
- Initiate an immediate programme of CO₂ mitigation to deliver cuts in emissions averaging a minimum of -12.2% per year to deliver a Paris aligned carbon budget. These annual reductions in emissions require national and local action, and could be part of a wider collaboration with other local authorities.
- Reach zero or near zero carbon no later than 2043. This report provides an indicative CO₂ reduction pathway that stays within the recommended maximum carbon budget of 203.5 MtCO₂. At 2043 5% of the budget remains. This represents very low levels of residual CO₂ emissions by this time, or the Authority may opt to forgo these residual emissions and cut emissions to zero at this point. Earlier years for reaching zero CO₂ emissions are also within the recommended budget, provided that interim budgets with lower cumulative CO₂ emissions are also adopted.

4.57 Given the trends in carbon emissions and energy consumption at both national and local level, carbon emissions in London, and each of the four London Boroughs within the ELJWP area, are likely to continue declining.

Road travel and associated energy consumption

Current baseline information

4.58 CO₂ emissions in the UK are provisionally estimated to have increased by 6.3% in 2021 from 2020, to 341.5 million tonnes (Mt), however compared to 2019, the most recent pre-pandemic year, 2021 CO₂ emissions are down 5.0% [\[See reference 48\]](#). This increase in 2021 is primarily due to the increase in the use of road transport as nationwide lockdowns were eased, along with increases in emissions from power stations and the residential sector. CO₂ emissions from transport rose 10.0% in 2021, accounting for almost half of the overall increase from 2020 [\[See reference 49\]](#).

4.59 Road transport accounts for more than half of oil demand in the UK and relies on petrol and diesel to meet around 98% cent of its energy needs. This has implications for carbon emissions considering the regular need to travel for both residents and those undertaking business.

4.60 The overall road energy consumption in Inner London decreased between 2005 and 2021 from 999t of equivalent oil (ktoe) to 683.2ktoe. This change was most influenced by the decreasing energy consumption for personal road travel which fell during this period from 765.9ktoe to 487.3ktoe. During this period energy consumption recorded in Inner London for freight uses declined from 233.2ktoe to 195.9ktoe [\[See reference 50\]](#).

4.61 The overall road energy consumption in Outer London decreased between 2005 and 2021 from 1,798.1t of equivalent oil (ktoe) to 1621.6ktoe. This change was most influenced by the decreasing energy consumption for personal road travel which fell during this period from 1,374.4ktoe to 1,147.1ktoe. During this period energy consumption recorded in Inner London for freight uses rose slightly from 423.6ktoe to 474.5ktoe [\[See reference 51\]](#).

4.62 Recent trends across the UK indicate that diesel consumption excluding biodiesel fell in 2018 for the first time since 2009. The trend is due in part to a slowing of growth in the diesel vehicle fleet following sharp drops in new registrations as well as increased efficiencies. It is expected that the UK will diversify in road transport to include more electric and ultra-low emissions vehicles in the coming years [\[See reference 52\]](#). The Ultra Low Emission Zones (ULEZ) in London and across the UK are expected to continue to drive down emissions from the most polluting vehicles.

4.63 The ELJWP area benefits from good transport and connectivity to the central and Greater London, Essex, Thurrock, further afield to Hertfordshire and Cambridgeshire to the north. There is a significant road transport network across the area, including the A12, A13, A1020 and the A406, with easy access to the M25 and M11.

Projected baseline information

4.64 Growth in traffic levels may occur in London because of projected population growth and associated development needs. The UK Government aims to ban the sale of new petrol and diesel cars by 2030 [\[See reference 53\]](#) which will significantly cut carbon emissions across the UK. While the full effect of this will not be seen immediately as people continue to use their existing vehicles, the market share of electric cars in the UK is already significant and likely to continue growing rapidly.

Renewable and low carbon energy constraints and opportunities

Current baseline information

4.65 Published as part of the National Statistics publication Energy Trends produced by the Department for Business, Energy and Industrial Strategy (now by Department for Energy Security and Net Zero, Department for Science, Innovation and Technology, and Department for Business and Trade), data concerning renewable electricity generation, capacity and number of sites is available at Borough level between 2014 and 2021 **[See reference 54]**.

- In Barking and Dagenham capacity increased from 2.6 MW in 2014 to 11.9 MW in 2022, providing 6,668 MWh of electricity generation in 2022.
- In Havering capacity increased from 41.4 MW in 2014 to 49.7 MW in 2022, providing 129,870 MWh of electricity generation in 2022.
- In Newham capacity increased from 21.4 MW in 2014 to 44.0 MW in 2022, providing 41,824 MWh of electricity generation in 2022.
- In Redbridge capacity increased from 1.6 MW in 2014 to 6.0 MW in 2022, providing 4,730 MWh of electricity generation in 2022.

Projected baseline information

4.66 It is clear from existing trends that East London is significantly increasing its capacity to generate renewable and low carbon sources of energy, with scope to increase capacity further across of a range of technology types. If capacity continues to increase over the medium to long term, energy generation is also likely to significantly increase. Further renewable energy development may be constrained by lack of capacity in the national grid, currently affecting West London, and constraints on development within urban areas.

Flood risk

Current baseline information

4.67 The UK Climate Projections (UKCP18) predicts that by 2070, under a high emission scenario, average winter precipitation is projected to increase, whilst average summer rainfall is projected to decrease. Although summer rainfall is projected to decrease, there will be an increased frequency of short-lived high intensity showers [\[See reference 55\]](#).

4.68 All areas within the ELJWP will become more vulnerable to fluvial flooding, water supply deficiencies, as the local climate continues to change. The Thames Tidal Defences provides some protection to the ELJWP area. A network of tidal flood defences provides a very high standard of protection in the Thames Estuary. The network includes:

- 330 kilometres (km) of walls and embankments;
- 9 major barriers and gates, including the Thames Barrier; and
- over 400 other structures (including flood gates, outfalls and pumps).

4.69 [Figure 4.7](#) at the end of this chapter illustrates the main areas of flood risk across the ELJWP area.

4.70 Local flood risk assessments are summarised for each borough below:

- Barking and Dagenham: Following the 2007 nation-wide flood events, more consideration is being given to potential risks from surface water, groundwater and sewerage, however the key source of flood risk is fluvial and tidal flooding from the River Thames. The local flood management strategy seeks to manage those risks, working with other statutory and non-statutory partners, and raising awareness in local communities [\[See reference 56\]](#).

- Havering: Within Havering, the main areas of flood risk are tidal and fluvial, and generally limited to the southern part of the borough. Flood risk is concentrated around the River Thames, the River Beam and the Ingrebourne and their tributaries [\[See reference 57\]](#).
- Newham: Historic flooding within Newham has related to the Thames, the River Lea and the River Roding. Newham shares a boundary with the Thames to the south, and the greatest risk is from tidal surges occurring at high tides, or fluvial flooding in the upper catchment. [\[See reference 58\]](#)
- Redbridge: Within Redbridge, the main sources of flood risk are surface water flooding and fluvial flooding from the River Roding, the Cran Brook and Seven Kings water. The River Thames has a tidal effect on the River Roding [\[See reference 59\]](#).

Projected baseline information

4.71 As previously outlined in the ‘climate change predictions’ section of this chapter, the climate in London is expected to change, presenting a series of risks. These include wetter winters, more intense rainfall events and more frequent storms and floods, leading to increased damage to property and infrastructure and significant economic costs. The Environment Agency has provided ‘local flood risk assessments: climate change allowances’ [\[See reference 60\]](#) indicating climate change impacts on peak rainfall intensity and peak river flows.

4.72 Due to the geography of London and the proximity to the River Thames, flooding (including flash, fluvial and tidal flooding) is one of the greatest risks to the East London Boroughs from climate change. Climate change will likely result in sea level rise which could lead to more frequent flooding in the ELJWP area and impact communities, businesses and local authority services. Additionally, incidences of heavy rainfall are expected to continue to rise and will present challenges in terms of drainage and flood risk.

Implications for health

4.73 Climate change has potential for substantial implications on human health, including:

- Disruption to health, social care and emergency management services and schools provision, from flooding, heatwaves and storms.
- Flooding poses multiple risks to people's health, such as heart attacks, trauma, an increase in waterborne infectious diseases, and common mental and post-traumatic stress disorders. Damp housing and damage to water and sanitation infrastructure can further reinforce the adverse effects on health.
- Climate change may bring increases in both cold weather excess mortality and heat-related deaths and illness occurring in the summer. Excess heat represents a serious threat for the entire population, but the elderly and small children, and people with pre-existing cardiovascular, respiratory and renal diseases, diabetes and neurological disorders, are more susceptible. Urban areas tend to be at greater risk due to the "urban heat island" effect. The number of excess deaths in England resulting from heatwaves (excluding COVID-19) in 2022 was 2,803 for those aged 65 and over. Cumulative excess deaths resulting from heatwaves in summer 2022 was the highest recorded on record since the heatwave plan for England was introduced in 2004 **[See reference 61]**.
- Cases of food poisoning in the UK that are linked to warm weather have been increasing rapidly.
- Wildfire likelihood and severity set to increase due to climate change.
- The likely increase in occurrence of severe winter gales is a cause for concern. Deaths during severe gales are commonplace, as are severe injuries. The likely loss of electrical power supplies during severe storms adds very significantly to these problems. Better forecasting of gales and better design and more frequent exercising of disaster plans may well help to mitigate the worst effects.

Key sustainability issues and opportunities for the ELJWP to address them

4.74 There is a need to significantly reduce greenhouse gas emissions to help meet international and national greenhouse gas reduction targets. The ELJWP provides opportunities to help achieve this through:

- Encouraging energy efficiency measures in the construction and design of new buildings.
- Reducing carbon emissions from freight use by reducing the need to travel to process and dispose of waste, as well as supporting the use of low or zero emission transport modes, as discussed below in the section covering transport.
- Promoting green infrastructure within new waste sites to deliver carbon sequestration.

4.75 The effects of climate change in the ELJWP area are likely to result in extreme weather events becoming more common and more intense. Flood risk is of particular significance in this regard, alongside heatwaves and drought. Fluvial and surface water flooding poses the most significant risk to the plan area, particularly in areas in close proximity to the Thames river. The ELJWP provides an opportunity to help adapt to the unavoidable effects of climate change by:

- Locating development in locations with no or low flood risk.
- Encouraging flood and heat resilient development.
- Promoting on-site biodiversity net-gain, as well as links to green infrastructure to deliver flood retention, shading/ cooling, air quality improvements and safe havens for vulnerable species.
- The waste industry has the potential to contribute to climate change via the emission of greenhouse gases generated by the use of energy in processes and transportation involved in the industries. In 2019, the UK government set a legally binding target to achieve net zero greenhouse

gas emissions (GHG) by 2050. Correspondingly, each of the four Boroughs have declared a climate emergency and have set monitored targets to reduce emissions to aid in reaching this goal.

4.76 Areas across the four Boroughs, which are at higher risk of flooding now and, in the future, (e.g. low-lying land on the floodplain) are also often attractive for development. Despite policies in the NPPF and NPPW, the ELJWP could play a key role in ensuring sufficient weight is given to the risk of flooding from all sources and over time; and that new or expanded waste management facilities are directed towards areas with the lowest risk of flooding. Furthermore, the ELJWP could demand highly resilient design to address residual risks of flooding and to tackle flood risk vulnerabilities locally and elsewhere.

Population, health and wellbeing

Population

Current baseline information

4.77 In England, the population has continued to age. More than one in six people (18.4%) were aged 65 years and over on Census Day in 2021. This is an increase of 20.1% since 2011. This is a higher percentage than ever before. On average in London, the largest age group in 2011 was those aged 25 to 29 years. More recently, in 2021, the largest age group in London was those aged 30 to 34 years [\[See reference 62\]](#).

4.78 Within the East London area, Newham has seen the largest increase in people aged 65 years and over with an increase of 21.9%, followed by Redbridge with 13.5% and Havering with 9.3%. The only exception is Barking and Dagenham, which whilst it saw the second largest increase in population between 2011 and 2021 in London, saw a decrease of 1.7% in people aged 65

years and over [\[See reference 63\]](#). Barking and Dagenham has the highest birthrate in London, the highest percentage of children under 4 years old, and the highest number of under 15-year-olds in England [\[See reference 64\]](#)

4.79 In Barking and Dagenham, the population size has increased by 17.7% since the 2011 census, the second largest increase out of the London Boroughs. Similarly, Newham's population has grown by 14% (fourth largest), Redbridge by 11.2% (sixth largest) and Havering's population has increased by 10.4%, (eighth largest). These population increases are higher than the overall increase for London (7.7%). **Table 4.11** presents the most recent (2021) population changes by Borough in Barking and Dagenham, Havering, Newham and Redbridge [\[See reference 65\]](#).

4.80 As of 2021, Havering is the second least densely populated of London's 33 local authority areas with 2,332 people per km², Newham is the eighth, Redbridge is the 14th, and Barking and Dagenham is the 16th least densely populated.

Table 4.14: Population change in the ELJWP area from 2011-2021

Area	2011 Census	2021 Census
Barking and Dagenham	185,900	218,900
Newham	308,000	351,100
Havering	237, 200	262,000
Redbridge	279,000	310,300
Total	772,900	1,142,300

Projected baseline information

4.81 Each of the borough's populations have continued to grow over the last decade, and it is predicted that each of the Borough's populations will continue to grow. The London Plan predicts that the population of London is projected to increase by 70,000 every year, reaching 10.8 million in 2041, and East London will play a large role in providing for this growth [See reference 66]. The London Plan also states that over a fifth of London's population is under 16, but over the coming decades the number of Londoners aged 65 or over is projected to increase by 90%. This is reflected in the high growth of those that are over 65 in each Borough (excluding Barking and Dagenham) over the past decade, and it is predicted that this trend will continue.

4.82 As the population grows so do the Borough's respective population densities. On average, the four Boroughs of East London have a slightly higher population density of 58.96 population per hectare than the London average of 55.96 population per hectare [See reference 67]. The greater the population density the greater the challenge to ensure that each Borough's communities have the quality of life, facilities and services and infrastructure they need, including public and private open space. However, increased population density can have both positive and negative effects in sustainable development terms, depending upon how it is designed and delivered (indeed, some of the most attractive and desirable parts of cities and towns in the UK and abroad are often those areas that are most densely developed).

Housing

Current baseline information

4.83 London's average house prices remain the most expensive of any region in the UK, with an average price of £537,000 in September 2023 and an annual inflation rate of negative 1.1% in the 12 months to September 2023. London's annual inflation slowed in September 2023 because London prices decreased

(negative 0.3%) between August and September 2023, while prices increased between the same months last year [\[See reference 68\]](#).

4.84 As of August 2023, Redbridge has the highest average house prices out of the four Boroughs (£467,406) and Barking and Dagenham has the lowest average house prices (£351,021) out of the four Boroughs and London as a whole. The average for the East London area is £411,487, which is lower than the London average [\[See reference 69\]](#).

4.85 The London Plan contains 10-year targets for net housing completions from 2019/20 up to 2028/29. This includes a total of approximately 52,000 homes per year over ten years. In 2017, the Strategic Housing Market Assessment identified that London needs around 66,000 net new homes a year to meet its housing need. This includes a target of 19,440 for Barking and Dagenham, 12,850 for Havering, 47,600 for Newham (including the area currently administered by the LLDC) and 14,090 for Redbridge. To date, Barking and Dagenham has achieved 4,636 completions since 2019/20, Havering has achieved 3,430, Newham has achieved 6,655 [\[See reference 70\]](#) and Redbridge has achieved 2,156. None of the four Boroughs have achieved the London Plan target housing delivery goal for over five years. Most recently, Newham surpassed their target of 1,994 dwellings by 38 in 2016/17. The average percentage across each East London Borough since 2019/20 is 66%. Havering has achieved the highest rate of delivery by achieving 79% of its housing delivery target whilst Redbridge has achieved the lowest with 45% [\[See reference 71\]](#).

4.86 The GLA's residential completions dashboard demonstrates that London is falling behind its housing completion targets. As a whole, London has failed to reach its housing delivery targets for the last seven years, although delivery did reach 103% in 2017/18. Since then, the average percentage of completions of target across London has been 76.8%. London was the worst-performing region in the Housing Delivery Test 2022. Fewer than half of London boroughs delivered more than 95% of their appropriate housing requirement for the test over the three-year monitoring period.

4.87 London's housing affordability challenge is the worst in the country, facing almost double the house price to earnings ratio compared to the rest of England, and a significantly more unaffordable private rented sector. Over the last 20 years, affordability has worsened in London more than anywhere else in the country, driven largely by house prices increasing faster than earnings [\[See reference 72\]](#).

4.88 From 2015 to the end of March 2023, there have been 55,027 affordable housing completions, relating to the 116,782 homes that were started under the AHP 2016-23. This leaves 61,755, out of the 116,782 starts, to complete. There were 1,261 homes started and also completed in 2015-16. In 2022-23, 13,949 homes were completed; this represents the highest number of completions in one year. There is no target set for when all 116,782 homes started under the AHP 2016-23 will be completed [\[See reference 73\]](#).

4.89 Between 2016-17 to 2022-23, Newham had the second highest number of affordable housing completions in London, with 4,709. The remaining East London Boroughs achieved significantly less, with Barking and Dagenham completing 2013 new affordable homes, Havering achieve 914 and Redbridge just 709 [\[See reference 74\]](#).

4.90 The London Plan suggests that the boroughs are best placed to assess the needs and make provision for Gypsy and Travellers through new pitch provision, protection or enhancement of existing pitches, or by other means. The London Plan 2021 requires each London Borough to provide for a set amount of gypsy and traveller accommodations, based on the midpoint projections of the 2007 assessment. The London Plan provisions are to be used as a starting point dependant on whether or not a more up-to-date assessment has been carried out at the Borough level.

4.91 Following the judgment in the Court of Appeal in the case of Smith v SSLUHC & Ors [\[See reference 75\]](#), the government has reverted to the definition of Gypsies and Travellers used in the Planning Policy for Travellers Sites to that adopted in 2012, with this change applying from 19 December 2023, for plan and decision making. The Gypsy and Traveller Accommodation

Assessment (GTAA) for each borough, considers the definition of Gypsies and Travellers that was in place at the time the assessment was prepared. There are likely to be further changes to national policy and guidance in 2024.

4.92 The Havering GTAA (2018) provides a robust assessment of current and future need for Gypsy, Traveller and Travelling Showperson accommodation in the borough up to 2031. The Assessment identifies a need for 70 additional pitches for the Gypsy and Traveller households who meet the planning definition as set out in the National Planning Policy for Traveller Sites. Of the 70 pitches needed, 57 pitches are required within the first 5-year period of the Plan (2016 – 2021), and the remaining 13 pitches in the latter part of the plan period. No additional need has been identified for plots for Travelling Showpeople over the 15-year plan period (2016-2031) [See reference 76](#). In Barking and Dagenham there is a need for 24 pitches over the period to 2034 for Gypsy and Traveller households [See reference 77](#). In Newham, the borough has identified a need for 23 pitches for households that meet the 'planning definition' [See reference 78](#). In Redbridge, there is no need for additional pitches [See reference 79](#).

Projected baseline information

4.93 The joint interim report by the London Housing Directors' Group and G15 [See reference 80](#) examines the barriers to housing delivery in London, particularly for affordable housing. The report highlights the extent of market failure in London's housing sector and the affordability challenge that has been created because of housing undersupply. The key findings are:

- Housing completions will average 43,000 per year over the period 2021-2025, compared to the London Plan target of 52,000 homes per year, with around 30% expected to be affordable or intermediate housing. Analysis suggests the actual need may be nearer 100,000 new homes per year, including 42,500 affordable homes.
- London requires 90,000-100,000 homes with at least 42,500 affordable homes required in London per year, compared to the London Plan target

of 52,000 homes per year. This compares to an average of 7,900 affordable homes delivered annually since 2015/16.

- A forecast of future supply against demand shows that the largest supply shortfall over the next five years will be in the lower mainstream market segment below £450 pound per square foot (psf) and in the sub-market rent segment, demonstrating the market's failure to deliver an adequate supply of homes that are affordable to low and middle-income households.
- London's affordability challenge is much starker than elsewhere in the country and the need for affordable housing greater. Average house prices in the capital are 93% higher than the UK average compared to wages that are just 49% higher, with a house price to earnings ratio in London of 12.5, compared to the national average of 7.7. Based on affordability alone, the annual need for additional affordable housing in London is 7.6 times greater than supply, compared to 2.6 in England.
- The boroughs have seen significant increases in homelessness, in part as a consequence of increasing costs resulting from under-supply, with 24,630 households owed a homelessness relief duty by a London borough in 2019/20 compared to 10,180 homelessness acceptances in 2010/11.

4.94 The four borough's strategies for housing growth are set out below.

- Barking and Dagenham aim to deliver more than 40,000 dwellings between 2024 and 2037 **[See reference 81]**. Growth is focussed in:
 - Barking and the River Roding;
 - Thames Riverside;
 - Dagenham Dock, Freeport;
 - Becontree and Heathway;
 - Chadwell and Marks Gate;
 - Becontree Heath and Rush Green; and
 - Dagenham East and Village.

- Havering aim to deliver a minimum of 18,930 dwellings over the adopted plan period (2016 to 2031) to meet an increased population of over 293,000 people. Growth will be focussed in Romford town centre and the Rainham and Beam Park area, in conformity with the London Plan [\[See reference 82\]](#).
- Newham aim to deliver 43,000 dwelling across the plan area between 2018 and 2033 [\[See reference 83\]](#). Growth is focussed in community neighbourhoods, and strategic sites in the following areas:
 - Stratford and West Ham;
 - Royal Docks;
 - Custom House and Canning Town;
 - Beckton;
 - Urban Newham – Forest Gate;
 - Urban Newham – East Ham: and
 - Urban Newham – Green Street.
- Redbridge aims to deliver a minimum of 16,845 new dwellings between 2015 and 2030 by prioritising housing delivery in:
 - Investment and Growth Areas of Ilford;
 - Crossrail Corridor;
 - Gants Hill;
 - South Woodford; and
 - Barkingside [\[See reference 84\]](#).

Health

Current baseline information

4.95 Health is a cross-cutting topic and as such many topic areas explored in this Scoping Report influence health either directly or indirectly.

4.96 The Office of National Statistics (ONS) have created an index that gives every local area in England an overall health score for each of the past six years. This overall score is made up of measures in different categories, called domains and subdomains. These measures include physical and mental health conditions like diabetes or anxiety, local unemployment, road safety, and behaviours like healthy eating [\[See reference 85\]](#).

4.97 This score can show whether health in a local area is improving. The Health Index score has a baseline of 100, which represents England's health in 2015. A score higher than 100 means that an area has better health for that measure than was average in 2015, lower than 100 means worse health than the 2015 average. In 2021, the four East London Boroughs scores were as follows:

- Barking and Dagenham – 93.8
- Havering – 104.2
- Newham – 93.6
- Redbridge – 100.1

General health trends in Barking and Dagenham

4.98 Barking and Dagenham has an overall Health Index score of 93.8, which is up 1.5 points compared with the previous year, however, Barking and Dagenham ranked in the bottom 20 percent of local authority areas in England for health in 2021.

4.99 Barking and Dagenham's best score across all subdomains is 132.2 for health relating to "physical health conditions". "Physical health conditions" looks at cancer, cardiovascular conditions, dementia, diabetes, kidney and liver disease, musculoskeletal conditions, and respiratory conditions.

4.100 The second highest scoring subdomain is "mental health", while Barking and Dagenham's worst score is for "protective measures".

General health trends in Havering

4.101 Havering has an overall Health Index score of 104.2, which is down 2.7 points compared with the previous year. Havering ranked around average among local authority areas in England for health in 2021.

4.102 Havering's best score across all subdomains is 114.6 for "mental health". "Mental health" looks at children's social, emotional and mental health, mental health conditions, self-harm, and suicides. Self-harm figures are counted through hospital admissions and so not all cases are recorded. During the coronavirus pandemic, people may have been less likely to seek help at hospital because of fears of infection or overwhelming services. Suicides per area are based on a three-year period, so these figures show longer-term trends rather than a change year to year. Suicide registrations were also affected by inquest delays in 2020.

4.103 The second highest scoring subdomain is "physical health conditions", while Havering's worst score is for "physiological risk factors".

4.104 Havering's score for "physical health conditions" fell from 116.8 in 2020 to 108.2 in 2021. This means Havering went from being among the best 10% of local authority areas to being among the best 30% across England for this subdomain.

4.105 The change was largely because of an increase in diabetes (the index worsened by 15.9 points) and an increase in cardiovascular conditions (the index worsened by 9.6 points).

General health trends in Newham

4.106 Newham has an overall Health Index score of 93.6, which is up 0.3 points compared with the previous year. Newham ranked in the bottom 20 percent of local authority areas in England for health in 2021.

4.107 Newham's best score across all subdomains is 123.0 for health relating to "difficulties in daily life".

4.108 "Difficulties in daily life" looks at disability and frailty. "Frailty" measures hospital admissions as a result of a hip fracture in those aged 65 years and over. Figures may have been affected by higher mortality rates in frailer people during the pandemic, or people being less exposed to injury while less active and staying at home.

4.109 The second highest scoring subdomain is "mental health", while Newham's worst score is for "physiological risk factors" declining from 72 in 2015 to 60 in 2021.

General health trends in Redbridge

4.110 Redbridge has an overall Health Index score of 100.1, which is down 1.4 points compared with the previous year. Redbridge ranked around average among local authority areas in England for health in 2021.

4.111 Redbridge's best score across all subdomains is 119.4 for "mental health". "Mental health" looks at children's social, emotional and mental health, mental health conditions, self-harm, and suicides.

4.112 Self-harm figures are counted through hospital admissions and so not all cases are recorded. During the coronavirus pandemic, people may have been less likely to seek help at hospital because of fears of infection or overwhelming services. Suicides per area are based on a three-year period, so these figures show longer-term trends rather than a change year to year. Suicide registrations were also affected by inquest delays in 2020.

4.113 The second highest scoring subdomain is "physical health conditions", while Redbridge's worst score is for "protective measures".

Life expectancy

4.114 In the UK, there has been a steady increase in life expectancy for both men and women for the first decade of the 2000s. However, in the last 10 years the trend has levelled off. **Table 4.12** sets out the average life expectancy across the four East London Boroughs, for 2021, and the average across 2018 to 2020.

Table 4.15: Life expectancy by London Borough

Borough	Male 2018 to 2020	Male 2021	Female 2018 to 2020	Female 2021
Barking and Dagenham	77.0	75.6	81.7	80.3
Havering	79.7	79.0	83.5	82.9
Newham	79.0	75.8	83.1	80.7
Redbridge	80.5	78.9	84.6	83.2

4.115 Across East London, the lowest life expectancy at birth in 2021 was 75.6 for males and 80.3 for females. The highest life expectancy at birth in 2021 was 79.0 for males and 83.2 for females. Life expectancy for women is almost 3

years lower in London Borough of Barking and Dagenham than in London Borough of Redbridge, and almost 4.5 years lower for men.

Obesity

4.116 Being overweight or obese carries numerous health risks, including increased likelihood of type 2 diabetes, cancer, heart and liver disease, stroke and related mental health conditions. It is estimated this health issue places a cost of at least £5.1 billion on the NHS and tens of billions on wider UK society every year. Obesity in adults in London is slightly lower than England as a whole, although over half of adults in London are classified as overweight or obese.

4.117 There is also a high level of obesity amongst children in the London. In 2021/22 by Year 6 25.8% of children are classified as overweight or obese. This is worse than England average of 22.7%. Within East London, Barking and Dagenham has the highest level of obesity amongst Year 6 children at 33.2% in 2021.

- Havering: 24.6%
- Newham 32.0%
- Redbridge: 27.9% [\[See reference 86\]](#).

Mental health and perception of wellbeing

4.118 National research highlights that good emotional and mental health is fundamental to the quality of life. As set out in [Table 4.13](#), residents in East London had broadly similar responses in comparison to England on a national scale out of ten (7.55, 7.78, and 7.45 respectively) during the 2021/22 period [\[See reference 87\]](#).

Table 4.16: Perception of Wellbeing 2021/22 by Borough

Borough	Life Satisfaction	Happiness	Sense that life is worthwhile
Barking and Dagenham	7.6	7.8	7.8
Havering	7.6	7.8	7.4
Newham	7.7	7.8	7.7
Redbridge	7.6	7.5	7.3

Social isolation/loneliness

4.119 The ONS mapped loneliness rates by local authorities between October 2020 to February 2021 during the COVID-19 pandemic. Areas with higher concentrations of younger people and higher rates of unemployment tended to have higher rates of loneliness during the study period. Across the UK, local authorities in more urban areas had a higher loneliness rate than rural, industrial, or other types of areas. In the London, 7.3% of the adult population reported they ‘often or always’ felt lonely. This was slightly higher than the British average of 7.2% [\[See reference 88\]](#). Within the East London Boroughs, Newham and Redbridge had relatively low levels of the adult population reporting they ‘often or always’ felt lonely at 4.53% and 4.73% respectively. This contrasts with the reported levels within Barking and Dagenham (11.25) and Havering (8.8%).

COVID-19

4.120 The COVID-19 pandemic highlighted health inequalities nationally, including the differences in people’s health and well-being that result from the conditions in which they are born, grow, live, work and age. For example, the pandemic has impacted social and community networks, showing that lack of social contact has a detrimental impact on mental health (causing or facilitating

anxiety and depression). It also had a negative impact on individual lifestyle factors such as lack of exercise and unhealthy diet, causing other health issues.

Projected baseline information

4.121 Given that London has performed poorly for some health indicators against regional and national averages, it is likely it will continue to do so without substantial intervention. There are a range of potential changes in determinants that will affect health in the UK and London in the future including climate change. Summers are expected to become hotter, and overheating may increase the excess mortality rate for vulnerable groups.

Access to services and facilities

Current baseline information

4.122 Services and facilities include hospitals and GPs, recreational resources, food retailers, employment and education centres, and other aspects of social infrastructure such as community centres and places of worship. Good and equitable accessibility and the provision of sufficient community facilities is a vital part of development's role in improving the health and well-being of a community.

4.123 The London Borough of Newham produced a Community Facilities Needs Assessment in 2021 [\[See reference 89\]](#). The study covers the whole of the borough, including the area currently covered by the London Legacy Development Corporation (LLDC), to form an evidence base and set of recommendations to inform the Local Plan review, specifically Policy INF8: Community Facilities. In addition, the evidence will enable LBN to make informed decisions about the spatial approach and location of community facilities as well as the detail in the borough's Site-Specific Allocations (SSA).

4.124 The most recent Department for Transport ‘journey time statistics’ [See reference 90] demonstrates the average journey time taken to reach the nearest key services (employment centres, primary and secondary schools, further education, GPs, hospitals, food stores and town centres) across local authorities. The average times taken to reach the nearest key services in each of the ELJWP London Boroughs are broadly the same or slightly higher than their regional and comparisons [See reference 91] as set out in Table 4.14 below.

Table 4.17: Average journey times to key services (minutes)

Location	Public Transport/ walking	Cycle	Car	Walking
Inner London	10.0	9.1	8.0	11.6
Outer London	13.2	10.9	8.9	17.1
Barking and Dagenham	12.7	10.8	8.8	16.6
Havering	15.1	12.0	9.5	20.5
Newham	10.7	9.4	7.8	12.5
LB Redbridge	12.6	10.6	8.7	15.6

4.125 Along with being physically available, support services need to provide people with a positive experience to promote uptake and engagement for early intervention and reducing or delaying development of additional health and care needs in the longer term. In London, fewer patients have a good experience in making a GP appointment overall. The rate had been falling over recent years, to the lowest in 2020 which likely had been impacted by changes resulting from the pandemic as improvements have been seen in reported experience lately and have surpassed levels seen in most recent years.

Projected baseline information

4.126 Access to key services and facilities could become more challenging as the population in the four London Boroughs continues to grow, if this results in insufficient capacity in the nearest services. As the population ages, this may result in a larger proportion of the plan area's population not having access to key services that are only readily accessible by car.

Open spaces

Current baseline information

4.127 In 2012, the NPPF introduced a new concept of a Local Green Space designation. The Local Green Space designation provides communities with a way to place special protection against the development of green areas of particular importance to them.

4.128 Barking and Dagenham has ambitions to be the 'Green Capital of the Capital' as set out in the Regulation 19 submission Local Plan [\[See reference 92\]](#). One third of the borough is green open space (463 hectares) and the borough is in close proximity to Epping Forest.

