

East London Joint Waste Plan (Regulation 19)

Integrated Impact Assessment Report

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

Final report
Prepared by LUC
February 2025

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Chapter 1

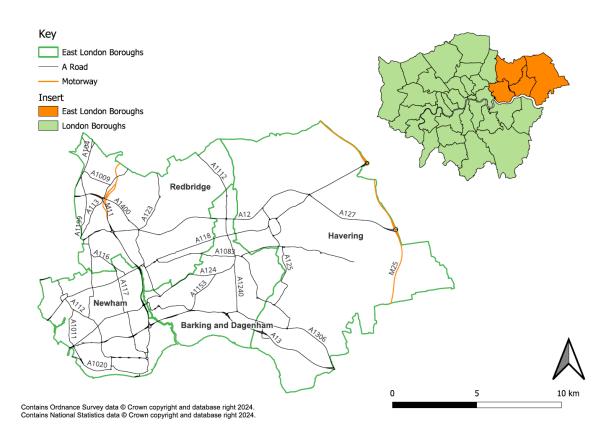
Introduction

- **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), and Equalities Impact Assessment (EqIA) for the new East London Joint Waste Plan (ELJWP). A separate Habitats Regulations Assessment (HRA) is also being prepared.
- **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 Regulation 19 proposed submission version of the ELJWP. The IIA appraises the likely effects of the vision, objectives and policies. This document will accompany the consultation on the Regulation 19 proposed submission version of the ELJWP that will be published for consultation in relation to legal compliance and soundness in Spring 2025.
- **1.4** This report is in an 'Accessible format' which means it was 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 East London Waste Authority [See reference 1] is 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 previously included the area covered by the London Legacy Development Corporation (LLDC) within the London Borough of Newham. However, since December 2024 planning powers have returned from the LLDC to the London Borough of Newham and Newham will now determine all planning applications and applications for related consents. The LLDC did not have a separate waste apportionment within the London Plan 2021, and therefore waste has always been planned for by the London Borough of Newham. A map of the area covered by the Plan is provided in **Figure 1.1.**

Figure 1.1: The area covered by the East London Joint Waste Plan



- **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 was 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 38,300 new homes and create 55,700 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 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. The River Thames forms the southern boundary of the Plan area and provides a hydrological connection to the downstream Thames Estuary & Marshes SPA and Ramsar site 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 Stansted.

East London Joint Waste Plan and its relationship to other relevant plans and programmes

- **1.15** The current version of the ELJWP was adopted in 2012 [See reference 4] and set out to meet the requirements of 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, 2024), the National Planning Policy for Waste (NPPW, 2014) and the accompanying Planning Practice Guidance (PPG, 2014). The National Planning Policy Framework was revised in December 2024, and this EJLWP will now proceed under the new December 2024 version (as amended in February 2025).
- **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 transferred planning powers back to LBN in December 2024. 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).

- **1.18** 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.
- **1.19** 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 zerowaste city by 2050.

Sustainability Appraisal and Strategic Environmental Assessment

1.20 Under the Planning and Compulsory Purchase Act 2004, SA is mandatory for Development Plan Documents. For these documents it is also necessary to conduct an environmental assessment in accordance with 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). As set out in the explanatory Memorandum accompanying the Brexit amendments [See reference 6], they are necessary to ensure that the law functions correctly following the UK's exit from the EU. No substantive changes are being made by this instrument to the way the SEA regime operates. Therefore, the SEA Regulations remain in force and it is a legal requirement for the ELJWP to be subject to SA and SEA throughout its preparation.

1.21 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 Government's Planning Practice Guidance [See reference 7], 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 by East London Waste Planning Authorities. This report also fulfils a number of purposes additional to SA, to more comprehensively address the topics of equalities (via an Equalities Impact Assessment – EqIA) and health (via a Health Impact Assessment – HIA), as described under the headings below. From here on, the term 'IIA' should therefore be taken to mean 'SA incorporating the requirements of the SEA Regulations, EqIA and HIA.'

1.22 The IIA process comprises a number of stages as, shown below:

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 IIA Report.

Stage D: Consulting on the Local Plan and the IIA Report.

Stage E: Monitoring the significant effects of implementing the Local Plan.

Health Impact Assessment

1.23 Although not a statutory requirement, Health Impact Assessment (HIA) aims to ensure that health-related issues are integrated into the plan-making process. Sustainability objectives that address health issues have been included as part of the IIA process and in this way the HIA of the ELJWP was

carried out as part of the SA. Recommendations will be made in relation to how the health-related impacts of the ELJWP can be optimised as the options are developed into detailed policies and site allocations.

Equalities Impact Assessment

1.24 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.

1.25 The EqIA of the ELJWP was 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

1.26 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in 2007 [See reference 8]. The currently applicable version is "The Conservation of Habitats and Species Regulations 2017 (SI 2017/1012), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579)" [See reference 9] (hereafter referred to as the "Habitats Regulations"). When preparing the ELJWP, the Council is therefore required by law to carry out an HRA. The Council can commission consultants to undertake HRA work on its behalf and this (the work documented in separate HRA reports) is then sent to and considered by the Council as the 'competent authority.' The Council will consider the HRA and may only progress the ELJWP if it considers that it will not adversely affect the integrity of any Habitats Sites or have a significant effect on qualifying habitats or species for which the Habitats

Sites are designated for, or if Imperative Reasons of Overriding Public Interest (IROPI) are identified. The requirement for authorities to comply with the Habitats Regulations when preparing a Plan is also noted in the Government's online Planning Practice Guidance [See reference 10].

1.27 The HRA was 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.

Meeting the requirements of the SEA Regulations

1.28 The relevant sections of the IIA Report that are considered to meet the SEA Regulations requirements are signposted below. This information will be included in the IIA Report at each stage of the IIA to show how the requirements of the SEA Regulations have been met through the IIA process.

1.29 SEA Guidance recognises that data gaps will exist but suggests that where baseline information is unavailable or unsatisfactory, authorities should consider how it will affect their assessments and determine how to improve it for use in the assessment of future plans. Where there are data gaps in the baseline these are highlighted in the text. The collection and analysis of baseline data is regarded as a continual and evolving process, given that information can change or be updated on a regular basis. Relevant baseline information will be updated during the appraisal process as and when data are published. The waste baseline has been revised to reflect the evidence prepared in support of the plan.

Structure of the IIA Report

- **1.30** 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 as follows:
 - Chapter 2 describes the approach that is being taken to the IIA of the East London Joint Waste Plan.
 - Chapter 3 describes the relationship between the East London Joint Waste Plan and other relevant plans, policies and programmes; summarises the social, economic and environmental characteristics of the District and identifies the key sustainability issues.
 - Chapter 4 presents the IIA options for the safeguarding of sites considered as part of the plan making process.
 - Chapter 5 presents the IIA findings for the various elements of the ELJWP, including the vision, objectives and policies.
 - Chapter 6 presents the cumulative effects of the ELJWP.
 - Chapter 7 presents proposed monitoring indicators for the potential effects of the ELJWP.
 - Chapter 8 describes the conclusions of the IIA and the next steps to be undertaken for the ELJWP and the IIA.
 - Appendix A presents a review of relevant plans, policies and programmes
 - Appendix B presents the consultation comments received in relation to the IIA work completed to date and explains how they have been addressed.
 - Appendix C presents baseline sustainability information for the plan area.

Requirements of the SEA Regulations and where they are met in this report

Preparation of an environmental report

- **1.31** Preparation of an environmental report in which 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, are identified, described and evaluated (Reg. 12). The information to be given is (Schedule 2):
 - a) An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.
 - Covered in Chapter 1 and Appendix C of this IIA Report.
 - b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.
 - Covered in Chapter 3 and Appendix C of this IIA Report.
 - c) The environmental characteristics of areas likely to be significantly affected.
 - Covered in Chapter 3 and Appendix C of this IIA Report.
 - d) 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 Directives 79/409/EEC and 92/43/EEC.
 - Covered in Chapter 3 and Appendix C of this IIA Report.
 - e) The environmental protection, objectives, established at international, community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation.

- Covered in Chapter 3 and Appendix A of this IIA Report.
- f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.)
 - Covered in Chapter 4 to Chapter 6 of this IIA Report.
- g) The measures envisaged to prevent, reduce and as fully possible offset any significant adverse effects on the environment of implementing the plan or programme.
 - Covered in Chapter 4 to Chapter 6 of this IIA Report.
- h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of expertise) encountered in compiling the required information.
 - Information about how the assessment was undertaken and difficulties encountered is covered in Chapter 2 of this IIA Report.
- i) A description of measures envisaged concerning monitoring in accordance with Reg. 17.
 - Covered in Chapter 7 of this IIA Report.
- j) A non-technical summary of the information provided under the above headings.
 - A separate non-technical summary document was prepared to accompany the IIA Report.
- The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more

appropriately assessed at different levels in that process to avoid duplication of the assessment (Reg. 12(3)).

Addressed throughout this IIA Report.

Consultation requirements

- Authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Reg. 12(5)).
 - Focused consultation on the scope and level of detail of the IIA was carried out with the Environment Agency, Historic England, and Natural England and other key stakeholders for 5 weeks in early 2024.
- Authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Reg. 13).
 - Consultation on the Regulation 18 draft Local Plan document and the accompanying iteration of the IIA Report was undertaken in the summer of 2024. Consultation is now being undertaken on Regulation 19 Local Plan in Spring 2025. The Regulation 19 ELJWP is accompanied by this IIA Report.
- Other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Reg. 14).
 - The Local Plan is not expected to have significant effects on other EU Member States.

Taking the environmental report and the results of the consultations into account in decision-making (Reg. 16)

Provision of information on the decision

1.32 When the plan or programme is adopted, the public and any countries consulted under Reg. 14 must be informed and the following made available to those so informed:

- The plan or programme as adopted;
- A statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report, the opinions expressed, and the results of consultations entered into have been taken into account, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and
- The measures decided concerning monitoring.
 - Information on how the findings of the IIA have been taken into account is provided in Chapter 3 and information on the reasons for choosing the proposed approaches in light of alternatives is provided in Chapter 5. The reporting requirements will be addressed in full in the form of an SEA Adoption Statement after the ELJWP is adopted.

Monitoring

- Monitoring of the significant environmental effects of the plan's or programme's implementation (Reg. 17).
 - Suggested monitoring indicators are set out in Chapter 7. The final suggested monitoring indicators will be included in the SEA postadoption statement.

Quality assurance

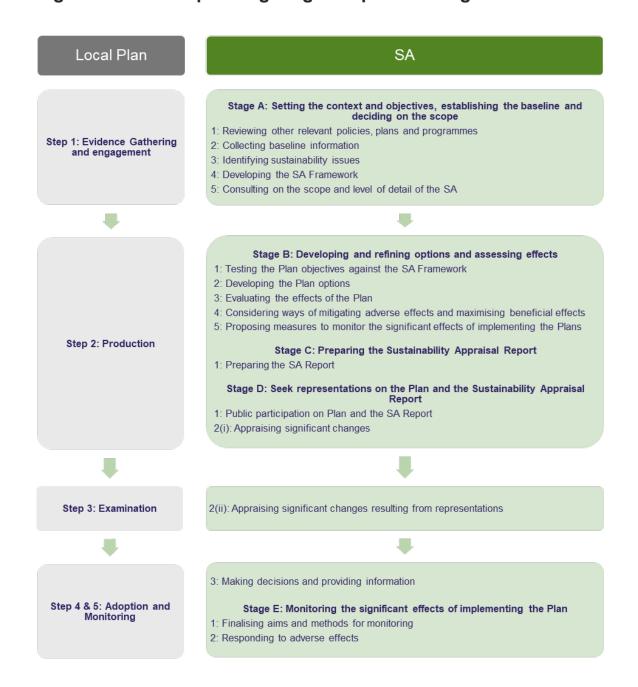
- Environmental reports should be of a sufficient standard to meet the requirements of the SEA Regulations.
 - This report was produced in line with current guidance and good practice for SEA/SA and this section demonstrates where the requirements of the SEA Regulations have been met.

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 IIA to be carried out as an integral part of the plan-making process and **Figure 2.1** sets out the main stages of the plan-making process and shows how these correspond to the IIA process.

Figure 2.1: Corresponding stages in plan-making and SA



2.2 The sections below describe the approach that was taken to the IIA of the ELJWP to date and provide information on the subsequent stages of the process.

SA Stage A: Scoping

2.3 The Scoping stage of IIA involves understanding the social, economic and environmental baseline for the plan area as well as the sustainability policy context and key sustainability issues and using these to inform the appraisal framework as follows.

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

- **2.4** 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.
- **2.5** The IIA Scoping Report contained a review of other policy documents relevant to the scope of the ELJWP and to the sustainability objectives it should seek to support. This review was updated as part of the preparation of each iteration of the IIA. The review is presented in Appendix A.

