

Epping Forest District Council Sustainability Appraisal and Habitats Regulations Assessment Scoping Report

Final Report
October 2010



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Sustainability Appraisal Scoping Report October 2010

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1 Introduction

1.1.1 Scott Wilson has been commissioned by Epping Forest District Council ('the Council') to carry out the Sustainability Appraisal (SA) and Habitats Regulations Assessment (HRA) of the Epping Forest District Core Strategy. The Core Strategy forms part of the Epping Forest District Local Development Framework (LDF).

1.1.2 A draft version of this report was available for consultation between 17th May - 9th July 2010. **Annex I** describes how consultation responses have been taken into account.

Sustainability Appraisal (SA)

1.1.3 SA involves identifying and evaluating the impacts of a draft plan on the economy, the community and the environment – the three dimensions of sustainable development – and then suggesting ways to avoid or reduce adverse impacts and maximise positive impacts. SA is a statutory requirement for Core Strategies under the Planning and Compulsory Purchase Act 2004.¹

1.1.4 In order to undertake the SA of the Core Strategy it is first necessary to establish the scope of the appraisal, i.e. establish the issues that should and should not be a focus. Establishing the scope is the aim of this 'Scoping Report'. Within this document, the scope of the SA is established by setting a 'framework' to guide the appraisal. It should also be noted that this SA framework may also be used to guide the SA of the other Development Plan Documents (DPDs) that will sit alongside the Core Strategy within the Epping Forest District LDF.

Habitats Regulations Assessment (HRA)

1.1.5 HRA of Core Strategies is a requirement under Article 6 of the EC Habitats Directive 1992. The HRA chapter of this report sets out the draft 'scope' of the HRA.

Report structure

1.1.6 This report is structured as follows:

| | |
|-----------------|--|
| Chapter 2 | further introduces the SA process and the role of the scoping stage; |
| Chapters 3 – 18 | set out the framework for the SA under 16 'sustainability topic' headings; |
| Chapter 19 | sets out the HRA scoping work that has been undertaken; |
| Chapter 20 | describes what will happen next in the SA process. |

Epping Forest District Core Strategy

1.1.7 The Council have been in the process of collecting evidence to inform the development of the Core Strategy for some time, and are now beginning to consider potential 'issues and options'. The Council will shortly be undertaking a consultation on a Core Strategy Issues and Options Report. The Sustainability Appraisal will run in parallel to the plan-making process, ensuring that key decisions are made based on a full consideration of sustainability implications.

¹ It should also be noted that the SA incorporates Strategic Environmental Assessment (SEA), which is a closely related process required under Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the 'SEA Directive') implemented through The Environmental Assessment of Plans and Programmes Regulations 2004