4.129 More than 50% of Havering is classed as Metropolitan Green Belt, and the borough has some of the most green space in London. The town centre in Romford has a lack of green space although it is within walking distance of a number of local parks. This mirrors other areas of the borough where, if there is a lack of one type of open space it is often met by another type of open space. There is generally a good coverage of parks, gardens, natural and semi natural spaces and amenity greenspaces across the borough.

4.130 Newham has an extensive network of natural and open areas, encompassing not only nature reserves, parks, and rivers but also playgrounds,

playing fields, allotments, gardens, hedges, green walls, green/brown roofs, cycle and footpaths, street trees, docks, lakes, and ponds. Specifically, Newham has 101 parks and gardens, and amenity greenspace which, along with natural and semi-natural greenspaces and sports facilities total approximately 254.72 ha of publicly accessible green space. However, the Borough has 16% tree cover which is the second lowest in London [See reference 93]. There are deficiencies in local and district park access, the former in Urban Newham, and the latter particularly in the east and west of the borough.

4.131 Redbridge, one of London's greenest boroughs, comprises extensive Green Belt land (37% of total area) to the north-east. About 48% of the borough comprises open spaces, including notable locations like Hainault Forest Country Park, Roding Valley Park, Fairlop Waters Country Park, Valentines Park, and around 120 hectares of countryside. These open spaces, including country parks and formal parks, contribute to the borough's character, biodiversity, and climate change mitigation efforts.

Projected baseline information

4.132 Development pressure could lead to the loss of some existing open space and sports/recreation facilities while projected population increases are likely to increase demand for such facilities.

Crime

Current baseline information

4.133 In the year ending July 2022, there was an average of 20 to 25 police recorded crimes per 1,000 population in London [See reference 94].

4.134 According to Police UK [See reference 95], crime in the each of the four Boroughs is lower than the London average, except for Havering although crime rates are increasing.

Projected baseline information

4.135 Crime rates are influenced by so many variables that it is very difficult to anticipate future trends. Spatial variation that currently exists in relative crime deprivation across the plan area is likely to remain for the foreseeable future, and for the most part will likely mirror overall deprivation trends.

Deprivation

Current baseline information

4.136 Poverty impacts upon entire families and has significant impacts on health, education, skills and life chances. Efforts to lift people out of poverty is a challenge, especially as it is linked to so many other factors such as income levels, cost of living and family size. The Indices of Multiple Deprivation (IMD) 2019 [See reference 96] provide comparison data down to the postcode level. **Figure 4.4** at the end of this chapter shows the IMD across the ELJWP area.

Barking and Dagenham

4.137 In Barking and Dagenham, 19.4% of the population was income-deprived in 2019, making the area the 20th most income-deprived local authority in England, excluding the Isles of Scilly. There are 110 neighbourhood areas within LBBD, and 49 of those are within the 20% most deprived in England. No neighbourhoods within LBBD are within the 20% least deprived in England.

Havering

4.138 In Havering, 10.8% of the population was income-deprived in 2019, making the area the 160th most income-deprived local authority in England, excluding the Isles of Scilly. There are 150 neighbourhood areas within LBH, and 14 of those are within the 20% most deprived in England. Thirty-two neighbourhoods within LBH are within the 20% least deprived in England.

Newham

4.139 In Newham, 16% of the population was income-deprived in 2019, making the area the 43rd most income-deprived local authority in England, excluding the Isles of Scilly. There are 164 neighbourhood areas within LBN, and 38 of those are within the 20% most deprived in England. Four neighbourhoods within LN are within the 20% least deprived in England.

Redbridge

4.140 In Redbridge, 12.1% of the population was income-deprived in 2019, making the area the 131st most income-deprived local authority in England, excluding the Isles of Scilly. There are 161 neighbourhood areas within LBR, and 11 of those are within the 20% most deprived in England. Fifteen neighbourhoods within LBR are within the 20% least deprived in England.

4.141 **Figure 4.4** at the end of this Chapter illustrates the range and distribution of deprivation across the Borough.

Projected baseline information

4.142 There are disparities in the level of deprivation across all four boroughs and within each borough. The GLA and each of the boroughs have strategies to

address inequalities over time but there are uncertainties if current trends will continue over time.

Equalities

Current baseline information

4.143 The Equality Act 2010 identifies nine ‘protected characteristics’ and seeks to protect people from discrimination based on these characteristics. It presents three main duties: to eliminate discrimination, harassment, victimisation and other conduct that is prohibited under the Act; to advance equality of opportunity between persons who share relevant protected characteristics and persons who do not share it; and to foster good relations between persons who share a relevant protected characteristic and persons who do not share it. The nine protected characteristics identified through the Act are:

- Age: Children (0-4), Younger people (aged 16-24), older people (aged 65 and over);
- Disability: Disabled people, people with physical and mental impairment;
- Gender reassignment;
- Marriage and civil partnership;
- Pregnancy and maternity;
- Race;
- Religion or belief;
- Sex; and
- Sexual orientation.

4.144 The data referred to below was collected in the 2021 UK Census.

Age

4.145 The latest dataset relates to the 2021 UK Census [\[See reference 97\]](#). The 2021 Census suggests that across London, the age profile has changed very little since 2011 and remains younger than the broader national average. In relation to the four London Boroughs, the Boroughs of Barking and Dagenham, Newham, and Redbridge have all seen minimal increases in their median age, whilst Havering has seen a decrease by one year, from 40 to 39 years of age.

4.146 The age protected characteristic is split into three. For children up to four years old, the following applies to each of the four London boroughs:

- In Barking and Dagenham, the percentage of children aged 4 and below showed a decrease from 10.0% in 2011, to 7.9% in 2021.
- In Havering, the percentage of children aged 4 and below rose from 5.8% in 2011 to 6.3% in 2021.
- In Newham, the percentage of children aged 4 and below showed a decrease of 1.4%, between 2011 and 2021, from 8.2% to 6.8%.
- In Redbridge, the percentage of children aged 4 and below decreased from 7.8% in 2011 to 6.8% in 2021.

4.147 For younger people aged from 16 to 24 years old:

- In Barking and Dagenham, the percentage of younger people aged 16 – 24 displayed a slight decrease from 12.4% in 2011 to 11.4% in 2021.
- In Havering, the proportion of younger people aged 16 – 24 also showed a decrease of from 11.5% in 2011 to 9.7% in 2021, signifying a 1.8% decrease.
- In Newham, the percentage of younger people aged 16 – 24 displayed a decrease from 15.9% in 2011, to 13.2% in 2021.
- In Redbridge, the percentage of younger people aged 16 – 24 displayed a decrease from 23.9% in 2011, to 21.1%.

4.148 Older people (65 and over):

- In Barking and Dagenham, the percentage of older people, aged 65 and above displayed a decrease of 1.7% between 2011 and 2021, from 10.4% in 2011 to 8.7% in 2021.
- In Havering, the percentage of older people aged 65 and above presented a slight decrease between 2011 and 2021, from 17.9% in 2011 to 17.7% in 2021.
- In Newham, the percentage of older people aged 65 and above showed a small increase of 0.4%, between 2011 and 2021, from 6.7% in 2011 to 7.1 in 2021.
- In Redbridge, the percentage of older people aged 65 and above displayed a slight increase from 11.9% in 2011, to 12.2%.

Disability

4.149 Disabled people and people with physical and mental impairment:

- In Barking and Dagenham, in 2021 17.9% of the population identified as having a disability. Of this, 9% of the population reported significant limitations due to disability, whilst 8.9% reported minor limitations. This marks a 5.2% decrease from 2011, when 23.1% of the population identified as having a disability.
- In Havering, 15.3% of the population identified as having a disability in 2021. Of this, 6.6% of the population reported significant limitations due to disability, whilst 8.7% reported minor limitations. This marks a 2.6% decrease from 2011, when 17.9% of the population identified as disabled, with 8.5% reported significant limitations due to disability, and 9.4% of the population reported minor limitations.
- In Newham, 9.1% of the population identified as disabled and limited a lot in 2021. This represents a 4.4% decrease from 13.5% in 2011. In 2021, 8.4% identified as disabled and limited a little, representing an increase from 11.2% in 2011.

- In Redbridge, 14.6% of the population identified as having a disability in 2021. Of this, 6.7% of the population reported significant limitations due to disability, whilst 7.9% reported minor limitations. This marks a 4.8% decrease from 2011, when 19.4% of the population identified as disabled, with 9.3% reported significant limitations due to disability, and 10.1% of the population reported minor limitations.

4.150 Concerning mental health, the London Boroughs of Barking and Dagenham, Havering, and Redbridge have a relatively small percentage of the adult population experiencing severe mental illnesses (SMI), including schizophrenia, bipolar affective disorder and other psychoses. Rates of SMI are lower than the national average in all three boroughs – nevertheless more than 6,800 people have a SMI [\[See reference 98\]](#). In Newham [\[See reference 99\]](#), the rate of mental health issues are higher in lower age groups than in older people.

Marriage and civil partnership

4.151 From the 2021 census data, the percentage of people married or in a civil partnership across England fell from 46.8% to 44.7%. During the same period, the London percentage fell from 40.2% to 40.0%.[\[See reference 100\]](#).

- In Barking and Dagenham, the percentage of people married (or in a civil partnership) rose from 42.1% in 2011 to 42.8% in 2021. The percentage of adults who had never married or registered a civil increased from 38.8% to 41.8%, while the percentage of adults who had divorced or dissolved a civil partnership decreased from 8.7% to 8.1%.
- In Havering, the percentage of people married (or in a civil partnership) declined slightly from 48.6% in 2011 to 47.0% in 2021. The proportion of people aged 16 years and over who had never been married or in a civil partnership rose from 33.0% in 2011 to 36.9% in 2021, and the percentage of adults who had divorced or dissolved a civil partnership declined from 8% to 7.8%.
- In Newham, the percentage of people married or in a civil partnership, was almost the same in 2021 as 2011, at 40.8% and 40.7% respectively. The

percentage of adults in Newham that had divorced or dissolved a civil partnership was 6.2% in 2011 and 2021. The proportion of people aged 16 years or over who had never been married or in a civil partnership rose from 45.2% in 2011 to 47.1% in 2021.

- In Redbridge, the percentage of people married (or in a civil partnership) rose slightly from 50.5% in 2011 to 51.1% in 2021. The proportion of people aged 16 years or over who had never been married or in a civil partnership rose from 34.6% in 2011 to 35.9% in 2021. the percentage of adults who had divorced or dissolved a civil partnership decreased slightly from 6.2% in 2011 to 6.1% in 2021.

Pregnancy and maternity

4.152 The total fertility rate (TFR) for England was 1.62 children per woman in 2021, increasing from 1.59 in 2020, an increase of 1.9%. In London the TFR was 1.52 children per women in 2021, a small decrease from 1.54 in 2020 **[See reference 101]**.

- In Barking and Dagenham, there were a total of 3,255 births in 2021, with a TFR of 2.04 children per woman, decreasing from 2.16 in 2020
- In Havering, the TFR rate was 1.66 in 2021, with a total of 3,057 births. This is a minimal decrease from 1.71 2020.
- In Newham, there were a total of 5, 346 births in 2021, with a TFR of 1.8 children per woman. This represents a small decrease from a TFR of 1.85 children per woman in 2020.
- In Redbridge, the TFR was 1.99 in 2021, with a total of 4,275 births. This is a minimal decrease from the TFR of 2.01 in 2020.

Ethnicity

4.153 Across London, the percentage of people from the "Asian, Asian British or Asian Welsh" ethnic group increased from 18.5% in 2011 to 20.7% in 2021,

while across England the percentage increased from 7.5% to 9.3% [\[See reference 102\]](#).

■ Barking and Dagenham:

- 25.9% of Barking and Dagenham residents identified their ethnic group within the "Asian, Asian British or Asian Welsh" category in 2021, compared with 15.9% in 2011.
- 44.9% of people in Barking and Dagenham identified their ethnic group within the "White" category in 2021, compared with 58.3% in 2011.
- 21.4% identified their ethnic group within the "Black, Black British, Black Welsh, Caribbean or African" category in 2021, compared with 20.0% the previous decade
- 4.3% identified their ethnic group within the "Mixed or Multiple" category in 2021, increased from 4.2% in 2011.

■ Havering:

- 10.7% of Havering residents identified their ethnic group within the "Asian, Asian British or Asian Welsh" category in 2021, up from 4.9% in 2011.
- 75.3% of people in Havering identified their ethnic group within the "White" category, in 2021, compared with 87.7% in 2011.
- 8.2% of Havering residents identified their ethnic group within the "Black, Black British, Black Welsh, Caribbean or African" category in 2021, compared with 4.8% in 2011.
- 3.7% identified their ethnic group within the "Mixed or Multiple" category in 2021, increased from 2.1% in 2011.

■ Newham:

- 42.2% of people in Newham identified their ethnic group within the "Asian, Asian British or Asian Welsh" category in 2021, compared with 43.5% in 2011.
- 30.8% of Newham residents identified their ethnic group within the "White" category, in 2021 up from 29.0% in 2011.

- 17.5% identified their ethnic group within the "Black, Black British, Black Welsh, Caribbean or African" category in 2021, compared with 19.6% in 2011.
- The percentage of residents that % identified their ethnic group within the "Mixed or Multiple" category has remained reasonably constant, from 4.5% in 2011 to 4.7% in 2021.

■ Redbridge

- 47.3% of Redbridge residents identified their ethnic group within the "Asian, Asian British or Asian Welsh" category in 2021, compared with 41.8% in 2011, representing a 5.5% change which was the largest increase among high-level ethnic groups in this area.
- 34.8% of people in Redbridge identified their ethnic group within the "White" category in 2021, compared with 42.5% in 2011.
- The percentage of residents that identified their ethnic group within the "Black, Black British, Black Welsh, Caribbean or African" category in Redbridge has remained largely constant, from 8.4% in 2021, compared with 8.9% the previous decade

4.154 The percentage of residents that identified their ethnic group within the "Mixed or Multiple" category has remained the same from 2011 to 2021, standing at 4.1%.

Religion and belief

4.155 As religion is self-reported in the census, caution is needed when comparing data across areas and between each census. In London, the percentage of residents who described themselves as Muslim increased from 12.6% to 15.0% between 2011 and 2021, while across England the percentage increased from 5.0% to 6.7% [\[See reference 103\]](#).

■ Barking and Dagenham:

- 24.4% of residents described themselves as Muslim in 2021, up from 13.7% in 2011.

- 45.4% of residents described themselves as Christian in 2021, down from 56.0% in 2011.
- 18.8% of residents reported having "No religion" in 2021, down from 18.9% in 2011.
- Havering:
 - 6.2% of residents described themselves as Muslim in 2021, up from 2.0% in 2011.
 - 52.2% of residents described themselves as Christian in 2021, down from 65.6% in 2011.
 - 30.6% of residents reported having "No religion" in 2021, up from 22.6% in 2011.
- Newham:
 - 34.8% described themselves as Muslim in 2021, up from 32.0% in 2011.
 - 35.3% of people in Newham described themselves as Christian in 2021, down from 40.0% in 2011.
 - 14.5% of Newham residents reported having "No religion" in 2021, up from 9.5% in 2011
- Redbridge
 - In 2021, 31.3% of Redbridge residents described themselves as Muslim, making it the most common response in this local authority area. This marks an 8% increase from 23.3% in 2011.
 - 30.4% of people in Redbridge described themselves as Christian in 2021, down from 36.8% in 2011.
 - 12.6% of Redbridge residents reported having "No religion" in 2021, up from 11% in 2011.

Sex

4.156 In 2020, across London, there were 4.51 million males, constituting 50.1% of the population, and 4.48 million females, making up 49.9%. This distribution remained consistent despite a smaller overall population. According to mid-year population estimates from the ONS, in 2019, there were 4.51 million males, constituting 50.1% of the population, and 4.49 million females, making up 49.9% [\[See reference 104\]](#). Looking broadly at England, in 2020, males comprised 49.5% of the population whilst females comprised 50.5%. This remains largely consistent to 2019 estimates, in which males made up 49.4% of the population, and females 50.6%.

- Barking and Dagenham: In 2020 the borough had a total population of 214,107, of which 49.9% were male and 50.1% were female.
- Havering: In 2020 the borough had a total population of 260,651, of which 48.2% were male and 51.8% were female.
- Newham: In 2020 the borough had a total population of 355,266, of which 53.2% were male and 46.8% were female.
- Redbridge: In 2020 the borough had a total population of 305,658, of which 50.8% were male and 49.2% were female.

Sexual orientation and gender identity

4.157 Sexual orientation [\[See reference 105\]](#):

- Barking and Dagenham: 2.3% of the population identified as LGB+ (those who described their sexual orientation as something other than heterosexual)
- Havering: From the 2021 census data, 91.1% of the population identified as straight or heterosexual, whilst 1.95% identified as LGB+ orientation.
- Newham: 4% of the population identified as LGB+. The vast majority of the population identified as heterosexual, at 83.3%.

- Redbridge: The 2021 Census data shows that in Redbridge, approximately 2.5% of residents ages 16 and over identify as part of the LGBT+ community, whilst 88.1% of the population identified as heterosexual.

4.158 Gender identity [\[See reference 106\]](#):

- Barking and Dagenham: Barking and Dagenham has the highest proportion of trans women (0.25%) and 3rd highest proportion of trans men (0.24%) in England and Wales.
- Havering: As of 2021, within London, Havering has the 5th lowest proportion of residents aged 16 and over reporting that the gender that they identify with now is different to their sex registered at birth, at 0.25%. Of this figure, 0.11% identified as a trans woman, and 0.10% identified as a trans man. 5.82% of Havering residents did not answer the question.
- Newham: Newham has the second highest percentage who identified as a trans men (0.25%). Furthermore, in Newham, 1.51% of people aged 16 and over said their gender identity was different from their sex at birth. Of them, 692 people were trans men and 645 were trans women. A further 168 said they were non-binary.
- Redbridge: 1% of residents aged 16 and over stated that they did not identify with the gender assigned to them at birth. Of them, 465 people were trans men and 401 were trans women. A further 61 said they were non-binary. About 20,300 people did not answer the voluntary question.

Projected baseline information

4.159 A review of the baseline information suggests that London has a younger than average population, greater ethnic and religious diversity, and a low mortality rate, although mortality rate and life expectancy differs across the four boroughs in the ELJWP area.

Implications for health

4.160 Some areas of the four London boroughs within the plan area experience health challenges, with high levels of obesity and risk of associated health problems. The UK Chief Medical Officers advise that for good physical and mental health, adults should aim to be physically active every day. Over the course of a week adults should accumulate at least 150 minutes of moderate intensity activity; or 75 minutes of vigorous intensity activity day; or even shorter durations of very vigorous intensity activity; or a combination of moderate, vigorous and very vigorous intensity activity [\[See reference 107\]](#).

4.161 Similarly, open spaces and recreational facilities provide residents space in which they can undertake physical activity to the benefit of public health, including lowering the risk of specific health conditions such as depression, anxiety, cortisol, blood pressure, pre-term birth, low birthweight, and type 2 diabetes. There is generally positive evidence relating to the impacts of activities in natural environments on children's mental health and their cognitive, emotional and behavioural functioning. These health benefits are thought to arise through a range of pathways, including providing opportunities and safe spaces for physical activity, for restoration and relaxation, and for socialising with friends and family. Exposure to green and blue space is also associated with higher levels of life satisfaction. Impacts appear to differ according to socio-economic status and other demographic factors such as age or gender.

4.162 Encouraging active travel, such as walking, wheeling and cycling can have a wider range of positive implications for health, including increased physical activity and opportunities for social interaction. In addition, an increase in active travel would be associated with a decrease in vehicular transport and an associated decrease in air pollutants that can be harmful to human health.

Key sustainability issues and opportunities for the ELJWP to address them

4.163 Across the four boroughs, population is forecast to increase, with younger (0 to 15) and older (over 65) groups seeing the largest increase. In Barking and Dagenham for example, the population is forecast to grow to 250,000 by 2031 with annual growth of households of 1,519 a year in that period. In the absence of any significant change in per capita resource consumption, the consequence of population growth will be an increase in the amount of waste being generated. The existing network of waste management facilities will need to become more efficient and may also need to expand in places to keep pace with demand for waste management services.

Economy

Economy and employment

Current baseline information

4.164 London is an international city which has established itself as a major centre of economic activity. As measured by Gross Value Added (GVA), London's total economic output was worth around £364 billion in 2014, 6.8% higher than in 2013. In 2014, London accounted for 22.5% of the UK's total GVA, up from 18.9% in 1997 [\[See reference 108\]](#).

4.165 Between 1971 and 2015, the total number of jobs in London has increased by almost one million. The professional, scientific and technical activities sector accounts for the largest number of jobs, at 755,000 (or 14%). Compared to the wider UK, London is specialised (in terms of jobs) in both the information and communications sector and the financial and insurance

activities sector. This sector is the largest in London, generating £68.7 billion of GVA and accounting for 18.9% of London's total economic output. Within these broad sectors there are a large number of significant subsectors of particular specialisation within London. In addition to this specialisation, there are significant levels of employment in a number of broad sectors – making for quite a diverse economic structure. The spatial make-up of London's economy shows that different sectors are important to different boroughs. The Financial and insurance activities sector accounts for 66.6% of total output in the City of London; whereas in Havering has the greatest proportional share of, the Distribution, transport, accommodation and food sector, accounting for accounts for 24.2% of output. Barking and Dagenham has the greatest proportional share of the Production industries, accounting for 21.2% of total output. Newham has the greatest proportional share of local authority output, public administration, education and health, accounting for 18.9% within London [\[See reference 109\]](#).

4.166 In Havering, Barking and Dagenham and Redbridge, the largest percentage of residents aged 16 and over (27.8%, 23% and 26.7% respectively) are employed in the public administration, education and health sector. In Newham, the largest employment sector is banking, finance and insurance, employing 29.8% [\[See reference 110\]](#).

4.167 Of people aged 16 to 64 years living in Havering, 82.6% were employed in the year ending June 2023. This is the highest employment rate when compared to the other three borough's. Consequently, it also has the lowest rate of unemployment (those without jobs who are actively seeking work and available to take up a job) at 3.5%. Newham has the second highest rate of employment (75.5%), and an unemployment rate of 4.7%. Barking and Dagenham has an employment rate of 73.1% and an unemployment rate of 5.5%. Redbridge has the lowest employment rate (72.5%) and an unemployment rate of 5.1%.

4.168 Across London in the year ending June 2023, 75.1% of people aged 16 to 64 years were employed. This means that Barking and Dagenham and Redbridge are below the London average. Across London in the year ending June 2023, 4.6% of people aged 16 to 64 years were unemployed. This means

that Newham, Barking and Dagenham and Redbridge have a higher unemployment rate than the London average. Newham has the fifth highest unemployment rate out of all London boroughs [\[See reference 111\]](#).

4.169 GLA analysis of the departure from the European Union [\[See reference 112\]](#) notes that the economy in London will be most impacted by changes to the provision of financial services, the loss of low skilled labour from the European Economic Area, with less impact to trade in comparison with the wider UK.

Growth Areas

4.170 The Growth Strategy for Barking and Dagenham 2013-2023 sets out the key aims and areas for growth in the borough, to increase investment and create a higher skilled workforce [\[See reference 113\]](#). The LBBD Regulation 19 Submission Local Plan (2021) [\[See reference 114\]](#) identifies the following areas for economic growth for the period between 2019 and 2037:

- Barking Town Centre and the River Roding
- Barking River side
- Thames Road
- Castle Green
- Chadwell Heath and Marks Gate
- Dagenham Dock and Beam Park
- Dagenham East
- Dagenham Heathway

4.171 Havering's Inclusive Growth Strategy (2020-2045) [\[See reference 115\]](#) provides an analysis of the local economy and identifies the types of employment growth and locations for growth over the period to 2045 [\[See reference 116\]](#). The LBH Local Plan 2021 [\[See reference 117\]](#) focusses growth on the areas of Rainham and Beam Park, and Romford, consistent with the London Plan 2021.

4.172 Three of the London Plan (2021) Opportunity Areas are located or partly located in Newham: Royal Dock and Beckton Riverside, and the Poplar Riverside and Olympic Legacy cross boundary Opportunity Areas. The Regulation 18 draft Newham Local Plan (2023) incorporates these areas and also includes a number of Micro Business Opportunity Areas, to promote business use around existing town centres.

4.173 The Redbridge Local Plan (2018) [\[See reference 118\]](#) identifies the following areas for economic growth for the period between 2015 and 2030, noting the inclusion of the Ilford Opportunity Area within the London Plan (2021):

- Ilford Investment and Growth Area
- Crossrail Corridor Investment and Growth Area
- Kind George and Goodmayes Hospital
- Land at Billet Road
- Gants Hill Investment and Growth Area
- Barkingside Investment and Growth Area
- South Woodford Investment and Growth Area

Strategic Industrial Land

4.174 Strategic Industrial Locations (SIL) are protected through Policy E5 of the London Plan. The London Plan notes the importance of these locations in east London, and the role the Thames Gateway will play in a "strategically co-ordinated plan-led consolidation of SILs in order to manage down overall vacancy rates, particularly in the boroughs of Newham and Barking and Dagenham" Plan [\[See reference 119\]](#).

Projected baseline information

4.175 The full economic impact of the COVID-19 pandemic will not be known for some time. However, anecdotal evidence suggests that office-based staff will work remotely/at home more frequently; consequently, businesses are likely to reduce their office space. Rising heating costs have the potential to encourage people back into the office however it is uncertain whether attendance will return to pre-pandemic levels. The full impacts of Brexit are still to be felt, and the continued impacts on London's economy will be different to the impacts on the UK as a whole, as set out above.

Implications for health

4.176 Employment and job security influence mental health and levels of stress. Income can also influence physical health, in terms of the quality and location of housing that people can afford. A strong local economy will help create more job opportunities, contribute to greater job stability and raise the quality of life for local people, resulting in improved health outcomes.

Key sustainability issues and opportunities for the ELJWP to address them

4.177 Beneficial economic characteristics have not been equally shared across the four borough's local communities. The consequence for this has been levels of local inequality, including areas such as South Hornchurch and Harold Hill in Havering, and areas within the wards Abbey, Gascoigne, Chadwell Heath, Thames and Abbey fall in Barking and Dagenham falling within the 10% more deprived Lower Super Output Areas in England.

4.178 The ELJWP could support a local policy framework that will make a small, but present, contribution towards improving the diversity and quality of local employment opportunities available in more deprived urban localities. It may

also bring about training investment, where relevant skills deficits might be present within local communities.

Transport

Current baseline information

4.179 London Infrastructure Plan 2050: Transport Supporting Paper [See reference 120] notes that across London, trip rates are expected to remain constant on a per person basis, but that expected growth in population will require significant additional capacity across London's transport networks by 2050.

- Barking and Dagenham: The Barking Borough Wide Transport Strategy (2021) [See reference 121] considers the key concerns are around the capacity and air quality in the vicinity of the A12 and A13, the lack of access to public transport, fragmented cycling and walking links, and the continued high rates of accidents.
- Havering: The Local Implementation Plan 3 [See reference 122] sets out how the borough will aim to achieve the target of 65% of all trips being made on foot, cycle or public transport by 2041, as well as improving casualty reduction and air quality.
- Newham: The Local Implementation Plan [See reference 123] focusses on the aim of 83% of all trips in Newham to be made by foot, by cycle or using public transport by 2041 as well as the Borough's corporate aims regarding air quality, sustainable and active travel and public health.
- Redbridge: The third Local Implementation Plan (2019) [See reference 124] focusses on transport improvements aligned to areas of growth, reducing car use to meet climate change targets, and improving access to sustainable transport across the borough and in new growth locations.

4.180 **Figure 4.2** at the end of this chapter illustrates the main road, rail and cycling routes in the ELJWP Area.

4.181 The Lower Thames Crossing is a proposed new motorway connecting Kent, Thurrock and Essex through a tunnel beneath the river Thames. If permission is granted, the project will provide over 90% additional road capacity across the Thames east of London. The new motorway will have three lanes in each direction, with a speed limit of 70mph. It will connect the tunnel to the A2 and M2 in Kent on the southern side and A13 and junction 29 of the M25 in the London Borough of Havering on the northern side. The crossing will also feature a 4km-long twin-tube tunnel under the Thames River, for southbound and northbound traffic. With a diameter of 16m, the tunnel will be one of the largest bored-tunnels in the world **[See reference 125]**. A decision is expected later in 2024.

4.182 At the time of Census 2021, UK government guidance and lockdown restrictions resulted in unprecedented changes to travel behaviour and patterns **[See reference 126]**. As seen in **Table 4.15**, between one fifth and just over one third of residents were working from home in 2021. The prevalence of car use over public transport in all boroughs other than Newham reflects the location of LBN within inner London.

Table 4.18: Method of travel to work 2021

Method of travel to work	Barking and Dagenham	Havering	Newham	Redbridge
Total surveyed	94,586	124,781	163,446	141,627
Work mainly at or from home (%)	20.7	33.4	29.2	34.9
Underground, metro, light rail, tram (%)	16.2	6.7	23.5	14.6
Train (%)	9.2	7.0	8.6	6.0

Method of travel to work	Barking and Dagenham	Havering	Newham	Redbridge
Bus, minibus or coach (%)	10.2	5.6	9.1	5.8
Taxi (%)	0.6	0.6	0.5	0.6
Motorcycle, scooter or moped (%)	0.6	0.5	0.7	0.5
Driving a car or van (%)	32.5	36.8	17.3	28.4
Passenger in a car or van (%)	2.5	2.7	1.5	2.1
Bicycle (%)	1.3	0.7	2.3	1.1
On foot (%)	4.7	4.9	6.0	4.8
Other method of travel to work (%)	1.5	1.2	1.4	1.3

Projected baseline information

4.183 Sustainable public transport, including active travel investment is essential alongside direct road congestion interventions if each borough is to continue to reduce the reliance on car travel, and support the use of more sustainable alternatives.

Implications for health

4.184 A lack of sustainable and active travel options can have negative impacts on public health whilst also increasing reliance on relatively expensive private motorised transit and exacerbating existing inequalities. Encouraging active travel, such as walking, wheeling and cycling can have a wide range of positive implications for health, including increased physical activity and opportunities for

social interaction. In addition, an increase in active travel could be associated with a decrease in reliance on often expensive vehicular transport, and an associated decrease in air pollutants that can be harmful to human health.

Key sustainability issues and opportunities for the ELJWP to address them

4.185 Several of the ELJWP road links are inadequate, with several roads and junctions noted as being at or near to capacity, and many experiencing congestion at peak times. Adverse traffic conditions on these routes often have knock-on effects on local roads, leading to localised gridlock on occasion and impacting negatively on economic productivity. In addition, with planned developments and increased housing and job provision, more pressure may be placed on the road networks.

4.186 Without the ELJWP it is anticipated that traffic congestion and air and noise pollution from transport associated with waste developments will continue to increase with the rising population and car dependency will continue to be high. The implications of air pollution for human health and the natural environment are described in subsequent sections.

4.187 The ELJWP provides an opportunity to reduce the demand on the transport network from waste development and to address potential adverse effects of travel by:

- Locating waste development where there is good access to sustainable transport modes for waste and employees
- Supporting and prioritising sustainable travel choices through workplace travel plans; and
- Supporting the uptake of electric vehicles through the provision of electric vehicle charging infrastructure at waste sites.

Historic environment

Current baseline information

Barking and Dagenham

4.188 The Regulation 19 Submission Local Plan for Barking and Dagenham [See reference 127] notes the importance of conserving and enhancing heritage and cultural assets as the borough continues to grow.

4.189 The borough has 45 statutory listed buildings, 123 locally listed buildings, 1 scheduled ancient monument and four conservation areas [See reference 128].

4.190 The greatest concentration of listed buildings is in Barking [See reference 129]. The site of Barking Abbey is Barking and Dagenham's only Scheduled Ancient Monument. It includes the ruins of the Abbey and most of Abbey Green.

4.191 There are four conservation areas:

- Abbey and Barking Town Centre Conservation Area;
- Abbey Road Riverside Conservation Area;
- Chadwell Heath Anti-aircraft Gun Site Conservation Area; and,
- Dagenham Village Conservation Area.

4.192 London Borough of Barking and Dagenham Archaeological Priority Areas Appraisal [See reference 130] found a total of 20 Archaeological Priority Areas are recommended for Barking and Dagenham.

Havering

4.193 The adopted 2021 Havering London Borough Local Plan 2016-2031 **[See reference 131]** highlights the importance of the plan in protecting the boroughs most valued historic assets by conserving and enhancing Havering's rich heritage and historic environment.

4.194 The borough contains a wealth of designated heritage assets, including 140 listed buildings. There are 3 Scheduled Monuments and 11 Conservation Areas **[See reference 132]**.