Collect baseline information to establish sustainability context

2.6 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.

- **2.7** 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.
- **2.8** The SEA Regulations require the Environmental 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.
- **2.9** 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 socioeconomic issues such as housing, access to services, crime and safety, education and employment. This reflects the integrated approach that is being taken to the IIA and SEA processes. Baseline information for the Borough was updated as part of the preparation of each iteration of the IIA and is presented in Appendix C.

Identify sustainability issues

- **2.10** The baseline information also allows the identification of existing sustainability issues, including problems, as required by the SEA Regulations.
- **2.11** Sustainability issues and their likely evolution without the ELJWP Review are detailed in Appendix C and summarised in Chapter 3.

Develop the IIA framework

- **2.12** 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 a set of sustainability objectives (the 'IIA framework') against which the effects of the Plan have been assessed. These objectives also take into account the types of issues that are capable of being affected by the land use planning system.
- **2.13** Development of the IIA 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. The IIA framework that was used in this way throughout the plan-making process is presented in Chapter 3.

Development of the site assessment criteria

- **2.14** The ELJWP does not 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:
 - Table 9 within the ELJWP sets out which sites are suitable to be released from safeguarding.
 - Appendix 2 of the ELJWP sets out sites safeguarded by the ELJWP.
- **2.15** The IIA has not therefore appraised site allocation options. The IIA does consider the process for the removal of sites from the safeguarded list within Chapter 4 of this report.

Consult on the scope and level of detail of the SA

- **2.16** Public and stakeholder participation is an important element 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.
- **2.17** 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.
- **2.18** Appendix B lists the comments that were received on the IIA during the consultation on the Scoping Report. The Appendix describes how each comment was addressed. In light of the comments received, a number of amendments were made to the review of policies, plans, and programmes, the baseline information, key sustainability issues and the IIA framework.

SA Stage B: Developing and refining options and assessing effects

2.19 The consideration of reasonable alternatives was a key focus of attention within the IIA process. 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 can help to identify where there may be other 'reasonable alternatives' to the options being considered for a plan.

2.20 In relation to the IIA report, Part 3 of the SEA Regulations 12 (2) requires that:

"The report must identify, describe and evaluate the likely significant effects on the environment of—

- (a) implementing the plan or programme; and
- (b) reasonable alternatives, taking into account the objectives and the geographical scope of the plan or programme."
- **2.21** Schedule 2 (h) of the SEA Regulations requires that the Environmental Report includes a description of:

"(h) an outline of the reasons for selecting the alternatives dealt with."

Developing and refining options

2.22 The SEA Regulations require that the alternative policies and site allocations considered for inclusion in a plan that must be subject to IIA are 'reasonable', 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.

Assessing the effects of the Plan and reasonable alternatives

2.23 The draft policies and sites included in the draft ELJWP as well as all reasonable alternatives were appraised against the IIA objectives in the IIA framework (see Chapter 3). This included the appraisal of a number of options for the spatial distribution of development in the plan area as well as the preferred approach to development taken forward in the draft Local Plan.

Site assessment criteria

- **2.24** The ELJWP does not 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 benefit from 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).
- **2.25** The IIA has not therefore appraised site options. The IIA has considered if there are any reasonable alternative options for the selection of sites that the ELJWP releases from safeguarding in Chapter 4 of this report.
- **2.26** The IIA findings are not the only factors taken into account when 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 (such as feedback on the SIP consultation), deliverability and conformity with national policy will also be taken into account by plan-makers when selecting preferred options for their plan.

SA Stage C: Preparing the Sustainability Appraisal report

2.27 This IIA report describes the process that was 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 seven policies. The focus of the appraisal was the identification of significant effects, whether positive or negative, in accordance with the SEA Regulations.

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

SA Stage D: Consultation on the Local Plan and the IIA Report

- **2.29** The four Boroughs previously invited comments on the Draft ELJWP (Regulation 18 draft) and the accompanying IIA report in the summer of 2024. Appendix B lists the comments that were received on the IIA and how each comment was addressed.
- **2.30** The four Boroughs are now inviting comments on the Draft ELJWP (Regulation 19 draft) and this IIA report. These documents will be published on the East London Joint Waste Plan website for consultation in the spring of 2025.

SA Stage E: Monitoring implementation of the Local Plan

2.31 Recommendations for monitoring the likely significant social, environmental and economic effects of implementing the ELJWP are presented in Chapter 7.

IIA framework

- **2.32** 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.
- **2.33** 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

2.34 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

- **2.35** Where a potential positive or negative effect is uncertain, a question mark was added to the relevant symbol (e.g. +? Or -?) and the symbol was 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.
- **2.36** 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 (--) was 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.

- 2.37 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.
- **2.38** 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 and data limitations

- **2.39** 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."

- **2.40** A number of difficulties and limitations arose in the course of the assessment work carried out to date and these are outlined below:
 - 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 any alterations to the ELJWP that follow examination of the plan will consider updated evidence and information available at the time.
- 2.41 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 was made to allocate arisings of Construction. Demolition and Excavation (C,D & E) waste attributed to London. This was done by applying London wide construction sector employment statistics. However as the arising value was arrived at partially through applying this statistical computation it is not possible to be certain what fate this reattributed waste followed. The IIA has followed the lead of the plan, and has not made any

additional assumptions in the movement of waste across the plan area, or further within or outside of London.

Chapter 3

Sustainability context

Introduction

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 and help to deliver against. 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 3.
- **3.3** 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 was 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 the ELJWP. 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'

- **3.4** 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.
- **3.5** As set out in the Explanatory Memorandum accompanying the Brexit amendments to the SEA Regulations [See reference 11], the purpose of the Brexit amendments is to ensure that the law functions correctly after the UK has left the EU.
- **3.6** 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

- **3.7** Relevant international plans and policy (including those at the EU level) are transposed into national plans, policy and legislation and these have been considered.
- **3.8** 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.

- **3.9** 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.
- **3.10** 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.
- **3.11** Furthermore, the 2030 Agenda for Sustainable Development (2015) [See reference 12]: 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

- **3.12** The National Planning Policy Framework (NPPF) [See reference 13] 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:
- **3.13** "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".
- **3.14** 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.
- **3.15** The NPPF is supported by Planning Practice Guidance which includes guidance on Waste (2015) [See reference 14]. 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.

- **3.16** 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.
- **3.17 Table 3.1** 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
HM Government (2000) Countryside and Rights of Way Act 2000
HM Government (2003) Sustainable Energy Act

National Legislation

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

HM Government (2002) Air Quality (England) (Amendment) Regulations 2002

HM Government Circular 1/2003: Safeguarding, Aerodromes, Technical Sites and Military Explosive Storage Areas

National Legislation

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

BEIS (2021) Industrial Decarbonisation Strategy

DEFRA (2020) Rural proofing in England 2020 Policy Paper

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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)

British Energy Security Strategy (2022)

DEFRA (GP3): Underground, Under threat – Groundwater Protection: Policy and Practice

National Legislation

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)

- **3.18** The ELJWP is not being prepared in isolation but is influenced by, and influences, other polices, 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.
- **3.19** 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"

- **3.20** 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:
- **3.21** UK economy The UK economy contracted by 0.3% in the fourth quarter of 2023 which was the second successive fall in GDP. However, guarter four of 2023 was 1.0% above its pre-pandemic level of Q4 2019 [See reference 15] Whilst the UK is in a technical recession, the Organisation for Economic Cooperation 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.
- **3.22** '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.

- **3.23** 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.
- **3.24** 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

3.25 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)

3.26 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 documents relating to the London Legacy Development Corporation. Planning powers for the area covered by the London Legacy Development Corporation will returned to Newham, Hackney, Tower Hamlets and Waltham Forest, at the end of

December 2024. Appendix B 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				
Local Plan 2037 (adopted September 2024)				
Local Plan 2037 Policies Map (2024)				
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)				
London Borough of Barking and Dagenham Industrial Land Strategy (2021)				
Barking and Dagenham Wide Transport Priorities 2021-2037 (2021)				

Key Local plans, programmes and policies

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 – Polices 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)

Site Specific Allocations Development Plan Document (Romford) (2008)

London Borough of Newham

Newham Local Plan (2018)

Newham Local Plan Polices Map (2018)

Newham Regulaiton 19 Local Plan (2024)

Climate Emergency Action Plan Climate Emergency Statement (2020)

Newham's Climate Emergency Annual Report (2021-2022)

Newham's Climate Action Just Transition Plan (2023)

AMR: Waste, Energy and Infrastructure Delivery Monitoring Bulletin (2013-2023)

AMR: Sustainability and Climate Monitoring Bulletin (2013-2018)

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Waste Management Guidelines for Architects and Property Developers

IIA of Regulation 19 Local Plan

Air Quality Action Plan (2019)

Air Quality Annual Status Report (2023)

London Borough of Newham Regulation 19 Local Plan

Strategic Flood Risk Assessment (2023)

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)

Key sustainability issues

3.27 Key sustainability issues for the ELJWP were originally identified through the preparation of the IIA Scoping Report in 2023. The key issues identified through the analysis of the baseline, policy context and consultations on the Regulation 18 draft plan and IIA are set out below.

- **3.28** It is also a requirement of the SEA Directive that consideration is given to the likely evolution of the environment in the plan area (in this case the ELJWP plan area) if the new Local Plan was not to be implemented. This analysis is also presented in relation to each of the key sustainability issues below.
- **3.29** The analysis below shows that, in general, the current trends in relation to the various social, economic and environmental issues affecting East London would be more likely to continue without the implementation of the new ELJWP. The effectiveness of the ELJWP will be focused on where waste development comes forward and may have a limited effect compared to wider local plans and other strategies.

Waste

- **3.30** Across the four boroughs, there is an increasing amount of waste that is reused, recycled, or reclaimed and reducing amounts of waste are sent to landfill. There will be further 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.
- **3.31** 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.
- **3.32** 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 mitigation and adaptation

- **3.33** 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.
- **3.34** 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.

3.35 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

3.36 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 and employment

- **3.37** 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.
- **3.38** 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 16]. The LBBD Local Plan 2037 (2024) [See reference 17] identifies the following areas for economic growth for the period between 2019 and 2037:
 - Barking Town Centre and the River Roding
 - Barking Riverside
 - Thames Road
 - Castle Green
 - Chadwell Heath and Marks Gate
 - Dagenham Dock and Freeport
 - Beam Park
 - Dagenham East
 - Dagenham Heathway
- **3.39** Havering's Inclusive Growth Strategy (2020-2045) [See reference 18] 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 19]. The LBH Local Plan 2021 [See reference 20] focusses growth on the areas of Rainham and Beam Park, and Romford, consistent with the London Plan 2021.

- **3.40** Three of the London Plan (2021) Opportunity Areas are located or partly located in Newham: Royal Docks and Beckton Riverside, and the Poplar Riverside and Olympic Legacy cross boundary Opportunity Areas. The Regulation 19 Newham Local Plan (2024) incorporates these areas and also includes a number of Micro Business Opportunity Areas, to promote business use around existing town centres.
- **3.41** The Redbridge Local Plan (2018) [See reference 21] 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
- **3.42** 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

3.43 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.

- **3.44** 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.
- **3.45** 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

3.46 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.

3.47 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

3.48 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

- **3.49** 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.
- **3.50** 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.

3.51 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

3.52 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.

Water

3.53 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 wastewater facilities across the county are taken.

3.54 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

- **3.55** 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.
- **3.56** 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 22] 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.

- **3.57** 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.
- **3.58** 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.
- **3.59** 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.

The IIA framework

- **3.60** As described in the Methodology chapter, the relevant objectives established via the review of plans, policies, and programmes and the key sustainability issues identified by the baseline review informed development of a framework of sustainability objectives, the IIA framework, against which the plan was assessed. For each of the sustainability objectives a number of appraisal questions are included to act as prompts when considering the potential effects of the Local Plan in relation to that objective. It should be noted that appraisal questions are not exhaustive and not all appraisal questions will be relevant to each element of the plan that is appraised. The IIA framework is presented below.
- **3.61** A small number of changes have been made to some of the appraisal questions in the IIA framework since it was presented in the Scoping Report, in

response to comments received during the Scoping consultation – these changes are detailed in Appendix A.

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

 SEA topics: 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 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?

- SEA topics: 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?

- SEA topics: 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?

- SEA topics: 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?

- SEA topics: 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?

- SEA topics: 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?

- SEA topics: 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?

- SEA topics: 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?

- SEA topics: 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?

- SEA topics; 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

- SEA topics: 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

- SEA topics: 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.