2 Approach to Sustainability Appraisal

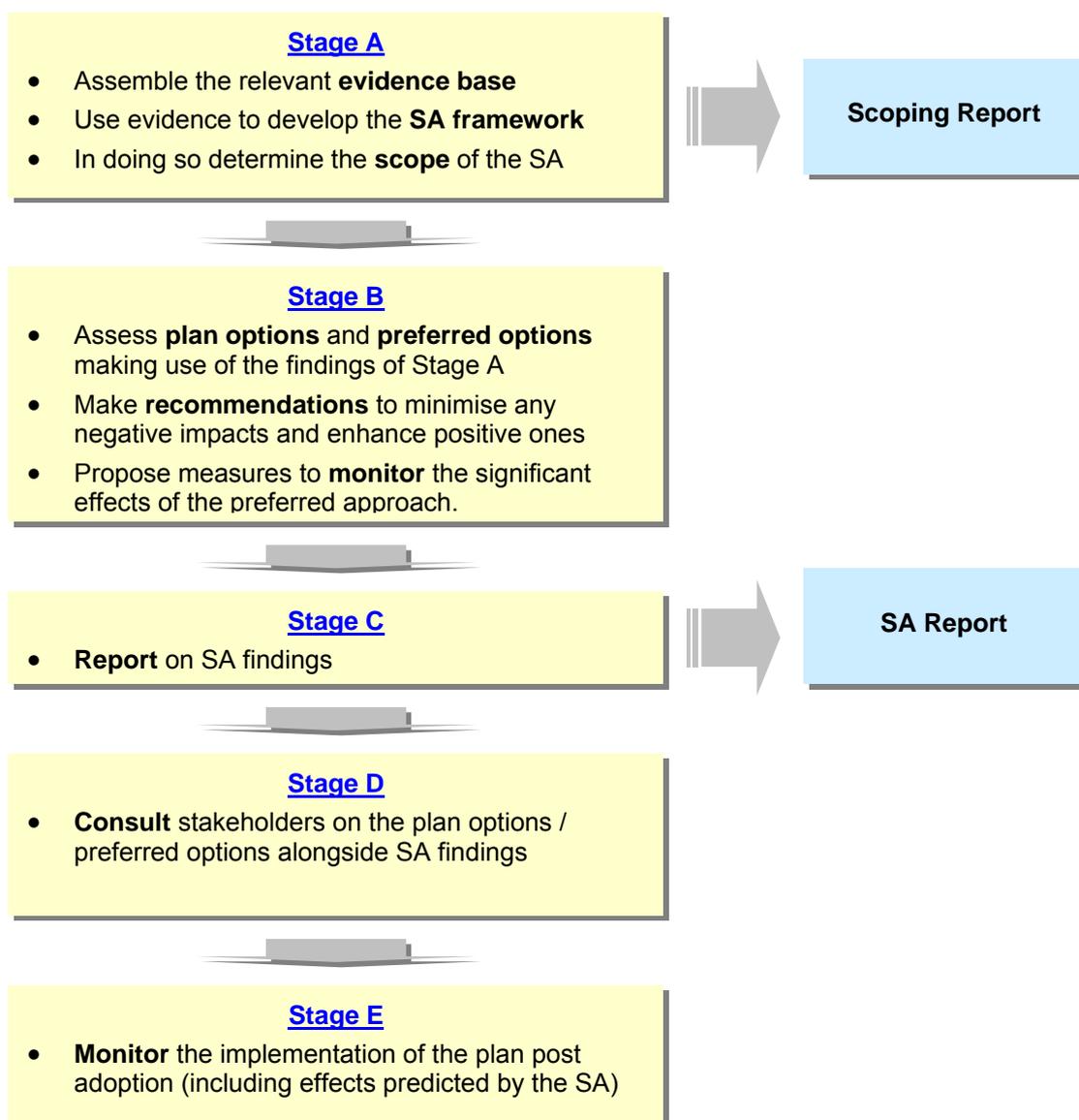
2.1 Introduction

2.1.1 This chapter further introduces the SA process and describes how this Scoping Report has been structured.

2.2 The SA process

2.2.1 SA is based on a five-stage approach – see **Figure 2.1**.

Figure 2.1: Five stage approach to SA



2.3 Stage A – Scoping

- 2.3.1 Stage A in the SA process involves developing the framework for undertaking the appraisal. The framework is essentially a collection of evidence that should be taken into account at Stage B – the assessment stage – thus ensuring a focus on particular issues.
- 2.3.2 Within this Scoping Report, evidence is considered for 11 thematic topics and five functional areas (sub-divisions of the district), which taken together should ensure that the full range of sustainability issues is identified.
- 2.3.3 The proposed **thematic topics** are:
- Air quality
 - Biodiversity and green infrastructure
 - Climate change (mitigation and adaptation)
 - Community and wellbeing
 - Economy and employment
 - Historic environment
 - Housing
 - Land and waste
 - Landscape
 - Transport
 - Water
- 2.3.4 The proposed **functional areas** are:
- Waltham Abbey & Nazeing Area
 - Rural North & Harlow
 - Central Line Settlements
 - Rural South East
 - Ongar & Rural North East
- 2.3.5 These headings, and the evidence collected under each, will provide the framework for the assessment stage. **Box 2.1** describes the reasoning behind selecting the proposed list of thematic topics and functional areas.