- Corbets Tey Conservation Area;
- Cranham Conservation Area;
- Gidea Park Conservation Area;
- Havering-atte-Bower Conservation Area;
- Langtons Conservation Area;
- North Ockendon Conservation Area;
- RAF Hornchurch Conservation Area;
- Rainham Conservation Area;
- Romford Conservation Area;
- St Andrews Conservation Area; and
- St Leonards Hornchurch Conservation Area.

4.195 Special townscape or landscape character areas are areas that have a special and unique character which adds to the townscape and landscape quality of Havering, of which Havering currently has two: Emerson Park, which is typified by large and varied dwellings set in spacious, mature, well landscaped grounds, and the Hall Lane Policy Area typified by large detached and semi-detached dwellings set in large gardens with considerable tree and shrub planting. All of the areas have unique characters which add considerable value to the borough's environment.

4.196 There is just one listed garden in Havering - Upminster Court Gardens, and just one scheduled monument which can be found within the Romford conservation area.

Newham

4.197 The Newham Local plan 2018-2033 [\[See reference 133\]](#) looks to tackle the legacy of Newham's historic position in London and integrate the area with local historic context.

4.198 Newham has over 100 listed buildings, ranging from the 15th century Spotted Dog pub to the 19th century Abbey Mills Pumping Station. Eleven percent of listed buildings and monuments were considered to be 'At Risk' in 2017 [\[See reference 134\]](#).

4.199 Newham's local list identifies historic buildings, spaces and features that are valued by the local community and that help give Newham its distinctive identity. The list identifies parts of the historic environment that are not already designated in another way (such as a listed building), but which nonetheless contribute to a sense of place, local distinctiveness and civic pride.

4.200 There are nine conservation areas in Newham:

- Durham Road Conservation Area, Manor Park, E12;
- East Ham Conservation Area, E6;
- Forest Gate Town Centre Conservation Area, E7;
- Romford Road Conservation Area, Forest Gate, E7;
- Stratford St John's Conservation Area, E15;
- Sugar House Lane Conservation Area, Stratford, E15;
- Three Mills Conservation Area, E3;
- University Conservation Area, Stratford, E15; and,

- Woodgrange Estate Conservation Area, Forest Gate, E7.

4.201 Two of Newham's conservation Areas: The Three Mills and Sugar House Lane are located in the London Legacy Development Corporation area.

4.202 The Local plan identifies Archaeological Priority Areas: five tier 1, sixteen tier 2, six tier 3 and one tier 4.

Redbridge

4.203 The Redbridge Local Plan 2015-2030 [\[See reference 135\]](#) looks to celebrate open spaces and enhance Redbridge's historic assets. The Council is also committed to the positive conservation and use of heritage assets as they make an important contribution to the identity, distinctiveness and character of Redbridge.

4.204 There are a range of heritage assets within the borough including over 200 statutorily listed buildings or structures of special architectural or historic interest and over 200 locally listed buildings.

4.205 There is also two Registered Historic Parks and Gardens, which are designed landscapes with special historic interest, no Archaeological sites and areas and eight Residential Precincts.

4.206 Redbridge has 16 Conservation Areas, which are statutory local designations covering areas of special architectural or historic interest:

- Aldersbrook and Lakehouse Conservation Area;
- Barnado's Village Homes Conservation Area;
- The Bungalow Estate Conservation Area;
- Claybury Conservation Area;
- George Lane Conservation Area;

- Little Heath Conservation Area;
- Snaresbrook Conservation Area;
- South Woodford Conservation Area;
- Valentines Mansion Conservation Area;
- Wanstead Park Conservation Area;
- Wanstead Grove Conservation Area;
- Wanstead Village Conservation Area;
- Woodford Bridge Conservation Area;
- Woodford Broadway Conservation Area;
- Woodford Green Conservation Area; and,
- Woodford Wells Conservation Area.

4.207 The 2016 London Borough of Redbridge Archaeological Priority Areas (APA) appraisal [\[See reference 136\]](#) finds a total of 36 Archaeological Priority Areas are recommended for Redbridge of which four are Tier 1 APAs, 28 are Tier 2 APAs and four are Tier 3 APAs.

Projected baseline information

4.208 The historic environment can be considered a finite resource. It cannot be replaced and is susceptible to decline over time as historic features experience degradation and decay. However, cultural heritage can evolve and change, and features which are not currently considered a valued part of the historic environment may become so in the future, either due to their uniqueness, past use, or historic or cultural significance.

4.209 At local level, new developments, infrastructure and environmental pressures, such as extreme weather and flooding, present the greatest risk to cultural heritage assets.

4.210 Historic England has a Heritage at Risk Register [\[See reference 137\]](#) which includes historic buildings, listed buildings, sites and Conservation Areas at risk of being lost through neglect, deterioration or decay. The register aims to highlight those places and buildings in greatest need of repair. As of 2023, there are eighty-one heritage assets registered as at risk within wider London. There are six heritage assets registered at risk within Barking and Dagenham, twelve within Havering, thirteen within Newham and nine within Redbridge.

Implications for health

4.211 Historic England explored the links between the historic environment and health in Wellbeing and the Historic Environment [\[See reference 138\]](#). This identified mental and social wellbeing benefits of the historic environment, including opportunities to meet people and expand knowledge through volunteering or visiting historic sites and giving people a sense of place, community and belonging.

Key sustainability issues and opportunities for the ELJWP to address them

4.212 There are many designated and undesignated heritage assets and areas of historical and cultural interest in the ELJWP area that could be adversely affected by climate change and poorly located or designed development. While several of the historic assets in the plan area, for example Listed Buildings and Scheduled Monuments, will continue to be protected by statutory designations, without the ELJWP it is possible that these, and undesignated assets, will be adversely affected by inappropriate development. The ELJWP provides an opportunity to protect these assets (including their settings) from inappropriate waste development.

4.213 Although there is a high level of protection afforded historic sites within the NPPF and NPPW, more of an emphasis could be placed within the ELJWP

on directing waste developments away from sensitive locations and requiring them to be designed and built so as to minimise adverse effects on the county's historic environment above and below ground.

Landscape and townscape

Current baseline information

4.214 The National Character Map defines the ELJWP area as lying within National Character Areas 111 - Northern Thames Basin and Area 112 – Inner London **[See reference 139]**.

4.215 The Northern Thames Basin area is more diverse mix of urban and rural landscapes. The rural and dispersed landscape adjacent to Essex becomes increasingly urban towards the centre of London. There is a mix of historic settlement patterns, with remnants of historical orchards and other communal green and farmed spaces. Urban areas have low levels of tranquillity with pockets of perceived tranquillity, as with the Inner London area. Moving eastwards in the ELJWP area, tranquillity increases as green space and Green Belt areas increase.

4.216 Within the Inner London area, there is a strong sense of place along the Thames and particularly in the wharfs and creeks of East London as well as the parks and gardens, green spaces, rivers and other natural habitats. There are strong settlement patterns, and industrial features, with good public access to heritage assets. The whole NCA scores negatively for tranquillity, but there are good pockets of perceived tranquillity in public parks and other small spaces.

Projected baseline information

4.217 Within the **Inner London NCA**, there are several drivers for change that will put pressure on landscape. These include:

- Overheating, flooding and drought cause by hotter, drier summers; warmer, wetter winters; and more frequent incidences of extreme weather;
- Change in species composition and reduction in the connectivity of habitats;
- Reduced water availability and lower oxygen levels in water bodies;
- Regeneration and development: As well as ongoing commercial and housing development pressure, Inner London will be affected by major infrastructure projects such as the Thames Tideway Tunnel and Cross Rail. Changes to the London skyline and iconic views will be affected by new building developments in the centre; and
- Development on brownfield land and urban greening have reduced pressure on London's green spaces and can bring land back into beneficial use.

4.218 Within the **Northern Thames Basin NCA**, drivers for change include:

- Continued urban expansion of settlements putting pressure on their landscape setting;
- Provision of new open space to improve health and wellbeing, which could lead to habitat fragmentation and an altered landscape character;
- Increased development of infrastructure (transport, logistics and industrial);
- Continued demand for minerals;
- Climate change will lead to increased wind erosion in hotter and drier periods and water erosion in the wetter, colder periods;
- Loss of brownfield sites in developed areas putting pressure on invertebrate habitats; and

- Decreased water availability with potential loss of specific drought intolerant species and water quality of water bodies.

4.219 The urban landscapes can be conserved by maintaining green spaces, landscaping and trees and implementing good design practices in new developments. Maintaining the rural landscape and natural landforms will be dependent on being able to preserve and conserve ancient woodlands, unimproved grasslands, protected lanes, commons and hedge-rowed field patterns, as well as the ridges and hilltops from inappropriately located or designed development, changing agricultural practices and seasonal climate change.

Implications for health

4.220 The landscape can benefit mental health and wellbeing in providing a pleasant setting and identifying and enhancing local landscape contributes to sense of place and belonging. Sensitive landscape management can also improve social and physical health by encouraging physical recreation, including providing a pleasant environment for activities such as walking and cycling, providing good public access links and helping people to feel safe and confident in navigating landscapes.

Key sustainability issues and opportunities for the ELJWP to address them

4.221 East London's varied urban and more rural landscapes are vulnerable to adverse effects from urban intensification, increasing recreational pressures and seasonal climate change. The ELJWP provides an opportunity to help to protect and enhance such areas by directing development to the most sustainable locations and ensuring the design of new waste facilities is sympathetic to the surrounding area. The ELJWP will be best placed to do so if it is able to draw on up to date evidence on landscape character and sensitivity.

Biodiversity

Current baseline information

4.222 Biodiversity net gain (BNG) is mandatory in England from 12 February 2024 [\[See reference 140\]](#). The NPPF emphasises that plans should identify and pursue opportunities for securing measurable net gains for biodiversity, and plans and decisions should minimise impacts and provide net gains for biodiversity. The statutory framework aims to ensure that developments will achieve at least a 10% gain in biodiversity value. The requirement will apply to most new planning applications within each borough, whether or not the requirement is captured within their adopted local plan.

4.223 The London Environment Strategy [\[See reference 141\]](#) includes policies and proposals that aim to ensure that more than half of London will be green by 2050 and the city's tree canopy cover increases by 10%. The Strategy aims to achieve this by:

- making it the first National Park City (achieved in 2019 [\[See reference 142\]](#));
- working with others to expand and improve London's urban forest;
- highlighting the economic value of London's natural capital, and finding new ways to fund London's green infrastructure that recognise this value;
- providing guidance and support to help people manage and create habitats for wildlife and enhance London's biodiversity;
- making maps, data and research available to help others to make a case for and identify priorities for green infrastructure in their local area;
- including policies in the new London Plan to protect the green belt and our best wildlife habitats, and to ensure that new developments include enough urban greening; and,

- supporting communities and others to improve London's greenspaces and opportunities to enjoy nature through funding programmes.

4.224 The Strategy recognises that in the past, green spaces and biodiversity in London has deteriorated in size and quality and now faces many environmental challenges. One of the challenges identified is waste. The Strategy states that waste has a big impact on the biodiversity and the environment both locally and globally. Less than half of the 7m tonnes of waste that London's homes and businesses produce each year is currently recycled, and landfill capacity is set to run out by 2026. Plastic packaging not only litters London streets, but often finds its way into waterways and oceans, releasing toxic chemicals before breaking down – a process that can take centuries. London needs to reduce, reuse and recycle more, to see waste as the valuable resource that it is, and to reduce London's increasing waste bill as the city grows.

4.225 There are three European protected wildlife sites within 5km of the four boroughs; Epping Forest Special Area of Conservation (SAC), Lee Valley Special Protection Area (SPA) and Lee Valley Ramsar. The south edge of Epping Forest crosses into the northern boundary of Redbridge. Downstream from the river Thames, which forms the southern boundary of the Plan area are Thames Estuary & Marshes Ramsar and SPA, which is within 10km of the plan area, and the Benfleet and Southend Marshes SPA.

4.226 Epping Forest is a former royal forest and one of the few remaining large-scale examples of ancient wood-pasture in lowland Britain. It is long (~19km) but relatively narrow, covering a series of semi-natural woodland and grassland blocks between Wanstead in London (near the A12) and the M25 at Epping. Approximately two-thirds of the forest is designated as an SAC.

4.227 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 woodlands primarily correspond to the NVC communities W14 (*Fagus sylvatica* – *Rubus fruticosus* woodland), W15 (*Fagus sylvatica* – *Deschampsia flexuosa* woodland) and W10 (*Quercus robur* – *Pteridium aquilinum* – *Rubus fruticosus*

woodland); the heathland habitats are primarily NVC communities M16 (*Erica tetralix* - *Sphagnum compactum* wet heath and H1 (*Calluna vulgaris* - *Festuca ovina*) heathland. 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 communities, fungi, and saproxylic invertebrates.

4.228 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"*.

4.229 The SSSI underpinning the SAC is mostly in 'favourable' or 'unfavourable recovering' condition. The primary reasons for SSSI units being in 'unfavourable no change' or 'unfavourable recovering' condition are air pollution and public access / disturbance, although management and invasive aquatic species are also issues for some units. Accordingly, the improvement plan identifies the following pressures affecting site integrity:

- Air pollution (impact of atmospheric nitrogen (N) deposition);
- Undergrazing;
- Public access / disturbance; and
- Invasive species. Changes in species distributions (relates to tree recruitment), water level management (principally relating to groundwater levels in wet heath areas), water pollution (primarily from local road run-off), disease (principally tree diseases) and invasive species (spread of heather beetle; impact of grey squirrel on woodland regeneration; *Crassula* dominance in Speakman's Pond) are all identified as threats.

4.230 The London Borough of Redbridge and the London Borough of Newham along with Natural England, City of London, and neighbouring Planning Authorities (Responsible Bodies) have developed a joint Strategic Access Management and Monitoring Strategy for Epping Forest SAC to manage the impact of visitor pressure, identified as a likely significant effect during Plan

Making for neighbouring authorities [\[See reference 143\]](#). Each impacted authority is also leading individually on work to secure Suitable Alternative Natural Greenspace and to understand and mitigate any air quality impacts on the Forest.

4.231 The Lee Valley SPA and Lee Valley Ramsar site (hereafter the ‘SPA/Ramsar’ unless considering specific site features) 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 Newham 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 ELJWP. Parts of the sites are managed as nature reserves.

4.232 The Walthamstow reservoirs are operated by Thames Water and are used for fishing and birdwatching, but water sports 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 water sports.

4.233 The SSSI units underpinning the SPA and Ramsar site are currently in ‘favourable’ or ‘unfavourable recovering’ condition, and the SIP does not identify any pressures currently affecting site integrity. The improvement plan [\[See reference 144\]](#) 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 water sports (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 Nitrogen is rarely a limiting factor in these ecosystems).

4.234 The boroughs are also important locations for various nationally and locally important habitats and species. A total of eight sites are currently designated as Sites of Special Scientific Interest (SSSI's) in Redbridge, whilst Havering contains three SSSIs.

4.235 There are 42 Sites of Importance for Nature Conservation (SINCs) within the London Borough of Newham [\[See reference 145\]](#). In Barking and Dagenham, a total of 25 sites are currently designated as SINCs. These comprise three Sites of Metropolitan Importance, seven Sites of Borough Importance Grade 1, eight Sites of Borough Importance Grade 2 and seven Sites of Local Importance [\[See reference 146\]](#). A total of 35 sites are currently designated as SINCs in Redbridge (five Sites of Metropolitan Importance, seven Sites of Borough Importance (Grade 1), 13 Site of Borough Importance (Grade 2) and 10 Sites of Local Importance) [\[See reference 147\]](#). In Havering, there are 101 designated Sites of Importance for Nature Conservation, of which 11 are Metropolitan SINCS as well as a number of wildlife corridors. There are seven Local Nature Reserves and a number of areas of ancient woodland.

4.236 The London Borough of Barking and Dagenham does not have extensive natural assets, due to its industrial past and heritage. The borough does not have any Areas of Outstanding Natural Beauty (AONB), Ramsar sites, Special Areas of Conservation or SSSI's [\[See reference 148\]](#).

4.237 Endangered species and habitats are protected through the compilation and delivery of Biodiversity Action Plans (BAPs) at national, regional and local

levels. Priority Habitats and Species are regarded as the most important habitats and species that need to be conserved across the country.

Projected baseline information

4.238 At UK level, the publication of the State of Nature Report [\[See reference 149\]](#) provides an overview of the health of the country's wildlife and how human impacts are driving sweeping changes in the UK. It looks back over 50 years of monitoring to see how nature has changed since the 1970s, averaging a 13% decline in the average abundance of wildlife in the UK since the 1970s, with key drivers for change being agricultural productivity, climate change and increasing average temperatures, urbanisation and hydrological changes. The report finds that on average, metrics suggest that decline in species abundance and distribution of species has continued in the UK throughout the most recent decade. These trends are likely to continue in the absence of concerted action.

Implications for health

4.239 A strong link exists between access to nature and biodiversity and associated health and societal benefits. Considering the COVID-19 pandemic, the importance of safe, accessible and well-connected green and blue spaces for improving quality of life has also never been more pertinent.

4.240 According to the recently published World Health Organisation report 'Nature, Biodiversity and Health: An Overview of Interconnections' [\[See reference 150\]](#) increased exposure to nature has been associated with a lower risk of specific health conditions including depression, anxiety, cortisol, blood pressure, pre-term birth, low birthweight, type 2 diabetes, and reduced risk of death from all causes. There is generally positive evidence relating to the impacts of activities in natural environments on children's mental health and their cognitive, emotional and behavioural functioning. These health benefits are thought to arise through a range of pathways, including providing opportunities and safe spaces for physical activity, for restoration and relaxation, and for

socialising with friends and family. Exposure to green and blue space is also associated with higher levels of life satisfaction. Impacts appear to differ according to socio-economic status and other demographic factors such as age or gender.

Key sustainability issues and opportunities for the ELJWP to address them

4.241 The ELJWP area contains many areas of high ecological value ranging from European designated sites such as the Epping Forest SAC in Redbridge, to nationally designated Sites of Special Scientific Interest, Sites of Metropolitan Nature Conservation Importance and Sites of Importance for Nature Conservation among local green spaces and networks that provide ecological connectivity and greater biodiversity, and there is proximity to sites of national importance.

4.242 There is a need for continued preservation and long-term management of these areas within the plan area, as well as consideration of potential effects on sites outside the plan area boundary. Local Wildlife Sites in the borough are being negatively affected by actions such as inappropriate management, traffic pollution and recreational activities. If this continues, it could affect their wildlife value and contribution they make to biodiversity, landscapes and the natural environment. Biodiversity harm can occur outside of protected areas, and local wildlife corridors should also be protected, appropriately within the hierarchy of types of designations.

4.243 Without the ELJWP, important habitats and biodiversity sites will continue to receive statutory protection. However, the ELJWP presents an opportunity to manage the sensitivities of the sites and biodiversity networks, for example by locating waste development away from the most sensitive locations, providing for biodiversity net-gain in new development. The plan should also ensure that waste development does not adversely affect the current condition of sites and where possible contributes to their improvement. Harm to biodiversity can also

be avoided through the consideration of sustainable transport and the avoidance and reduction of amenity impacts.

Air, land and water quality

Soils and geology

Current baseline information

4.244 Although all four boroughs are within the large urban expanse of Greater London, there are still large areas of green space, although these are mostly in non-agricultural use. Natural England land classification maps for London and the South East [\[See reference 151\]](#) show that although most land is classified as 'Land predominantly in urban use' there are pockets of Good to Moderate and potentially 'Excellent' land within the ELJWP area.

4.245 Most of the ELJWP area is considered brownfield or Previously Developed Land (PDL). All four boroughs have a history of industrial land use and potential for the discovery of contaminated land requiring mediation in tandem with new development.

4.246 There are limited minerals deposits or mineral processing facilities within the ELJWP area. National policy requires that mineral resources are safeguarded for future use [\[See reference 152\]](#). The recycling of soils and construction wastes on development sites is one of the main ways that use of these resources is minimised in the ELJWP area.

Projected baseline information

4.247 Soil is a finite natural resource which regenerates only over extremely long geological timescales and provides many essential services including food production, water management and support for valuable biodiversity and ecosystems. It also plays a role in preventing climate change as a larger storer of carbon.

4.248 Soils in England have degraded significantly over the last two decades due to intensive agricultural production and industrial pollution and continue to face the following threats:

- Soil erosion by wind and rain, affects the productivity of soils as well as water quality and aquatic ecosystems;
- Compaction of soil, reduces agricultural productivity and water infiltration, and increased flood risk through higher levels of runoff; and
- Organic matter decline affects the supply of nutrients in soil moisture (particularly during summer and autumn months) in the future, which is likely to affect the natural environment and landscape.

Water

Current baseline information

4.249 Water consumption rates per household are still mainly composed of flushing toilets, washing clothes or taking a bath or shower. The London Plan 2021 [\[See reference 153\]](#) sets water efficiency standards for new development of 105 litres or less per person per day.

4.250 Several water bodies across the four boroughs do not meet the required 'good' status, and a number of water bodies and watercourses are protected sites and sensitive to changes in water quality. In Newham, the Thames, Lea

and Roding rivers have not improved in water quality over the past few years, whilst the River Beam (from Ravensbourne to the Thames) is classified as Bad and the Lower Roding, Mayesbrook River and the Goresbrook in Barking and Dagenham all fail on Chemical quality [\[See reference 154\]](#).

Projected baseline information

4.251 Under predicted climate change scenarios, more frequent drought conditions are expected in London and the South East of England, along with increased demands on water resources. Future developments will create additional demand for water abstraction from surface and groundwater sources in London. At a high level, it is broadly assumed that the quality of water bodies will improve in line with national objectives. However, water quality is influenced by a wide range of internal and external factors, including climate change, geology and soils, human consumption and population change, and pollution from human activities such as industry, agriculture, contaminated runoff from roads and other built surfaces, combined sewer overflows, and nutrient enrichment from treated wastewater. Future development, particularly in areas close to water bodies, may therefore hamper efforts to improve water quality.

Air and noise pollution

Current baseline information

4.252 Air pollution associated with London's road network has exceed statutory nitrogen dioxide levels and needs active monitoring and management. Whilst noise complaints in the London Boroughs are more commonly associated with domestic noise, Building Regulations aim to manage the impact of noise from new domestic and industrial developments through good design. Furthermore, the increasing prevalence of sustainability standards such as BREEAM will also have a positive contribution.

4.253 Development of an up-to-date local planning framework will ensure that ELJWP and development management policies seek to address the current sustainability issues (including noise). In the absence of the ELJWP, the policies in the NPPF and the Clean Air Strategy [\[See reference 155\]](#) would apply which support measures to improve air quality through traffic and travel management; to develop and enhance green infrastructure; and to direct new development to sustainable locations which limits the need to travel and offer a choice of transport modes.

4.254 All local authorities have an obligation to declare AQMAs, via the Environment Act 1995, and develop action plans for improvement of air quality. As set out in paragraph 3.246, each of the four boroughs has declared one AQMA that covers the whole borough.

4.255 The London Plan defines Air Quality Focus Areas (AQFA) as locations that not only exceed the EU annual mean limit value for nitrogen dioxide but are also locations with high human exposure. AQFAs are not the only areas with poor air quality but they have been defined to identify areas where currently planned national, regional and local measures to reduce air pollution may not fully resolve poor air quality issues [\[See reference 156\]](#). There are currently 187 total designated AQFAs across London.

4.256 In the London Borough of Barking and Dagenham, there are three:

- Barking Town Centre;
- A13 Ripple Road; and,
- Whalebone Lane North.

4.257 In Havering there is one (Romford Town Centre).

4.258 In Newham there are five:

- Barking Road A124 from Canning Town to Wallend/Barking;
- Newham Way A13 and Prince Regent Lane;

- Canning Town Silvertown Way;
- Stratford Town Centre and Romford Road; and,
- A118 Romford Road at Manor Park between Green St and Little Ilford Lane).

4.259 In Redbridge there is one designated AQFA (Ilford A123 Ilford Road and Telford Hill) [\[See reference 157\]](#).

4.260 There is a risk that local air quality could be worsened by waste development, particularly through emissions from conventional fossil-fuel based transport of waste.

4.261 The London Borough of Redbridge produced an Air Quality Action Plan (AQAP) in 2020, which outlines the action the Council is taking to improve air quality in the Borough from 2020-2025 [\[See reference 158\]](#). Furthermore, We Care For Our Air is a community focused project in Redbridge aiming to improve air quality in the borough and to raise awareness about the issues of air pollution. The project runs from March 2023 to March 2025, focussing on schools and GP surgeries in three areas: Loxford, Goodmayes and Newbury. Residents are encouraged to get involved in monitoring air pollution levels in their neighbourhoods. The data gathered will be used to drive action towards improving local health outcomes [\[See reference 159\]](#).

4.1 The ELJWP could support a spatial strategy that will facilitate an increasingly effective and efficient network of waste facilities that will reduce the frequency and miles needed to be travelled by waste. It could seek to use more sustainable alternatives to emission-generating fossil-fuel based road transport of waste. This could include switching to more sustainable modes of transport or to low and zero carbon road-based transport.

4.2 The ELJWP could also support efficient and appropriate freight routes for transporting waste by road that avoid areas with the worst rates of air pollution – namely AQMAs.

Projected baseline information

4.3 Each of the London Boroughs has declared an AQMA:

- Barking and Dagenham AQMA declared in 2008 for Nitrogen dioxide and Particulate Matter PM10.
- Havering AQMA 2006 for Nitrogen dioxide and Particulate Matter PM10.
- Newham AQMA (No.2) 2019 for Nitrogen dioxide and Particulate Matter PM10.
- Redbridge AQMA 2003 for Nitrogen dioxide and Particulate Matter PM10.

4.4 There is a possibility that air quality may worsen in the long-term because of climate change, due to a greater likelihood of prolonged periods of still, dry days, and to-date this relationship has been difficult to predict. This will need to be considered in the potential development of air quality action plans and monitoring regimes, as will the effects of major infrastructure developments.

4.5 The Mayor of London has designated a Low Emission Zone (LEZ), and an Ultra Low Emission Zone (ULEZ), in addition to the Congestion Charge zone. The LEZ covers all roads within Greater London, those at Heathrow and parts of the M1 and M4 are included, except the M25 (even where it passes within the GLA boundary). The LEZ is designed to target pollution from the heaviest polluting heavy diesel vehicles.

4.6 The ULEZ covers all London boroughs, except for the area of the M25, and applies to all cars, motorcycles, vans and specialist vehicles (up to and including 3.5 tonnes) and minibuses (up to and including 5 tonnes).

4.7 The congestion charge zone covers part of central London, outside of the ELJWP area, and is designed to discourage driving in the centre of London.

Implications for health

4.8 Air pollution is associated with several adverse health impacts and is recognised as a contributing factor in the onset of heart disease and cancer. Pollution particularly affects the most vulnerable in society such as children, the elderly, and those with existing heart and lung conditions. There is also often a strong correlation between poor air quality areas and less affluent areas.

4.9 London and the South East of England is one of the driest areas of the country and thus faces ongoing water resource challenges, growing demand, and uncertainty from climate change. In addition, poor water quality can increase the risk of water-borne disease.

Key sustainability issues and opportunities for the ELJWP to address them

Soils and geology

4.10 Without the ELJWP it is possible that development could result in unnecessary sterilisation of mineral and soil resources thereby preventing their use for future generations, if there is additional need for new or relocated waste sites. There is therefore a need to minimise the amount of development located on brownfield land or on important mineral processing facilities. In the absence of the ELJWP, the NPPF would apply. This supports the reuse of brownfield land, but the ELJWP provides an opportunity to strengthen this approach to ensure these natural assets are not lost or compromised by prioritising brownfield sites and lower quality agricultural land for development.

- Provide adequate space in new developments for waste facilities capable of accommodating general waste, recyclable waste and compostable waste;

- Ensure site allocations do not compromise the operation of nearby waste management facilities; and
- Ensure sufficient land is available in appropriate locations for new waste management facilities.

Water

4.11 There are many factors and initiatives outside of the local planning policy framework contained within the ELJWP that may impact on water quality and the use of water resources, such as land management practices and investment plans by utility bodies. However, the ELJWP has a role to play by ensuring new and expanded waste management developments will not adversely impact upon water quality and / or water quantity through securing efficient use of water resources. The ELJWP could also create a clear, positive and supportive investment environment in which opportunities to upgrade and improve the network of waste water facilities across the county are taken.

4.12 Without the ELJWP, it is possible that unplanned development for waste could be in areas that could lead to further water quality issues and risks to the natural environment. However, existing safeguards, such as the Water Framework Regulations, would help to reduce the potential for this to occur. The ELJWP provides an opportunity to ensure that development is located and designed to consider the sensitivity of the water environment and water-dependent protected sites, to plan for adequate wastewater infrastructure, to incorporate sustainable drainage systems (SuDS), and to promote water efficiency and grey water recycling.

Air and noise

4.13 Air pollution associated with London's road network has exceed statutory levels and needs active monitoring and management. Whilst noise complaints in the London Boroughs are more commonly associated with domestic noise, Building Regulations aim to manage the impact of noise from new domestic and

industrial developments through good design. Furthermore, the increasing prevalence of sustainability standards such as BREEAM will also have a positive contribution.

4.14 Development of an up-to-date local planning framework will ensure that ELJWP and development management policies seek to address the current sustainability issues (including noise). In the absence of the ELJWP, the policies in the NPPF and the Clean Air Strategy [\[See reference 160\]](#) would apply which support measures to improve air quality through traffic and travel management; to develop and enhance green infrastructure; and to direct new development to sustainable locations which limits the need to travel and offer a choice of transport modes.

4.15 All local authorities have an obligation to declare AQMAs, via the Environment Act 1995, and develop action plans for improvement of air quality. As set out in paragraph 3.246, each of the four boroughs has declared one AQMA that covers the whole borough. There is a risk that local air quality could be worsened by waste development, particularly through emissions from conventional fossil-fuel based transport of waste.

4.16 The ELJWP could support a spatial strategy that will facilitate an increasingly effective and efficient network of waste facilities that will reduce the frequency and miles needed to be travelled by waste. It could seek to use more sustainable alternatives to emission-generating fossil-fuel based road transport of waste. This could include switching to more sustainable modes of transport or to low and zero carbon road-based transport.

4.17 The ELJWP could also support efficient and appropriate freight routes for transporting waste by road that avoid areas with the worst rates of air pollution – namely AQMAs.