Chapter 4

Safeguarding of sites within the ELJWP

Principles of safeguarding

- **4.1** The Councils considered a number of alternative policy approaches that the ELJWP could take in relation to the safeguarding of waste sites, as required by the London Plan. Part of this process has resulted in an additional policy within the Regulation 19 plan that solely relates to the safeguarding of wastewater treatment. This section sets out the options relating to safeguarding of all other types of waste sites, which evolved into policy JWP 2 of the Regulation 19 ELJWP. In considering the alternative policy approaches considered by the Councils for safeguarding, it should be kept in mind that
 - The London Waste Plan (SI9) safeguards all waste sites that benefit from planning permission or hold an environmental permit.
 - Sites that are not explicitly safeguarded by the ELJWP would still be safeguarded by the London Plan, until such time as the London Plan is updated. London Plan policy may or may not change over the lifetime of the ELJWP.
 - Any option will deliver the amount of waste management capacity that the evidence base concludes is required in the plan period

Options

- **4.2** There are a number of options that the ELJWP has considered in coming to the criteria set out in JWP 2:
 - Option 1: Safeguard all sites required by the London Plan.

- Option 2: Safeguard all sites with planning permission and not explicitly safeguard sites which hold an environmental permit and do not benefit from planning permission.
- Option 3: Set a threshold for sites to be safeguarded, and not explicitly safeguarding sites that only hold an environmental permit that have a throughput of less than 500 tonnes.
- Option 4: Safeguard temporary sites for the duration of the planning permission or environmental permit only, and not for the lifetime of the plan.
- **4.3** All four options are considered to be reasonable. It may also be reasonable to apply other thresholds, and the IIA considers that as a fifth option.
- **4.4** Option 1 is essentially the baseline position. All waste sites would be safeguarded whether they benefit from an environmental permit or planning permission (temporary or permanent). A loss of any site would require reprovision of the capacity to manage waste to ensure there was no loss of treatment capacity across the plan area, or indeed within London. This option could result in over provision of capacity over the lifetime of the plan, as well as the continuation of issues on sites that do not benefit from planning permission for good reason, and only hold an environmental permit. It is worth noting that Option 1 will apply to all sites for the lifetime of the current London Plan, whether the ELJWP makes different provision for safeguarding or not.
- **4.5** Option 2 would only safeguard sites with planning permission and would not explicitly safeguard sites that only hold an environmental permit (at any threshold). This would be a departure from the London Plan, but would allow the ELJWP to safeguard sites that have been considered through planning, and have addressed the relevant land use issues. This option could allow for waste sites that are currently operating under an environmental permit, but would not be considered acceptable in planning terms, to be more easily redeveloped for other uses, in accordance with the relevant local plan. As with option 1, London Plan policy would still apply to sites not explicitly safeguarded for the lifetime of the current London Plan.

- **4.6** Option 3 focuses safeguarding on larger sites, removing safeguarding from sites that have a throughput of less than 500 tonnes, have an environmental permit, and do not benefit from planning permission. Although some small scale facilities and capacity could be lost through the implementation of option 3, sites with a throughput of under 500 tonnes are unlikely to have a significant effect on the objectives of the ELJWP.
- **4.7** Option 4 would see safeguarding lapse for sites that either have a temporary planning permission, or once a site gives up its environmental permit. This option could ensure sites are not unduly safeguarded beyond their useful lifetime.
- **4.8** Option 5 could consider alternative thresholds for throughput of waste sites to be safeguarded. Lower thresholds would not be practicable. Higher thresholds would likely need to consider different thresholds for different types of waste management. There is little evidence to support this approach, and it would take the ELJWP further away from the principles of waste management within national policy and the London Plan.
- **4.9** It is likely that a combination of these options will be the most effective to ensure that land is not unduly safeguarded, resulting in negative effects, and that there is no loss of provision that is essential for the ELJWP. The assessment of the proposed policy JWP 2 and its alternatives is set out in Chapter 5.

Chapter 5

IIA of the Draft East London Joint Waste Plan and its reasonable alternatives

5.1 This chapter records the IIA findings for the Draft East London Joint Waste Plan (ELJWP) and its reasonable alternatives, originally prepared for the Regulation 18 draft plan and updated for the Regulation 19 plan. The draft plan has set out a vision and eight 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;
- Strategic Objective 7: Minimise Transportation and Establish Alternative Infrastructure; and
- Strategic Objective 8: Restrict Landfilling to Exceptional Circumstances.
- **5.2** There are seven 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 normally take precedence.
- **5.3** The policies align with the strategic objectives as below:

- Strategic Objective 1: Significantly Reduce Waste Production Overall
 - Policy JWP 1: Circular Economy, Policy
- Strategic Objective 2: All Built Development Will Contribute to the Achievement of a Fully Functioning Circular Economy by 2041
 - Policy JWP 1: Circular Economy
 - Policy JWP 4: Design of Waste Management Facilities;
- Strategic Objective 3: Appropriately Locate Waste Management Capacity
 - Policy JWP2: Safeguarding and Provision of Waste Capacity
 - Policy JWP 2B: Safeguarding and Provision of Wastewater Treatment Capacity
 - Policy JWP 3 Prevention of Encroachment
 - Policy JWP 5: Energy from Waste
 - Policy JWP 6: Deposit of Waste on Land
- Strategic Objective 4: Contribute to East London's Regeneration and Economic Growth
 - Policy JWP 1: Circular Economy
 - Policy JWP 2: Safeguarding and Provision of Waste Capacity
 - Policy JWP 2B: Safeguarding and Provision of Wastewater Treatment Capacity
 - Policy JWP 4: Design of Waste Management Facilities
 - Policy JWP 5: Energy from Waste
 - Policy JWP 6: Deposit of Waste on Land
- Strategic Objective 5: Achieve Net Zero Waste Management
 - Policy JWP 1: Circular Economy
 - Policy JWP 4: Design of Waste Management Facilities
 - Policy JWP 5: Energy from Waste

- Policy JWP 6: Deposit of Waste on Land
- Strategic Objective 6: Optimise Existing Waste Management Capacity
 - Policy JWP 2: Safeguarding and Provision of Waste Capacity
 - Policy JWP 2B: Safeguarding and Provision of Wastewater Treatment Capacity
 - Policy JWP 3 Prevention of Encroachment
- Strategic Objective 7: Minimise Transportation and Establish Alternative Infrastructure
 - Policy JWP 4: Design of Waste Management Facilities
 - Policy JWP 5: Energy from Waste
- Strategic Objective 8: Restrict Landfilling to Exceptional Circumstances
 - Policy JWP 1: Circular Economy.
 - Policy JWP 6: Deposit of Waste on Land

Vision and strategic objectives

- **5.4** Section 3 of the ELJWP Regulation 19 document outlines the vision and strategic objectives for the emerging plan.
- **5.5** The overarching 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.

5.6 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 and historic 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 energy efficient transport infrastructure, including River Thames wharves, to allow movement without reliance on fossil fuel-powered HGVs.

Strategic Objective 8: Restrict Landfilling to Exceptional Circumstances

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- 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.
- **5.7** These two components of the ELJWP Regulation 18 document were subjected to IIA. No reasonable alternatives to the vision and objectives were identified at Regulation 18.
- **5.8** There are no changes to the vision in the Regulation 19 plan and changes to two of the strategic objectives:
 - Strategic Objective 3 now refers to the historic environment; and
 - Strategic Objective 7 now refers to energy efficient transport, and to HGVs instead of 'vehicles'.
- **5.9** The wording of the Regulation 19 ELJWP is considered within the appraisals below.

Likely effects of the draft vision themes, overarching vision and 8 strategic objectives

5.10 Given the clear aspirational relationship between the overarching vision and 8 strategic objectives, these two components of the ELJWP Regulation 19 document have been appraised together. Table 5.1 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 5.1: Summary of IIA findings for the vision and strategic objectives

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
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

- **5.11** 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.
- **5.12** 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, as well as helping to minimise landfill gas emissions.
- **5.13** 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.
- **5.14** The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective.
- **5.15** Minimising greenhouse gas emissions from waste within the ELJWP area is also expected to have an indirect positive effect on air, climate, water, material assets, soil and biodiversity. Improvements to the local environment.

This will, in turn, 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

- **5.16** 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.
- **5.17** 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.
- **5.18** The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective.
- **5.19** Movement of waste up the waste hierarchy is expected to have an indirect positive effect on air, climate, water, material assets, soil and biodiversity. Improvements to the local environment will, in turn, 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

5.20 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.

- **Chapter 5** IIA of the Draft East London Joint Waste Plan and its reasonable alternatives
- **5.21** 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.
- **5.22** 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 net zero waste management.
- **5.23** 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 an indirect 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

- **5.24** 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.
- **5.25** 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.

- **Chapter 5** IIA of the Draft East London Joint Waste Plan and its reasonable alternatives
- **5.26** The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective.
- **5.27** . Improvements in the local environment will have positive benefits for the mental health of local populations, as well as physical health.
- **5.28** Improved health and wellbeing could indirectly have benefits in relation to other objectives (for example IIA 3, IIA 7 and IIA 8).

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

- **5.29** The vision is likely to have a minor positive effect against this IIA objective as it supports investigating the use of alternative means of sustainable transport, especially via the River Thames.
- **5.30** 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.
- **5.31** 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.
- **5.32** 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 an indirect 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

- **5.33** The vision is likely to have a minor positive effect on this IIA objective as it encourages the repair, refurbishment and reuse of built structures. This could help to safeguard derelict or at-risk historic buildings by restoring them for appropriate use.
- **5.34** The Regulation 19 plan includes a specific reference to the historic environment in strategic objective 3. This results in a minor positive effect.
- **5.35** 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

5.36 The Regulation 18 IIA recommended that strategic objective 3 could be extended to include the historic environment, which would then have a minor positive effect on this IIA objective. This recommendation was incorporated into the Regulation 19 plan.

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

- **5.37** The vision is likely to have a minor positive effect against this IIA objective as it states that waste management facilities will be located so that the natural environment can be protected and enhanced.
- **5.38** 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.
- **5.39** The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective.
- **5.40** The positive effects on biodiversity are also expected to have indirect positive effects on 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

- **5.41** The vision and objectives make no specific references to open spaces or townscapes, therefore their effects in relation to this IIA objective are considered to be negligible.
- **5.42** The lack of protection for open space and townscapes within the vision and objectives also represents a missed opportunity to avoid indirect negative

effects or secure indirect positive effects on material assets and population health, including mental health.

Recommendation

5.43 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

- **5.44** The vision is likely to have a minor positive effect against this IIA objective as it states that waste management facilities will be located so as to protect and enhance the natural environment, which is considered to include the area's water resources.
- **5.45** 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.
- **5.46** The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.
- **5.47** Protecting and enhancing the quality and quantity of watercourses and water bodies and maximising the efficient use of water, is also expected to have an indirect positive effect on material assets, soil and biodiversity. Reducing the risk of water pollution and ensuring water security will also have indirect, positive effects on the physical and mental health of local populations.

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

- **5.48** 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.
- **5.49** 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.
- **5.50** The other strategic objectives are expected to have a negligible effect, as they are not connected to the themes of this IIA objective.
- **5.51** Managing and reducing flood risk from all sources is also expected to have an indirect positive effect on material assets, soil and biodiversity. Reducing risk from flooding will have indirect, 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

5.52 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.

- **Chapter 5** IIA of the Draft East London Joint Waste Plan and its reasonable alternatives
- **5.53** A minor positive effect is recorded for strategic objective 1 against this IIA objective due to the 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.
- **5.54** The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.
- **5.55** Minimising pollution and the effects of pollution from new development is also expected to have an indirect 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

- **5.56** The vision references waste to be managed efficiently by maximising the existing capacity of facilities but releasing underutilised and poorly located sites, as well as prioritising the re-use of materials and the use of recycled materials in construction. There is therefore a minor positive effect against this IIA objective.
- **5.57** 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.
- **5.58** 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.

5.59 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 also expected to have an indirect positive effect on material assets, soil, water and biodiversity. Effective and sustainable use of land also provides healthy environments for people.

Policies

5.60 There are seven policies in the ELJWP Regulation 19 document:

- Policy JWP 1: Circular Economy
- Policy JWP 2: Safeguarding and Provision of Waste Capacity
- Policy JWP 2b: Safeguarding and Provision of Wastewater Treatment Capacity
- Policy JWP 3 Prevention of Encroachment
- Policy JWP 4: Design of Waste Management Facilities
- Policy JWP 5: Energy from Waste
- Policy JWP 6: Deposit of Waste on Land
- **5.61** 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 JWP 1 and JWP 3 will apply to all forms of development. Parts of policy JWP 2 will apply to proposals which involve the redevelopment of existing waste management facilities.
- **5.62** Relevant policies included in the adopted Local Plan of the Boroughs 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, in most instances, take precedence.