Box 2.1: Reasons for selecting the proposed list of thematic topics and functional areas

In proposing this list of thematic topics and functional areas we have considered:

- **The topics addressed in the SA of the East of England Plan**
- **The topics suggested in the SEA Directive²**
- **The need to give full consideration to issues relating to health, equalities and rural disadvantage, thus negating the need to undertake a separate Health Impact Assessment, Equality Impact Assessment or Rural Proofing exercise**
 - See **Annex II** for further discussion of the way these ‘other assessment processes / proofing exercises’ have been integrated
- **The likely significant effects of the Core Strategy (identified in discussion with the Council)**
 - Each ‘functional area’ is characterised within this Scoping Report so that the issues that are specific to each can be established for consideration at the SA assessment stage.

2.3.6 Under each heading, evidence is considered systematically by asking the following **questions**:

- What is the policy context?
- What are the key sustainability objectives that we need to consider?
- What is the situation now?
- What will be the situation without the plan?
- What issues should be a particular focus for the appraisal?

2.3.7 These questions have been selected in order to demonstrate clear compliance with the requirements of the SEA Directive. Set out below is a description of the information contained under each heading.

² Annex 1(f) of the Directive states that the Environmental Report must include “*the likely significant effects (1) 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*”

What is the policy context?

- 2.3.8 This section includes a summary of key implications from the Plans, Policies, Strategies and Initiatives (PPSIs) that set the context for considering sustainability issues. This context review meets the requirement of Annex 1(a) of the SEA Directive that the following is reported as part of the SEA:

“an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes”

What are the key objectives we need to consider?

- 2.3.9 This section is an extension of the context review, and is reported separately to ensure full and clear compliance with the requirement of Annex 1(e) of the SEA Directive that the following is reported as part of the SEA:

“the environmental protection objectives, established at international, Community or Member State 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”

- 2.3.10 The key objectives established in the East of England are those set out in the draft Integrated Regional Sustainability Framework (ISF) – see **Table 2.1**. Whilst identifying which objectives are relevant to the consideration of sustainability issues under each heading, it becomes apparent that many of the objectives are cross-cutting in nature.

Table 2.1: Integrated Regional Sustainability Framework objectives

| East of England Integrated Regional Sustainability Framework Objectives | |
|---|--|
| 1 | Promote sustainable growth within environmental limits |
| 2 | Reduce poverty and inequality and promote social inclusion |
| 3 | Reduce greenhouse gas emissions |
| 4 | Adapt to the impacts of climate change |
| 5 | Promote employment, learning, skills and innovation |
| 6 | Increase resource efficiency and reduce resource use and waste |
| 7 | Conserve, restore and enhance the region’s natural and built environment |
| 8 | Move goods and people sustainably |
| 9 | Meet the needs of the changing regional demographic |
| 10 | Provide decent, affordable and safe homes for all |

What is the situation now?

- 2.3.11 This section of the Scoping Report takes a snap-shot of the current sustainability 'baseline' in the district, as well as considering how the baseline has evolved over time and how the local baseline compares to other geographical areas and scales (e.g. the regional or national picture). There is also an emphasis on identifying any variation in the baseline at the sub-authority scale (i.e. areas with particular problems as well as areas of opportunity). This section meets the requirements of Annex I(b) and 1(c) of the SEA Directive that the following is reported as part of the SEA:

“the relevant aspects of the current state of the environment...” (Annex 1(b)); and

“the environmental characteristics of areas likely to be significantly affected” (Annex 1(c))

What will be the situation without the plan?

- 2.3.12 This section will consider how the baseline might be likely to evolve in the future under a business as usual scenario. Knowledge of the likely future baseline under a business as usual scenario allows effects to be predicted and evaluated with greater accuracy at the assessment stage. This section meets the requirements of Annex 1(b) of the SEA Directive that the following is reported as part of the SEA:

“... the likely evolution thereof without implementation of the plan or programme” (Annex 1(b))

What are the issues that should be a particular focus of the appraisal?

- 2.3.13 Following from the review of evidence undertaken under the preceding headings, this section describes those sustainability issues that have been shown to be potentially significant, and so should be a particular focus of the assessment stage. This section meets the requirement of Annex 1(d) of the SEA Directive that the following is reported as part of the SEA:

“any existing environmental problems which are relevant to the plan or programme...”