Figure 4.2: Transport Network

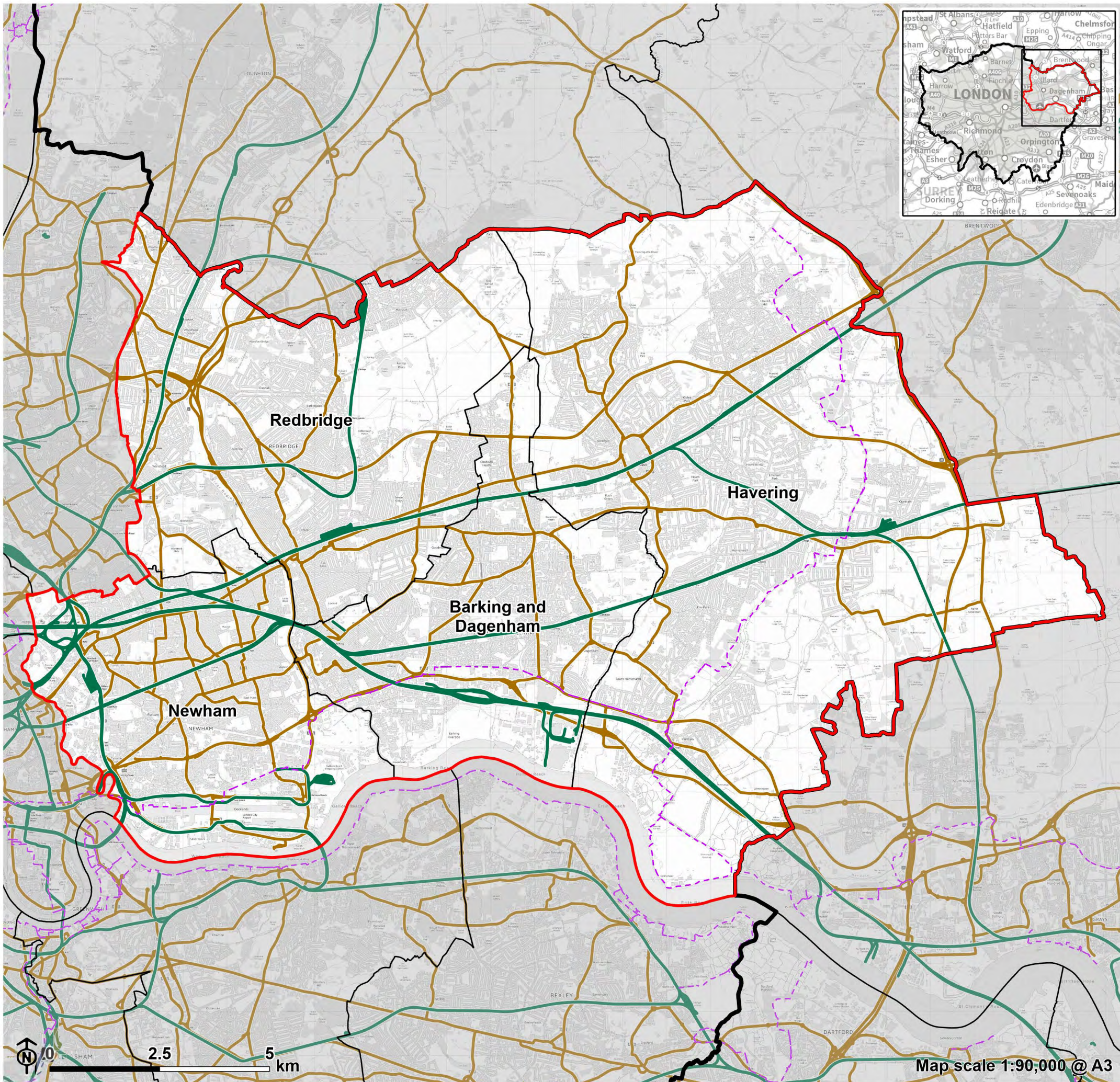
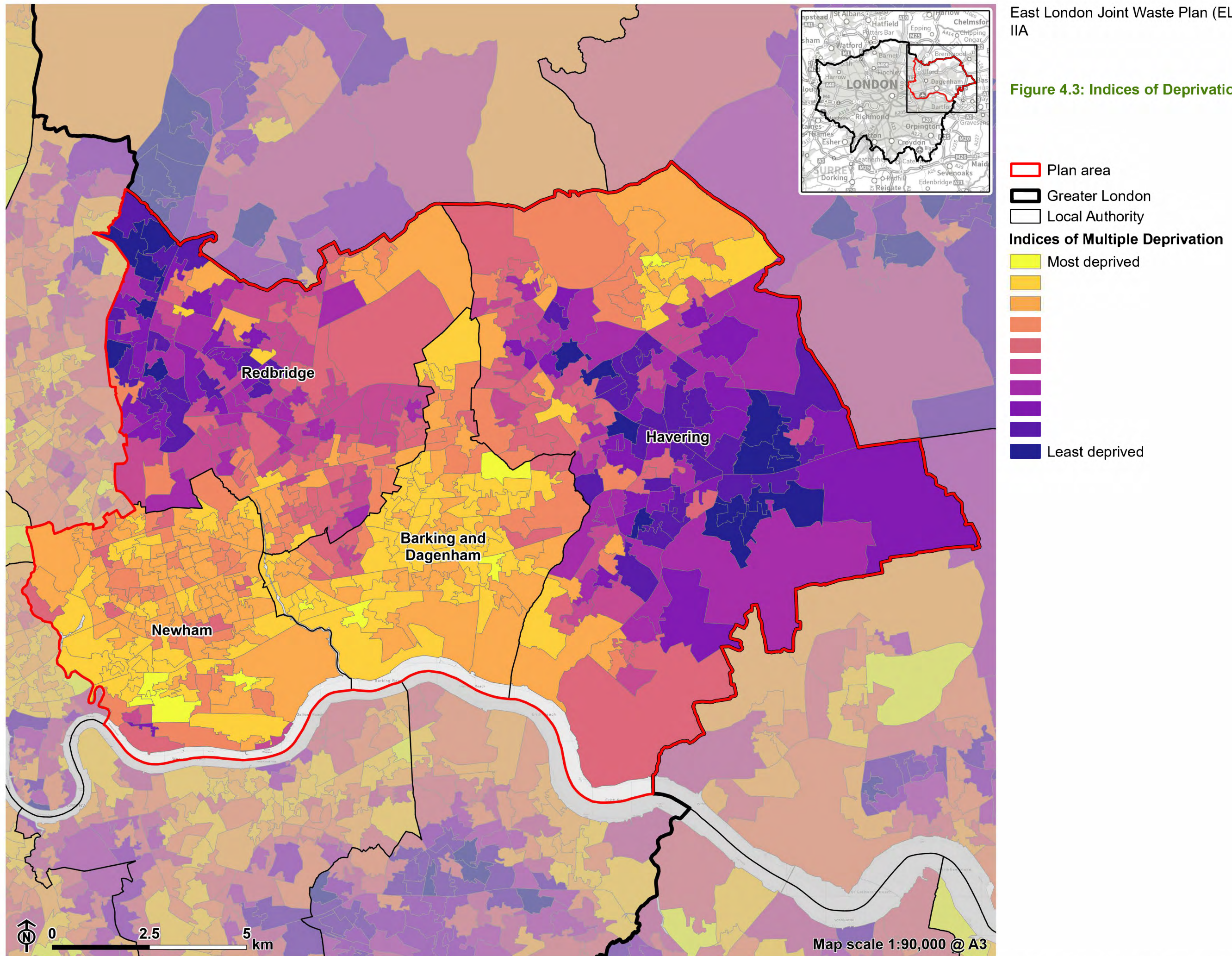


Figure 4.3: Indices of Deprivation



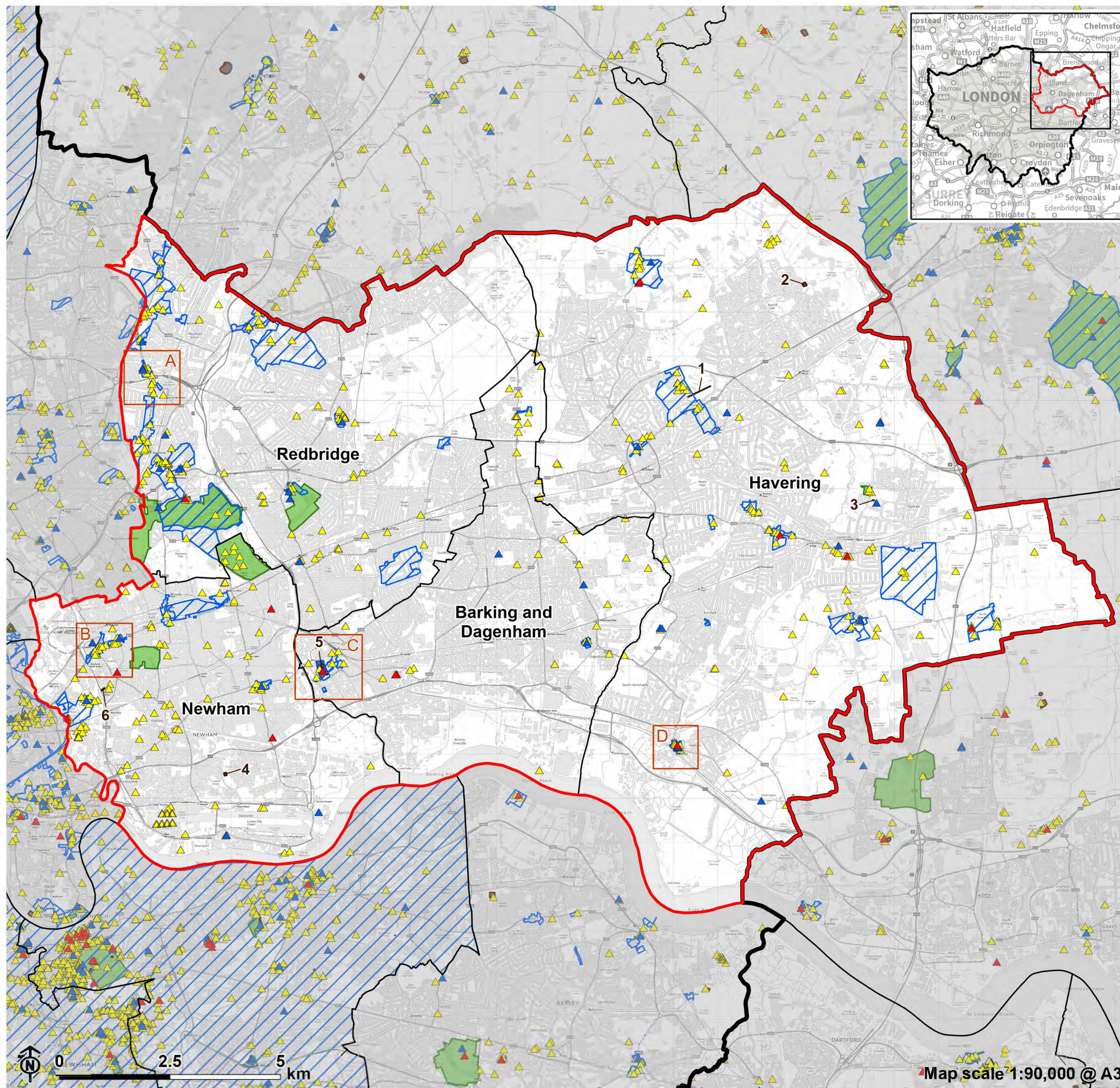
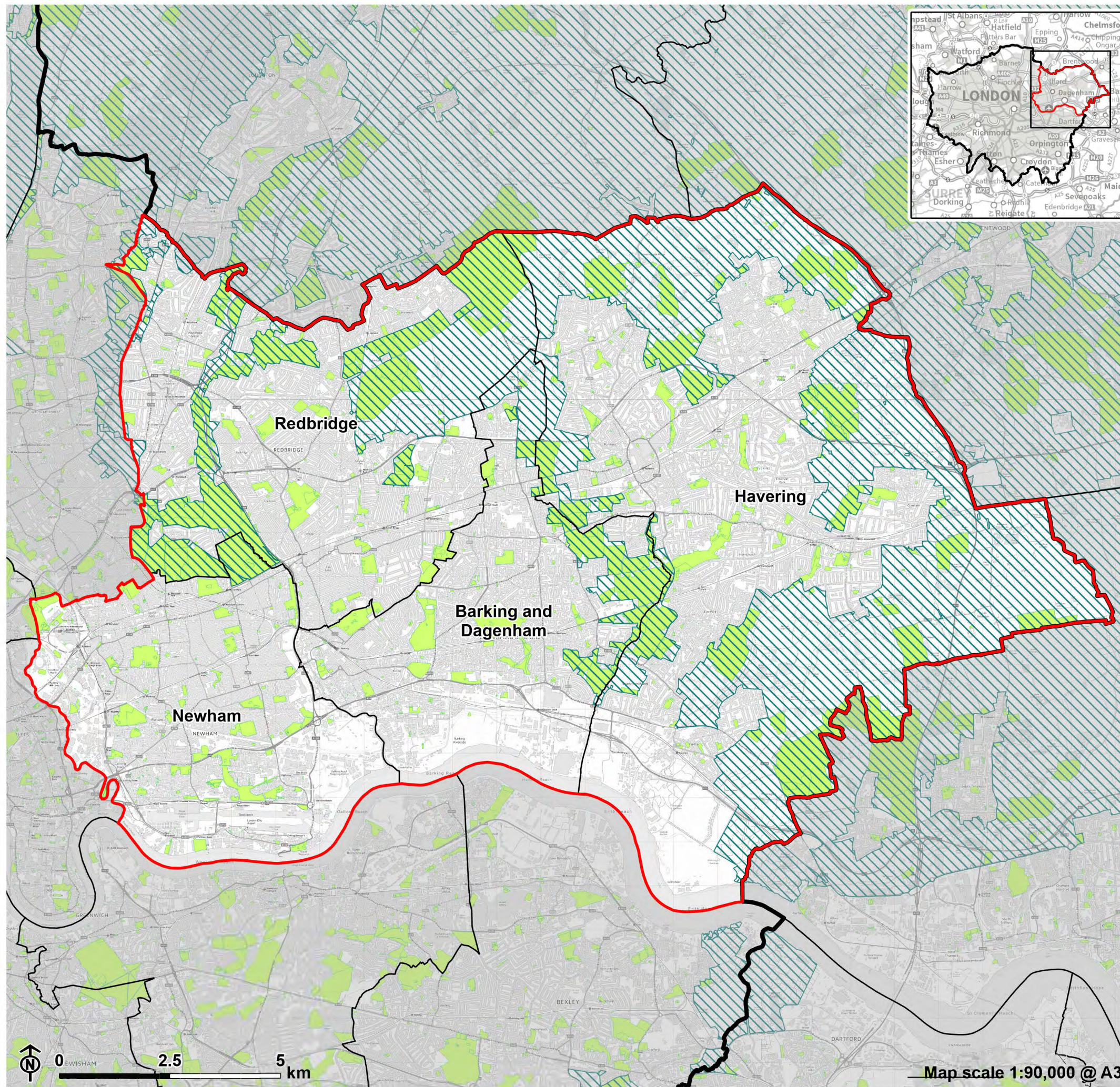


Figure 4.4: Historic Environment

- Plan area
- Greater London
- Local Authority
- Listed building**
- Grade**
- ▲ I
- ▲ II*
- ▲ II
- Conservation area
- Registered parks and gardens
- Scheduled monument
- 1 - Section of Roman road on Gidea Park golf course
- 2 - Dagnam Park Farm moated site
- 3 - Medieval grange barn
- 4 - Second World War anti-aircraft gun emplacements
- 5 - Barking Abbey
- 6 - Stratford Langthorne Abbey (part of area within precincts)





East London Joint Waste Plan (ELJWP) - IIA



Figure 4.5: Open Space and Metropolitan Green Belt

- Plan area
- Greater London
- Local Authority
- Green Belt
- Greenspace

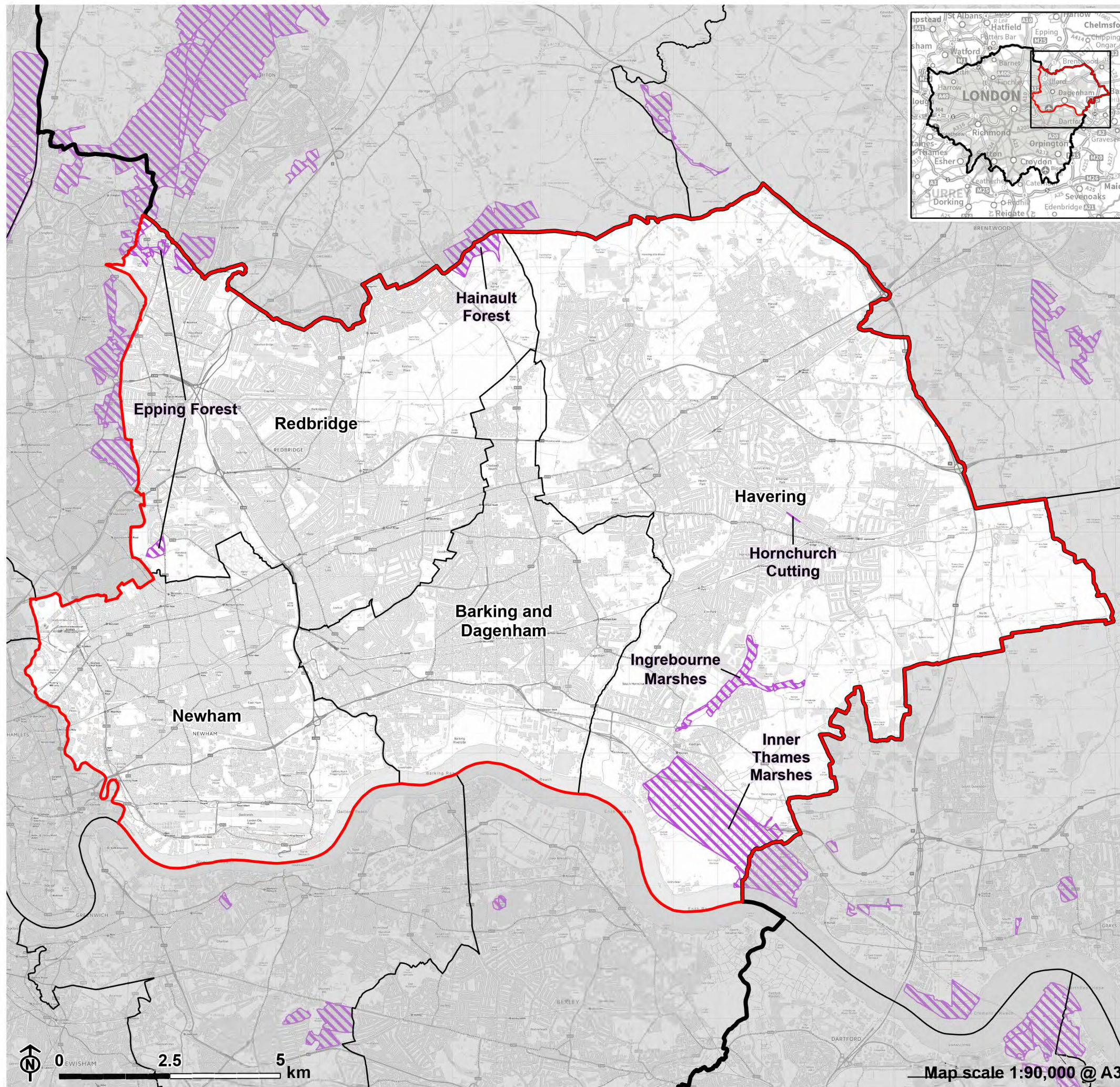
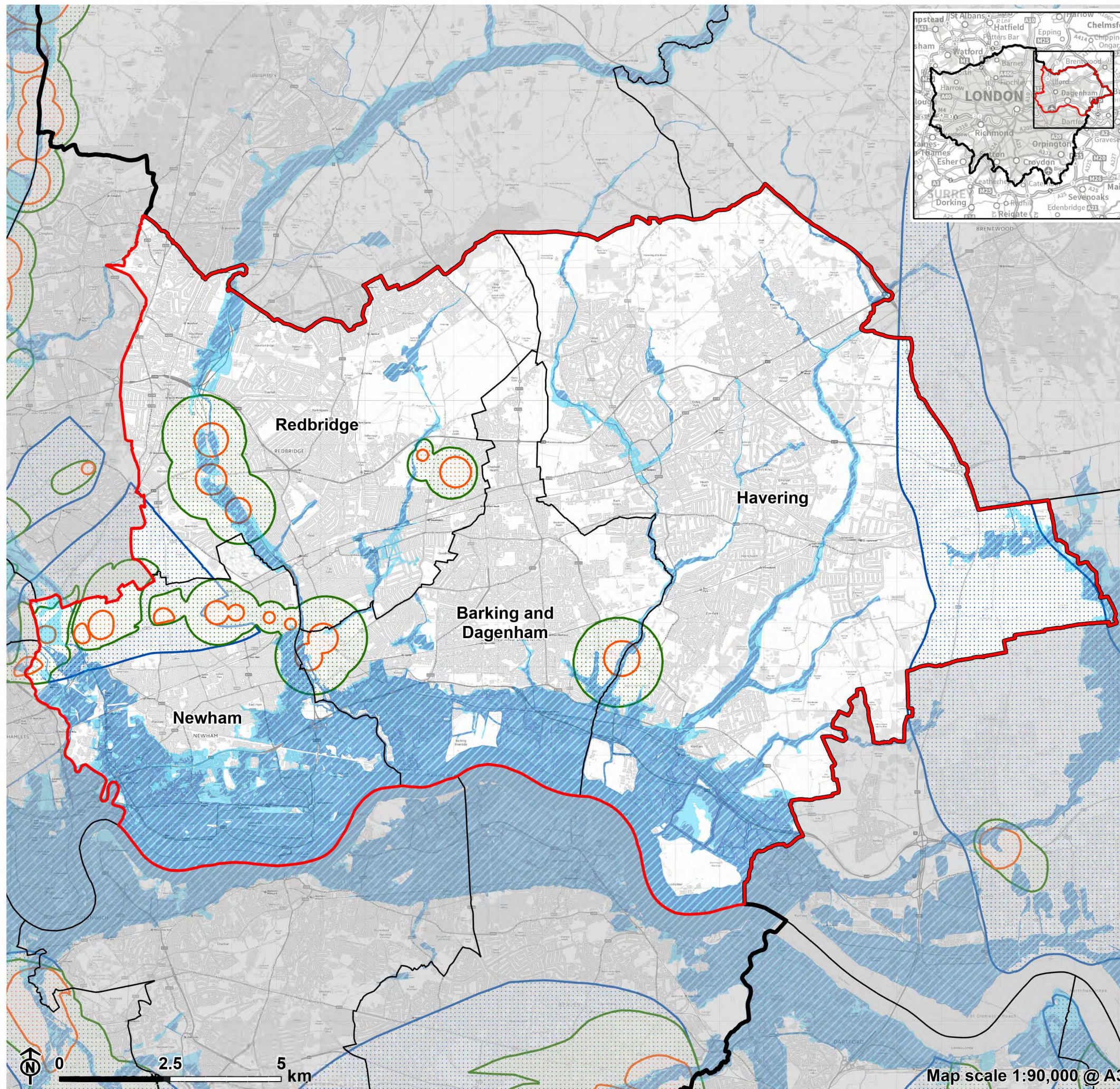


Figure 4.6: Sites of Special Scientific Interest

- Plan area
- Greater London
- Local Authority
- Site of Special Scientific Interest

Figure 4.7: Hydrology



- Plan area
- Greater London
- Local Authority
- Flood zone 2
- Flood zone 3
- Source Protection Zone**
- Zone I (inner protection zone)
- Zone II (outer protection zone)
- Zone III (total catchment)

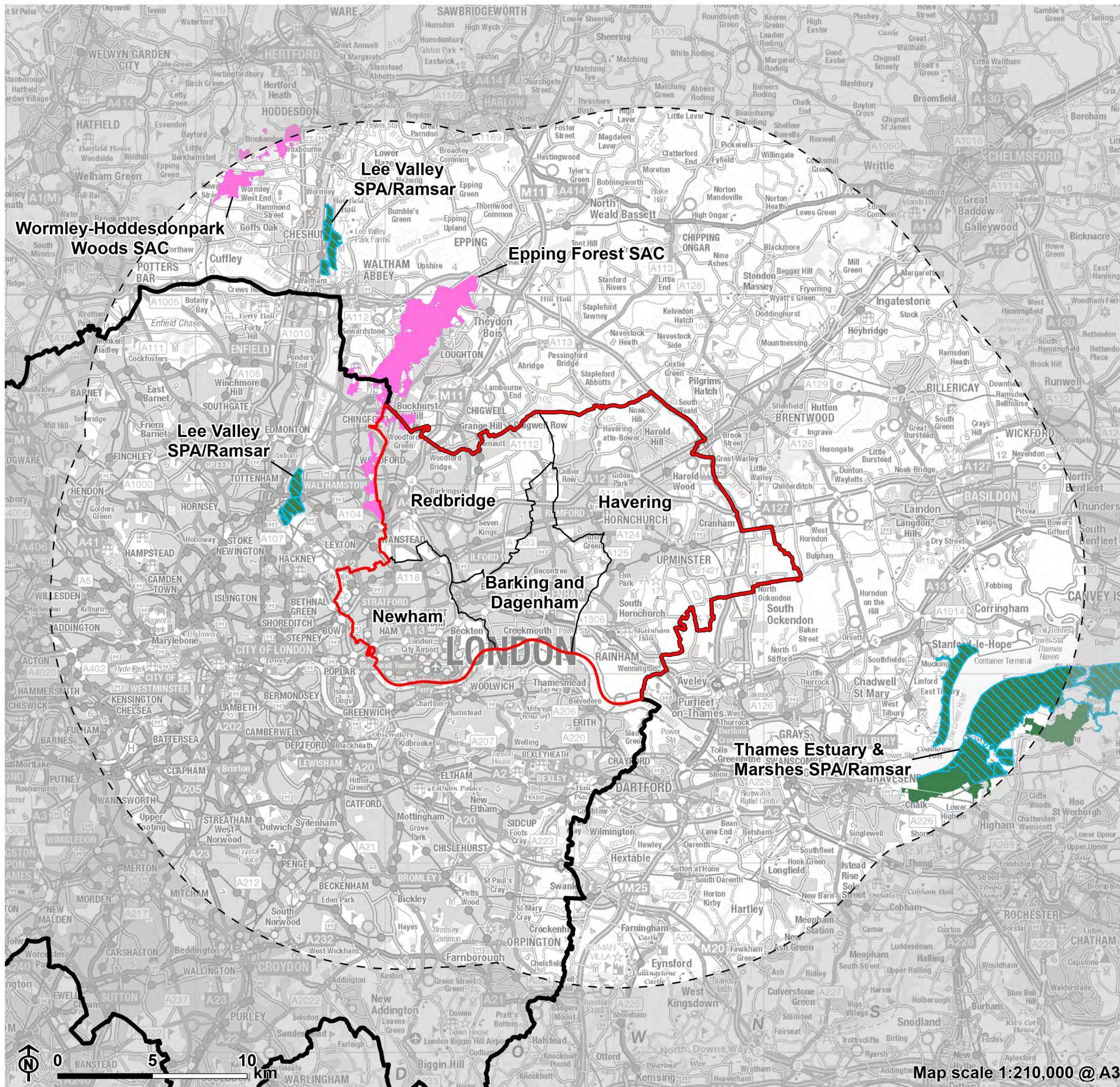


Figure 4.8: Habitat Sites within 15km of the Plan Area

- Plan area
- Plan area 15km buffer
- Greater London
- London borough
- Special Area of Conservation
- Special Protection Area
- Ramsar site

Chapter 5

Integrated Impact Assessment Framework

5.1 The SEA Regulations, Schedule 2(6) require the Environmental Report to consider:

“The likely significant effects on the environment, including short, medium and long term effects, permanent and temporary effects, positive and negative effects and secondary, cumulative and synergistic effects, on issues such as (a) biodiversity, (b) population, (c) human health, (d) fauna, (e) flora, (f) soil, (g) water, (h) air, (i) climatic factors, (j) material assets, (k) cultural heritage including architectural and archaeological heritage, (l) landscape and (m) the inter-relationship between the issues referred to in sub-paragraphs (a)–(l).”

5.2 The development of a set of IIA objectives (known as the IIA framework) is a recognised way in which the likely environmental and sustainability effects of a plan can be described, analysed and compared. The formulation of the IIA Framework presented overleaf, considered the SA frameworks set out in the SA documents for each of the four London boroughs within the East London Joint Waste Plan (ELJWP) area. The frameworks have also been reviewed and updated to consider the requirements of Health Impact Assessment (HIA) and Equalities Impact Assessment (EqIA) as well as Sustainability Appraisal (SA), the latest baseline and key sustainability issues and opportunities identified for the four London boroughs, and the latest targets and objectives set out in other relevant plans, programmes and strategies. This updated IIA Framework will help to ensure that the IIA of the ELJWP reflects recent global events (such as the COVID-19 pandemic), challenges and priorities, thereby helping to deliver an ambitious ELJWP.

5.3 The IIA objectives and appraisal guidance (which provide a guide to the factors that should be considered when carrying out assessments) set out in the IIA Framework are subject to change as new information comes to light during the IIA process.

5.4 The IIA Framework for the appraisal of the ELJWP is set out below; each primary bullet point constitutes an IIA objective and the sub-bullet points set out further guidance to help guide the appraisal of each objective. The questions included in the framework are not exhaustive, and some may be more relevant to certain Plan elements than others. The framework below also highlights the most relevant SEA topics for each IIA objective, and whether each objective supports the ELJWP Health Impact Assessment and/or Equalities Impact Assessment.

IIA framework for the East London Joint Waste Plan

IIA objective 1: To minimise the East London Joint Waste Plan's contribution to climate change through a reduction of greenhouse gas emissions from managing waste.

Appraisal questions:

- Will it reduce the East London Joint Waste Plan's contribution to climate change by reducing greenhouse gas emissions from waste management activities?
- Will it utilise the waste hierarchy to ensure less waste is being managed at the most appropriate level of the hierarchy?

- Will it support development of modern waste facilities for waste that cannot be recycled or composted?
- Will it promote energy efficiency by encouraging the use of energy efficient buildings and plant, and the use of appropriate renewable or low carbon energy sources on waste sites?

Carbon emissions associated with waste transport are dealt with under IIA objective 7.

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Climatic factors;
- Air;
- Water;
- Material assets;
- Population;
- Human health;
- Equalities Impact Assessment – Equality Act 2010 all protected characteristics:
- Health Impact Assessment: Activities that generate greenhouse gas emissions often generate other pollutants that adversely affect health and wellbeing

IIA objective 2: Move treatment of waste up the Waste Hierarchy within East London.

Appraisal questions:

- Will it contribute to the aim in the London Plan of a zero-waste city by 2050?
- Will it promote a circular low carbon economy within ELJWP area, and within London?
- Will it contribute to minimising disposal of all forms of waste, across the ELJWP area and across London?
- Will it promote the re-use, recycling and recovery of waste?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Population;
- Human health;
- Material assets;
- Equalities Impact Assessment – Equality Act 2010 all protected characteristics;
- Health Impact Assessment:
- Promoting the sustainable treatment of waste provides mental benefits of security and physical health benefits of having a healthy living environment.

IIA objective 3: Support, maintain or enhance the development of the economy of East London.

Appraisal questions:

- Will it generate employment opportunities in the waste and resource sector for local people, especially within areas of deprivation, providing opportunities to improve local skills?
- Will it minimise harm to the existing local economy, locating waste uses away from existing sensitive receptors?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Population and human health;
- Material assets;
- Equalities Impact Assessment – all Equality Act 2010 protected characteristics;
- Health Impact Assessment: Security of employment is important for mental wellbeing

IIA objective 4: Protect and improve the health of the people of the East London Joint Waste Plan area.

Appraisal questions:

- Will it avoid or minimise adverse effects on human health and safety, especially those with protected characteristics, including mental health, and those in more deprived areas?
- Will it provide opportunities to improve health and amenity through delivery of green infrastructure, enhanced public rights of way and improved access to recreation as part of the restoration of sites, or provision of biodiversity net-gain in new sites?
- Will it avoid or minimise adverse effects on the quality and extent of existing recreational assets?
- Will it reduce the incidence of crime associated with waste (e.g. fly-tipping and illegal dumping of large amounts of waste) by ensuring a sustainable network of waste facilities across the ELJWP area, and London?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Population;
- Human health;
- Equalities Impact Assessment – all Equality Act 2010 protected characteristics;
- Health Impact Assessment:
 - This objective directly addresses health and wellbeing;

- Ensuring access to green infrastructure means that people can meet their daily needs, ensuring both physical and mental wellbeing;
- Reducing crime, anti-social behaviour and fear of crime is important for physical and mental wellbeing;

IIA objective 5: Promote sustainable modes of transport in the East London Joint Waste Plan area by reducing road traffic, congestion and pollution.

Appraisal questions:

- Will it support an overall reduction in the distance travelled by waste, either within the ELJWP area or across the wider London area?
- Will it contribute towards a reduction in traffic congestion, particularly in designated AQMAs?
- Will it reduce reliance on road-based freight movements and support the use of rail and water where this represents a deliverable, efficient and sustainable choice?
- Will it support the transition from low to ultra-low and then zero emission vehicles for the transportation of waste by road?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Air;
- Climatic factors;
- Population;

- Human health;
- Biodiversity;
- Equalities Impact Assessment – Equality Act 2010 all protected characteristics.
- Health Impact Assessment: Encouraging active travel, such as walking, wheeling and cycling can have a wider range of positive implications for health, including increased physical activity and opportunities for social interaction. In addition, an increase in active travel would be associated with a decrease in vehicular transport and an associated decrease in air pollutants that can be harmful to human health. Poor air quality can lead to and aggravate respiratory diseases

IIA objective 6: Protect and enhance the historic environment within East London.

Appraisal questions:

- Will allocated waste facilities conserve, protect and enhance designated and undesignated heritage assets and their settings?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Historic environment;
- Landscape;
- Equalities Impact Assessment – Equality Act 2010 all protected characteristics
- Health Impact Assessment: The historic environment can promote wellbeing by providing a sense of place, pride in the local area, and intellectual stimulation

IIA objective 7: Protect, enhance, restore, and expand the biodiversity and geodiversity assets within the East London Joint Plan area.