Changes to the policies from the Regulation 18 Draft ELJWP

5.63 The only policy that has not been amended in the Regulation 19 ELJWP is policy JWP 6 Deposit of Waste on Land. The main changes are to JWP 2, new policy JWP 2b and JWP 3.

5.64 Changes to JWP 1 include additional reference to development plan objectives, storage for re-use and secured by design principles. JWP 2 amends the position in the Regulation 18 ELJPW and now safeguards specific existing sites, as well as safeguarding future waste sites that benefit from planning permission, are classed as lawful development, and have a throughput of greater than 500 tonnes per annum. JWP 2b is a new policy that safeguards wastewater treatment capacity and provides criteria relating to new wastewater treatment.

5.65 Changes to JWP 3 clarify that the policy will apply to existing waste management sites and wastewater treatment facilities, and those that are committed to within local plans. The supporting text for the policy now includes distances to help prevent encroachment at wastewater treatment works.

5.66 JWP 4 now explicitly refers to wastewater treatment facilities, and includes reference to Secured by Design, and protection of the historic environment. JWP 5 now contains explicit reference to the disposal of hazardous waste and a test for whether re-use is viable.

Changes to the ELJWP in relation to recommendations in the IIA of the Regulation 18 Plan

5.67 The updates to the ELJWP reflect some of the recommendations in the Regulation 18 IIA:

- JWP 4 and JWP 6 now refer to the historic environment as recommended in relation to IIA objective 6;
- The ELJWP now includes a policy and other references to water quality as recommended in relation to IIA objective 9; and
- JWP 4 refers to flood risk within the policy criteria, as recommended in relation to IIA objective 10.

5.68 The policies within the Regulation 19 ELJWP reflect the appraisals of alternative options within the Regulation 18 IIA.

Likely effects of the policies

5.69 The likely sustainable effects of the policies are set out in **Table 5.2** and described below.

Table 5.2: Summary of IIA findings for the ELJWP policies

IIA Objectives	Policy JWP 1: Circular Economy	Policy JWP 2: Safeguarding and Provision of Waste Capacity	Policy JWP 2b: Safeguarding and Provision of Wastewater treatment works	Policy JWP 3: Prevention of Encroachment	Policy JWP 4: Design of Waste Management Facilities	Policy JWP 5: Energy from Waste	Policy JWP 6: Deposit of Waste on Land
IIA1: Climate Change	+	+	0	0	++	++	+
IIA2: Treatment of waste	++	+	+	+	+	+	+
IIA3: Economy	++	++	+?	+	+/-	0	+
IIA4: Health and wellbeing	+	+/-?	+/-?	+?	++/-?	+	+?
IIA5: Sustainable transport	+	+	0	0	+	+	0
IIA6: Historic environment	?	?	?	0	+	0	?
IIA7: Biodiversity and geodiversity	+?	+/-?	+/-?	0	+/-?	0	+/-
IIA8: Open spaces and townscapes	+?	+/-?	+/-?	0	+/-?	0	+/-
IIA9: Water	0	+/-?	+	0	+/-?	0?	+?
IIA10: Flooding	0	0	+	0	++	0	0
IIA11: Noise, light and air pollution	0	-?	-?	++?	+	+	+
IIA12: Mineral resources and soils	0	+?	+/-	0	+	0	+

5.70 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

- **5.71** 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.
- **5.72** Policy JWP 2 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.
- **5.73** Policy JWP 2b safeguards wastewater treatment works and seeks to ensure there is adequate wastewater treatment capacity within the plan area. Although the policy requires the recovery of gas and solids for beneficial use, it is not clear if this will have more than a minimal effect. The policy is expected to have a negligible effect on IIA1, as maintaining an adequate network of wastewater treatment works within the plan area will require the use of additional resources, and there is unlikely to be a noticeable effect on transport.

- **Chapter 5** IIA of the Draft East London Joint Waste Plan and its reasonable alternatives
- **5.74** Policy JWP 3 seeks to prevent the encroachment of development on existing waste facilities and as such will have a negligible effect on this IIA objective.
- **5.75** Policy JWP 4 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.
- **5.76** Policy JWP 5 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.
- **5.77** Policy JWP 6 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

5.78 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

5.79 As set out above, policy JWP 1 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.

- **Chapter 5** IIA of the Draft East London Joint Waste Plan and its reasonable alternatives
- **5.80** Policy JWP 2 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.
- **5.81** Policy JWP 2b requires the safeguarding of existing wastewater treatment works and the provision of appropriate wastewater treatment works within the plan area. The policy criteria require the recovery of gas and solids within any new or upgraded facilities. Therefore a minor positive effect is recorded on this IIA objective.
- **5.82** Policy JWP 3 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. This will help ensure that waste is continued to be managed on site as effectively as possible in relation to the waste hierarchy. 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.
- **5.83** Policy JWP 4 promotes recycling as a climate adaption measure, which will minimise the disposal of waste in the plan area, ensuring waste is managed at a higher level in the waste hierarchy. As such, a minor positive effect is expected in relation to IIA2.
- **5.84** Policy JWP 5 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.
- **5.85** Policy JWP 6 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

5.86 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

- **5.87** 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.
- **5.88** Policy JWP 2 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.
- **5.89** Policy JWP 2b provides support for existing wastewater treatment works within East London, and for the development of new facilities, if appropriate. The level of employment associated with these facilities is relatively low in the context of East London, and so although the policy is supportive, the effect is considered to be uncertain, and minor positive.

- **Chapter 5** IIA of the Draft East London Joint Waste Plan and its reasonable alternatives
- **5.90** Policy JWP 3 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.
- **5.91** Policy JWP 4 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 JWP 4 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.
- **5.92** Policy JWP 5 is concerned with the operation of new energy from waste facilities and will have a negligible effect on this IIA objective.
- **5.93** Policy JWP 6 is concerned with controlling the deposit of waste to land, and promotes positive after uses on landfill sites. By ensuring that landfill is controlled appropriately, this policy will prevent negative effects on existing businesses. Beneficial after uses 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

5.94 There are no police recommendations in relation to IIA3.

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

5.95 Policy JWP 1 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.

5.96 Policy JWP 2 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.

5.97 Policy JWP 2b requires that existing wastewater treatment sites are safeguarded and there is adequate treatment capacity within East London. By ensuring adequate provision for the treatment of wastewater the policy should reduce the potential for adverse environmental outcomes, and therefore have a minor positive effect on this IIA objective. However, the policy offers potential to permit new facilities which, as with other waste uses, may have localised impacts. Therefore an uncertain mixed minor positive and minor negative effect is recorded against this IIA objective overall.

5.98 Policy JWP 3 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.

- **5.99** Policy JWP 4 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.
- **5.100** Policy JWP 5 Energy from Waste is expected to have a minor positive effect in relation to IIA4 as the burning of non-biogenic waste (e.g. oil-based plastics) will be minimised, thus reducing the potential for adverse effects on human health across the ELJWP area.
- **5.101** Policy JWP 6 strictly controls the circumstances in which proposals for disposal of non-inert waste or for reworking of old landfill sites will be allowed, reducing the potential for harmful emissions and leachate that can be associated with these. It also requires such proposals 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 so as to benefit the health and wellbeing of local communities. As such, an uncertain but minor positive effect is expected in relation to IIA4.

Policy recommendations

5.102 Most policies are considered to have positive effects in relation to IIA4. Policy JWP 6 references the restoration of sites to a high quality with benefits to local communities. The policy could be improved by describing these benefits in more detail, for example, benefits to recreation, health or the economy.

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

- **5.103** Policy JWP 1 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, with 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.
- **5.104** Policy JWP 2 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.
- **5.105** Policy JWP 2b safeguards existing wastewater treatment works and requires the plan to provide adequate waste capacity within the plan area. Due to the nature of wastewater treatment works, it is expected that any effect on IIA5 will be negligible.
- **5.106** Policy JWP 3 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.
- **5.107** Policy JWP 4 gives preference to non-road transport where practicable and additionally promotes low emission vehicles, seeks to utilise vehicle charging points, incorporates scheduling and management of vehicle routing, and supports developer contributions to community benefits including Public Rights of Way. As such, a minor positive effect is expected in relation to IIA5.

5.108 Policy JWP 5 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.

5.109 Policy JWP 6 will have a negligible effect on this IIA objective.

Policy recommendations

5.110 Policy JWP 4 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

5.111 IIA6 is expected to receive an uncertain effect in relation to policies JWP 1, 2, 2b 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.

5.112 A negligible effect is recorded for policy JWP 3 and 5, which are concerned with the evaluation of specific proposals and/or scenarios rather than their impacts on the historic environment. Policy JWP 4 contains a specific reference to protecting the historic environment and was appraised as having a minor positive effect on IIA6.

Policy recommendations

5.113 Although the plan objectives now include a specific reference to the historic environment, the plan could include provision for safeguarding and enhancing the historic environment within policies relating to new waste development.

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

- **5.114** By providing an adequate network of waste facilities, policy JWP 1 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.
- **5.115** Policy JWP 2 and JWP 2b protect existing sites, and do not actively promote new sites for development. While there may be no negative effects of new sites on the natural environment, the policies do not address the potential negative effects of existing 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.
- **5.116** Policy JWP 3 is considered to have a negligible effect on this IIA objective.
- **5.117** Policy JWP 4 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.

- **5.118** Policy JWP 5 does not address the location of energy from waste facilities and as such, is expected to have a negligible effect on this IIA objective.
- **5.119** Policy JWP 6 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

5.120 Consideration could be given to outlining measures for monitoring 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

5.121 Policy JWP 1 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.

5.122 As discussed above, Policy JWP 2 and Policy JWP 2b protect existing sites, and do not actively promote new sites for development. The effects on IIA8 are similar to the effects of policy JWP 2 and JWP 2b 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.

5.123 Policy JWP 3 is expected to have a negligible effect on IIA8.

5.124 Policy JWP 4 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.

5.125 As with IIA7, Policy JWP 5 does not address the location of energy from waste facilities and as such, is expected to have a negligible effect on IIA8.

5.126 As with IIA7, Policy JWP 6 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 recommendations

5.127 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

- **5.128** Policy JWP 1 will have a negligible impact on IIA9.
- **5.129** The overall effects of JWP 2 on IIA8 are 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 policies protect existing sites, and do not actively promote new sites for development. The effects on IIA9 are similar to the effects of policy JWP 2 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. Policy JWP 2b will have a minor positive effect as it directly deals with the appropriate treatment of wastewater.
- **5.130** Policy JWP 3 will have a negligible impact on IIA9 as it relates to the impacts of new development on existing waste sites.
- **5.131** Policy JWP 4 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.
- **5.132** Policy JWP 5 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.

5.133 Policy JWP 6 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

5.134 Only policy JWP 4 directly addresses water quality. The plan could consider additional wording in relation to water for each of the other policies unless this is judged to be adequately covered by policies within other development plan documents that 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

5.135 JWP Policies 1, 2, 3, 4 and 6 are considered to have a negligible impact on IIA10.

5.136 Policy JPW2b provides protection for existing wastewater treatment facilities and development of new facilities where appropriate. Although wastewater is dealt with separately to other types of water and drainage, the provision of modern wastewater treatment works to meet the needs of current and new development, will help to minimise flood risk and overflow. Policy JWP 2b is therefore considered to have a minor positive effect on this objective.

5.137 Policy JWP 4 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

5.138 The ELJWP could further consider the flooding implications of JWP 5: Energy from Waste and JWP 6: 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

- **5.139** Policy JWP 1 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.
- **5.140** The overall effect JWP 2 and JWP 2b on IIA11 is considered to minor negative, with uncertainty due to the effects being dependent on the active sites within the plan period. The policies protect existing sites, and do not actively promote new sites for waste development. The policies do not address the potential negative effects of existing waste sites, where there may be existing negative effects.
- **5.141** Policy JWP 3 Prevention of Encroachment is expected to have a significant positive effect in relation to IIA11. By restricting non-waste development close to existing waste management facilities, the policy minimises the potential impacts of pollution on new sensitive receptors. The

inclusion of precautionary distance buffers in the supporting text will further support IIA1.

- **5.142** Policy JWP 4 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.
- **5.143** Policy JWP 5 Energy from Waste is expected to have a minor positive effect in relation to IIA11 as the policy states that release of non-biogenic carbon emissions will be minimised along with mechanisms in place for carbon capture.
- **5.144** Policy JWP 6 will control the effects of landfill and as such will have a minor positive effect on IIA11.

Policy recommendations

5.145 There are no policy recommendations in relation to IIA11.

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

- **5.146** Policies JWP 1 has a minor positive effect on IIA12 as it supports the use of recycled materials and reuse of built structures. JWP 3 and JWP 5 are considered to have a negligible effect on IIA12.
- **5.147** By safeguarding existing waste sites and capacity, Policy JWP 2 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.