2.4 Forthcoming Stages of the SA

Stage B – The assessment stage

2.4.1 The sustainability effects of alternative approaches will be assessed under the same headings used to structure the Scoping Report (i.e. functional areas and thematic topics). Under each heading, the following three questions will be answered:

- What are the sustainability effects of the preferred approach and/or alternative approaches?
 - This section meets the requirement of the SEA Directive to *identify, describe and evaluate the likely significant environmental effects of implementing the plan or programme, and reasonable alternatives*; and report *“the likely significant effects on the environment”*.
- What are the SA recommendations?
 - This section meets the requirement of Annex 1(g) of the SEA Directive to report *“the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme”*.
- How can we best monitor the plan’s impacts?
 - This section meets the requirement of Annex 1(i) of the SEA Directive to report *“a description of the measures envisaged concerning monitoring...”*

Stage C – Reporting

2.4.2 Stage C in the SA process involves documenting the appraisal findings and preparing an SA Report. The full SA Report should be published for consultation alongside the ‘pre-submission’ version of the DPD in question; however, SA reports focusing on the emerging plan may be published earlier in the plan-making process. For example, an *Interim* SA Report will be published for consultation alongside the Core Strategy Issues and Options Report.

Stage D – Consultation

2.4.3 Stage D in the SA process involves consulting on the ‘pre-submission’ version of the plan and the accompanying SA Report; however, as stated above, SA reports can also be prepared to support the consultation on earlier versions of the plan.

Stage E – Monitoring

2.4.4 Stage E in the SA process involves monitoring the adopted plan including its sustainability impacts; this is done through the LDF Annual Monitoring Report (AMR).

3 Air quality

3.1 Introduction

- 3.1.1 The Government has a National Air Quality Strategy³ to improve and protect ambient air quality in the UK in the medium-term. Improvements in air quality help meet health and biodiversity objectives, as well as helping to reduce greenhouse gas emissions.

3.2 What is the policy context?⁴

- 3.2.1 The revised Air Quality Strategy (AQS) for the UK (July 2007) provides the over-arching strategic framework for air quality in the UK and contains national air quality standards and objectives established by the UK Government to protect human health. Objectives are set for ten pollutants (benzene, 1,3-butadiene, carbon monoxide, lead, nitrogen dioxide (NO₂), sulphur dioxide (SO₂) particulates (PM₁₀ and PM_{2.5}), ozone and Polycyclic Aromatic Hydrocarbons (PAHs)). The UK Government has also set new national air quality objectives for PM_{2.5}, although unlike the other pollutants there is no statutory obligation on Local Authorities to review and assess air quality against them. The air quality objectives incorporated in the AQS and UK Legislation are derived from the Limit Values prescribed in EU Directives.
- 3.2.2 The locations / receptors where the AQS objectives apply are defined as locations outside buildings or other natural or man-made structures where members of the public are regularly present and might reasonably be expected to be exposed [to pollutant concentrations] over the level set by the objective. Typically these include residential properties and schools/care homes and high streets (although the definition of a sensitive receptor varies according to the specific objective).
- 3.2.3 As established by the Environment Act 1995 Part IV, all local authorities in the UK are under a statutory duty to undertake an air quality assessment within their area and determine whether they are likely to meet the air quality objectives. Where the results of the review and assessment process highlight that problems in the attainment of health-based objectives for air quality will arise, the authority is required to declare an Air Quality Management Area (AQMA).
- 3.2.4 It is important to note that the national air quality standards and objectives set out in the revised AQS for the UK relate solely to human health. However, critical thresholds for significant effects to biodiversity can be lower than for health (in the case of NO₂, for example, the critical level for the protection of human health is set as an annual mean of 40µg/m³, whereas that for the protection of vegetation is only 30µg/m³). In addition, the AQS standards do not include consideration of the deposition of nitrogen or of acidity.

³ Defra (2007) *The Air Quality Strategy for England, Scotland, Wales and Northern Ireland* [online] available at: <http://www.defra.gov.uk/environment/airquality/strategy/pdf/air-qualitystrategy-vol1.pdf> (accessed 09/09).