Appraisal questions:

- Will it protect and enhance habitats of international, national, regional or local importance, particularly in relation to Epping Forrest?
- Will it protect and improve local populations of terrestrial species that are of international, national, regional or locally importance?
- Taking into account the impact of climate change, will it conserve and enhance designated and undesignated ecological assets and networks?
- Will it maintain and enhance wildlife corridors and minimise fragmentation of ecological areas and green spaces, enhancing biodiversity and securing the level of net-gain set out in local, regional and national policy?
- Will it protect and support enhanced knowledge and understanding of geological sites of national, regional or local importance?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Biodiversity;
- Climatic Factors;
- Soil;
- Water;
- Equalities Impact Assessment – Equality Act 2010 all protected characteristics

- Health Impact Assessment: Well-functioning ecosystems provide a range of ecosystem services, including clean air and water, pollination of food crops and opportunities for recreation. Connection with nature can improve mental wellbeing

IIA objective 8: Protect, enhance, and restore open spaces and townscapes within the ELJWP area.

Appraisal questions:

- Will it minimise the visual intrusion of waste facilities on sensitive and/or distinct townscapes?
- Will it enhance and protect townscape features including open spaces, parks and gardens and their settings?
- Will it provide for the restoration of land to an appropriate after-use including the creation of accessible greenspaces and open spaces at former waste sites?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Historic environment;
- Landscape;
- Equalities Impact Assessment – Equality Act 2010 all protected characteristics:
- Health Impact Assessment: The landscape and townscape can promote wellbeing by providing a sense of place, a sense of peace and beauty, interest and providing sites for recreation;

IIA objective 9: Protect and enhance the quality and quantity of watercourses and water bodies and maximise the efficient use of water within East London.

Appraisal questions:

- Will it maximise the efficient use of water?
- Will it protect the quantity of ground and surface water from over abstraction?
- Will it protect and enhance the quality of watercourses and water bodies?
- Will it take appropriate account of Source Protection Zone (SPZ) designations?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Climatic factors;
- Water;
- Soil;
- Population;
- Human health;
- Biodiversity
- Equalities Impact Assessment – Equality Act 2010 protected characteristics:
 - Age: Children (0-4), Younger people (aged 18-24), older people (aged 60 and over);

- Disability: Disabled people, people with physical and mental impairment; and
- Pregnancy and maternity.
- Health Impact Assessment: Issues with water quality and availability can result in the spread of disease and impact on mental health.

IIA objective 10: To manage and reduce flood risk from all sources within East London.

Appraisal questions:

- Will it promote the use of SuDS, nature-based solutions or other flood resilient design measures?
- Through the appropriate allocation of waste sites, will it ensure waste developments are not at risk of flooding both presently and in the future, taking into account climate change, and will it not result in an increase in the risk of flooding elsewhere?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Climatic factors;
- Water;
- Soil;
- Population;
- Human health;
- Biodiversity

- Equalities Impact Assessment – Equality Act 2010 protected characteristics:
 - Age: Children (0-4), Younger people (aged 18-24), older people (aged 60 and over);
 - Disability: Disabled people, people with physical and mental impairment; and
 - Pregnancy and maternity.
- Health Impact Assessment: Flooding can result in emotional and financial stress, as well as the spread of disease

IIA objective 11: Minimise noise, light and air pollution relating to waste development within East London.

Appraisal questions:

- Will it minimise pollution and impacts on amenity, including from noise and light, from activities associated with waste developments and minimise the potential for such pollution?
- Will it minimise air pollution and help achieve the objectives of Air Quality Management Plans, particularly within the designated AQMAs?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Air;
- Climatic factors;
- Population;

- Human health;
- Biodiversity;
- Equalities Impact Assessment – Equality Act 2010 all protected characteristics.
- Health Impact Assessment: Poor air quality as well as other amenity nuisances can lead to and aggravate respiratory diseases, and impact on mental health.

IIA objective 12: Protect and enhance mineral resources and soils within East London.

Appraisal questions:

- Will it ensure the safeguarding of mineral resources from sterilisation by waste management related development?
- Will it safeguard soil quality and quantity and reduce soil contamination?
- Will it avoid the loss of the best and most versatile agricultural land by prioritising the location of waste developments to appropriately located previously developed sites?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Material assets;
- Climatic factors;
- Soil;
- Water;
- Biodiversity;

- Landscape;
- Equalities Impact Assessment – Equality Act 2010 all protected characteristics:
- Health Impact Assessment: Sustainable use of resources ensures that resources are available for essential infrastructure, including transport, health centres and local amenities. Optimising reuse and minimising waste also benefit the wider environment and the ecosystem services it provides. Best and most versatile land is important for food growing

Predicting and evaluating effects

5.5 The prediction and evaluation of the effects of options in the ELJWP relies heavily on the IIA Framework – every policy (and reasonable alternative) has been appraised for their likely impacts in relation to achievement of the IIA objectives. In line with the SEA Regulations, the following characteristics of effects will be predicted and evaluated:

- Probability;
- Duration, including short, medium and long-term impacts;
- Frequency;
- Reversibility;
- Cumulative and synergistic nature;
- Transboundary nature;
- Secondary nature;
- Permanent or temporary nature; and
- Positive or negative nature.

Probability

5.6 There is an inherent degree of uncertainty in carrying out an IIA. Should it be adopted, the East London Joint Waste Plan would likely be in force for several years. Over this time, currently unforeseen changes are likely to occur. These circumstances are impossible to predict. The planning system is generally robust enough to deal with such changes by re-assessing the needs of sites and communities at the time applications are made. Uncertainties are dealt with in IIA by adopting a precautionary approach, wherein a reasonable worst-case scenario is assumed unless reliable evidence suggests otherwise. This is to ensure that any potentially significant negative effects are identified, and appropriate consideration is given to how the ELJWP could help to avoid or mitigate the worst effects if such scenarios were to arise. However, it is accepted that the likelihood of many such worst-case scenarios occurring is low, particularly as the comprehensive array of policies proposed in ELJWP would help to avoid or mitigate negative impacts.

5.7 The assessment of the ELJWP includes an assessment of where uncertainties exist in relation to the effects identified.

Duration, including short, medium and long-term impacts

5.8 The temporal scope of the IIA covers the ELJWP period. For the purposes of the IIA:

- Short term covers the period for 0-5 years, or during construction (inclusive of temporary impacts);
- Medium term covers the period for 5-20 years; and
- Long term covers the period over 20 years, beyond the Plan period.

5.9 Effects can occur over multiple terms, such as arising in the short-term and residing in the long-term.

Frequency

5.10 All effects of the ELJWP are considered to occur once, unless indicated otherwise.

Reversibility

5.11 The assessment considers whether effects are reversible or irreversible. Reversible effects may be identified where a former waste site is proposed for other uses, including restoration to open space; irreversible effects may be identified where development is proposed on greenfield land thereby resulting in the loss of best and most versatile agricultural land.

Cumulative and synergistic effects

5.12 The IIA provides an appraisal of all reasonable options considered for inclusion in the ELJWP. The vision, strategic objectives, policies and site allocations of the Plan will not be adopted in isolation and therefore an evaluation of the cumulative and synergistic effects will be undertaken at each stage. Cumulative and synergistic effects are defined as follows:

- Cumulative effects arise, for instance, where several developments each have insignificant effects but together have a significant effect, or where several individual effects have a combined effect; and
- Synergistic effects interact to produce a total effect greater than the sum of the individual effects, so that the nature of the final impact is different to the nature of the individual impacts.

Transboundary effects

5.13 The geographical extent of effects will be experienced predominantly in the ELJWP area. However, where effects are likely to be discernible in neighbouring authorities or at a greater scale, this has been specified. For example, transboundary effects may be experienced in relation to waste transported across local authority boundaries, either through an increase in air pollution or an increase in waste to be dealt with outside of the plan area.

Secondary effects

5.14 The assessment process inherently includes a consideration of secondary effects. Secondary effects are defined as “effects that are not a direct result but occur away from the original effect or as a result of a complex pathway”.

Permanent or temporary

5.15 The assessment indicates whether effects are temporary or permanent in nature. Should the ELJWP be adopted, it would only be in place for the Plan period and would subsequently be replaced by a new or revised ELJWP. Many of the effects of policies in the Plan are therefore typically temporary effects. Nevertheless, several of the effects of new development on a greenfield site would be likely to be permanent.

Positive and negative effects and significance

5.16 The IIA evaluates whether the nature of effects is likely to be positive, negative, neutral or mixed. The magnitude of effects in relation to each IIA objective is defined as significant or minor. For example, a significant positive effect is identified where an option is likely to significantly contribute to the achievement of an IIA objective, whereas an adverse effect (either significant or

minor negative) is identified where the option conflicts with the IIA objective. Options which are unlikely to significantly influence whether an objective will be achieved receive a neutral rating. Mixed effects are identified where an option is expected to have both a positive and negative effect on the IIA objective.

5.17 The IIA assessments have been carried out at a high level and so the dividing line between sustainability effects is often quite small. The effect of an option on a IIA objective is significant where it is of such magnitude that it will have a noticeable and measurable effect compared with other factors that may influence the achievement of that IIA objective.

5.18 Minor effects are still identified as these assist with the identification of cumulative and synergistic effects (e.g., several minor effects can combine to become a significant effect), can help to identify opportunities for enhancements (e.g., enhancing a minor positive effect to make it significant) and better enable the Boroughs to make a more informed decision over the sustainability performance of options.

5.19 In determining the significance of the effects of the options for potential inclusion in the ELJWP, the IIA considers the plan's relationship with the other documents in the planning system such as the NPPF and other national policy approaches, and regulatory requirements, as these may provide additional safeguards or mitigation of potentially significant adverse effects.

5.20 The findings of the IIA are presented as a colour coded symbol showing a score for each option (including reasonable alternatives) against each of the IIA objectives along with a concise justification for the score given, where appropriate. The use of colour coding in the matrices allows for the magnitude of effects (both positive and negative) to be easily identified. **Table 5.1** presents the colour coded symbols and definitions that have been used to report the significance of effects of the ELJWP policies and sites and their reasonable alternatives.

Table 5.1: Effect symbols and colours used in IIA

IIA Effect	Description of Effect
++	Significant positive effect likely
++/-	Mixed significant positive and minor negative effects likely
+	Minor positive effect likely
+/-	Mixed minor effects likely
++/--	Mixed significant effects likely
-	Minor negative effect likely
--/+	Mixed significant negative and minor positive effects likely
--	Significant negative effect likely
0	No or negligible effect likely
?	Likely effect uncertain
N/A	Assessment criterion not applicable

Reasonable alternatives

5.21 The IIA must appraise not only the preferred options for inclusion in the ELJWP but also ‘reasonable alternatives’ to these options. This implies that alternatives that are not reasonable do not need to be subject to appraisal. Part (b) of Regulation 12(2) notes that reasonable alternatives will consider the objectives of the plan, as well as its geographical scope. Therefore, alternatives that do not meet the objectives of national policy or are outside the Plan area are unlikely to be reasonable.

Site assessment criteria

5.22 The ELJWP does not currently allocate new waste sites. The evidence suggests that there is a sufficient surplus in waste management capacity to consider the release of waste sites that currently enjoy policy protection for waste management uses:

- Safeguarded existing waste management sites (Schedule 1 of the ELJWP).
- Sites in locations that are identified as suitable for strategic waste management facilities (Schedule 2 of the ELJWP).

5.23 The IIA has not therefore appraised site options at this stage. Spatial assessment criteria relevant to each of the IIA objectives outlined above will be prepared at a later date if required.

Health impact assessment

5.24 The background and overall approach to HIA is set out in Chapter 1. The IIA Framework above identifies the IIA objectives that have potential to impact the health and wellbeing of the population.

Equality impact assessment

5.25 There are three main duties set out in the Equality Act 2010, which public authorities including the London boroughs must meet in exercising their functions:

- To eliminate discrimination, harassment, victimisation and other conduct that is prohibited under the Act;
- To advance equality of opportunity between persons who share relevant protected characteristics and persons who do not share it; and

- To foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

5.26 The Equality Act 2010 identifies nine ‘protected characteristics’ and seeks to protect people from discrimination based on these characteristics:

- Protected characteristics identified in the Equality Act 2010:
 - Age: Children (0-4), Younger people (aged 18-24), older people (aged 60 and over);
 - Disability: Disabled people, people with physical and mental impairment;
 - Gender reassignment;
 - Marriage and civil partnership;
 - Pregnancy and maternity;
 - Race;
 - Religion or belief;
 - Sex; and
 - Sexual orientation.

5.27 This document sets out the baseline and projected baseline for the protected characteristics within Chapter 4. The ELJWP will therefore be assessed to consider the likely impacts of policy on each of the nine protected characteristics from the Equality Act.

Chapter 6

IIA of the Draft East London Joint Waste Plan and its Reasonable Alternatives

6.1 This chapter records the IIA findings for the Draft East London Joint Waste Plan (ELJWP) and its reasonable alternatives, produced for Regulation 18 consultation. The ELJWP will set out how and where waste will be managed and will be used to determine planning applications affecting the management of waste in the four East London boroughs that are the joint authorities preparing the plan (Barking & Dagenham, Havering, Newham and Redbridge).

6.2 The ELJWP will form part of the Development Plan for each of the boroughs, sitting alongside separate Local Plans that are concerned with other forms of development such as housing and that related other forms of employment.

6.3 The draft plan has set out a Joint Waste Plan Vision and 8 strategic objectives:

- Strategic Objective 1: Significantly Reduce Waste Production Overall;
- Strategic Objective 2: All Built Development Will Contribute to the Achievement of a Fully Functioning Circular Economy by 2041;
- Strategic Objective 3: Appropriately Locate Waste Management Capacity;
- Strategic Objective 4: Contribute to East London's Regeneration and Economic Growth;
- Strategic Objective 5: Achieve Net Zero Waste Management;
- Strategic Objective 6: Optimise Existing Waste Management Capacity;

Chapter 6 IIA of the Draft East London Joint Waste Plan and its Reasonable Alternatives

- Strategic Objective 7: Minimise Transportation and Establish Alternative Infrastructure; and
- Strategic Objective 8: Restrict Landfilling to Exceptional Circumstances.

6.4 There are six strategic policies set out in the draft ELJWP. In some cases there may be overlap between the policies of the Borough's Local Plans and the policies in this Plan, where this occurs the latest policy to have been adopted will take precedence.

6.5 The policies align with the strategic objectives as below:

- Strategic Objective 1: Policy JWP1: Circular Economy & Policy JWP5: Energy from Waste;
- Strategic Objective 2: Policy JWP1: Circular Economy & Policy JWP4: Design of Waste Management Facilities;
- Strategic Objective 3: Policy JWP2: Safeguarding and Provision of Waste Capacity & Policy JWP3 Prevention of Encroachment;
- Strategic Objective 4: Policy JWP2: Safeguarding and Provision of Waste Capacity & Policy JWP4: Design of Waste Management Facilities;
- Strategic Objective 5: Policy JWP1: Circular Economy, Policy JWP4: Design of Waste Management Facilities & Policy JWP6: Deposit of Waste on Land;
- Strategic Objective 6: Policy JWP5: Energy from Waste;
- Strategic Objective 7: Policy JWP4: Design of Waste Management Facilities; and
- Strategic Objective 8: Policy JWP1: Circular Economy.

Vision and strategic objectives

6.6 Section 3 of the ELJWP Regulation 18 document outlines the vision and strategic objectives for the emerging plan.

6.7 The overarching draft vision for ELJWP is:

By 2041, the principles of the circular economy will be fully integrated into all forms of development within East London, resulting in reduced waste production and increased emphasis on repair, refurbishment and reuse including that associated with built structures

A network of accessible service providers for reuse, repair, and recycling will be in place. Remaining waste will be viewed and managed as a resource, with hazardous properties virtually eliminated in construction and demolition waste. Priority will be given to using recycled materials in construction, and development projects will prioritise waste minimisation.

Sustainable waste management in East London will contribute to the area's regeneration, positioning it as a key part of London's industrial engine and a thriving economic centre. Waste management facilities will be located to protect and enhance communities and the natural environment, and be resilient to climate change. Waste will be managed efficiently by maximising existing capacity of facilities, releasing underutilised or poorly located sites, minimising transportation and using infrastructure established for alternative means of waste movement, in particular via the River Thames.

Net zero in waste management will have been achieved in East London through an understanding, and reduction, of lifecycle carbon impacts and incorporating renewable energy in waste management and transportation.

Sending waste to landfill will be a last resort, occurring only in exceptional circumstances, and any landfill in East London will be considered a strategic resource with carefully managed capacity.

6.8 Eight draft strategic objectives have been defined to support the delivery of the overarching vision:

Strategic Objective 1: Significantly Reduce Waste Production Overall

- Encourage the integration of circular economy principles and the adoption of best practice design and construction approaches, to achieve a significant reduction in waste production by 2041.

Strategic Objective 2: All Built Development Will Contribute to the Achievement of a Fully Functioning Circular Economy by 2041

- Promote the use of circular economy principles in design, construction and development in the built environment, emphasising reduced waste production and increased reuse and repair practices.
- Encourage development to consider and minimise waste during construction and operation, following the waste hierarchy in priority order.
- Enable delivery of development which will help establish a viable and easily accessible network of re-use, repair, and recycling services.
- Foster a shift in perception such that waste materials are viewed as a valuable resource, ensuring sustainable waste management is integral to the development and use of all new development.
- Encourage development that prioritises the use of reused, reusable, recycled and recyclable materials and minimises the use hazardous materials which could result in the production of hazardous waste in construction projects in East London

Strategic Objective 3: Appropriately Locate Waste Management Capacity

- Locate, construct, and operate waste management facilities while protecting and enhancing communities, health, employment, and the natural environment, and ensuring resilience to climate change.

Strategic Objective 4: Contribute to East London's Regeneration and Economic Growth

- Leverage sustainable waste management in a manner that contributes to East London's regeneration and economic growth.
- Ensure high quality restoration and aftercare of landfill sites which maximises benefits to the community and the environment.
- Ensure waste is managed using methods and in locations that contribute to measurable improvements in the natural environment, including biodiversity, of East London.

Strategic Objective 5: Achieve Net Zero Waste Management

- Attain net zero in waste management by 2041 by ensuring that whole lifecycle carbon impacts are taken into account in proposals for the management of waste.
- Provide waste management capacity that minimises greenhouse gas production and supports the development of a low carbon economy and decentralised energy.
- Promote development which allows for the exclusive use of renewable energy sources in waste management operations and transportation.

Strategic Objective 6: Optimise Existing Waste Management Capacity

- Realise the full potential of existing waste management capacity in East London, using only the minimum land necessary while ensuring the capability to manage at least the apportionment in the London Plan is maintained.

- Review and release land occupied by poorly located or under-utilised waste management facilities for other uses.

Strategic Objective 7: Minimise Transportation and Establish Alternative Infrastructure

- Minimise the transportation of waste by locating facilities as close as possible to its source
- Safeguard and establish alternative transport infrastructure, including River Thames wharves, to allow movement without reliance on fossil fuel-powered vehicles.

Strategic Objective 8: Restrict Landfilling to Exceptional Circumstances

- Ensure the disposal of waste occurs only as a last resort and in exceptional circumstances.
- Ensure any landfill capacity is reserved solely for the disposal of waste which cannot be managed by any other means.

6.9 These two components of the ELJWP Regulation 18 document were subjected to IIA. No reasonable alternatives to the vision and objectives were identified at this stage.

Likely effects of the draft vision themes,
overarching vision and 10 strategic objectives

6.10 Given the clear aspirational relationship between the overarching vision and 8 strategic objectives, these two components of the ELJWP Regulation 18 document have been appraised together. **Table 6.1** below sets out the likely effects of the vision and strategic objectives. The reasoning for the identification of these likely effects is set out by IIA objective below the table.

Table 6.1: Vision and strategic objective effects

IIA Objectives	Overarching Vision	Strategic Objective 1: Significantly reduce waste production overall	Strategic Objective 2: All built development will contribute to the achievement of a fully functioning circular economy by 2041	Strategic Objective 3: Appropriately locate waste management capacity	Strategic Objective 4: Contribute to London’s regeneration and economic growth	Strategic Objective 5: Achieve net zero waste management	Strategic Objective 6: Optimise existing waste management capacity	Strategic Objective 7: Minimise transportation and establish alternative infrastructure	Strategic Objective 8: Restrict landfilling to exceptional circumstances
IIA1: Climate change mitigation	++	+	+	0	0	++	0	++	+
IIA2: Treatment of waste	++	++	+	0	0	+	0	+	+
IIA3: Economy	+	0	+/-	0	++	-	0	0	0
IIA4: Health and wellbeing	+	0	0	+	+	0	0	0	0
IIA5: Sustainable transport	+	+	+	0	0	++	+	++	0
IIA6: Historic environment	+	0	0	0	0	0	0	0	0
IIA7: Biodiversity and geodiversity	+	0	0	+	+	0	0	0	0
IIA8: Open spaces and townscapes	0	0	0	0	0	0	0	0	0
IIA9: Water	+	0	0	+	+	+	0	+	0
IIA10: Flooding	+	+	0	0	0	+	0	0	0
IIA11: Noise, light and air pollution	++	+	0	0	0	0	0	+	0
IIA12: Mineral resources and Soils	+	0	0	0	0	0	+	0	+

IIA objective 1: To minimise the East London Joint Waste Plan's contribution to climate change through a reduction of greenhouse gas emissions from managing waste

6.11 The vision is likely to have a significant positive effect against this IIA objective because it emphasises repair, refurbishment and reuse and the overall minimisation of waste across the East London area. Construction will prioritise recycled materials and the overall transportation of waste will be reviewed to use alternative infrastructure via the River Thames, thus diminishing the release of carbon emissions.

6.12 Strategic objectives 1 and 2 are likely to have minor positive effects against the IIA objective due to the emphasis on re-use, recycle and recover to minimise the amount of waste produced, resulting in fewer emissions associated with its management. Strategic objective 8 requires that landfill should only be used as an absolute last resort, positively contributing to London's reduction of greenhouse gas emissions by minimising the need to transport landfill-bound waste farther afield.

6.13 Strategic objectives 5 and 7 seek to prioritise the reduction of greenhouse gas production and unsustainable transportation and will therefore have a significant positive effect on this IIA objective.

6.14 The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective.

6.15 Minimising emissions from waste within the ELJWP area and contributing to a reduction in greenhouse gas emissions is expected to have a positive effect on air, climate, water, material assets, soil and biodiversity. Improvements to

the local environment will have positive benefits for the physical and mental health of local populations.

IIA objective 2: Move treatment of waste up the Waste Hierarchy within East London

6.16 The vision and strategic objective 1 are both likely to have a significant positive effect against this IIA objective as they both promote the re-use, recycling and recovery of waste and a circular low carbon economy, driving waste up the waste hierarchy.

6.17 The following strategic objectives all have a minor positive effect against this IIA objective. Strategic objective 2 because it favours circular economy principles; 5 and 7 support the development of a low carbon economy and prioritise the use alternative fuels for transport, respectively. Finally, 8 minimises the landfilling of waste, driving the remaining proportion of landfilled waste up the waste hierarchy.

6.18 The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective.

6.19 . Movement of waste up the waste hierarchy is expected to have a positive effect on air, climate, water, material assets, soil and biodiversity. Improvements to the local environment will have positive benefits for the physical and mental health of local populations.

IIA objective 3: Support, maintain or enhance the development of the economy of East London

6.20 The vision is likely to have a minor positive effect against this IIA objective because it states that sustainable waste management in East London will be a contributor to London's thriving economic centre.

6.21 A significant positive effect is recorded for this IIA objective for strategic objective 4, which focusses on harnessing waste management to deliver economic regeneration and growth in East London.

6.22 Strategic objective 2 has the potential to generate a mixture of minor positive and negative effects against this IIA objective as it encourages resource efficiency such as the practice of repairing, which can also generate employment opportunities within the area. However, the promotion of circular economy principles in design, construction and development may increase costs in some areas, at least in the short term until the economies are more mature. A minor negative effect is recorded for this IIA objective for Strategic Objective 5 for similar reasons, specifically the costs associated with delivering a net zero in waste management.

6.23 The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective. Support for the economy is expected to have a positive effect on population health and material assets. Improvements to the local economy will have positive benefits for the mental health of local populations, as well as physical health.

IIA objective 4: Protect and improve the health of the people of the East London Joint Waste Plan area

6.24 The vision is likely to have a minor positive effect against this IIA objective as it promotes the protection and enhancement of communities in the area.

6.25 Similarly, strategic objective 3 emphasises the importance of protecting and enhancing the health of communities and the natural environment and 4 prioritises restoration and aftercare of landfill sites, both of which will have a minor positive effect against this IIA objective.

6.26 The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective .

6.27 Support for the health of local communities is expected to have a positive effect on population health. Improvements in the local environment will have positive benefits for the mental health of local populations, as well as physical health.

IIA objective 5: Promote sustainable modes of transport in the East London Joint Waste Plan area by reducing road traffic, congestion and pollution

6.28 The vision is likely to have a minor positive effect against this IIA objective as it bolsters investigating the use of alternative means of sustainable transport, especially via the River Thames.

6.29 The vision is supported by strategic objectives 1, 2, 5, 6 and 7. Strategic objectives 5 and 7 make a significant contribution through their prioritisation of net-zero and transportation efficiencies and sustainable modes.

6.30 More minor positive effects are recorded for strategic objectives 1, 2 and 6. This recognises the strategic objectives efforts to minimise waste and/or maximise the efficient siting and capacity of facilities, which reduce the scale and need to transport waste within and outside East London .

6.31 The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective. Support for sustainable transport is expected to have a positive effect on population health, air, climate, material assets, water and biodiversity. Access to sustainable transport, and reduction in air pollution, will have positive benefits for the mental health of local populations, as well as physical health.

IIA objective 6: Protect and enhance the historic environment within East London

6.32 The vision is likely to have a minor positive effect on this IIA objective; as it encourages the repair and refurbishment of goods which extends to built structures.

6.33 There are no strategic objectives which explicitly contain details around the historic environment, resulting in negligible effects against this IIA objective.

6.34 The lack of focus on the historic environment within the vision and objectives is expected to have a negative outcome for material assets and population health. Negative effects on the historic environment due to waste development will have negative effects for the mental health of local populations.

Recommendation

6.35 Strategic objective 3 puts emphasis on the need to protect and enhance the natural environment. The IIA recommends that this could be extended to include the historic environment, which would then have a minor positive effect on this IIA objective.

IIA objective 7: Protect, enhance, restore, and expand the biodiversity and geodiversity assets within the East London Joint Plan area

6.36 The vision is likely to have a minor positive effect against this IIA objective as it states that the location of waste management facilities will be specifically chosen so that the natural environment can be protected and enhanced.

6.37 Strategic objectives 3 and 4 actively support the vision by emphasising the importance of protecting and enhancing the natural environment including the biodiversity within East London and are therefore recorded as having a minor positive effect against this IIA objective.

6.38 The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective.

6.39 Support for the biodiversity is expected to have a positive effect on biodiversity, air, pollution, material assets and population health. Improvements in biodiversity will have positive benefits for the mental health of local populations, as well as physical health.

IIA objective 8: Protect, enhance, and restore open spaces and townscapes within the ELJWP area

6.40 The vision and objectives make no specific references to open spaces or townscapes. The vision and objectives may have indirect positive or negative effects where open spaces or townscapes are protected or affected by waste development. The effect is considered to be negligible and uncertain at present.

6.41 The lack of focus on open space and townscapes within the vision and objectives is expected to have a negative outcome for material assets and population health. Negative effects on open spaces and townscape due to waste development will have negative effects for the mental health of local populations.

Recommendation

6.42 Specific reference to the protection and enhancement of open space or townscape within the vision and strategic objectives would result in positive effects on this IIA objective.

IIA objective 9: Protect and enhance the quality and quantity of watercourses and water bodies and maximise the efficient use of water within East London

6.43 The vision is likely to have a minor positive effect against this IIA objective as it states that the location of waste management facilities will be specifically chosen so that the natural environment can be protected and enhanced, including the area's water resource.

6.44 Similarly, strategic objectives 3 and 4 emphasise the importance of protecting and enhancing the natural environment and are therefore considered to have a minor positive effect on IIA9.

6.45 The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.

6.46 Protecting and enhancing the quality and quantity of watercourses and water bodies and maximising the efficient use of water, is expected to have a positive effect on water, material assets, soil and biodiversity. Reducing risk of water pollution and ensuring water security will have positive benefits for the physical and mental health of local populations.

IIA objective 10: To manage and reduce flood risk from all sources within East London

6.47 Whilst there is no direct reference to flooding or SuDS and nature-based solutions, the vision emphasises waste facilities to be located to protect and enhance the natural environment and increase climate resilience. The vision therefore has a minor positive effect against this IIA objective .

6.48 Similarly, strategic objectives 3, 4 and 5 focus on protecting and enhancing the natural environment and/or ensure resilience to climate change, resulting in minor positive effects against this IIA objective.

6.49 The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective.

6.50 Managing and reducing flood risk from all sources is expected to have a positive effect on water, material assets, soil and biodiversity. Reducing risk from flooding will have positive benefits for the physical and mental health of local populations.

IIA objective 11: Minimise noise, light and air pollution relating to waste development within East London

6.51 Although there are no direct references to minimising pollution within East London in the vision, the vision pursues several priorities that will directly result in reductions in pollution across East London, including efficient use of waste, waste reduction, locating waste sources close to their end-use, minimising transportation and maximising sustainable travel and delivering net-zero. Therefore, a significant positive effect is recorded against this IIA objective.

6.52 A minor positive effect is recorded for strategic objective 1 against this IIA objective due to general contribution that a general reduction in waste production in East London will have on the need to process and transport it, reducing the opportunity for associated pollution. Strategic objectives 5 and 7 promote the use of low carbon technologies and sustainable transportation of waste, pursuing transport modes that do not rely on fossil fuels for power, resulting in a minor positive effect against this IIA objective.

6.53 The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.

6.54 Minimising pollution and the effects of pollution from new development is expected to have a positive effect on physical and mental health, material assets, soil, water and biodiversity.

IIA objective 12: Protect and enhance mineral resources and soils within East London

6.55 The vision references waste to be managed efficiently by maximising the existing capacity of facilities but releasing underutilised and poorly located sites. This can ensure that large parts of the East London area can revert to safeguarded and undisturbed mineral resources and soils through this action. This therefore has a minor positive effect against this IIA objective.

6.56 Similarly, strategic objective 6 promotes the efficient use of land, resulting in the same minor positive effect recorded against this IIA objective as the vision.

6.57 Strategic objective 8 states that the landfilling will only be used as a last resort, which saves and prevents unnecessary contamination of mineral resources and soils within East London.

6.58 The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective. Protecting and enhancing mineral resources and soils is expected to have a positive effect on material assets, soil, water and biodiversity. Effective and sustainable use of land provides health environments for people.

Policies

6.59 There are six policies in the ELJWP Regulation 18 document:

- Policy JWP1: Circular Economy
- Policy JWP2: Safeguarding and Provision of Waste Capacity
- Policy JWP3 Prevention of Encroachment
- Policy JWP4: Design of Waste Management Facilities
- Policy JWP5: Energy from Waste
- Policy JWP6: Deposit of Waste on Land

6.60 Each policy is accompanied by a paragraph setting out the purpose of the policy, and supporting text to help with the implementation of the plan. The policies within the ELJWP will be applied when making decisions on the suitability of proposals for development in East London. All the policies apply to proposals relating to waste management and Policies JWP1 and JWP3 will apply to all forms of development. Parts of Policy JWP2 will apply to proposals which involve the redevelopment of existing waste management facilities.

6.61 Relevant policies included in the adopted Local Plan of the Borough within which the proposal is located will also be applied. Such policies may relate to wider issues concerning the protection and enhancement of communities and the natural environment. Where there is overlap between the policies of the Borough's Local Plans and the policies in this Plan, the latest policy to have been adopted will take precedence.