5.148 The effects are similar for JWP 2a. By safeguarding existing wastewater treatment works and capacity, Policy JWP 2b also helps to reduce the need for new sites within East London. The effect is more mixed however, as there is likely to be a need for new facilities within the plan period. The effects are therefore mixed minor positive and minor negative but this is uncertain as it depends on the sites that are active or come forward during the plan period.

5.149 Policy JWP 4 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.

5.150 Policy JWP 6 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

5.151 There are no policy recommendations in relation to IIA12.

Reasonable alternatives

5.152 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.

5.153 There are a number of reasonable alternatives to the policies within the ELJWP Regulation 19 document. These are outlined and appraised below, and

the findings discussed alongside the appraisal findings for the proposed policies.

Reasonable alternatives to Policy JWP 1

5.154 One reasonable alternative to Policy JWP 1 was 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 JWP 1 still encourage all development to follow the principles of the circular economy. 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 scores.

5.155 The preferred policy was 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 5.3: Effects of Policy JWP 1 and its reasonable alternative

IIA objective	Policy JWP 1 (as proposed)	Alternative 1
IIA1: Climate Change	+	+
IIA2: Treatment of waste	++	++
IIA3: Economy	++	++
IIA4: Health and wellbeing	+	+
IIA5: Sustainable transport	+	+

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IIA objective	Policy JWP 1 (as proposed)	Alternative 1
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 Policy JWP 2

Need alternatives (JWP 2)

5.156 In terms of 'need', one reasonable alternative to Policy JWP 2 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.

Safeguarding alternatives (JWP 2)

5.157 JWP2 safeguards sites with permanent planning permission and sites that hold an environmental permit, lawful sites(including sites that benefit from a certificate of lawful use), due to the time a site has been operational. Where

planning permission is temporary, safeguarding will fall away at the time limit of the permission. Sites will also lose the benefit of safeguarding where a permit is given up. Sites that have a throughput of less than 500 tonnes and do not operate for a specialist use are not safeguarded.

- **5.158** Safeguarded wastes sites within the Appendix to the new ELJWP have only been included where they have not since been allocated for alternative uses in adopted local plans (and plans that have reached a late stage of examination), or by change of use through planning applications, since the adoption of the previous ELJWP, or they have an annual throughput of less than 500 tonnes.
- **5.159** In terms of safeguarding, a number of reasonable alternatives were identified:
- 1. Safeguarding all sites that have planning permission for waste use or an environmental permit (the London Plan position). This includes sites that hold an environmental permit but have no planning permission.
- 2. Safeguarding all sites above a higher permitted throughput (for example 5000 tonnes) in the future.
- 3. Safeguarding only sites that have valid planning permission.
- **5.160** A supplementary option for any of the options above is to safeguard any sites that have a lawful waste use, without express planning permission and benefit from a Certificate of Lawful Existing Use or Development (CLUED).
- **5.161** Safeguarding Alternative Option 1 is likely to have more negative effects than the proposed approach in JWP 2, particularly on IIA4, 7, 8, 9 and 11, as it allows the continued operation of waste sites that benefit from a waste permit but do not have planning permission.

- **5.162** Safeguarding Alternative Option 2 would reduce the number of sites that are safeguarded and may, over time, reduce the effects of smaller waste sites. These may have a disproportionate negative effect compared to larger sites that are more strategic in nature, as they are more likely to be dispersed through the plan area alongside other potentially more sensitive land uses. These effects are considered uncertain and at a such a low level that there is no meaningful distinction between this option and the policy within the ELJWP.
- **5.163** Safeguarding Alternative Option 3 would only safeguard sites with valid planning permission. This would remove negative effects (in relation to the environment and amenity) relating to sites that only benefit from an environmental permit. The level of uncertainty around the level of improvement or the nature of the improvements, which would only occur if a site was redeveloped for another use, means that there is again no difference in the significance of effects (i.e. the effects score) between this policy option and the policy within the ELJWP.
- **5.164** The policy within the ELJWP also includes safeguarding for sites that benefit from CLUED. With each of the alternative options, this has the potential to increase negative effects in relation to the environment and amenity, as the sites will not have been subject to the same restrictions as sites that applied for permission through the normal planning application process. Again, the level of this effect is difficult to quantify and is uncertain, therefore the appraisal scores for this option are the same as for the proposed policy.

Site allocations

5.165 There is no identified need for additional waste sites or allocations. Any sites that come forward through the plan period would be subject to criteria set out in national policy, 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. Any proposed development would need to meet these criteria, and as such, they have not been considered as reasonable alternatives within this IIA.

Reasons for choosing the proposed policy JWP 2 in light of alternatives

5.166 The preferred policy was 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 redevelopment of sites that are now longer required to manage the identified need for waste, or the wider need for London. The preferred policy requires compensatory capacity if sites are lost. The alternative policy options 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 and will be explored through future updates to the London Plan.

Table 5.4: Effects of Policy JWP 2 and its reasonable alternatives

IIA objective	Policy JWP 2 (as proposed)	Need alternative 1	Safeguarding alternative 1	Safeguarding alternative 2	Safeguarding alternative 3
IIA1: Climate Change	+	+/-?	+	+	+
IIA2: Treatment of waste	+	+	+	+	+
IIA3: Economy	++	++/-?	++	++	++
IIA4: Health and wellbeing	+/-?	+/-?	-?	+/-?	+/-?
IIA5: Sustainable transport	+	+/-?	+/-	+	+
IIA6: Historic environment	?	?	?	?	?
IIA7: Biodiversity & geodiversity	+/-?	+/-?	-?	+/-?	+/-?
IIA8: Open spaces & townscapes	+/-?	+/-?	-?	+/-?	+/-?
IIA9: Water	+/-?	+/-?	-?	+/-?	+/-?
IIA10: Flooding	0	0	0	0	0
IIA11: Noise, light & air pollution	-?		-?	-?	-?

IIA objective	Policy JWP 2 (as proposed)	Need alternative 1	Safeguarding alternative 1	Safeguarding alternative 2	Safeguarding alternative 3
IIA12: Mineral resources & soils	+?	+/-?	+?	+?	+?

Reasonable alternatives to Policy JWP 2b

5.167 No alternatives were considered in relation to Policy JWP2b. The policy requires the safeguarding of existing facilities, the consenting of new facilities to meet additional need, supports appropriate intensification on existing sites, and requires that new development protects and enhances local communities. The additional need will be considered in reference to new development set out in local plans, and the Asset Management Plans of the relevant water companies. There are no other reasonable options to consider need. Other options would not be consistent with national policy or the London Plan, which acknowledges the need for additional treatment in East London beyond 2041. It should be noted that expansion of wastewater treatment works is already underway within the plan area.

Reasonable alternatives to JWP Policy 3

5.168 One reasonable alternative was identified for ELJWP Policy 3 (Alternative 1). The policy within the Regulation 18 draft did not include a specified distance where the policy would apply whereas the policy within the Regulation 19 ELJWP provides guidance on buffer zones within the supporting text. 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.

5.169 The preferred policy was selected over the reasonable alternatives because specified distances have been selected within the supporting text to aid in avoiding and mitigating impacts. It is worth noting that 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 5.5: Effects of Policy JWP 3 and its reasonable alternative

IIA Objectives	Policy JWP 3 (as proposed)	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 Policy JWP 4

5.170 The only reasonable alternative identified for this policy was to rely on the more general development management policies within the London Plan and the adopted local plans within East London instead. This would be likely to result in additional negative effects on IIA objectives 6, 7, 8 and 11 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.

5.171 The preferred policy was 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 5.6: Effects of Policy JWP 4 and its reasonable alternative

IIA Objectives	Policy JWP 4 (as proposed)	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	++	++
IIA11: Noise, light and air pollution	+	+/-
IIA12: Mineral resources and Soils	+	+

Reasonable alternatives to Policy JWP 5

5.172 The only reasonable alternative identified for policy JWP 5 was to rely on policies within the London Plan and the adopted local plans within East London (Alternative 1). This would be likely to result in additional negative effects on IIA objectives 2, 4, 5 and 11, and reduce certainty for development on energy from waste facilities within East London where appropriate.

5.173 The preferred policy was selected over the reasonable alternatives because, as with the preferred option of JWP 4, JWP 5 provides specialist policy criteria to address the specific effects of energy from waste facilities.

Table 5.7: Effects of Policy JWP 5 and its reasonable alternative

IIA Objectives	Policy JWP 5 (as proposed)	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
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 Policy JWP 6

5.174 The only reasonable alternative identified in relation to Policy JWP 6 was to explicitly require a target of zero biodegradable waste to landfill by either 2026 or 2030 (Alternative 1). The alternative option was 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 objective 2 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.

5.175 The preferred policy was 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 JWP 6 to improve the sustainability of the plan.

Table 5.8: Effects of Policy JWP 6 and its reasonable alternative

IIA Objectives	Policy JWP 6 (as proposed)	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

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IIA Objectives	Policy JWP 6 (as proposed)	Alternative 1
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

5.176 The EqIA and HIA criteria are embedded within the IIA objectives used to appraise the ELJWP.

5.177 With regards to 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.

5.178 With regards to HIA and SEA, the following paragraphs provide commentary relevant to health outcomes and each IIA objective.

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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

5.179 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.

5.180 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

5.181 Movement of waste up the waste hierarchy is expected to have a positive effect on air, climate, water, material assets, soil and biodiversity.

5.182 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

5.183 Support for the economy is expected to have a positive effect on population health and material assets.

5.184 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

5.185 Support for the health of local communities is expected to have a positive effect on population health.

5.186 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

5.187 Support for sustainable transport is expected to have a positive effect on population health, air, climate, material assets, water and biodiversity.

5.188 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

5.189 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

5.190 Support for the biodiversity is expected to have a positive effect on biodiversity, air pollution, material assets and population health.

5.191 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

5.192 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

5.193 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.

5.194 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

5.195 Managing and reducing flood risk from all sources is expected to have a positive effect on water, material assets, soil and biodiversity.

5.196 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

5.197 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

5.198 Protecting and enhancing mineral resources and soils is expected to have a positive effect on material assets, soil, water and biodiversity.

5.199 Effective, efficient and sustainable use of land provides healthier environments for people.

Chapter 6

Cumulative effects

Introduction

6.1 Cumulative effects of the Plan are 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.

Total effects of the ELJWP

6.2 The total effects of the vision, strategic objectives and policies in the Regulation 19 East London Joint Waste Plan document in relation to each of the IIA objectives are discussed below and summarised in **Table 6.1**.

Table 6.1: Total effects of the ELJWP (Regulation 19) document

IIA objectives	Total effect
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	+
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

6.3 Where an effect was identified, the vision, strategic objectives and policies 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

6.4 Where an effect was identified, the vision, strategic objectives and policies 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

6.5 Where effects have been identified, the effects on the ELJWP's vision, strategic objectives and policies on IIA3 range from minor negative (SO5) to significant positive (JWP 1 and JWP 2). 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

6.6 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 JWP 3 and JWP 6. The effects in relation to JWP 4 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 arise 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

6.7 Where effects have been identified, the majority of the policies and strategic 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 and encouraging the transportation of waste via sustainable modes 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

6.8 The vision will have a minor positive effect on IIA6. Most 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 will depend on the location of any development that comes forward. However, strategic objective 3 and JWP 4 refer to the historic environment. Consequently, overall, the ELJWP is considered to have an uncertain minor positive on IIA6.

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

6.9 The vision and strategic objectives SO3 and SO4 have minor positive effects on IIA7. Three of the seven policies have uncertain mixed minor positive and minor negative effects, and one policy has an uncertain minor positive effect. 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

6.10 The vision and objectives have a negligible effect on IIA8. JWP 1 has a minor positive effect, and JWP 2, JWP 2b, JWP 4 and JWP 6 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

6.11 Where an effect was identified, the vision and objectives have a minor positive effect on IIA9. Where effects are identified in relation to the policies, the effects are generally minor positive, although policy JWP 2 is considered to have the potential for more uncertain and mixed minor positive and minor negative effects. Policy JWP 2b will have a minor positive effect on wastewater. 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

6.12 The vision and strategic objectives SO1 and SO5 have minor positive effects on this objective. Most policies have a negligible effect on this objective, with the exception of JWP 4, which has a significant positive effect in isolation.

Policy JWP 2b will have a minor positive effect. 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 relatively 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

6.13 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 JWP 2 is recorded as having the potential for uncertain minor negative effects, as is policy JWP 2b. Conversely, policy JWP 4 is recorded as having the potential for uncertain significant positive effects on this objective. The effects recognise the focus on avoiding and minimising pollution generated by waste management in East London, particularly through policy JWP 4. 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 arise, which may have a minor adverse effect in some circumstances.