Likely effects of the policies

6.62 The likely sustainable effects of the policies are set out in **Table 6.3** and described below.

Table 6.1: Policy effects

IIA Objectives	Policy JWP1: Circular Economy	Policy JWP2: Safeguarding and Provision of Waste Capacity	Policy JWP3: Prevention of Encroachment	Policy JWP4: Design of Waste Management Facilities	Policy JWP5: Energy from Waste	Policy JWP6: Deposit of Waste on Land
IIA1: Climate Change	+	+	0	++	++	+
IIA2: Treatment of waste	++	+	+	+	+	+
IIA3: Economy	++	++	+	+/-	0	+
IIA4: Health and wellbeing	+	+/-?	+?	++/-?	+	+?
IIA5: Sustainable transport	+	+	0	+	+	0
IIA6: Historic environment	?	?	0	?	0	?
IIA7: Biodiversity and geodiversity	+?	+/-?	0	+/-?	0	+/-
IIA8: Open spaces and townscapes	+?	+/-?	0	+/-?	0	+/-
IIA9: Water	+	+/-?	0	+/-?	0?	+?
IIA10: Flooding	0	0	0	++	0	0
IIA11: Noise, light and air pollution	0	-?	++?	+	+	+
IIA12: Mineral resources and soils	0	+?	0	+	0	+

6.63 The reasoning for the identification of these likely effects is set out by IIA objective below.

IIA objective 1: To minimise the East London Joint Waste Plan's contribution to climate change through a reduction of greenhouse gas emissions from managing waste

6.64 Policy JWP 1 promotes the circular economy, minimising the production of waste, providing adequate treatment facilities, and also makes provision for education facilities within new waste development. The policy is expected to have a minor positive effect on IIA1, as it promotes the minimisation of waste, as well as the appropriate treatment of waste, thereby minimising the overall volume of emissions from waste treatment.

6.65 Policy JWP2 safeguards waste sites and ensures there is adequate waste capacity within the plan area. The policy is expected to have a minor positive effect on IIA1, as maintaining an adequate network of waste sites within the plan area will minimise the distance waste needs to travel, minimising emissions from transport.

6.66 Policy JWP3 seeks to prevent the encroachment of development on existing waste facilities and as such will have a negligible effect on this IIA objective.

6.67 Policy JWP4 seeks to minimise greenhouse gas as far as practicable and ensure the implementation of climate adaptation measures. As such, a significant positive effect is expected in relation to IIA1.

6.68 Policy JWP5 Energy from Waste is expected to have a significant positive effect in relation to IIA1 as it states that any energy from waste facilities will only

be permitted where the release of carbon emissions will be minimised, and that facilities will operate as combined heat and energy plants.

6.69 Policy JWP6 seeks to minimise fugitive emissions of landfill gas whilst maximising energy recovery. These provisions will benefit a reduction of greenhouse gas emissions and as such, a minor positive is expected in relation to IIA1.

Policy recommendations

6.70 Although the ELJWP is broadly positive in terms of IIA Objective 1, the plan could consider the inclusion of specific targets in relation to reduction in carbon emissions or reuse of materials associated with waste management facilities and transfer operations.

IIA objective 2: Move treatment of waste up the Waste Hierarchy within East London

6.71 As set out above, policy JWP1 requires the minimisation of waste and appropriate treatment within the waste hierarchy. As such, this policy is expected to have significant positive effects against IIA2.

6.72 Policy JWP2 requires the safeguarding of existing facilities and the provision of appropriate waste capacity within the plan area. The policy states that proposals for new facilities should be refused unless they result in waste being dealt with further up the waste hierarchy or consolidate existing facilities in order to improve their efficiency. Therefore a minor positive effect is recorded on this IIA objective.

6.73 Policy JWP3 is expected to have a minor positive effect in relation to IIA2 as it prevents any future development from impeding on the functioning of existing waste management facilities. It is therefore contributing to London's

goal of becoming a zero-waste city and promoting a low carbon economy through correct waste disposal at existing waste sites.

6.74 Policy JWP4 promotes recycling as a climate adaption measure, which will minimise the disposal of waste in the plan area. As such, a minor positive effect is expected in relation to IIA2.

6.75 Policy JWP5 is expected to have a minor positive effect in relation to IIA2 as it states that any waste to be used as fuel is waste which cannot be reused, recycled or composted (as detailed within a Waste Hierarchy Statement). This therefore promotes waste up the waste hierarchy and contributes towards London's aim of becoming a zero-waste city by minimising the disposal of all waste across the ELJWP area.

6.76 Policy JWP6 makes provision for the re-use of waste prior to its disposal to land, including requirements for proposals for land to be used as waste to demonstrate that waste cannot be practically managed by other means further up the waste hierarchy. As such, a minor positive effect is expected in relation to IIA2, given the proportion of waste that currently goes to landfill and the general declining trend.

Policy recommendations

6.77 Most policies are considered to have positive effects in relation to IIA2. The plan could consider the inclusion of specific targets in relation to reduction of waste to landfill.

IIA objective 3: Support, maintain or enhance the development of the economy of East London

6.78 Policy JWP 1 supports the circular economy within East London. This provides support for existing businesses as well as for new or expanded

businesses that may come forward that minimise the use of waste and maximise the prevention and re-use of materials. This policy is expected to have a significant positive effect on IIA3.

6.79 Policy JWP2 provides support for existing waste sites and existing waste capacity within East London. As such, the policy is expected to have a significant positive effect on this IIA objective.

6.80 Policy JWP3 seeks to prevent encroachment on existing waste sites from incompatible new development. This provides protection for existing waste sites and is therefore expected to have a minor positive effect on IIA3.

6.81 Policy JWP4 seeks to ensure that employment opportunities are created for residents of the respective Borough from major development at both construction and operational stages. This will benefit the local economy, and as such, a minor positive effect is expected in relation to IIA3. Conversely, the long list of measures required in policy JWP4 to improve the sustainable development and management of waste in East London will require considerable investment, which may influence the profitability and viability of certain waste management practices with minor adverse effects against this objective.

6.82 Policy JWP5 is concerned with the operation of new energy from waste facilities and will have a negligible effect on this IIA objective.

6.83 Policy JWP6 is concerned with controlling the deposit of waste to land, and promotes positive afteruses on landfill sites. By ensuring that landfill is controlled appropriately, this policy will prevent negative effects on existing businesses. Beneficial afteruses on landfill sites will have positive effects for the local economy. As such, this policy is expected to have a minor positive effect on IIA3.

Policy recommendations

6.84 There are no police recommendations in relation to JWP3.

IIA objective 4: Protect and improve the health of the people of the East London Joint Waste Plan area

6.85 Policy JWP1 requires that there is sufficient storage space for the collection and treatment of recyclable materials. This should minimise negative effects on the community, by ensuring materials are stored appropriately. This policy is considered to have a minor positive effect on this objective.

6.86 Policy JWP2 requires that existing sites are safeguarded and there is adequate waste capacity within East London. By ensuring adequate provision for the collection and treatment of wastes within the plan area, this policy should minimise unauthorised waste treatment or fly tipping, which will have a minor positive effect on this IIA objective. However, in addition, the policy offers scope to permit waste management uses on safeguarded waste sites where they avoid undue amenity impacts, offering scope for some minor adverse effects to this objective within their immediate vicinity. Therefore an uncertain mixed minor positive and minor negative effect is recorded against this IIA objective overall.

6.87 Policy JWP3 is expected to have a minor positive effect in relation to IIA4 as the policy seeks to prohibit future incompatible development from encroaching existing waste facilities. This should diminish the consequential impacts on human health and safety as a result of residing in close proximity to waste sites, most commonly from noise or odour. This policy is therefore expected to have a minor positive effect on this IIA objective; however, in the absence of precautionary distance buffers, this is uncertain until such time as the specific sensitivities of receptors and pathways to and from them are known.

6.88 Policy JWP4 employs a wide range of measures to avoid adverse impacts from development, including those that compromise the health and wellbeing of local communities. However, the policy states that only ‘unacceptable’ adverse impacts on health and well-being should be avoided, offering scope for some minor adverse effects. As such, a significant positive effect is recorded, mixed with the potential for some uncertain minor adverse effects in relation to IIA4.

6.89 Policy JWP5 Energy from Waste is expected to have a minor positive effect in relation to IIA4 as the release of non-biogenic gaseous carbon emissions will be minimised thus minimising the adverse effects on human health across the ELJWP area.

6.90 Policy JWP6 intends to ensure that restoration and aftercare of sites are of high quality with benefits to local communities. Whilst this is not directly stated in the policy, this suggests that sites will be restored as a benefit to the health of local communities. As such, an uncertain but minor positive effect is expected in relation to IIA4.

Policy recommendations

6.91 Policy JWP6 references the restoration of sites to a high quality with benefits to local communities. The policy should consider expanding these benefits in more detail, for example, benefits to recreation, health or the economy. Most policies are considered to have positive effects in relation to IIA4.

IIA objective 5: Promote sustainable modes of transport in the East London Joint Waste Plan area by reducing road traffic, congestion and pollution

6.92 Policy JWP1 provides for a network of sites to enable the minimisation of waste and maximisation of the circular economy. This network of sites should reduce the amount of waste on the road network and the distance that waste has to travel, and have a minor positive effect on this objective. This will depend on sites coming forward within the plan period, and therefore the effect is considered to be uncertain.

6.93 Policy JWP2 safeguards existing sites and requires the plan to provide adequate waste capacity within the plan area. Ensuring the plan area provides sufficient capacity for the treatment of waste will help minimise the distance waste has to travel. The policy is therefore expected to have a minor positive effect on this objective.

6.94 Policy JWP3 is concerned with preventing existing waste sites being affected by new incompatible development in close proximity. The policy has no direct relationship with this objective, and is therefore expected to have a negligible effect on IIA5.

6.95 Policy JWP4 gives preference to non-road transport where practicable and additionally promotes low emission vehicles, seeks to utilise vehicle charging points and incorporates scheduling and management of vehicle routing. As such, a minor positive effect is expected in relation to IIA5.

6.96 Policy JWP5 Energy from Waste is expected to have a minor positive effect in relation to **IIA5** as the policy will be consistent with the proximity principle limiting long distance vehicle movements and therefore reducing the distance travelled and traffic congestion.

6.97 Policy JWP6 will have a negligible effect on this IIA objective.

Policy recommendations

6.98 Policy JWP4 references a preference towards 'non-road transport' in the design of waste management facilities. The policy should consider identifying what forms of transport this would be, including reference towards the promotion of active travel if applicable. Currently, this element of the policy is ambiguous.

IIA objective 6: Protect and enhance the historic environment within East London

6.99 IIA6 is expected to receive an uncertain effect in relation to policies JWP1, 2, 4 and 6 as there is no specific mention of the historic environment where waste management sites and/or activities could have an adverse effect on the historic environment.

6.100 A negligible effect is recorded for policy JWP3 and 5, which are concerned with the evaluation of specific proposals and/or scenarios rather than their impacts on the historic environment .

Policy recommendations

6.101 Policy JWP4 does not currently address the historic environment as a consideration regarding proposals for new waste management uses.

6.102 Policy JWP6 does not currently address the historic environment as a consideration regarding proposals for new land to be used for the disposal of waste.

6.103 The policies should consider including provision for safeguarding and enhancing the historic environment where relevant.

IIA objective 7: Protect, enhance, restore, and expand the biodiversity and geodiversity assets within the East London Joint Plan area

6.104 By providing an adequate network of waste facilities, policy JWP1 will help to prevent fly tipping and other uncontrolled waste uses. This could have a minor positive effect on IIA7, by ensuring waste sites are protected from waste development. This effect is considered to be uncertain as the policy does not specifically address the natural environment, and the effects are dependent on the development sites that come forward in the plan area.

6.105 Policy JWP2 protects existing waste sites, and does not actively promote new sites for waste development. While there may be no negative effects of new sites on the natural environment, the policy does not address the potential negative effects of existing waste sites, where there may be issues with negative effects on the natural environment. The overall effect of this policy on IIA7 is considered to be mixed minor positive and minor negative, with uncertainty due to the effects being dependent on the active sites within the plan period.

6.106 Policy JWP3 is considered to have a negligible effect on this IIA objective.

6.107 Policy JWP4 seeks contributions to green and blue infrastructure and biodiversity enhancement where net gain is required. This will contribute towards improving local biodiversity in the plan area and as such, a minor positive effect is expected in relation to IIA7. However, the policy states that only 'unacceptable' adverse impacts on the environment should be avoided, offering scope for some minor adverse effects, albeit uncertain ones.

6.108 Policy JWP5 does not address the location of energy from waste facilities and as such, is expected to have a negligible effect on this IIA objective.

6.109 Policy JWP6 intends to ensure that the restoration and aftercare of sites demonstrate benefits to the environment, whilst requiring a management system to demonstrate the management of leachate whilst the site is in operation. However, the initial use of land for waste may result in land degradation if not properly managed, which may lead to negative impacts on local biodiversity. As such, a mixed minor positive and minor negative effect is expected in relation to IIA7.

Policy recommendations

6.110 Consideration could be given to outlining measures for monitoring and improving the ongoing management of potential adverse environmental effects from operational allocated waste sites.

IIA objective 8: Protect, enhance, and restore open spaces and townscapes within the ELJWP area

6.111 Policy JWP1 provides for a network of waste facilities within the plan area. This could ensure that waste facilities are appropriately planned for and may reduce impacts on the open space and townscapes within the plan area. This minor positive effect is considered to be uncertain, as it will depend on the locations of the sites that come forward within the plan period.

6.112 As discussed above, Policy JWP2 protects existing waste sites, and does not actively promote new sites for waste development. The effects on IIA8 are similar to the effects of policy JWP2 on IIA7. There may be no negative effects of new sites on open space and townscape, however the policy does not address the potential negative effects of existing waste sites, where there may

be existing negative effects. As is the case with IIA7, the overall effect of this policy on IIA8 is considered to be mixed minor positive and minor negative, with uncertainty due to the effects being dependent on the active sites within the plan period.

6.113 Policy JWP3 is expected to have a negligible effect on IIA8.

6.114 Policy JWP4 promotes open space design as a climate adaption measure, which will contribute towards the protection and/or enhancement of open spaces in the plan area. As such, a minor positive effect is expected in relation to IIA8. However, the policy states that only 'unacceptable' adverse impacts on the environment should be avoided, offering scope for some minor adverse effects, albeit uncertain ones.

6.115 As with IIA7, Policy JWP5 does not address the location of energy from waste facilities and as such, is expected to have a negligible effect on IIA8.

6.116 As with IIA7, Policy JWP6 intends to ensure that the restoration and aftercare of sites demonstrate benefits to the community. However, the initial use of land for waste may result in negative effects if not properly managed, which may lead to negative impacts on local communities. As such, a mixed minor positive and minor negative effect is expected in relation to IIA8, Policy JWP5 does not address the location of energy from waste facilities and as such, is expected to have a negligible effect on IIA8.

6.117 As with IIA7, Policy JWP6 intends to ensure that the restoration and aftercare of sites demonstrate benefits to the community. However, the initial use of land for waste may result in negative effects if not properly managed, which may lead to negative impacts on local communities. As such, a mixed minor positive and minor negative effect is expected in relation to IIA7.

Policy recommendations

6.118 Consideration could be given to outlining measures for monitoring and improving the ongoing management of potential adverse environmental effects from operational allocated waste sites

IIA objective 9: Protect and enhance the quality and quantity of watercourses and water bodies and maximise the efficient use of water within East London

6.119 Policy JWP1 will have a negligible impact on IIA9.

6.120 The overall effect of JWP2 on IIA8 is considered to be mixed minor positive and minor negative, with uncertainty due to the effects being dependent on the active sites within the plan period. The policy protects existing waste sites, and does not actively promote new sites for waste development. The effects on IIA9 are similar to the effects of policy JWP2 on IIA7 and IIA8. There may be no potential negative effects of new sites on waterbodies in the plan area, however the policy does not address the potential negative effects of existing waste sites, where there may be existing negative effects.

6.121 Policy JWP3 will have a negligible impact on IIA9 as it relates to the impacts of new development on existing waste sites.

6.122 Policy JWP4 promotes the efficient use of water and drought-resistant landscaping. This will contribute towards increased water efficiency in the plan area and as such, a minor positive effect is expected in relation to IIA9. However, the policy states that only 'unacceptable' adverse impacts on the environment should be avoided, offering scope for some minor adverse effects, albeit uncertain ones.

6.123 Policy JWP5 focusses on energy from waste. Although the reduction in carbon emissions could have a positive effect on water bodies within the plan area, the effect is considered to be negligible and uncertain.

6.124 Policy JWP6 includes provision for minimising the effects of existing landfill, as well as requiring after uses that are positive for the environment and community. It is considered likely that this policy will have a minor positive effect on water bodies, however this is uncertain as it will depend on the location of the landfill and appropriate after uses coming forward within the plan period.

Policy recommendations

6.125 Only policy JWP4 directly addresses water quality. The plan could consider additional wording in relation to water for each of the other policies. The requirement for additional wording may be covered elsewhere as other policies within the development plan will apply. This includes the London Plan and the local plans for each of the Boroughs within East London. Consideration could also be given to outlining measures for monitoring and improving the ongoing management of potential adverse environmental effects from operational allocated waste sites.

IIA objective 10: To manage and reduce flood risk from all sources within East London

6.126 JWP Policies 1, 2, 3, 4 and 6 are considered to have a negligible impact on IIA10.

6.127 Policy JWP4 promotes the use of sustainable drainage systems and other methods of flood resistance, including green roofs. This will contribute towards better managed flood risk in the plan area and as such, a significant positive effect is expected in relation to IIA10.

Policy recommendations

6.128 The ELJWP could further consider the flooding implications of JWP5: Energy from Waste and JWP6: Landfill. The requirement for additional wording may be covered elsewhere as other policies within the development plan will apply. This includes the London Plan and the local plans for each of the Boroughs within East London.

IIA objective 11: Minimise noise, light and air pollution relating to waste development within East London

6.129 Policy JWP1 sets out criteria for the provision of a network of waste facilities within the plan area. This may have an effect on the impacts of waste development in relation to noise, light and air pollution, but this is considered to be negligible, given the general goal of reducing waste generation and maximising the efficiency of existing and safeguarded sites across East London.

6.130 The overall effect JWP2 on IIA11 is considered to minor negative, with uncertainty due to the effects being dependent on the active sites within the plan period. The policy protects existing waste sites, and does not actively promote new sites for waste development. The policy does not address the potential negative effects of existing waste sites, where there may be existing negative effects.

6.131 Policy JWP3 Prevention of Encroachment is expected to have a significant positive effect in relation to IIA11 as the restricted distance between a new non-waste development and existing waste management facilities minimises the potential impacts of pollution on new sensitive receptors; however, in the absence of precautionary distance buffers, this is uncertain until such time as the specific sensitivities of receptors and pathways to and from them are known.

6.132 Policy JWP4 seeks to minimise adverse impacts arising from multiple sources of pollution, including those relevant to this IIA objective such as noise, light and air. As such, a minor positive effect is expected in relation to IIA11.

6.133 Policy JWP5 Energy from Waste is expected to have a minor positive effect in relation to IIA11 as the policy states that any release of non-biogenic carbon emissions will be minimised along with mechanisms in place for carbon capture.

6.134 Policy JWP6 will control the effects of landfill and as such will have a minor positive effect on IIA11.

Policy recommendations

6.135 There are no policy recommendations in relation to IIA11.

IIA objective 12: Protect and enhance mineral resources and soils within East London

6.136 Policies JWP1, JWP3 and JWP5 are considered to have a negligible effect on IIA12.

6.137 By safeguarding existing waste sites and capacity, Policy JWP2 helps to reduce the need for new waste sites within East London. This will have a minor positive effect on IIA12, but the effect is uncertain as it depends on the sites that are active or come forward during the plan period.

6.138 Policy JWP4 seeks to protect the best and most versatile agricultural land and soil quality, which will contribute towards the protection of soil resources in the plan area. As such, a minor positive effect is expected in relation to IIA12.

6.139 Policy JWP6 seeks to ensure that proposals for the permanent deposit of inert waste on land demonstrate the waste will be deposited for a beneficial purpose, such as restoring mineral workings. It further states that if the waste is intended for use in an engineering operation it must be demonstrated that there is no local demand for its use in mineral working restoration. These provisions will enhance mineral resources in the plan area. As such, a minor positive effect is expected in relation to IIA12.

Policy recommendations

6.140 There are no policy recommendations in relation to IIA12.

Reasonable Alternatives

6.141 Given the strategic and high-level nature of the visions and objectives, it was considered that there are no reasonable alternatives to appraise within the IIA. There are a number of reasonable alternatives to the draft policies within the ELJWP Regulation 18 document as set out in the paragraphs below.

6.142 The reasonable alternatives were considered against the IIA objectives. Differences in the appraisal outcomes are set out in **Tables 6.2 to 6.7** below.

Reasonable alternatives to JWP Policy 1

6.143 One reasonable alternative to Policy JWP1 has been identified (Alternative 1). This involves applying the London Plan threshold for the size of development required to provide Circular Economy Statements, i.e. referrable development rather than all major development. This would result in fewer applications for development preparing circular economy statements. Although this alternative could result in major development applicants providing less detail with regards to the circular economy, the other criteria within policy JWP1 still encourage all development to follow the principles of the circular economy.

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Therefore, this alternative would likely reduce the sustainability of the ELJWP in relation to IIA1 and IIA2, but not significantly enough to alter the IIA score overall.

6.144 The preferred policy has been selected over the reasonable alternative because applying a lower threshold than the London Plan for the size of development required to provide Circular Economy Statements will result in more applications for development considering and planning for the circular economy across East London.

Table 6.2: Effects of JWP Policy 1 and its reasonable alternative

IIA objective	JWP Policy 1	Alternative 1
IIA1: Climate Change	+	+
IIA2: Treatment of waste	++	++
IIA3: Economy	++	++
IIA4: Health and wellbeing	+	+
IIA5: Sustainable transport	+	+
IIA6: Historic environment	?	?
IIA7: Biodiversity and geodiversity	+	+
IIA8: Open spaces and townscapes	+	+
IIA9: Water	+	+
IIA10: Flooding	0	0
IIA11: Noise, light and air pollution	0	0
IIA12: Mineral resources and Soils	0	0

Reasonable alternatives to JWP Policy 2

6.145 In terms of 'need', one reasonable alternative to Policy JWP2 was identified (Need Alternative 1). This involves making provision for further additional waste management capacity above the London Plan apportionment. It is likely that this option would result in waste travelling further, if the sites were to deal with waste from outside of the plan area. This option could also have negative effects on all IIA objectives, where East London's environment and communities would be under additional pressure to allocate and/or identify less suitable sites for waste development to come forward.

6.146 In terms of safeguarding, no reasonable alternatives were identified. JWP Policy 2 safeguards existing waste sites in accordance with national waste policy and policies within the London Plan. Safeguarded waste sites included in the previous East London Joint Waste Plan have only been removed where they have since been allocated for alternative uses in adopted local plans (and plans that have reached a late stage of examination) as a baseline update exercise.

6.147 Two reasonable alternatives to Policy JWP2 were identified in relation to location of allocated development. In the first instance, the policy could identify specific existing waste sites that are suitable for intensification (Location Alternative 1). This could increase the positive effects of the policy in relation to IIA objectives relating to the environment, by providing certainty of locations for development, as well as reducing the overall likelihood of the development of new or expansion of existing waste sites, and their local impacts. The positive effects are balanced by the potential increase in negative effects in relation to IIA4 and IIA5, as waste may need to travel further, and environmental impacts may be greater than at smaller, less intensive waste sites.

6.148 As a second location alternative option (Location Alternative 2), the policy could require any new or existing waste site to be located within areas identified for industrial activity within local plans, without expressly including criteria within the East London Waste Plan. This option would remove the potential for policies to be misaligned with the adopted local plan, and allow for more bespoke policy

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criteria within each Borough. This option would also remove consistency of the approach to waste sites in industrial locations across the East London waste plan area and increase uncertainty in its application given it would be reliant on Local Plans, resulting a general increase in uncertainty to IIA objectives 2, 3, 4 and 5.

6.149 There are a number of location specific criteria which could be applied to identifying land for new waste sites, such as land at a lower risk of flooding, or where there are negative effects on the natural environment will be avoided, minimised or mitigated. These locational criteria are already set out in national policy, the London Plan, and other adopted local plans. Any proposed development would need to meet these criteria, and as such, they have not been considered as reasonable alternatives within this IIA.

6.150 The preferred policy has been selected over the reasonable alternatives because East London has established through its emerging evidence base that the plan area has more capacity than required for its needs and the additional needs of its neighbours. The preferred policy allows for the intensification of sites and for new sites to come forward within industrial locations, if that is appropriate at the time of an application. The alternative policies could increase the likelihood of meeting the target of net-self-sufficiency within the London Plan; however, the extent to which London is already net-self-sufficient is uncertain.

Table 6.3: Effects of Policy JWP2 and its reasonable alternatives

IIA objective	JWP Policy 2	Need Alternative 1	Location Alternative 1	Location Alternative 2
IIA1: Climate Change	+	+/-?	+	+
IIA2: Treatment of waste	+	+	+	++?
IIA3: Economy	++	++/-?	++	+++?

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IIA objective	JWP Policy 2	Need Alternative 1	Location Alternative 1	Location Alternative 2
IIA4: Health and wellbeing	+/-?	+/-?	+/-?	+
IIA5: Sustainable transport	+	+/-?	+/-	+
IIA6: Historic environment	?	?	?	?
IIA7: Biodiversity and geodiversity	+/-?	+/-?	+	+/-?
IIA8: Open spaces and townscapes	+/-?	+/-?	+	+/-?
IIA9: Water	+/-?	+/-?	+	+/-?
IIA10: Flooding	0	0	0	0
IIA11: Noise, light and air pollution	-?	--	-	-
IIA12: Mineral resources and Soils	+	+/-?	+	+/-?

Reasonable alternatives to JWP Policy 3

6.151 One reasonable alternative was identified for ELJWP Policy 3 (Alternative 1). The policy within the Regulation 18 draft does not include a specified distance where the policy would apply. The alternative option could provide a set distance where the policy would apply. Although the effects from waste development are likely to differ due to the nature of the waste activity and the proposed new use within proximity to the existing waste site, a precautionary distance buffer would remove uncertainty around the implementation of the policy. It may be appropriate to include more than one buffer dependant on the scale of development and the type of waste. This could more effectively minimise the potential for adverse effects of ELJWP Policy 3 on the IIA objectives, and improve the sustainability of the ELJWP.

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6.152 The preferred policy has been selected over the reasonable alternatives because specified distances may not be appropriate in avoiding and mitigating impacts. Impacts depend on pathways and the specific sensitivities of receptors and not proximity, and the criteria would be difficult to define and manage over time, given the wide variation in waste uses and the environment across the plan area.

Table 6.4: Effects of Policy JWP 3 and its reasonable alternative

IIA Objectives	JWP Policy 3	Alternative 1
IIA1: Climate Change	0	0
IIA2: Treatment of waste	+	+
IIA3: Economy	+	+
IIA4: Health and wellbeing	++?	+
IIA5: Sustainable transport	0	0
IIA6: Historic environment	0	0
IIA7: Biodiversity and geodiversity	0	0
IIA8: Open spaces and townscapes	0	0
IIA9: Water	0	0
IIA10: Flooding	0	0
IIA11: Noise, light and air pollution	+++	++
IIA12: Mineral resources and Soils	0	0

Reasonable alternatives to JWP Policy 4

6.153 The only reasonable alternative identified for this policy is to rely on the more general development management policies within the London Plan and the adopted local plans within East London instead. This is likely to result in additional negative effects on the IIA objectives where there are gaps in policy within the development plan of particular relevance to waste management, and reduce certainty and consistency for waste development within East London.

6.154 The preferred policy has been selected over the reasonable alternatives because the policy wording within the ELJWP provides a specialist policy framework for waste development. Alternative policy options could result in additional negative effects, where existing policies within the wider development plan do not address the potential impacts of waste development.

Table 6.5: Effects of Policy JWP 4 and its reasonable alternative

IIA Objectives	JWP Policy 4	Alternative 1
IIA1: Climate Change	++	++
IIA2: Treatment of waste	+	+
IIA3: Economy	+/-	+/-
IIA4: Health and wellbeing	++/-?	++/-?
IIA5: Sustainable transport	+	+
IIA6: Historic environment	?	-?
IIA7: Biodiversity and geodiversity	+/-?	--/+
IIA8: Open spaces and townscapes	+/-?	--/+
IIA9: Water	+/-?	+/-?
IIA10: Flooding	++	++

IIA Objectives	JWP Policy 4	Alternative 1
IIA11: Noise, light and air pollution	+	+/-
IIA12: Mineral resources and Soils	+	+

Reasonable alternatives to JWP Policy 5

6.155 The only reasonable alternative identified for policy JWP5 is to rely on policies within the London Plan and the adopted local plans within East London (Alternative 1). This is likely to result in additional negative effects on the IIA objectives, and reduce certainty for development on energy from waste facilities within East London where appropriate.

6.156 The preferred policy has been selected over the reasonable alternatives because, as with the preferred option of JWP4, JWP5 provides specialist policy criteria to address the specific effects of energy from waste facilities.

Table 6.6: Effects of Policy JWP 5 and its reasonable alternative

IIA Objectives	JWP Policy 5	Alternative 1
IIA1: Climate Change	++	++?
IIA2: Treatment of waste	+	+/-?
IIA3: Economy	0	0
IIA4: Health and wellbeing	+	+/-?
IIA5: Sustainable transport	+	+/-?
IIA6: Historic environment	?	?
IIA7: Biodiversity and geodiversity	0	0

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IIA Objectives	JWP Policy 5	Alternative 1
IIA8: Open spaces and townscapes	0	0
IIA9: Water	0?	0?
IIA10: Flooding	0	0
IIA11: Noise, light and air pollution	+	+/-?
IIA12: Mineral resources and Soils	0	0

Reasonable alternatives to JWP Policy 6

6.157 The only reasonable alternative identified in relation to Policy JWP6 is to explicitly require a target of zero biodegradable waste to landfill by either 2026 or 2030 (Alternative 1). The alternative option is considered to be more ambitious than the draft policy wording, which does not contain any target for the reduction of biodegradable waste to landfill. The effect on the IIA objectives would be positive as it would be more likely that more waste would be diverted from landfill up the waste hierarchy. This option of zero waste by 2030 is consistent with national policy, but a less stringent requirement than the target of zero biodegradable waste to landfill by 2026 within the Mayor of London's Environment Strategy. Either the 2026 or 2030 target could be implemented within the ELJWP, and either option could increase the sustainable treatment of waste within East London.

6.158 The preferred policy has been selected over the reasonable alternatives because it offers flexibility in the timescales for reducing biodegradable waste to landfill. This is considered to be less sustainable than the alternative option and the IIA recommends that a target could be included within JWP6 to improve the sustainability of the plan.

Table 6.7: Effects of Policy JWP 6 and its reasonable alternative

IIA Objectives	JWP Policy 6	Alternative 1
IIA1: Climate Change	++	++
IIA2: Treatment of waste	+	++
IIA3: Economy	0	0
IIA4: Health and wellbeing	+	+
IIA5: Sustainable transport	+	+
IIA6: Historic environment	0	0
IIA7: Biodiversity and geodiversity	0	0
IIA8: Open spaces and townscapes	0	0
IIA9: Water	0?	0?
IIA10: Flooding	0	0
IIA11: Noise, light and air pollution	+	+
IIA12: Mineral resources and Soils	0	0

Equalities Impact Assessment, Health Impact Assessment and Strategic Environmental Assessment

6.159 The EqIA and HIA criteria are embedded within the IIA objectives used to appraise the ELJWP.

6.160 With regards to the equality, the vision, strategic objectives and policies for the ELJWP are likely to have a negligible effect on protected characteristics given their strategic nature, their focus on waste management issues, and as the plan does not allocate land for development. However, the ELJWP does

indirectly give consideration to the potential effects of waste development on specific groups, where there may be increased vulnerability to the effects of waste management facilities and processes, including air pollution, climate change, employment opportunities and social deprivation.

6.161 With regards to HIA and SEA, the following paragraphs provide commentary relevant to health outcomes and each IIA objective.

IIA objective 1: To minimise the East London Joint Waste Plan's contribution to climate change through a reduction of greenhouse gas emissions from managing waste

6.162 Minimising emissions from waste within the ELJWP area and contributing to a reduction in greenhouse gas emissions is expected to have a positive effect on air, climate, water, material assets, soil and biodiversity.

6.163 Similar reductions will also avoid adverse effects on the physical and mental health of local populations.

IIA objective 2: Move treatment of waste up the Waste Hierarchy within East London

6.164 Movement of waste up the waste hierarchy is expected to have a positive effect on air, climate, water, material assets, soil and biodiversity.

6.165 Reductions in the quantities of waste and the more effective and efficient management of waste will help to avoid adverse effects on the physical and mental health of local populations.

IIA objective 3: Support, maintain or enhance the development of the economy of East London

6.166 Support for the economy is expected to have a positive effect on population health and material assets.

6.167 Investment in waste management will have benefits for the local economy, which will in turn have positive benefits for the mental health of local populations, as well as physical health.

IIA objective 4: Protect and improve the health of the people of the East London Joint Waste Plan area

6.168 Support for the health of local communities is expected to have a positive effect on population health.

6.169 Measures to improve and protect the local environment and sensitive receptors within it will avoid adverse effects on and have positive benefits for the mental health of local populations, as well as physical health.

IIA objective 5: Promote sustainable modes of transport in the East London Joint Waste Plan area by reducing road traffic, congestion and pollution

6.170 Support for sustainable transport is expected to have a positive effect on population health, air, climate, material assets, water and biodiversity.

6.171 Access to sustainable transport, and reduction in air pollution associated with the effective management of traffic associated with waste management, will avoid adverse effects on and have positive benefits for the mental health of local populations, as well as physical health.

IIA objective 6: Protect and enhance the historic environment within East London

6.172 The lack of focus on the historic environment within the vision and objectives is expected to have a negligible outcome for material assets and population health.

IIA objective 7: Protect, enhance, restore, and expand the biodiversity and geodiversity assets within the East London Joint Plan area

6.173 Support for the biodiversity is expected to have a positive effect on biodiversity, air pollution, material assets and population health.

6.174 Measures to protect, conserve and enhance the natural environment in East London will avoid adverse effects on and have positive benefits for the mental health of local populations, as well as physical health.

IIA objective 8: Protect, enhance, and restore open spaces and townscapes within the ELJWP area

6.175 The lack of focus on open space and townscapes within the vision and objectives is expected to have a negligible effect for material assets and population health.

IIA objective 9: Protect and enhance the quality and quantity of watercourses and water bodies and maximise the efficient use of water within East London

6.176 Protecting and enhancing the quality and quantity of watercourses and water bodies and maximising the efficient use of water, is expected to have a positive effect on water, material assets, soil and biodiversity.

6.177 Reducing risk of water pollution and ensuring water security will avoid adverse effects on and have positive benefits for the physical and mental health of local populations

IIA objective 10: To manage and reduce flood risk from all sources within East London

6.178 Managing and reducing flood risk from all sources is expected to have a positive effect on water, material assets, soil and biodiversity.

6.179 Reducing risk from flooding will avoid adverse effects on and have positive benefits for the physical and mental health of local populations.

IIA objective 11: Minimise noise, light and air pollution relating to waste development within East London

6.180 Minimising pollution and the effects of pollution from new development is expected to avoid adverse effects on and have a positive effect on physical and mental health, material assets, soil, water and biodiversity

IIA objective 12: Protect and enhance mineral resources and soils within East London

6.181 Protecting and enhancing mineral resources and soils is expected to have a positive effect on material assets, soil, water and biodiversity.

6.182 Effective, efficient and sustainable use of land provides healthier environments for people.

Cumulative effects

6.183 Cumulative effects of plan should be considered both in terms of the plan as a whole, and in relation to other plans or development in the plan area, and potentially outside of the plan area, depending on the potential impacts.

Cumulative effects of the ELJWP

6.184 This section summarises the cumulative effects of the vision, objectives and policies, building on the appraisals set out earlier in this chapter. A summary of the cumulative effects against each IIA objectives follows the table below, which sets out the summary scores for the vision, objectives and each of the six policies.

Table 6.8: Cumulative effects of the ELJWP

IIA Objectives	Cumulative effect
IIA1: Climate Change	++
IIA2: Treatment of waste	++
IIA3: Economy	++/-

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IIA Objectives	Cumulative effect
IIA4: Health and wellbeing	+/-?
IIA5: Sustainable transport	++
IIA6: Historic environment	0?
IIA7: Biodiversity and geodiversity	+/-?
IIA8: Open spaces and townscapes	+/-?
IIA9: Water	+/-?
IIA10: Flooding	+
IIA11: Noise, light and air pollution	++/-?
IIA12: Mineral resources and Soils	+

IIA objective 1: To minimise the East London Joint Waste Plan's contribution to climate change through a reduction of greenhouse gas emissions from managing waste

6.185 Where an effect has been identified, the vision, policies and objectives of the ELJWP have a mixture of significant and minor positive effects on this objective. This is in recognition of the ELJWP's consistent focus on pursuing the sustainable location and management of waste in East London, minimising carbon emissions through on-site operations and the sustainable transportation of waste within and beyond the city. Therefore, overall, a significant positive effect is recorded for this objective.

IIA objective 2: Move treatment of waste up the Waste Hierarchy within East London

6.186 Where an effect has been identified, the vision, policies and objectives of the ELJWP have a mixture of significant and minor positive effects on this objective. This is in recognition of the ELJWP's consistent focus on moving waste up the waste hierarchy. Therefore, overall, a significant positive effect is recorded for this objective.

IIA objective 3: Support, maintain or enhance the development of the economy of East London

6.187 Where effects have been identified, the effects on the ELJWP's visions, objectives and policies on IIA3 range from minor negative (SO5) to significant positive (JWP1 and JWP2). There is a mixed minor positive and minor negative effect for SO2. On balance, the ELJWP is considered to have a mixed significant positive and minor negative effect on IIA3, in recognition of the plan's efforts to maintain and improve the efficiency of the waste management industry in East London, but also the potential for its requirements to increase the long term cost of waste management in East London, potentially affecting the viability and profitability of some facilities.

IIA objective 4: Protect and improve the health of the people of the East London Joint Waste Plan area

6.188 The majority of the strategic objectives will have a negligible effect on IIA4. Where effects have been identified, the vision and objectives will have a minor positive effect. The majority of the policies have a minor positive effect in relation to IIA4. This effect is uncertain in relation to JWP3 and JWP6. The effects in relation to JWP4 are considered to be mixed significant positive and minor negative, although this effect is uncertain. The effects recognise the Plan's focus on avoiding and minimising adverse effects on East Londoners. On

balance, an uncertain mixed minor positive and minor negative effect is recognised overall in acknowledgement of safeguards put in place, but also acknowledging that some adverse effects may be permitted in some circumstances.

IIA objective 5: Promote sustainable modes of transport in the East London Joint Waste Plan area by reducing road traffic, congestion and pollution

6.189 Where effects have been identified, the majority of the policies and objectives have minor positive effects on IIA5. SO5 and SO7 have significant positive effects on this objective. This is in recognition of the ELJWP's consistent focus on pursuing the sustainable location and management of waste in East London, minimising travel through the consistent implementation of the proximity principle encouraging the sustainable transportation of waste within and beyond the city. Therefore, overall, a significant positive effect is recorded for this objective.

IIA objective 6: Protect and enhance the historic environment within East London

6.190 The vision will have a minor positive effect on IIA6. All of the objectives will have a negligible effect on the historic environment. The policies are generally considered to have an uncertain effect on IIA6 as any effects. This is generally to the notable absence of any reference to the safeguarding, conservation and enhancement of the historic environment, both directly and indirectly. Consequently, overall, the ELJWP is considered to have an uncertain negligible effect on IIA6.

IIA objective 7: Protect, enhance, restore, and expand the biodiversity and geodiversity assets within the East London Joint Plan area

6.191 The vision and strategic objectives SO3 and SO4 have minor positive effects on IIA7. Three of the six policies have uncertain mixed minor positive and minor negative effects, and one policy has an uncertain minor positive effects. These effects recognise the efforts of the ELJWP to protect East London's natural environment; however, the nature of waste management means that all adverse effects on biodiversity cannot be ruled out. Consequently, on balance, the ELJWP is considered to have an uncertain mixed minor positive and minor negative effect.

IIA objective 8: Protect, enhance, and restore open spaces and townscapes within the ELJWP area

6.192 The vision and objectives have a negligible effect on IIA8. JWP1 has a minor positive effect, and JWP2, JWP4 and JWP6 have an uncertain mixed minor positive and minor negative effect. These effects acknowledge the measures put in place within the policies to simultaneously maximise the efficient use of land within East London and conserve the city's character; however, the nature of waste management means that all adverse effects on open spaces and the city's character cannot be ruled out. Consequently, on balance, the ELJWP is considered to have an uncertain mixed minor positive and minor negative effect.

IIA objective 9: Protect and enhance the quality and quantity of watercourses and water bodies and maximise the efficient use of water within East London

6.193 Where an effect has been identified, the vision and objectives have minor positive effect on IIA9. Where effects are identified in relation to the policies, the

effects are generally minor positive, although Policy JWP2 is considered to have the potential for a more uncertain and mixed minor positive and minor negative. These effects recognise the efforts of the ELJWP to maximise the efficient use of water in waste management and protect the quality of East London's water resources; however, the nature of waste management means that all adverse effects on water quality cannot be ruled out. Consequently, on balance, the ELJWP is considered to have an uncertain and mixed minor positive and minor negative effect.

IIA objective 10: To manage and reduce flood risk from all sources within East London

6.194 The vision and strategic objectives SO1 and SO5 have a minor positive effects on this objective. Most policies have a negligible effect on this objective, with the exception of JWP4, which has a significant positive effect in isolation. These effects recognise the appropriate efforts of the ELJWP to reduce flood risk through flood resilience in design as well as promoting reductions in the extent of impermeable surfaces on waste sites across East London. On balance, given the scale and density of London, and the relative small footprint of East London's waste management facilities, the ELJWP is considered to have a minor positive effect on this objective.

IIA objective 11: Minimise noise, light and air pollution relating to waste development within East London

6.195 The vision has a significant positive effect in relation to IIA11. The strategic objectives generally have a negligible effect on IIA11, with the exception of SO1 and SO7, which are expected to have a minor positive effect. Three policies are considered to have minor positive effects, and policy JWP2 is recorded as having the potential for uncertain minor negative effects. Conversely, policy JWP4 is recorded as having the potential for uncertain significant positive effects on this objective. The effects recognise the Plan's, particularly policy JWP4's, focus on avoiding and minimising pollution generated

by waste management in East London. However, on balance, an uncertain mixed significant positive and minor negative effect is recognised overall in acknowledgement of safeguards put in place. It is also acknowledged that some pollution may be permitted which may have a minor adverse effect in some circumstances.

IIA objective 12: Protect and enhance mineral resources and soils within East London

6.196 The vision, SO6 and SO8 are considered to have minor positive effects on IIA12. Three policies have minor positive effects on the objective, with these positive effects being recorded as more uncertain for policy JWP2. These effects acknowledge the measures put in place within the policies to maximise the efficient use of land within East London and use waste as a resource wherever possible. Consequently, the ELJWP is considered to have a minor positive effect overall.

Cumulative effects of the ELJWP in combination with other plans

6.197 Development proposed in the ELJWP will not be delivered in isolation from development proposals in other plans and projects covering East London and the surrounding area. This section outlines the development proposed by nationally significant infrastructure projects, plans covering London as a whole, and the Local Plans of the neighbouring authorities which may combine with the ELJWP to produce additional effects in combination.

Nationally significant infrastructure projects

6.198 There are eight NSIP projects within London currently on the National Infrastructure Planning website :

- Expansion of Heathrow (third runway)
- Heathrow West
- North London (Electricity Line) Reinforcement
- North London Heat and Power Project
- Riverside Energy Park
- Silvertown Tunnel
- Teddington Direct River Abstraction
- Thames Tideway Tunnel

Potential for cumulative effects with Nationally significant infrastructure projects

6.199 There is uncertainty around the potential cumulative effects of NSIP projects across London in relation to the ELJWP, given the lack of proximity and the relatively small-scale nature of the development being managed within the ELJWP. There are potential cumulative effects in relation to NSIPs such as flood risk and water quality in the Thames; air quality, including from increased road traffic on the major arterial roads, or roads within impact zones for Epping Forest; noise and vibration; biodiversity; and landscape and visual amenity.

The London Plan and other London strategies

6.200 The London Plan 2021 provides the regional planning framework for London. The relevant plans and strategies in relation to the ELJWP are set out in Chapter 3 and Chapter 4.

Potential for cumulative effects with the London Plan

6.201 The ELJWP could result in in-combination effects with the London Plan where the specific location and type of development proposed in the ELJWP, although at a relatively small scale, could combine to result in more significant effects. Given that many of the development growth areas within London are large scale, and there are no proposals for additional waste allocations within the ELJWP, it is likely that any in-combination effects will be minimal.

6.202 The London Transport Plan is designed to deliver the transport solutions required to support development delivered through Borough Local Plans in London, while also addressing existing transport challenges and issues, including improving the public transport network, to improve use of public transport and to reduce air pollution. The small level of development likely to arise from the ELJWP is likely to result in a negligible effect when combined with the large-scale projects within the London Transport Plan.

East London Local Plans and neighbouring Local Plans

6.203 Each of the boroughs within the ELJWP area has an adopted local plan. The main development proposed by their respective Local Plans is summarised set out in Chapter 4.

- Barking and Dagenham aim to deliver more than 40,000 dwellings between 2024 and 2037 (subject to approval by full council in July 2024)
- Havering aim to deliver a minimum of 18,930 dwellings between 2016 to 2031.
- Newham aim to deliver 43,000 dwelling across the plan area between 2017 and 2033
- Redbridge aims to deliver a minimum of 16,845 new dwellings between 2015 and 2030.

6.204 The ELJWP area is adjoined by the neighbouring local authorities of Tower Hamlets, Hackney, and Waltham Forest within London. Epping Forest, Brentwood and Thurrock form the boundaries to the East of the plan area. Although parts of the areas within Essex are more rural, all of these local plan areas are expected to see high levels of housing growth, employment growth and to benefit from strategic transport infrastructure improvements.

6.205 The Boroughs within the ELJWP area and the authorities surrounding the ELJWP area range from the intensely urban areas of central London to the rural areas in Essex.

6.206 All of the local plans identified above whether adopted or in the process of preparation, provide for both increases in housing supply as well as job creation. The increased level of development in East London and neighbouring authorities will in combination with the ELJWP to lead to increased traffic, which in turn have the potential to increase air pollution, and carbon emissions. To mitigate this, the Local Plans aim to support sustainable transport modes and energy efficiency in built development. Many of the in combination effects at a sub-regional scale are likely to be concentrated within and around major development areas and along the strategic transport corridors. In addition, a number of the locations targeted for large-scale growth by neighbouring plans are close to the border of the plan area, increasing the potential for more localised in combination effects. There may be localised impacts in relation to health, noise, air quality, water resources and flooding, and transport.

6.207 Given the lack of allocations within the ELJWP for new or improved facilities over the plan period, and the lack of need for additional waste management capacity, it is likely that the cumulative effect of the ELJWP with other local plans will be relatively minor.

Habitats Regulations Assessment

6.208 The HRA has been undertaken separately but the findings have been taken into account in the IIA where relevant (for example to inform judgements about the likely effects of potential development locations on biodiversity).

6.209 The first stage of HRA is to screen for likely significant effects. Following the HRA screening, likely significant effects could not be ruled out in relation to:

- Physical damage and loss of habitat: Epping Forest (directly or via functionally linked habitats) – ELJWP alone.
- Air pollution - dust: Epping Forest SAC (direct impacts only) – ELJWP alone.
- Air pollution – industrial emissions: Epping Forest SAC (direct impacts only), Lee Valley SPA and Ramsar site (direct impacts only), and Thames Estuary & Marshes SPA and Ramsar site (direct impacts only) – ELJWP alone or in-combination with other plans / projects.
- Air pollution – vehicle emissions: Epping Forest SAC (direct impacts only) and Lee Valley SPA and Ramsar site (direct impacts only) – ELJWP alone or in-combination with other plans / projects.
- Pests and vermin: Epping Forest (directly or via functionally linked habitats) – ELJWP alone.
- Water quality and quantity – abstraction: Lee Valley SPA/Ramsar (direct impacts only) – ELJWP alone or in-combination with other plans / projects.

6.210 Non-physical disturbance and wastewater have been screened out as there are no impact pathways.

6.211 These impacts would arise from three of the ELJWP's policies: JWP2, JWP5 and JWP6. However, the Appropriate Assessment concluded that, with safeguards provided by Policy JWP4 along with environmental permitting requirements for industrial emissions and water abstraction, adverse effects on the integrity of Habitats Sites will be avoided.

Chapter 6 IIA of the Draft East London Joint Waste Plan and its Reasonable Alternatives

6.212 The HRA will be published alongside the ELJWP Regulation 18 consultation. Following the consultation, the plan will be updated as necessary and will include confirmation of the existing waste sites to be removed from safeguarding. The HRA will then be updated to reflect any changes to the ELJWP and in response to any relevant Regulation 18 consultations, for example if received from Natural England.

Chapter 7

Monitoring

7.1 This section sets out recommendations for indicators to monitor the effects of implementing the ELJWP, taking into account monitoring indicators included within the ELJWP Regulation 18 draft.

7.2 The SEA Regulations require that "the responsible authority shall monitor the significant environmental effects of the implementation of each plan or programme with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action" and that the environmental report should provide information on "a description of the measures envisaged concerning monitoring". Monitoring proposals should be designed to provide information that can be used to highlight specific issues and significant effects, and which could help decision-making.

7.3 Although national Planning Practice Guidance states that monitoring should be focused on the significant environmental effects of implementing the Local Plan, the reason for this is to enable local planning authorities to identify unforeseen adverse effects at an early stage and to enable appropriate remedial actions. Since effects which the IIA expects to be minor may become significant and vice versa, monitoring measures have been proposed in this IIA Report in relation to all of the IIA objectives in the IIA Framework. As the ELJWP is implemented and the likely significant effects become more certain, the Councils may wish to narrow down the monitoring framework to focus on those effects of the ELJWP that are likely to be significantly adverse.

7.4 The remainder of this chapter sets out a number of suggested indicators for monitoring the potential sustainability effects of implementing the ELJWP. The data used for monitoring in many cases will be provided by outside bodies, for example the Environment Agency. It is therefore recommended that the Boroughs remains in dialogue with statutory environmental consultees and other stakeholders and work with them to agree the relevant sustainability

effects to be monitored and to obtain information that is appropriate, up to date and reliable.

IIA objective 1: To minimise the East London Joint Waste Plan's contribution to climate change through a reduction of greenhouse gas emissions from managing waste

- CO2 emissions per capita
- Total energy consumption of waste facilities
- Total energy generation from renewable and low carbon sources linked to waste facilities
- Climate change assessments submitted with applications/applications permitted
- Reduction in carbon emissions from existing/re-configured waste sites committed to in climate change assessments
- Landfill gas production and related energy production

IIA objective 2: Move treatment of waste up the Waste Hierarchy within East London

- Waste stream quantities
- Landfill rates
- Recycling rates

- Number of re-use facilities within the plan area

IIA objective 3: Support, maintain or enhance the development of the economy of East London

- Unemployment rate, compared to rest of London.
- Jobs generated through waste development

IIA objective 4: Protect and improve the health of the people of the East London Joint Waste Plan area

- Percentage change in life expectancy and levels of deprivation (Indices of Multiple Deprivation)
- Air quality exceedances and number of new Air Quality Management Areas declared

IIA objective 5: Promote sustainable modes of transport in the East London Joint Waste Plan area by reducing road traffic, congestion and pollution

- Percentage of trips to work, school, leisure using public transport, walking and cycling
- Peak traffic flow

- Travel times
- Investment in road infrastructure
- Number of electric vehicle charging devices

IIA objective 6: Protect and enhance the historic environment within East London

- Number of entries on the Heritage at Risk Register
- Number of entries removed from the Heritage at Risk Register
- Number of waste planning applications approved contrary to Historic England and/or Conservation Officer advice
- Number of designated and non-designated heritage assets

IIA objective 7: Protect, enhance, restore, and expand the biodiversity and geodiversity assets within the East London Joint Plan area

- Net loss/gain of designated wildlife habitats
- Number and hectares of SSSIs
- Percentage of District's SSSI in a favourable and unfavourable condition
- Hectares of Local Nature Reserves, Local Wildlife Sites/Sites of Nature Conservation Importance, Ancient Woodland and Priority Habitats

IIA objective 8: Protect, enhance, and restore open spaces and townscapes within the ELJWP area

- Hectares of brownfield/previously developed land
- Loss and gains of public open space and Local Green Space
- Green Infrastructure secured through development of waste sites

IIA objective 9: Protect and enhance the quality and quantity of watercourses and water bodies and maximise the efficient use of water within East London

- Water availability/consumption ratios
- Ecological/chemical status of water bodies
- Average commercial water consumption
- Water pollution incidents recorded by the Environment Agency

IIA objective 10: To manage and reduce flood risk from all sources within East London.

- .Waste development permitted contrary to advice by the Environment Agency on flood risk

- Waste sites delivered within Flood Zones 2 and 3

IIA objective 11: Minimise noise, light and air pollution relating to waste development within East London

- Air quality exceedances and number of new Air Quality Management Areas declared
- Complaints received relating to the operations of existing waste sites

IIA objective 12: Protect and enhance mineral resources and soils within East London

- Number of waste planning applications approved within Minerals Consultation Areas
- Percentage of new waste development on brownfield/previously developed land

Chapter 8

Next steps

8.1 This IIA Report will be available for consultation alongside the ELJWP (Regulation 18) draft plan document in July and August 2024.

8.2 Following this consultation, the Boroughs will consider the findings of the IIA, representations received from stakeholders of the Draft ELJWP and IIA Report and additional, emerging evidence in order to prepare a revised version of the ELJWP for Regulation 19 consultation. That consultation will be on the version of the ELJWP that the Council proposes to submit to the Secretary of State for examination and will be accompanied by an updated and amended IIA report.

8.3 Following the above periods of public consultation, the ELJWP will be independently examined by a Government appointed Planning Inspector appointed by the Secretary of State, who will consider and challenge its content and any objections to it and reach a decision on its overall ‘soundness’ before it can proceed to be adopted.

LUC

May 2024

Appendix A

Review of relevant plans, policies and programmes

International

IPCC AR6 Synthesis Report on Climate Change 2023

Key objectives:

- To limit/or reduce all greenhouse gas emissions which contribute to climate change.

Key targets/indicators:

- None
- Implications for Waste local Plan
- Plan should support reduction in emissions of greenhouse gases.

Implications for IIA

- Include sustainability objectives to support reduction in emissions of greenhouse gases.

Johannesburg declaration on Sustainable Development 2002

Key objectives relevant to the Waste Local Plan

- Commitment to building a humane, equitable and caring global society aware of the need for human dignity for all.

Areas of focus include:

- Sustainable consumption and production patterns.
- Accelerate shift towards sustainable consumption and production – 10-year framework of programmed of action.
- Reverse trend in loss of natural resources.
- Renewable energy and energy efficiency.
- Urgently and substantially increase Global share of renewable energy.
- Significantly reduce the rate of biodiversity loss by 2010.

Key targets and indicators relevant to the Waste Local Plan

- To promote greater resource efficiency, increase energy efficiency and develop new technology for renewable energy.

Implications for the Waste Local Plan

- Allocate sites and develop policies that take account of the Declaration.

Implications for the IIA

- Include sustainability objectives to enhance the natural environment and promote renewable energy and energy/resource efficiency

Aarhus Convention 1998

Key objectives relevant to the Waste Local Plan

- Established a number of rights of the public with regard to the environment.

Local authorities should provide for:

- The right of everyone to receive environmental information.
- The right to participate from an early stage in environmental decision making.
- The right to challenge in a court of law public decisions that have been made without respecting the two rights above or environmental law in general.

A.1 Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Allocate sites and develop policies that take account of the Convention.

Implications for the IIA

- Ensure that the public are involved and consulted at all relevant stages of IIA production.

Bern Convention 1979

Key objectives relevant to the Waste Local Plan

- The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was adopted in Bern, Switzerland in 1979, and came into force in 1982.
- The principal aims of the Convention are to ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species) listed in Appendix III.
- To this end the Convention imposes legal obligations on contracting parties, protecting over 500 wild plant species and more than 1,000 wild animal species.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Allocate sites and develop policies that take account of the Convention.

Implications for the IIA

- Include sustainability objectives to protect and enhance biodiversity.

Ramsar convention 1971

Key objectives relevant to the Waste Local Plan

- To promote the conservation and wise use of all wetlands through local, regional and national actions and international co-operation, as a contribution towards achieving sustainable development throughout the world.

Key targets and indicators relevant to the Waste Local Plan

- The number of Ramsar sites being designated in the UK.

Implications for the Waste Local Plan

- Plan should promote the conservation and make wise use of all wetland areas.

Implications for the IIA

- Consider inclusion of objectives which aim to promote conservation and wise use of wetland areas.

UN Paris Climate Change Agreement (2015)

Key objectives relevant to the Waste Local Plan

- International agreement to keep global temperature rise this century well below 2 degrees Celsius above pre-industrial levels.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Allocate sites and develop policies that take account of the Agreement.

Implications for the IIA

- Consider climate change.

National

NPPF (2023)

Key objectives relevant to the Waste Local Plan

Economic objective:

- To help build a strong, responsive and competitive economy
- By ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity
- By identifying and coordinating the provision of infrastructure.

Social objective:

- To support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations
- By fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being.

Environmental objective:

- 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
- Mitigating and adapting to climate change, including moving to a low carbon economy.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

Economic objective:

- Plan should make adequate provision for waste management infrastructure to ensure the growth of the waste economy.

Social objective:

- Plan should include policies and objectives to promote a circular economy and the delivery of green infrastructure, enhanced public rights of way or improved access to recreation as part of the development and restoration of waste sites.

Environmental objective:

- Plan should include policies and objectives to address the causes and impacts of climate change relating to waste development activity, including using opportunities arising from waste operations and reclamation activity to mitigate and adapt to climate change and to leave a positive legacy.

Implications for the IIA

Economic objective:

- Include a sustainability objective relating to strengthening the economy.

Social objective:

- Include a sustainability objective relating to health and well-being.

Environmental objective:

- Include a sustainability objective relating to climate change mitigation and adaptation, conservation of historic features, conservation and enhancement of the natural environment.

NPPW (2015)

Key objectives relevant to the Waste Local Plan

- The National Planning Policy for Waste was adopted in October 2014 and sets out the need for local authorities to:
 - Prepare local plans using a robust proportionate evidence base
 - Identify need for waste management facilities
 - Identify suitable sites and areas
 - Determine planning applications
 - Monitor and report
 - Take up in allocated sites and areas
 - Existing stock and changes in the stock of waste management facilities.
 - The amount of waste recycled, recovered or going for disposal

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Allocate sites and develop policies that take account of the National Planning Policy for Waste.

Implications for the IIA

- Include a sustainability objective relating to sustainable waste management.

DEFRA (2021): National Waste Management Plan for England

Key objectives relevant to the Waste Local Plan

- Provides an analysis of the current waste management situation in England and evaluates how it will support implementation of the objectives and provisions of the revised Waste Framework Directive.
- At the local authority level, the Waste Management Plan notes that waste planning authorities (county and unitary authorities in England) are responsible for producing local waste management plans that cover the land use planning aspect of waste management for their areas.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Allocate sites and develop policies that take account of the National Waste Management Plan.

Implications for the IIA

- Include a sustainability objective relating to sustainable waste management.

Resources and Waste Strategy for England (2018)

Key objectives relevant to the Waste Local Plan

- Sets out how to preserve material resources by minimising waste, promoting resource efficiency and moving towards a circular economy in England.
- It identifies five strategic ambitions:
 - To work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025;
 - To work towards eliminating food waste to landfill by 2030;
 - To eliminate avoidable plastic waste over the lifetime of the 25 Year Environment Plan;
 - To double resource productivity by 2050; and

- To eliminate avoidable waste of all kinds by 2050.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Allocate sites and develop policies in line with the Resources and Waste Strategy.

Implications for the IIA

- Include a sustainability objective relating to sustainable waste management.

DCLG (2015): Planning Practice Guidance on Waste

Key objectives relevant to the Waste Local Plan

- Provides further information in support of the implementation of waste planning policy.
- At the local authority level, the Guidance outlines who is responsible for waste developments and which matters come within the scope of 'waste development'.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Allocate sites and develop policies that take account of the Planning Practice Guidance on Waste.

Implications for the IIA

- Include a sustainability objective relating to sustainable waste management.

MHCLG Planning Practice Guidance (2021)

Key objectives relevant to the Waste Local Plan

- The PPG documents provide guidance on the interpretation and implementation of the NPPF.
- Of particular relevance are:
 - Planning Practice Guidance on air quality
 - Planning Practice Guidance on climate change
 - Planning Practice Guidance on conserving and enhancing the historic environment
 - Planning Practice Guidance on ensuring the vitality of town centre
 - Planning Practice Guidance on flood risk and coastal change
 - Planning Practice Guidance on health and wellbeing

Appendix A Review of relevant plans, policies and programmes

- Planning Practice Guidance on local plans
- Planning Practice Guidance on the natural environment
- Planning Practice Guidance on noise
- Planning Practice Guidance on light pollution
- Planning Practice Guidance on open space, sports and recreation facilities, public rights of way and local green space
- Planning Practice Guidance on rural housing
- DCLG Planning Practice Guidance on renewable and low carbon energy
- Planning Practice Guidance on water supply, wastewater and water quality
- Planning Practice Guidance on Waste

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Plan needs to be produced in accordance with the guidance outline in the NPPG.

Implications for the IIA

- The SA should be prepared in line with the NPPG.

DEFRA (2012): National Policy Statement for Waste Water

Key objectives relevant to the Waste Local Plan

- Sets out the proposed policy framework to inform planning decisions on applications for large waste water infrastructure projects.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Allocate sites and develop policies that take account of the National Policy Statement for Waste Water.

Implications for the IIA

- Include IIA objectives that relate to sustainable waste management and the protection of water quality.

DEFRA (2013): National Policy Statement for Hazardous Waste

Key objectives relevant to the Waste Local Plan

- Sets out the strategic need and justification of Government policy for the provision of national significant infrastructure for the management of hazardous waste.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Allocate sites and develop policies that take account of the National Policy Statement for Hazardous Waste.

Implications for the IIA

- Include IIA objectives that relate to sustainable waste management which will include hazardous waste.

HM Government (2013) Waste prevention programme for England: Prevention is better

than cure – The role of waste prevention in moving to a more resource efficient economy

Key objectives relevant to the Waste Local Plan

- The aim of the Programme is to:
 - Improve the environment and protect human health by supporting a resource efficient economy, reducing the quantity and impact of waste produced whilst promoting sustainable economic growth.
 - Encourage businesses to contribute to a more sustainable economy by building waste reduction into design, offering alternative business models and delivering new and improved products and services.
 - Encourage a culture of valuing resources by making it easier for people and businesses to find out how to reduce their waste, to use products for longer, repair broken items, and enable reuse of items by others.
 - Help businesses recognise and act upon potential savings through better resource efficiency and preventing waste, to realise opportunities for growth.
 - Support action by central and local government, businesses and civil society to capitalise on these opportunities.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Policies should take account of the strategic measures in the Programme.

Implications for the IIA

- Include IIA objectives which seek to promote waste prevention.

HM Government (2009): The UK Low Carbon Transition Plan

Key objectives relevant to the Waste Local Plan

- The Plan plots how the UK will meet the 34 percent cut in emissions on 1990 levels by 2020.
- The Plan shows how reductions in the power sector and heavy industry; transport; homes and communities; workplaces and jobs; and farming, land and waste sectors could enable carbon budgets to 2022 to be met.

Key targets and indicators relevant to the Waste Local Plan

- The plan includes a 5-point Action Plan covering the following areas:
 - Protecting the public from immediate risk;
 - Preparing for the future;
 - Limiting the severity of future climate change through a new international climate agreement;
 - Building a low carbon UK;
 - Supporting individuals, communities and businesses to play their part.

Implications for the Waste Local Plan

- Plan should include policies that contribute towards achieving lower carbon emissions.

Implications for the IIA

- Objectives should reflect the aims set in the UK Low Carbon Transition Plan to reduce carbon emissions.

HM Government (2011): The Carbon Plan: Delivering our low carbon future

Key objectives relevant to the Waste Local Plan

- The Carbon Plan is a Government wide plan of action on climate change, including domestic and international activity.

Key targets and indicators relevant to the Waste Local Plan

- The plan includes a range of sectorial plans and targets including low carbon industry.

Implications for the Waste Local Plan

- Plan should include policies that contribute towards achieving lower carbon emissions such as:
 - Diverting waste from landfill by driving it up the waste hierarchy.
 - Using alternate or low emission transport options where viable.

Implications for the IIA

- Include a sustainability objective relating to reducing carbon emissions.

DECC (2009): The UK Renewable Energy Strategy

Key objectives relevant to the Waste Local Plan

- Increase our use of renewable electricity, heat and transport, and help tackle climate change.
- Build the UK low-carbon economy, promote energy security and take action against climate change.

Key targets and indicators relevant to the Waste Local Plan

- 15% of energy from renewable sources by 2020.
- Reducing UK CO₂ emissions by 750 million tonnes by 2030.

Implications for the Waste Local Plan

- Ensure that site allocations and policies will support renewable energy provision including electricity, heat and transport.