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

6.14 The vision, SO6 and SO8 are considered to have minor positive effects on IIA12. Two policies have minor positive effects on the objective, with these

positive effects being recorded as more uncertain for policy JWP 2 and JWP 2b. 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 with other plans

6.15 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 cumulative effects.

Nationally significant infrastructure projects

6.16 At the time of writing eight NSIP projects within London were identified 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

6.17 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

6.18 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 an expanded list is contained in Appendix A.

Potential for cumulative effects with the London Plan

- **6.19** 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.
- **6.20** 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

6.21 Each of the boroughs within the ELJWP area has an adopted local plan. The main development proposed by their respective Local Plans is summarised in Appendix C (Baseline).

- Barking and Dagenham aim to deliver more than 40,000 dwellings between 2024 and 2037.
- 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 The Regulation 19 Local Plan sets out a stepped trajactory to deliver between 51,425 and 53,784 additional new homes between 2023/24 and 2037/38.
- Redbridge aims to deliver a minimum of 16,845 new dwellings between 2015 and 2030.
- **6.22** 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.
- **6.23** The Boroughs within the ELJWP area and the authorities surrounding the ELJWP area range from the densely urban areas of central London to the rural areas in Essex.

6.24 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, lead to increased traffic, which in turn has 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.

6.25 Although there may be increased negative cumulative effects when the ELJWP is considered alongside other plans and projects, the policies within the ELJWP that seek to protect the environment and local amenity could result in increased positive effects, when taken alongside similar policies in the wider development plan.

6.26 However, given the lack of allocations within the ELJWP for new or improved waste 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

6.27 The HRA was 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).

6.28 The first stage of HRA was 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.
- **6.29** Non-physical disturbance and wastewater were screened out as there are no impact pathways.
- **6.30** These impacts would arise from three of the ELJWP's policies: JWP 2, JWP 5 and JWP 6. 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.
- **6.31** 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 and other reporting requirements

- **7.1** This section sets out recommendations for indicators to monitor the effects of implementing the East London Joint Waste Plan (ELJWP), taking into account monitoring indicators included within the Regulation 19 draft plan.
- **7.2** The SEA Regulations require that the appraisal sets out how environmental report has been taken into account in plan making.
- **7.3** The ELJWP utilised the baseline and issues identified in the IIA Scoping Report in the preparation of the Regulation 18 ELJWP. In preparing the local plan, the Boroughs identified alternative policy approaches to addressing each issue, prior to drafting the policies within the Regulation 18 plan. Those alternatives were considered as part of defining the reasonable alternatives within the IIA.
- **7.4** The IIA provided recommendations in relation to the objectives and policies within the Regulation 18 ELJWP, within a 'Recommendations' section at the end of each policy that were considered by the Boroughs in the preparation of the Regulation 19 ELJWP. More detail is set out in the recommendations sections within Chapter 5.
- **7.5** 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.

7.6 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.

7.7 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 remain 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-configurated 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

Conclusions and next steps

- **8.1** This document has considered the sustainability implications of the policies in the Regulation 19 East London Joint Waste Plan (ELJWP). These have been subject to assessment against the IIA objectives developed at the scoping stage of the IIA process.
- **8.2** In total, the Plan was found to have a range of minor positive and significant positive effects in relation to all of the IIA objectives, although a number of potential minor negative effects were also identified. Many of the effects are mixed, reflecting that the plan does not actively allocate sites for development and the effects will depend on when and where development comes forward. In considering the total effects of all of the draft ELJWP policies, the IIA found that:
 - Significant positive effects are expected in relation to IIA objective 1: Climate Change, IIA objective 2: Treatment of waste, IIA objective 5: Sustainable transport.
 - Mixed significant positive and minor negative effects are expected in relation to IIA objective 3: Economy and IIA objective 11: Noise, light and air pollution.
 - Minor positive effects are expected in relation to IIA objective 6: Historic Environment, IIA objective 10: Flooding and IIA objective 12: Mineral resources and Soils. These effects are considered uncertain in relation to IIA objective 6: Historic Environment as they will depend on the location of development.
 - Uncertain mixed minor positive and minor negative effects are expected in relation to IIA objective 4: Health and Wellbeing, IIA objective 7: Biodiversity and geodiversity, IIA objective 8: Open space and townscapes and IIA objective 9: Water, again primarily due to the uncertainty around locations for development.

Chapter 8 Conclusions and next steps

- **8.3** No significant negative effects were identified for the Regulation 19 ELJWP as a whole.
- **8.4** A number of recommendations were made that could strengthen the positive effects or reduce the negative effects of the ELJWP, as set out in Chapter 5.

Next steps

- **8.5** This IIA Report will be available for consultation alongside the ELJWP (Regulation 19) draft plan document in Spring 2025. This consultation is on the version of the ELJWP that the Boroughs proposes to submit to the Secretary of State for examination.
- **8.6** Following the above periods of public consultation, the ELJWP will be independently examined by a Planning Inspector appointed by the Secretary of State, who will consider its content and any objections to it, and reach a decision on its overall 'soundness' before it can proceed to be adopted.
- **8.7** Once the plan is adopted it will form part of the development plan for East London.

LUC

January 2025

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 10year 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.

 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.

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.

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.

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)

- 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

- 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)

- 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

- 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)

- 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.

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.

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.

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

- 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 wate 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, reuse 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)

8.8 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.

8.9 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 polices:
 - 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

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 was developed by the Drain London Programme, a partnership of the Mayor of Londin, 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 was 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 was 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 related to the IIA received in response to previous consultations

B.1 The following tables summarise the comments received in relation to the Regulation 18 IIA Report and the earlier consultation on the IIA Scoping Report. Any comments made on the Regulation 19 IIA will be considered as part of the examination of the ELJWP.

Responses to comments received in relation to the Regulation 18 ELJWP IIA Report

B.2 Only one comment was directly attributed to the IIA. Other comments that did not directly refer to the IIA but may have implications for the appraisal were e reviewed and considered in the preparation of the Regulation 19 IIA report.

Table B.1: Responses and actions to comments received on the ELJWP Regulation 18 IIA

Subject	Comment detail	LUC response
IIA Objective 10 and the Thames Estuary 2100 strategy	IIA objective 10 is too vague in considering flood risk from 'all sources' and there is no reference to the TE2100 strategy	The IIA objectives are strategic in nature. The TE2100 strategy was included as part of the Plans, Policies and Programmes review in Appendix A and was considered as part of

Appendix B Responses related to the IIA received in response to previous consultations

Subject	Comment detail	LUC response
		the formulation of the IIA objectives.

Responses from Statutory Consultees to the ELJWP Scoping Report

B.3 The following table summarises the comments received from the Environment Agency and Natural England. No responses were received from Historic England within the consultation period.

Table B.2: 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 Scoping 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 ELJWP does not make any site allocations. More generally, the IIA has taken account of the findings of the Habitats Regulations

Appendix B Responses related to the IIA received in response to previous consultations

Subject	Comment detail	LUC response
		Assessment as appropriate.

Table B.3: 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.

Appendix B Responses related to the IIA received in response to previous consultations

Subject	Comment details	LUC response
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.	IIA objective 9 has been amended to refer to SPZs.
Consideration of waste transport impacts.	It's noted that the East London Waste Disposal Authority (ELWA) will soon 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.	The Boroughs are communicating with ELWA in relation to changes to the 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	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.

Appendix B Responses related to the IIA received in response to previous consultations

Subject	Comment details	LUC response
	managing and recording this sharing.	
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. JWP 4 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 comment is noted.

Appendix B Responses related to the IIA received in response to previous consultations

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	Noted.

Appendix B Responses related to the IIA received in response to previous consultations

Subject	Comment details	LUC response
	elsewhere. However, it's suggested that this aspect should be explicitly addressed beyond being an objective in the Integrated Impact Assessment (IIA) framework.	
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.
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.

Appendix C

Baseline

C.1 Baseline information provides the basis for predicting and monitoring the likely sustainability effects of a plan and helps to identify key sustainability issues.

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

- The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.
- The environmental characteristics of areas likely to be significantly affected.
- 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].

C.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

Appendix C Baseline

Air, land and water quality

C.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.

C.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

C.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:

- Plan for identified waste needs;
- 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,
- 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.

Appendix C Baseline

C.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 23];
- 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 24].

C.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

C.9 Information within this section is taken from the ELJWP evidence base 2024/5 [See reference 25]. Future iterations of the IIA will be updated in line with the emerging evidence for the new ELJWP.

C.10 The exercise has not been applied to Household, Industrial and Commercial (HIC) [See reference 26] waste tonnages because the London Plan apportionments already determine the minimum 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 27] 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

C.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 C.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

London Borough	Waste Arising 2021	Waste Arising 2041	Apportionment 2021	Apportionment 2041
Redbridge	196	216	151	160
Total	883	955	1,409	1,497

Net Self Sufficiency Balance

C.12 Table C.2 shows the tonnages of waste attributed to East London in the Environment Agency WDI 2022 and managed at permitted facilities within East London.

Table C.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

C.13 Table C.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 to be managed in East London

Table C.3: Amount of waste managed within East London by origin

Origin of waste	Tonnes
East London waste managed in East London	931,768

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

C.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.

C.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 C.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 (2022). 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).

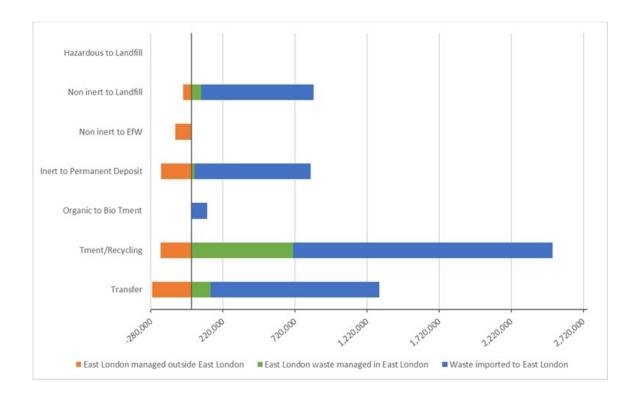


Figure C.1: Imports and exports in East London by waste type

Construction, demolition and excavation waste current baseline

C.16 C, D & E waste comprises waste arising from the construction and demolition industries, including excavation during construction activities, and is made up of mainly inert materials such as soils, stone, concrete, brick and tile. However, there are also non-inert elements in this waste stream such as wood, metals, plastics, cardboard, and residual household-like wastes. Hazardous waste are also present particularly when development takes place on brownfield sites that have been affected by historical contamination. Due to their weight, the inert elements make up the majority of the total tonnage.

C.17 Different types of C, D & E waste require different forms of management. For example, hard inert materials (such as concrete, brick and road planings arising from demolition and road maintenance) can be recycled for use as an aggregate, while soft materials such as soils and sub-soils can be deposited on

land for beneficial purposes such as the restoration of minerals workings and in other engineering projects. The non-inert component includes timber, plasterboard and plastics may be recycled if separated. Ultimately there is very little C, D & E waste that cannot be recycled or recovered in some other way.

- **C.18** Soft inert excavation material may be deposited on land for beneficial purposes which may be consented as non-waste development and, either subject to an Environmental Permit as a recovery to land operation or managed under the CL:AIRE definition of waste protocol. If the latter case applies, the material managed through this route is not classed as waste.
- **C.19** The London Plan does not apportion quantities of C, D & E waste for management, but boroughs are still required to plan for this waste stream.
- **C.20** The production of C, D & E waste is influenced by large-scale infrastructure projects, as well as commercial and residential developments, which means that peaks and troughs in its production are often observed with arisings not following a regular pattern. Given it is a bulky and heavy waste type it does not tend to travel significant distances from source for management.

Table C.4: Estimated Non-Hazardous C,D&E waste baseline arisings in East London

Waste Stream	Inert	Non-inert	Total
C&D	345,495	449,507	795,002
Excavation	1,397,953	10,627	1,408,589
Total	1,743,448	460,134	2,203,591

Waste management routes

Table C.5: East London's Non-hazardous C&D waste management routes (2023)

Waste Type	Recycling	Recovery	Landfill	Transfer	Mobile Plant
Inert	41%	1%	<1%	4%	0%
Non-inert	28%	2%	<1%	23%	0%
Sub-total	69%	3%	1%	27%	0%

Table C.6: East London Non-Hazardous Excavation Waste Management Routes (2023)

Waste Type	Recycling	Recovery	Landfill	Transfer	Mobile Plant
Inert	30%	44%	0%	25%	1%
Non-inert	<1%	0%	<1%	0%	0%
Sub-total	30%	44%	<1%	25%	1%

C.21 To summarise the management profile for non-hazardous C& D waste is as set out below:

- 69% was managed at recycling facilities;
- 3% was recovered (either through incineration or recovery to land);
- 1% was disposed at permitted landfills;
- 27% was managed at intermediate sites and transferred on for recovery or disposal; and
- 0% was managed via mobile plant (normally for recycling or reuse).