Implications for the IIA

- Include a sustainability objective relating to increasing energy provided from renewable sources.

HM Government (2017) The Clean Growth Strategy

Key objectives relevant to the Waste Local Plan

- Under the Climate Change Act, the Government is required to publish a set of policies and proposals that will enable the legally binding carbon budgets, on track to the 2050 target, to be met.
- The Clean Growth Strategy sets out a range of policies and proposals, as well as possible long-term pathways for UK emissions in two ways – by decreasing emissions and by increasing economic growth.

Key targets and indicators relevant to the Waste Local Plan

- The strategy covers the fourth and fifth carbon budgets, spanning 2023-2027 and 2028-2032, by when the UK must cut its greenhouse gas emissions to 57% below 1990 levels.

Implications for the Waste Local Plan

- Plan should support renewable energy provision including electricity, heat and transport.

Implications for the IIA

- Include a sustainability objective relating to promoting energy efficiency and the use of appropriate renewable or lower carbon energy sources on site.

DEFRA (2018): The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting– Making the Country Resilient to a Changing Climate

DEFRA (2013): Underground, Under threat – Groundwater Protection: Policy and Practice (GP3)

Environment Agency (2022): The National Flood and Coastal Erosion Risk Management Strategy for England

Key objectives relevant to the Waste Local Plan

- This Strategy sets out the national framework for managing the risk of flooding and coastal erosion. It sets out the roles for risk management authorities and communities to help them understand their responsibilities.
- The strategic aims and objectives of the Strategy are to:
 - “manage the risk to people and their property;
 - Facilitate decision-making and action at the appropriate level – individual, community or local authority, river catchment, coastal cell or national;
 - Achieve environmental, social and economic benefits, consistent with the principles of sustainable development”.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Policies should seek to reduce and manage the risk of all types of flooding.

Implications for the IIA

- The IIA framework should include objectives which seek to reduce the risk and manage flooding sustainably.

DEFRA (2008) Future Water: The Government's Water Strategy for England

Key objectives relevant to the Waste Local Plan

- Sets out how the Government want the water sector to look by 2030 and an outline of the steps which need to be taken to get there.
- The vision for 2030 is one where we, as a country have:
 - “improved the quality of our water environment and the ecology it supports, and continue to maintain high standards of drinking water quality from taps;
 - Sustainably managed risks from flooding and coastal erosion, with greater understanding and more effective management of surface water;
 - Ensure a sustainable use of water resources, and implement fair, affordable and cost-reflective water charges;

- Cut greenhouse gas emissions; and
- Embed continuous adaptation to climate change and other pressures across the water industry and water users”.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Policies should aim to contribute to the vision set out in this Strategy.

Implications for the IIA

- Include IIA objectives which seek to protect, manage and enhance the water environment and promote water management and efficiency.

Environment Agency (2009): Water for People and the Environment: Water Resources Strategy for England and Wales

Key objectives relevant to the Waste Local Plan

- The Strategy vision for water resource “is for there to be enough water for people and the environment, meeting legitimate needs”.
- Its aims include:
 - To manage water resource and protect the water environment from climate change.

- Restore, protect, improve and value species and habitats that depend on water.
- To contribute to sustainable development through good water management.
- People to understand how water and the water environment contribute to their quality of life.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Policies should reflect the aims of the strategy where relevant.

Implications for the IIA

- Include IIA objective which seeks to promote water management and efficiency.

DEFRA (2009) Safeguarding our Soils: A Strategy for England

Key objectives relevant to the Waste Local Plan

- The vision is “by 2030, all England’s soils will be managed sustainability and degradation threats tackled successfully. This will improve the quality of England’s soils and safeguard their ability to provide essential services for future generations”.

- The Strategy highlights the areas for priority including:
 - Better protection for agricultural soils.
 - Protecting and enhancing stores of soil carbon.
 - Building the resilience of soils to a changing climate.
 - Preventing soil pollution.
 - Effective soil protection during construction and development.
 - Dealing with our legacy of contaminated land.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Ensure that site allocations and policies will help protect and enhance the quality of soils and seek to sustainably manage their quality for future generations.

Implications for the IIA

- Include IIA objective which seeks to safeguard and enhance the quality of soil.

DEFRA (2007): The Air Quality Strategy for England, Scotland, Wales and Northern Ireland

Key objectives relevant to the Waste Local Plan

- Make sure that everyone can enjoy a level of ambient air quality in public spaces, which poses no significant risk to health or quality of life.
- Render polluting emissions harmless.

Key targets and indicators relevant to the Waste Local Plan

- Sets air quality standards for 13 air pollutants.

Implications for the Waste Local Plan

- Develop policies that aim to meet the standards.

Implications for the IIA

- Include sustainability objectives to reduce pollution and protect and improve air quality.

DEFRA Clean Air Strategy 2019

Key objectives relevant to the Waste Local Plan

- The Clean Air Strategy 2019 sets out actions to improve air quality by reducing pollution from a wide range of sources. The Clean Air Strategy informs the detailed National Air Pollution Control Programme.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Ensure that site allocations and policies will contribute to maintaining and improving air quality.

Implications for the IIA

- Include sustainability objectives to protect and improve air quality.

DEFRA and DfT (2017): UK plan for tackling roadside nitrogen dioxide concentrations

Key objectives relevant to the Waste Local Plan

- The strategy aims to help local authorities by setting up a £225 million implementation fund, establishing a clear air fund and £100 million for retrofitting and new low emission buses.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Ensure that site allocations and policies will contribute to maintaining and improving air quality.

Implications for the IIA

- Include sustainability objectives to protect and improve air quality.

DEFRA (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services

Key objectives relevant to the Waste Local Plan

- The strategy aims to guide conservation efforts in England up to 2020 and move from a net biodiversity loss to gain. The strategy includes 22 priorities which include actions for the following sectors:
 - Agriculture;
 - Forestry;
 - Planning and Development;
 - Water Management;
 - Marine Management;
 - Fisheries;
 - Air Pollution; and
 - Invasive Non-Native Species.

Key targets and indicators relevant to the Waste Local Plan

- The strategy develops ambitious yet achievable goals for 2020 and 2050, based on Aichi Targets set at the Nagoya UN Biodiversity Summit in October 2010.

Implications for the Waste Local Plan

- Develop policies that promote conservation and enhancements of biodiversity and ensure that site allocations take account of the aims of the strategy.

Implications for the IIA

- Include sustainability objective that relates to biodiversity.

DoH (2010): Healthy Lives, Healthy People: our Strategy for public health in England

Key objectives relevant to the Waste Local Plan

- Protect the population from serious health threats; helping people live longer, healthier and more fulfilling lives; and improving the health of the poorest, fastest.
- Prioritise public health funding from within the overall NHS budget.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Ensure that site allocations and policies reflect the objectives of the strategy.

Implications for the IIA

- Include a sustainability objective relating to health and well-being.

DECC (2014): Community Energy Strategy

Key objectives relevant to the Waste Local Plan

- Sets out plans to promote and facilitate the planning and development of decentralised community energy initiatives in four main types of energy activity:
 - Generating energy (electricity or heat)
 - Reducing energy use (saving energy through energy efficiency and behaviour change)
 - Managing energy (balancing supply and demand)
 - Purchasing energy (collective purchasing or switching to save money on energy)

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Ensure that site allocations and policies will support community low carbon and renewable energy provision including electricity, heat and transport.

Implications for the IIA

- Include a sustainability objective relating to increasing energy provided from decentralised low carbon and renewable sources.

HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment

Key objectives relevant to the Waste Local Plan

- The 25 Year Environment Plan sets out government action to tackle a wide range of environmental pressures.
- The 25 Year Environment Plan identifies six areas around which action will be focused. These include:
 - Using and managing land sustainably.
 - Recovering nature and enhancing the beauty of landscapes.
 - Connecting people with the environment to improve health and wellbeing.
 - Increasing resource efficiency and reducing pollution and waste.
 - Securing clean, productive and biologically diverse seas and oceans.
 - Protecting and improving the global environment.

Key targets and indicators relevant to the Waste Local Plan

- The 25 Year Environment sets out ambitious goals to manage pressures on the environment in the UK, based on England's 159 National Character Areas and monitoring indicators.

Implications for the Waste Local Plan

- Develop policies that promote conservation and enhancements of the natural environment and ensure that site allocations take account of the goals of the Environment Plan.

Implications for the IIA

- Include sustainability objective that relates to the protection of the natural environment.

HM Government (2018) Our Waste, Our Resources: A strategy for England

Key objectives relevant to the Waste Local Plan

- The Strategy sets out how the Government will preserve stocks of material resources by minimising waste, promoting resource efficiency and moving towards a circular economy.
- The strategy is framed by natural capital thinking and guided by two overarching objectives:
 - To maximise the value of resource use; and
 - To minimise waste and its impact on the environment.

Key targets and indicators relevant to the Waste Local Plan

- The Strategy seeks to contribute to the delivery of five strategic ambitions:
 - To work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025;
 - To work towards eliminating food waste to landfill by 2030;
 - To eliminate avoidable¹⁵ plastic waste over the lifetime of the 25 Year Environment Plan;
 - To double resource productivity by 2050; and
 - To eliminate avoidable waste of all kinds by 2050.

Implications for the Waste Local Plan

- Develop policies that promote conservation and enhancements of the natural environment and ensure that site allocations take account of the goals of the Strategy.

Implications for the IIA

- Include sustainability objective that relates to the efficient use of resources.

British Energy Security Strategy (2022)

Key objectives relevant to the Waste Local Plan

- The Strategy sets out long-term targets for offshore wind, solar, hydrogen, and nuclear energy following the onset of conflict in Ukraine.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Ensure that site allocations and policies will support community low carbon and renewable energy provision.

Implications for the IIA

- Include sustainability objective that relates to renewable energy.

DLHC (2022) Flood risk and coastal change

Key objectives relevant to the Waste Local Plan

- This report advises how to take account of and address the risks associated with flooding and coastal change in the planning process.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Ensure that site allocations and policies will mitigate against flood risk.

Implications for the IIA

- Include sustainability objective that relates to mitigating and managing flood risk.

Environment Agency (2022) National Flood and Coastal Erosion Risk Management Strategy for England

Key objectives relevant to the Waste Local Plan

- The strategy outlines a series of measures risk management authorities must undertake to manage flood and coastal erosion risk.

Key targets and indicators relevant to the Waste Local Plan

- No targets or indicators.

Implications for the Waste Local Plan

- Ensure that site allocations and policies will mitigate against flood risk.

Implications for the IIA

- Include a sustainability objective that relates to mitigating and managing flood risk.

London

The London Plan (2021)

Key objectives relevant to the Waste Local Plan

- This spatial development strategy for London sets out an integrated economic, environmental, transport and social framework for London's development. As such it has a number of key objectives (policies) it seeks to achieve on waste:
 - To reduce waste as part of establishing a circular economy.
 - To achieve and maintain sufficient waste capacity such that London achieves self-sufficiency on waste management.
 - To safeguard and retain waste sites for waste management.

Key targets and indicators relevant to the Waste Local Plan

- The three objectives (representing three distinct policies within the London Plan) contain a number of commitments for the Mayor, Mayoral Development Corporations and Local Authorities. Key targets amongst these are:
 - ensure that there is zero biodegradable or recyclable waste to landfill by 2026.
 - meet or exceed the municipal waste recycling target of 65 per cent by 2030.
 - meet or exceed the targets for each of the following waste and material streams:
 - a) construction and demolition – 95 per cent reuse/recycling/recovery

b) excavation – 95 per cent beneficial use

- the equivalent of 100 per cent of London's waste should be managed within London (i.e. net self-sufficiency) by 2026.

Implications for the Waste Local Plan

- Include objectives for new and existing waste sites to promote circular economy practices as well as for circular economy practices to be supported through other activities that support resource conservation, re-use and recycling and reductions in waste going for disposal.
- Include objectives for full net self-sufficiency for waste management for the affected area.
- Include objectives to identify compensatory waste capacity where the loss of waste sites is possible

Implications for the IIA

- The London Plan sets out a series of intentions for waste management policy, the design and operation of waste sites and the design and operation of all built developments in London. As such, it has a number of implications for the IIA on environmental, social and economic factors to be assessed. In particular, key implications from policies specifically aimed at waste policy and waste sites are to:
 - Include objectives and site assessment criteria for waste facilities to be integrated with non-waste related development and provide other local benefits.
 - Include objectives for achieving circular economy principles.
 - Include objectives for renewable energy generation.
 - Include objectives for greenhouse gas savings.
 - Include objectives for reducing impact on amenity in surrounding areas to waste sites.

- Include objectives that support waste minimisation
- Include objectives and site assessment criteria to ensure waste sites are developed in accessible locations.

London Environment Strategy (2022)

Key objectives relevant to the Waste Local Plan

- This strategy of the Greater London Authority has a range of environmental objectives including for London to become a ‘zero waste city’. This means that by 2026 no biodegradable or recyclable waste will be sent to landfill, and by 2030 65 per cent of London’s municipal waste will be recycled. It also aims for London boroughs, businesses and the waste industry to increase the availability of recycling facilities and services.

Key targets and indicators relevant to the Waste Local Plan

- By 2026 no biodegradable or recyclable waste will be sent to landfill.
- By 2030 65 per cent of London’s municipal waste will be recycled.
- By 2030 75 per cent minimum target for business waste recycling.

Implications for the Waste Local Plan

- Ensure a net zero waste capacity.
- Develop policies that support the creation of recycling facilities.
- Develop policies in relation to waste sites that support households and commercial entities to recycle (including reuse, repair, and remanufacturing services).

Implications for the IIA

- Include objectives and sites criteria that prioritise the movement of waste up the waste hierarchy and away from landfill

Climate Action Strategy 2020-2027 (2020)

Key objectives relevant to the Waste Local Plan

- The main objective of the Climate Action Strategy is for London to become a zero-carbon city by 2050. This requires zero emissions from all transport and buildings, and any residual emissions in London to be offset.

Key targets and indicators relevant to the Waste Local Plan

- The London wide actions are:
 - 40% reduction in CO2 between 2018 and 2022
 - 50% reduction in CO2 between 2023 and 2027
 - Zero waste to landfill in 2026
 - 15% of demand for energy will be met by renewable and district heating sources
 - 60% reduction in CO2 between 2028 and 2032

Implications for the Waste Local Plan

- Consideration of policy to meet the requirement of zero waste to landfill across London by 2026.
- Consideration of policy to reduce emissions across the plan period.

Implications for the IIA

- Inclusion of a sustainability objective and site assessment criteria in relation to the reduction of CO2 and the complete diversion of waste from landfill by 2026

Local Nature Recovery Strategy (*Upcoming*)

8.4 The Greater London Authority is currently preparing a Local Nature Recovery Strategy for London. This is a new system of spatial biodiversity strategies that will involve all 33 of the London boroughs as well as its six neighbouring counties, including Essex. It will provide a statement of London's strategic biodiversity priorities and a fully updated and comprehensive spatial habitat map.

8.5 The strategy is intended to be completed in 2025.

Accessible London: Achieving an Inclusive Environment Supplementary Planning Guidance (2014)

Key objectives relevant to the Waste Local Plan

- The document makes reference to the separate Housing SPG for London which requires new housing developments to make communal facilities and any storage facilities for waste and recycling to be accessible to all residents, including children and wheelchair users.

Key targets and indicators relevant to the Waste Local Plan

- No indicators or targets above those in the London Plan.

Implications for the Waste Local Plan

- Consider the inclusion of policy in relation to accessible spaces

Implications for the IIA

- Inclusion of a sustainability objective and site assessment criteria for waste sites and their accessibility.

Optimising Site Capacity: A Design-led Approach LPG (2023)

Key objectives relevant to the Waste Local Plan

- The LPG provides guidance on delivering the requirements of London Plan policies:
 - Policy D1 London's form, character and capacity for growth – Part (B3)
 - Policy D3 Optimising site capacity through the design-led approach Policy
 - D4 Delivering good design
- The design capacity approach applies to all existing site allocations as well as any new sites that come forward for development.

Key targets and indicators relevant to the Waste Local Plan

- Use of the 'Indicative Capacity Toolkit'
- Indicators within the toolkit provide additional detail in relation to the London Plan, and do not set further targets.

Implications for the Waste Local Plan

- Consideration of policy and site allocations through use of the toolkit to determine suitable capacity of development on allocated waste sites and other new waste development.

Implications for the IIA

- Inclusion of objectives relating to site capacity, green infrastructure, SuDS, accessibility and heritage

Characterisation and Growth Strategy (2023)

Key objectives relevant to the Waste Local Plan

- The Characterisation and Growth Strategy guidance provides information on how to carry out a borough or neighbourhood-wide character assessment (or study). This assessment should be used to inform a borough or neighbourhoods growth strategy, setting out how an area will change in the future. This includes identifying if and where there are locations where tall buildings may be appropriate.

Key targets and indicators relevant to the Waste Local Plan

- The Characterisation and Growth Strategy guidance relates to the implementation of London Plan policies:
 - Policy D1 London's form, character and capacity for growth
 - Policy D2 Infrastructure requirements for sustainable densities
 - Policy D3 Optimising site capacity through the design-led approach
 - Policy D9 Tall buildings
 - Policy HC1 Heritage conservation and growth
 - Policy SD9 (Part B) Town centres: Local partnerships and implementation

Implications for the Waste Local Plan

- Consideration of the location of waste sites in relation to the relevant Characterisation and Growth Study for each borough or neighbourhood.

Implications for the IIA

- Inclusion of objectives and site assessment criteria in relation to local characterisation and growth studies

Mayor of London, Air Quality Positive (2023)

Key objectives relevant to the Waste Local Plan

- The Air Quality Positive approach is a process of identifying and implementing ways to push development beyond compliance with both the

Air Quality Neutral benchmarks and the minimum requirements of an air quality assessment.

Key targets and indicators relevant to the Waste Local Plan

- Maximising improvements to air quality through consideration of design and layout, transport and energy.

Implications for the Waste Local Plan

- Consideration of policy to demonstrate a holistic approach to the improvement of air quality.

Implications for the IIA

- Inclusion of objectives and site assessment criteria to minimise effects on air quality.
- Inclusion of 'in combination' assessment in relation to effects on air quality.

Greater London Authority, Air Quality Neutral (2023)

Key objectives relevant to the Waste Local Plan

- To improve air quality by a reduction in emissions from the built environment.

Key targets and indicators relevant to the Waste Local Plan

- The document sets out a range of targets in relation to the emissions from heating or cooling buildings, and the effects of any trip rates associated with an individual development proposal.

Implications for the Waste Local Plan

- Consideration of site allocations in locations where trip rates will be reduced
- Consideration of policy in relation to energy from waste

Implications for the IIA

- Inclusion of objectives and site assessment criteria in relation to the reduction of emissions from waste facilities.
- Inclusion of objectives and site assessment criteria in relation to sustainable transport.

Mayor of London, 'Be Seen' energy monitoring guidance (2023)

Key objectives relevant to the Waste Local Plan

8.6 The Be Seen energy monitoring guidance sets out a process of monitoring energy performance in development from planning through to 'as built' stages.

Key targets and indicators relevant to the Waste Local Plan

- Policy SI 2 of the London Plan.

Implications for the Waste Local Plan

- Consideration of policy to implement the requirement of new waste facilities to demonstrate energy performance.

Implications for the IIA

- Inclusion of objectives in relation to energy use and reduction in emissions

Circular Economy Statements (2022)

Key objectives relevant to the Waste Local Plan

- This document provides guidance for developers on producing Circular Economy Statements for new developments in London. Developers must produce statements on waste management from development and operational waste management plans should be produced as part of the Circular Economy Statements, satisfying the London Plan and London Environment Strategy (see above)

Key targets and indicators relevant to the Waste Local Plan

- As a guidance document for producing statements that show conformity with the London Plan Policy SI7 on Circular Economy and the London Plan and London Environment Strategy (see above) more broadly, it does not contain new targets or indicators to meet.

Implications for the Waste Local Plan

- Consideration of policy in relation to the requirements and outputs of Circular Economy Statements.
- Consider the requirements of new types of waste facilities to meet demands in relation to the circular economy.

Implications for the IIA

- Inclusion of objectives in relation to the circular economy and waste minimisation.
- Inclusion of site assessment criteria in relation to waste sites needed to support the circular economy.

Energy Planning Guidance (2022)

Key objectives relevant to the Waste Local Plan

- This document provides Greater London Authority guidance on preparing energy assessments as part of planning applications. It provides some guidance for waste facilities that intend to produce fuel on maximising heat and power opportunities. The updated guidance confirms that all major developments in London must continue to meet the London Plan net zero carbon target by following the energy hierarchy (Policy SI 2), the heating hierarchy (Policy SI 3) and by maximising on-site carbon reductions.

Key targets and indicators relevant to the Waste Local Plan

- As a guidance document for producing statements that show conformity with the London Plan Policy SI7 on Circular Economy and the London

Plan and London Environment Strategy (see above) more broadly, it does not contain new targets or indicators to meet.

Implications for the Waste Local Plan

- Major non-residential development is included within the scope of the guidance, including the requirement for non-carbon heating.
- Possible opportunities and demand for energy from waste facilities

Implications for the IIA

- Inclusion of objectives that take account of the requirement for carbon reduction within new waste developments

The Control of Dust and Emissions During Construction and Demolition (2014)

Key objectives relevant to the Waste Local Plan

- This document provides guidance on the control of dust and emissions during construction and demolition, responding to the requirements of the London Plan 2011. As such it does not provide new objectives relevant to the Waste Local Plan.

Key targets and indicators relevant to the Waste Local Plan

- This document provides guidance on the control of dust and emissions during construction and demolition, responding to the requirements of the London Plan 2011. As such it does not provide additional objectives relevant to the Waste Local Plan.

Implications for the Waste Local Plan

- Implications for all sites producing construction and demolitions wastes which may have an impact on waste streams

Implications for the IIA

- Include objectives for new or existing waste sites in relation to dust suppression and reduction of emissions

Whole Life-Cycle Carbon Assessments (2022)

Key objectives relevant to the Waste Local Plan

- This document provides guidance for explains how to prepare a Whole Life-Cycle Carbon (WLC) assessment in line with Policy SI2F of the London Plan 2021. As such it does not provide new objectives relevant to the Waste Local Plan.

Key targets and indicators relevant to the Waste Local Plan

- This document provides guidance for explains how to prepare a WLC assessment in line with Policy SI2F of the London Plan 2021. As such it does not provide new targets relevant to the Waste Local Plan.

Implications for the Waste Local Plan

- Consideration of WLC in relation to new or expanded waste sites.

Implications for the IIA

- Inclusion of WLC in objectives relating to climate change.

Sustainable Transport, Walking and Cycling LPG (2022)

Key objectives relevant to the Waste Local Plan

- This document provides guidance for plan-makers and developers on transport, walking and cycling in London, including the protection of planned schemes.

Key targets and indicators relevant to the Waste Local Plan

- None above the requirements of the London Plan.

Implications for the Waste Local Plan

- Consideration of the location new or expanded waste sites in relation to the effects on sustainable transport networks.

Implications for the IIA

- Inclusion of objectives and site assessment criteria relating to the impacts of waste sites on sustainable transport networks.

Urban Greening Factor (2023)

Key objectives relevant to the Waste Local Plan

- The Urban Greening Factor is a tool used to evaluate the quality and quantity of natural features proposed as part of a development application, such as planting, waterbodies, and green roofs, collectively referred to as urban greening. This document advises developers on how to meet these requirements under London Plan Policy G5 Urban Greening.

Key targets and indicators relevant to the Waste Local Plan

- The Urban Greening Factor tool sets out design considerations in relation to the natural and built environment and provides a score in terms of meeting the aims of policy G5 of the London Plan.

Implications for the Waste Local Plan

- Consideration of the location of waste sites in relation to Sites of Importance for Nature Conservation (SINC), the Public Realm and Sustainable Drainage Systems (SuDS), as well as the potential opportunities for biodiversity in relation to roofs and facades of buildings.

Implications for the IIA

- Inclusion of objectives and site assessment criteria relating to SINCs, SuDS, and biodiversity gain.

London Sustainable Drainage Action Plan (2015)

Key objectives relevant to the Waste Local Plan

- This document is a long-term plan to coordinate the development of 'sustainable drainage' systems across London. The plan has been developed by the Drain London Programme, a partnership of the Mayor of London, Environment Agency, London Councils and Thames Water. It sets out a range of actions for each major land-use sector including major utilities. As such, it makes very brief mention of some waste management sites likely being able to deliver SuDS cost-effectively.

Key targets and indicators relevant to the Waste Local Plan

- To achieve a 1% reduction in surface water flows in the sewer network each year for 25 years, resulting in a 25% reduction in flows by 2040.

Implications for the Waste Local Plan

- Consideration of policy and site allocations in relation to sustainable drainage within a London wide context.

Implications for the IIA

- Inclusion of objectives and site assessment criteria in relation to urban drainage

Thames Estuary 2100 Plan

Key objectives relevant to the Waste Local Plan

- This document is a long-term plan to ensure the management of flood risk from the Thames. The plan has been developed by the Environment Agency in partnership with others. It sets out a range of actions for landowners, regulators, developers and policy makers.

Key targets and indicators relevant to the Waste Local Plan

- Ensuring there is no inappropriate development in tidal flood risk areas

Implications for the Waste Local Plan

- Consideration of policy and site allocations in relation to minimising flood risk and contributing to flood defences along the Thames. Ensuring landowners or developers to raise or adapt flood defences as part of any planned development.

Implications for the IIA

Inclusion of objectives and site assessment criteria in relation to flood risk

River Thames Scheme (2021)

Key objectives relevant to the Waste Local Plan

- This document is a long-term plan to ensure the management of flood risk from the Thames, in Surrey and West London. The plan has been

developed by the Environment Agency in partnership with others. It sets out a range of actions for landowners, regulators, developers and policy makers.

Key targets and indicators relevant to the Waste Local Plan

- Ensuring there is no inappropriate development in tidal flood risk areas within East London.

Implications for the Waste Local Plan

- Consideration of policy and site allocations in relation to minimising flood risk and contributing to flood defences along the Thames. Ensuring landowners or developers to raise or adapt flood defences as part of any planned development.

Implications for the IIA

- Inclusion of objectives and site assessment criteria in relation to flood risk

Appendix B

Responses from Statutory Consultees to the ELJWP Scoping Report

B.1 The following table summarises the comments received from the Environment Agency and the actions taken in response. No responses were received from Historic England or Natural England within the consultation period. The organisations will be consulted on this IIA document, and any future comments will be addressed in later stages of the IIA .

Table B.1: Responses and actions to comments received on the ELJWP Scoping Report – Natural England

Subject	Comment detail	LUC response
Epping Forest	Paragraph 3.225 mentions the Epping Forest Strategic Solution and an interim position – a finalised Governance Agreement was signed by the LPAs in January 2024 which secures a package of SAMM measures for the site moving away from the previous interim tariff.	The report has been updated to refer to and take account of the Epping Forest Governance Agreement.
Site Assessment	We agree with the comments that the potential impacts on designated sites should be considered as part of a site evaluation process	The IIA has taken account of the assessments within the Habitats Regulations Assessment.

Table B.2: Responses and actions to comments received on the ELJWP Scoping Report - Environment Agency

Subject	Comment details	LUC response
Lower Thames Flood Risk Management Strategy (LTFRMS).	The document does not mention the LTFRMS.	The LTFRMS (now the River Thames Scheme) has been reviewed and included in Appendix A.
Outdated Strategic Flood Risk Assessments (SFRAs).	SRFAs cited in the document are from 2017 and do not account for the changes in the National Planning Policy Guidance (NPPG).	The ELJWP will be prepared in accordance with the NPPF, including the latest changes in relation to flood risk. The IIA will be updated to include the most recent SFRA documents as the plan progresses.
Classification of waste treatment facilities.	The plan correctly identifies waste treatment facilities as less vulnerable and suitable for all flood zones except 3b (functional floodplain).	No action required.
Differentiation between waste treatment and hazardous waste facilities.	The document distinguishes between waste treatment and hazardous waste facilities, with the latter considered more vulnerable and suitable for Flood Zones 1 and 2, possibly 3a, subject to the exception test per NPPF.	No action required.
Definition of functional floodplain.	The EA suggest defining the functional floodplain as the 1 in 30-year floodplain, aligning with the Planning Policy Guidance (PPG) issued in 2022.	The IIA will refer to the latest national guidance as appropriate.
Lack of mention of Source Protection Zones (SPZs).	The document does not address SPZs for groundwater protection. It's emphasised that considering SPZs is crucial, particularly for opposing waste activities in SPZ1, such as landfills.	The IIA objectives have been updated to refer to SPZs.
Consideration of waste transport impacts.	It's noted that the East London Waste Disposal Authority (ELWA) will soon	The Boroughs are communicating with ELWA in relation to changes to the

Appendix B Responses from Statutory Consultees to the ELJWP Scoping Report

Subject	Comment details	LUC response
	replace its long-term waste management contract. Emphasis is placed on the importance of considering impacts from waste transport in shaping future waste management systems.	contract. The IIA considers the impacts of waste transport within the baseline, IIA objectives and appraisals.
Sharing of surplus waste management capacity.	The document suggests that the sharing of surplus waste management capacity under the GLA's apportionment system could play a significant role in waste plans in other parts of London. Early dialogue with other Boroughs and involvement of relevant authorities are encouraged in managing and recording this sharing.	The Boroughs are undertaking a series of Duty to Cooperate activities to ensure there is appropriate communication with the GLA, other waste planning authorities and other relevant stakeholders.
Minimising health risks from waste management facilities.	The focus is on reducing health risks from waste facilities through adherence to the 'agents of change' principle outlined in the London Plan. Concerns arise about the document's failure to integrate waste site considerations with nearby housing developments. Encouragement is given for engagement with housing developers and early collaboration with waste facility operators to implement mitigative measures.	The ELJWP primarily deals with new waste development, or new waste activity. The Agent of Change principle is one mechanism to help in minimising the effects of waste development on housing development. The ELJWP does not currently propose any new waste sites, and there are criteria within the policies to guide development towards suitable locations, such as industrial sites identified within local plans. JWP4 provides additional criteria to mitigate impacts on amenity.
Incorporation of Sustainable Urban Drainage Systems (SuDS.).	SuDS are mandated in schemes to prevent development from increasing flood risk elsewhere, as outlined in paragraph 173 of the National Planning Policy Framework (NPPF). However, caution is advised regarding contamination mobilisation, requiring a risk assessment before SuDS implementation if previous site use has led to pollution of controlled waters.	The comments is noted.

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Subject	Comment details	LUC response
Reference to Thames Tidal Defence system.	Uncertainty exists regarding the reference to the Thames Tidal Defence system, necessitating clarification whether it pertains to the Thames Barrier and Tidal Walls or other elements (we presume Thames Barrier). Additionally, new waste sites must maintain setbacks from tidal and fluvial flood defences, with provisions for accessing and raising defences as per the Thames Estuary 2100 plan.	The reference to the Thames Tidal Defence system has been updated. A reference to the Thames Estuary 2100 plan has been included and the document has been reviewed in Appendix A.
Identification of main flood risks.	The document appropriately identifies the primary flooding risks for each borough, encompassing surface water flooding.	No action required.
Utilisation of ELJWP to address climate change effects.	Acknowledgment is made of the ELJWP's potential to mitigate climate change effects by locating developments in low flood risk areas, aligning with the requirements of the Planning Policy Guidance (PPG) and National Planning Policy Framework (NPPF).	No action required.
Consideration of residual risk and facility safety.	The plan acknowledges residual risk and emphasises the necessity of ensuring facility safety without exacerbating flood risk elsewhere. However, it's suggested that this aspect should be explicitly addressed beyond being an objective in the Integrated Impact Assessment (IIA) framework.	Noted.
Assessment of additional sustainability issues.	Inquiry is raised regarding the inclusion of other pertinent sustainability issues in Chapter 3 of the ELJWP – no comments raised from the Environment Agency.	No action required.

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Subject	Comment details	LUC response
Appropriateness of the Integrated Impact Assessment (IIA) framework and objectives.	Evaluation is needed on whether the IIA framework in Chapter 4 adequately covers relevant objectives within the Waste Plan's scope.	The IIA framework aligns with the London Plan, and the scope of the ELJWP.
Lack of mention of mitigation or resilience for developments in Flood Zone 3.	Although IIA Objective 10 implies ensuring safety throughout the facilities' lifetime amid climate change considerations, there's no explicit mention of mitigation or resilience strategies for developments in Flood Zone 3, contingent upon the Exception test and permissible development.	Any sites that come forward for development would be subject to the sequential tests within national policy for flood risk.

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