- **C.22** The management profile for non-hazardous excavation waste is as set out below:
 - 30% was managed at recycling facilities;
 - 44% was recovered (either through incineration or recovery to land and use in restoration/ backfilling on permitted landfills);
 - <1% was managed at permitted landfills;</p>
 - 25% was managed at intermediate sites and transferred on for recovery or disposal); and
 - 1% was managed via mobile plant (normally for recycling or reuse).
- **C.23** This compares with the following targets set in the London Plan for C, D & E waste generated in London in Policy SI 7 Reducing waste and supporting the circular economy:
 - Meet or exceed the targets for each of the following waste and material streams:
 - Construction and demolition 95% reuse/recycling/recovery;
 - Excavation 95% beneficial use overall and 100% of inert excavation beneficially used.
- **C.24** The management profile for non-hazardous C& D waste managed at permitted facilities reporting through the WDI is as set out below:
 - At least 72% was managed through recycling or recovery;
 - With less than 1% disposed at permitted landfills; and
 - 27% transferred on for recovery or disposal.
- **C.25** It should be noted that waste going for reuse may not be managed through permitted sites, plus a substantial amount of the fraction of C&D waste that constitutes hardcore may be managed on the site of production and converted into recycled aggregate either used on site or sold offsite. Therefor the recycled value is taken to be a minimum.

C.26 The management profile for non-hazardous excavation waste is as set out below:

- At least 74% was managed through recycling or recovery (inc mobile plant);
- With <1% disposed at permitted landfills; and
- 25% transferred on for recovery or disposal. Given that disposal would only be to landfill, and backfilling of mineral workings and other uses would be classed as recovery, it is considered highly unlikely that the inert fraction of this stream would actually end up being disposed of.

C.27 The updated East London Capacity Assessment shows that there is more than sufficient consented/permitted management capacity within East London for the London Plan targets for C & D waste to be met. The above management profile is simply a function of the market at the time data was analysed.

C.28 With regards to excavation waste, the capacity assessment found there was a predicted shortfall in management capacity as currently consented. However the London Plan does not expect this waste to be managed within the confines of London.

C.29 The updated East London Capacity Assessment shows that there is more than sufficient consented/permitted capacity within East London for the total tonnage of apportioned HIC waste within the London Plan to be managed in accordance with the qualifying capacity stipulation.

Duty to Cooperate

C.30 Waste is a strategic cross-boundary issue and is subject to the duty to coperate. 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.

C.31 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.

Projected baseline information

C.32 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

C.33 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. Facilities are shown in Figure 4 of the Regulation 19 ELJWP.

C.34 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

C.35 There is currently a surplus of supply of capacity across the ELJWP area to meet the Plan area's identified need and the apportionment of HIC waste from the London Plan, as set out in the updated evidence prepared in support of the update to the ELJWP [See reference 28]. This may provide additional capacity to meet the needs of other areas of London in the future, or there may enable release of certain existing waste sites over the plan period.

Implications for health

C.36 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

C.37 Other than through policy relating to new development (and associated C,D&E waste production) 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 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 further 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

C.38 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.

C.39 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 29].

C.40 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 30].

C.41 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 31].

C.42 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 32]. The Mayor declared a climate emergency shortly after the Assembly and set a target for London to be net zero-carbon by 2030.

C.43 London Borough Barking and Dagenham declared a climate emergency in 2019 [See reference 33]. London Borough of Havering declared a climate and ecological emergency in 2023 [See reference 34]. London Borough of Newham declared a climate emergency in 2019 [See reference 35]. London Borough of Redbridge have an action plan to be carbon neutral by 2030 and carbon zero by 2050 [See reference 36].

Projected baseline information

C.44 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 37]:

- 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%.

C.45 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 38]:

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

C.46 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.

C.47 The Government regularly publishes local authority and regional carbon dioxide emissions national statistics [See reference 39]. 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 C.7 (Total Emissions) and Table C.8 (Per Capita Emissions). It should be noted the figures in Table C.7 [See reference 40] and Table C.8 [See reference 41] 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 C.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
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 C.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

Year	Barking and Dagenham	Havering	Newham	Redbridge
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

C.48 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 42]

- **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.

C.49 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 C.9**.

Table C.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
Total	13,682	11,385.8

Table C.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

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Gas	113.2	87.4
Electricity	67.4	48.5
Bioenergy and wastes	0.4	3.4
Total	253.4	204.8

Table C.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
Total	392.0	344.3

Table C.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

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Electricity	92.9	108.2
Bioenergy and wastes	0.3	4.7
Total	436.7	376.1

Table C.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
Total	358.0	306.7

Projected baseline information

C.50 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 43]:

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.

C.51 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

C.52 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 44]. 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 45].

- **C.53** 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.
- **C.54** 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 46].
- **C.55** 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 47].
- **C.56** 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 48]. 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.
- **C.57** 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

C.58 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 49] 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

C.59 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 50].

- 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

C.60 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

C.61 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 51].

C.62 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).

C.63 Figure C.2 at the end of this chapter illustrates the main areas of flood risk across the ELJWP area.

C.64 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 52].
- 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 53].
- 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 54]
- 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 55].

Projected baseline information

C.65 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 56] indicating climate change impacts on peak rainfall intensity and peak river flows.

C.66 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

C.67 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 57].
- 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

C.68 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.

C.69 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.

C.70 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

C.71 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 58].

C.72 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 59]. 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 60]

C.73 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 C.14** presents the most recent (2021) population changes by Borough in Barking and Dagenham, Havering, Newham and Redbridge [See reference 61].

C.74 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 C.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

Area	2011 Census	2021 Census
Havering	237, 200	262,000
Redbridge	279,000	310,300
Total	772,900	1,142,300

Projected baseline information

C.75 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 62]. 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.

C.76 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 63]. 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

C.77 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 64].

C.78 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** 65].

C.79 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. According to the GLA's residential completions dashboard to date, Barking and Dagenham has achieved 4,636 completions since 2019/20, Havering has achieved 3,430, Newham has achieved 6,655 (not including the area of the borough administered by the LLDC) [See reference 66] 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 67].

- **C.80** 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.
- **C.81** 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 68].
- **C.82** 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 69].
- **C.83** 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 achieved 914 and Redbridge just 709 [See reference 70].
- **C.84** 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.

C.85 Following the judgment in the Court of Appeal in the case of Smith v SSLUHC & Ors [See reference 71], 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.

C.86 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 72]. In Barking and Dagenham there is a need for 24 pitches over the period to 2034 for Gypsy and Traveller households [See reference 73]. In Newham, the borough has identified a need for 23 pitches [See reference 74]. In Redbridge, there is no need for additional pitches [See reference 75].

Projected baseline information

C.87 The joint interim report by the London Housing Directors' Group and G15 [See reference 76] 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.

C.88 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 77]. 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 78].
- Newham aim to deliver between 51,425 and 53,784 additional new homes between 2023/24 and 2037/38 [See reference 79]. 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 80].

Health

Current baseline information

C.89 Health is a cross-cutting topic and as such many topic areas explored in this Scoping Report influence health either directly or indirectly.

C.90 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 81].

C.91 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

C.92 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.

C.93 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.

C.94 The second highest scoring subdomain is "mental health"; while Barking and Dagenham's worst score is for "protective measures".

General health trends in Havering

C.95 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.

C.96 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.

C.97 The second highest scoring subdomain is "physical health conditions", while Havering's worst score is for "physiological risk factors".

C.98 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.

C.99 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

C.100 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.

C.101 Newham's best score across all subdomains is 123.0 for health relating to "difficulties in daily life".

C.102 "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.

C.103 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

C.104 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.

C.105 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.

C.106 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.

C.107 The second highest scoring subdomain is "physical health conditions", while Redbridge's worst score is for "protective measures".

Life expectancy

C.108 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 C.15** sets out the average life expectancy across the four East London Boroughs, for 2021, and the average across 2018 to 2020.

Table C.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

C.109 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

C.110 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.

C.111 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 82].

Mental health and perception of wellbeing

C.112 National research highlights that good emotional and mental health is fundamental to the quality of life. As set out in **Table C.16**, 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 83].

Table C.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

C.113 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** 84]. 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

C.114 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

C.115 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

C.116 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.

C.117 The London Borough of Newham produced a Community Facilities

Needs Assessment in 2021 [See reference 85]. 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).

C.118 The most recent Department for Transport 'journey time statistics' [See reference 86] 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 87] as set out in **Table C.17** below.

Table C.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

C.119 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

C.120 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

C.121 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.

C.122 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 88]. One third of the borough is green open space (463 hectares) and the borough is in close proximity to Epping Forest.

C.123 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.

C.124 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 89]. 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.

C.125 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

C.126 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

C.127 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 90].

C.128 According to Police UK **[See reference** 91**]**, crime in the each of the four Boroughs is lower than the London average (except for in Havering) although crime rates are increasing across the ELJWP area.

Projected baseline information

C.129 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

C.130 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 92] provide comparison data down to the postcode level.
Figure C.2 at the end of this chapter shows the IMD across the ELJWP area.

Barking and Dagenham

C.131 In Barking and Dagenham, 19.4% of the population was incomedeprived 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

C.132 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

C.133 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

C.134 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.

C.135 Figure C.2 at the end of this Chapter illustrates the range and distribution of deprivation across the Borough.

Projected baseline information

C.136 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

C.137 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.

C.138 The data referred to below was collected in the 2021 UK Census.

Age

C.139 The latest dataset relates to the 2021 UK Census [See reference 93]. 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.

C.140 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.

C.141 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%.

C.142 Older people (65 and over):

- In Barking and Dagenham, the percentage of older people, aged 65 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

C.143 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.

C.144 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 94]. In Newham [See reference 95], the rate of mental health issues are higher in lower age groups than in older people.

Marriage and civil partnership

C.145 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 96].

- 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

C.146 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 97].

- 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

C.147 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 98].

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 2011, increased from to 2.1% in 2021.

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
- 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

C.148 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 99].

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

C.149 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 100]. 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

C.150 Sexual orientation [See reference 101]:

- 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.

C.151 Gender identity [See reference 102]:

- 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

C.152 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

C.153 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 103].

C.154 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 socioeconomic status and other demographic factors such as age or gender.

C.155 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

C.156 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

C.157 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 104].

C.158 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 105].

C.159 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 106].

C.160 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%.

C.161 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 107].

C.162 GLA analysis of the departure from the European Union [See reference 108] 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

C.163 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 109]. The LBBD Regulation 19 Submission Local Plan (2021) [See reference 110] 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

C.164 Havering's Inclusive Growth Strategy (2020-2045) [See reference 111] 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 112]. The LBH Local Plan 2021 [See reference 113] focusses growth on the areas of Rainham and Beam Park, and Romford, consistent with the London Plan 2021.

C.165 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 19 Newham Local Plan (2024) incorporates these areas and also includes a number of Micro Business Opportunity Areas, to promote business use around existing town centres.

C.166 The Redbridge Local Plan (2018) [See reference 114] 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

C.167 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 coordinated 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 115].

Projected baseline information

C.168 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

C.169 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

C.170 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.

C.171 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

C.172 London Infrastructure Plan 2050: Transport Supporting Paper [See reference 116] 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 117] 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 118] 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 119] 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 120] 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.

C.173 Figure C.2 at the end of this chapter illustrates the main road, rail and cycling routes in the ELJWP Area.

C.174 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 121]. A decision is expected later in 2024.

C.175 At the time of Census 2021, UK government guidance and lockdown restrictions resulted in unprecedented changes to travel behaviour and patterns [See reference 122]. As seen in **Table C.18**, 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 C.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

Method of travel to work	Barking and Dagenham	Havering	Newham	Redbridge
Train (%)	9.2	7.0	8.6	6.0
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

C.176 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

C.177 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

C.178 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.

C.179 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.

C.180 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

C.181 The adopted Local Plan for Barking and Dagenham [See reference 123] notes the importance of conserving and enhancing heritage and cultural assets as the borough continues to grow.

C.182 The borough has 45 statutory listed buildings, 123 locally listed buildings, 1 scheduled ancient monument and four conservation areas [See reference 124].

C.183 The greatest concentration of listed buildings is in Barking [See reference 125]. 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.

C.184 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.

C.185 London Borough of Barking and Dagenham Archaeological Priority Areas Appraisal [See reference 126] found a total of 20 Archaeological Priority Areas are recommended for Barking and Dagenham.

Havering

C.186 The adopted 2021 Havering London Borough Local Plan 2016-2031 [See reference 127] 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.

C.187 The borough contains a wealth of designated heritage assets, including 140 listed buildings. There are 3 Scheduled Monuments and 11 Conservation Areas [See reference 128].

- 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.

C.188 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.

C.189 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

C.190 The Newham Local plan 2018-2033 [See reference 129] looks to tackle the legacy of Newham's historic position in London and integrate the area with local historic context. This position is taken forward in the Regulation 19 Local Plan (2024).

C.191 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 130].

C.192 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.

C.193 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.

C.194 Two of Newham's conservation Areas: The Three Mills and Sugar House Lane are located in the London Legacy Development Corporation area.

C.195 The Local plan identifies Archaeological Priority Areas: five tier 1, sixteen tier 2, six tier 3 and one tier 4.

Redbridge

C.196 The Redbridge Local Plan 2015-2030 [See reference 131] 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.

C.197 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.

C.198 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.

C.199 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.

C.200 The 2016 London Borough of Redbridge Archaeological Priority Areas (APA) appraisal [See reference 132] 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

C.201 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.

C.202 At local level, new developments, infrastructure and environmental pressures, such as extreme weather and flooding, present the greatest risk to cultural heritage assets.

C.203 Historic England has a Heritage at Risk Register [See reference 133] 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

C.204 Historic England explored the links between the historic environment and health in Wellbeing and the Historic Environment [See reference 134]. 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

C.205 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.

C.206 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

C.207 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 135].

C.208 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.

C.209 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

C.210 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.

C.211 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.

C.212 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

C.213 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

C.214 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

C.215 Biodiversity net gain (BNG) is mandatory in England from 12 February 2024 [See reference 136]. 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.

C.216 The London Environment Strategy [See reference 137] 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 138]);
- 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.

C.217 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.

C.218 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.

C.219 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.

C.220 The site supports a mosaic of high-value habitats including ancient seminatural 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.

C.221 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".

C.222 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 runoff), 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.

C.223 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 139]. 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.

C.224 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.

C.225 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.

C.226 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 140] 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).

C.227 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.

C.228 There are 42 Sites of Importance for Nature Conservation (SINCs) within the London Borough of Newham [See reference 141]. 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 142]. 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 143]. 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.

C.229 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 144].

C.230 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

C.231 At UK level, the publication of the State of Nature Report **[See reference** 145] 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

C.232 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.

C.233 According to the recently published World Health Organisation report 'Nature, Biodiversity and Health: An Overview of Interconnections' [See reference 146] 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

C.234 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.

C.235 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.

C.236 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

C.237 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 147] 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.

C.238 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.

C.239 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** 148]. 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

C.240 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.

C.241 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

C.242 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 149] sets water efficiency standards for new development of 105 litres or less per person per day.

C.243 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 150].

Projected baseline information

C.244 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

C.245 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.

C.246 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 151] 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.

C.247 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.

C.248 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 152]. There are currently 187 total designated AQFAs across London.

C.249 In the London Borough of Barking and Dagenham, there are three:

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

C.250 In Havering there is one (Romford Town Centre).

C.251 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).

C.252 In Redbridge there is one designated AQFA (Ilford A123 Ilford Road and Telford Hill) [See reference 153].

C.253 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.

C.254 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 154]. 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 155].

C.255 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.

C.256 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

C.257 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.

C.258 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.

C.259 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.

C.260 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).

C.261 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

C.262 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.

C.263 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

C.264 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

C.265 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.

C.266 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

C.267 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.

C.268 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 156] 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.

C.269 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.

C.270 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.

C.271 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 C.2: Transport Network within the EJLWP Area

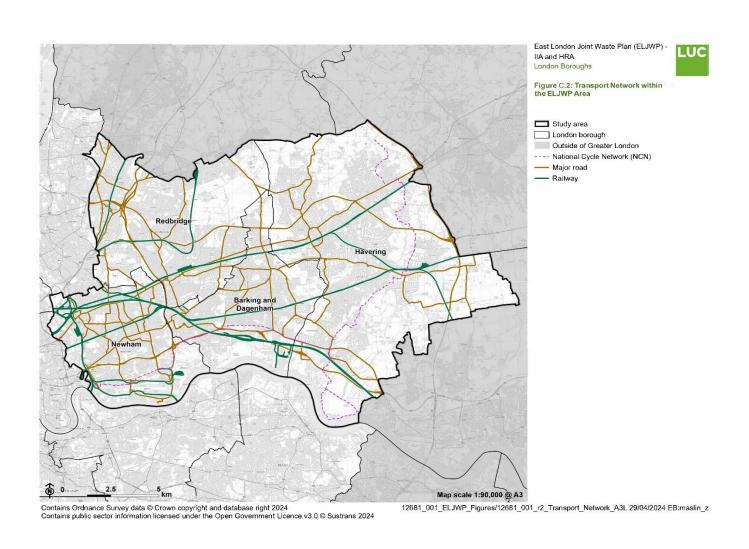


Figure C.3: Indices of deprivation within the EJLWP Area

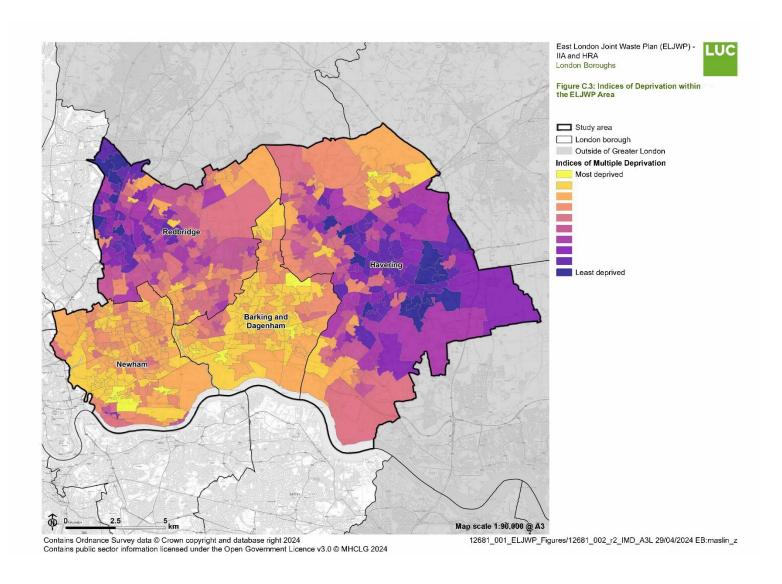


Figure C.4: Historic Environment within the ELJWP Area

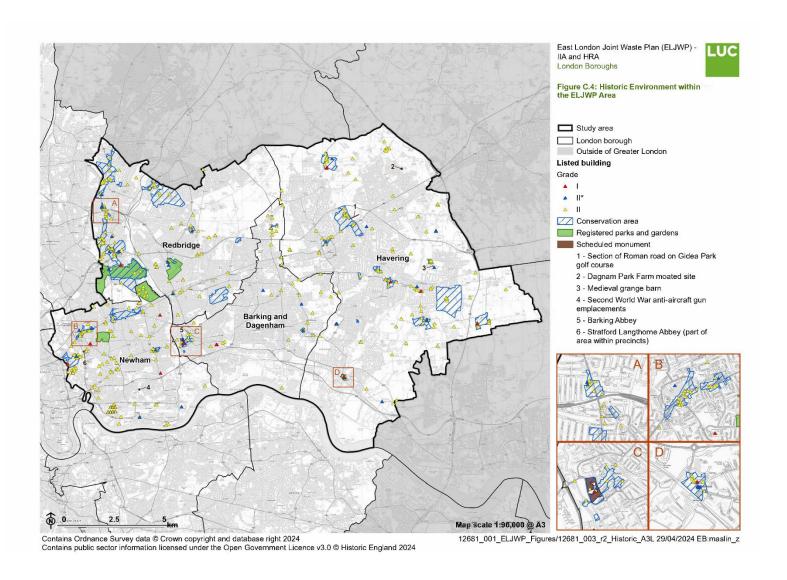


Figure C.5:Open Space and Metropolitan Green Belt within the EJLWP Area

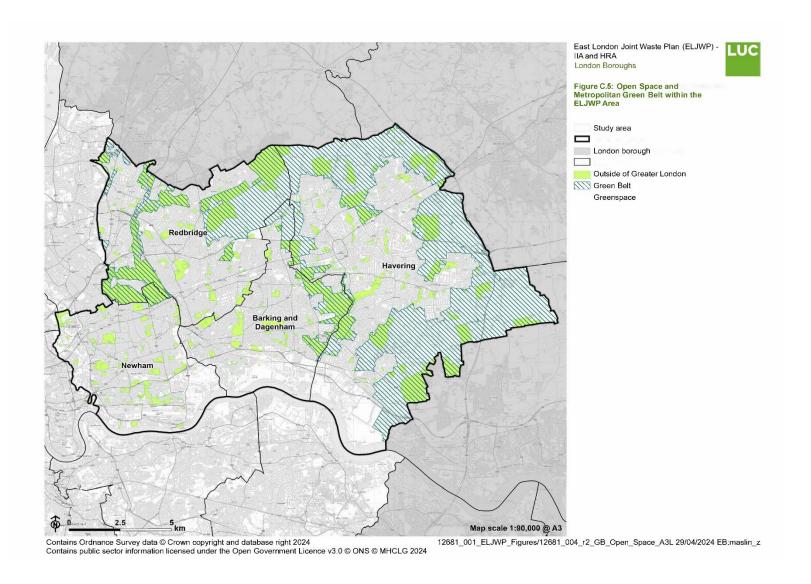


Figure C.6:Biodiversity within the EJLWP Area

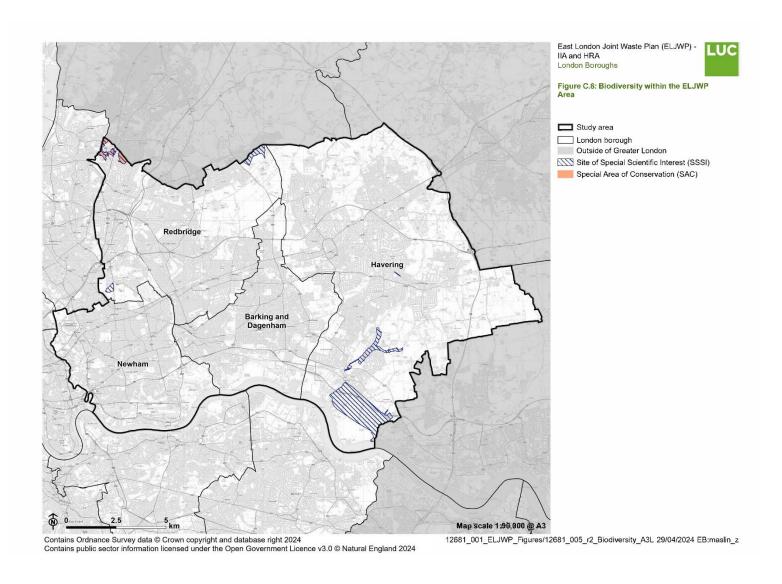
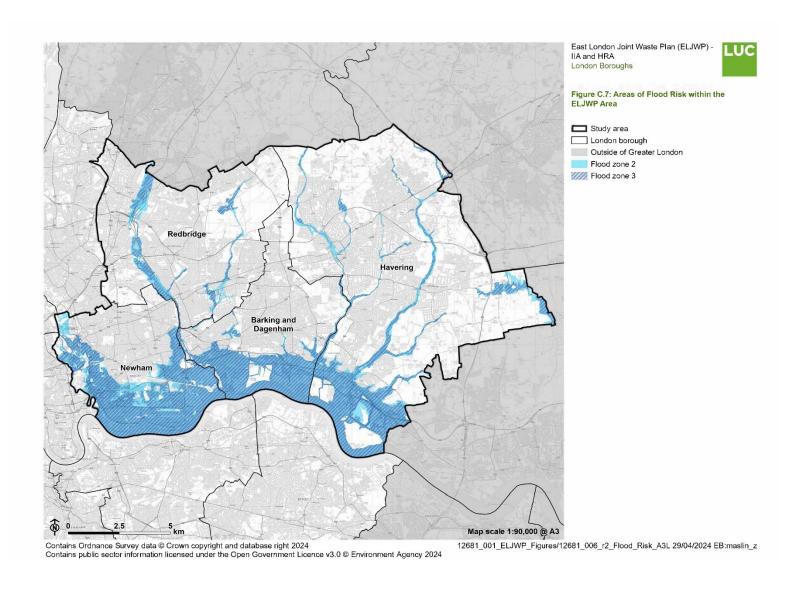


Figure C.7: Areas of Flood Risk within the EJLWP Area



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