⁴ Information has been taken and adapted from the 2009 Updating and Screening Assessment (USA) for Epping Forest

3.3 What are the key objectives that we need to consider?

3.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:

- Promote sustainable growth within environmental limits
- Conserve, restore and enhance the region's natural and built environment
- Move goods and people sustainably

3.4 What is the situation now?

3.4.1 The main sources of air pollution in the district are the M25, M11, A414 and A121 (also a source of noise pollution). Other sources of pollution include the congested roads of Epping Forest District's town centres, and about 30 minor sources of industrial air pollution.⁵

3.4.2 The 2009 Updating and Screening Assessment (USA) for Epping Forest District provides an up to date assessment of air quality issues within the district. The USA considers the seven priority health based air quality objectives as laid down in Regulations and assesses the likelihood that the air quality objectives will be met by their target dates. If the air quality objectives are unlikely to be met, a detailed assessment will be required.

3.4.3 This USA concludes that there is no requirement to complete a detailed assessment for benzene, 1,3-butadiene, carbon monoxide, lead, particles and sulphur dioxide. However, monitoring data indicates exceedences of the NO₂ annual mean objective at six sites in the district. Two of these sites (Bell Vue & Goldings Hill) are currently subject to detailed assessments, and the results of these assessments will inform the next stage in the process. It is expected that an AQMA will be designated at Bell Vue.⁶ In terms of the other sites, it is either the case that detailed assessment is not required because there is no potentially sensitive receptor; or that the exposure to sensitive receptors is uncertain and thus further monitoring is planned.

3.4.4 In addition to air quality monitoring, air quality modelling has also been carried out. This has highlighted that one location - Beechfield Walk near the M25 Junction 25-26 - may be in exceedence of the annual mean NO₂ objective. As a result, a short duration monitoring exercise with diffusion tubes is proposed for this location.

3.4.5 There is currently one AQMA designated in the district, at 37-49 High Street, Epping. However, Defra are currently being consulted about the revocation of this AQMA as monitoring now demonstrates that nitrogen dioxide concentrations are actually well within the air quality objective.

Air quality and biodiversity

3.4.6 Natural England is concerned that levels of several atmospheric pollutants (most notably NO_x and NH₃) are currently significantly in exceedence of the relevant critical levels across much of the Epping Forest SSSI and SAC. Elevated NO_x levels within the Forest are derived both from vehicular emissions from roads in the area and from the 'London plume'. Dependent upon the location of any new developments, there is the potential for this situation to be seriously exacerbated by the emissions from any additional traffic generated by that development.

⁵ Essex County Council (2009) *Air Quality in Epping Forest* [online] available at: <http://www.essexair.org/> (accessed 10/09)

⁶ Epping Forest Air Quality Officer, *per comms*.

3.5 What will be the situation without the plan?

3.5.1 There are currently no planned new developments that are considered likely to have a detrimental impact on air quality. However, future growth outside the district has the potential to result in traffic growth that affects Epping Forest District.⁷

3.6 What issues should be a particular focus for the appraisal?

3.6.1 There is a need to:

- avoid air quality issues, or the worsening of existing issues, where possible through a spatial approach to planning; and
- ensure there is scope to mitigate air quality impacts.

⁷ Essex County Council on behalf of EFDC (2008) *Epping Forest District Council LAQM Progress Report 2008* [online] available at: <http://www.essexair.org/> (accessed 10/09).

4 Biodiversity and green infrastructure

4.1 Introduction

- 4.1.1 Biodiversity is the term given to the diversity of life on Earth. This includes the plant and animal species that make up our wildlife and the habitats in which they live. As well as being important in its own right, we value biodiversity because of the ecosystem services it provides, such as flood defence, clean water and wide ranging 'cultural services'. There is also a need to give consideration to geodiversity.
- 4.1.2 Green infrastructure is a multifunctional network of green spaces, likely to include formal parks, gardens, woodlands and trees, waterways, Sustainable Drainage Systems (SuDS), 'green space', and links to open countryside. As well as supporting biodiversity, it can help to make walking and cycling more attractive; promote mental wellbeing; help to establish local identity and a sense of place; help to reduce air pollution; contain flooding; and help to combat urban heat island effects.⁸

4.2 What is the policy context?

- 4.2.1 The EU Sustainable Development Strategy, adopted in 2006, includes an objective to halt the loss of biodiversity by 2010.⁹ The UK is also a Party to the Convention on Biological Diversity (CBD), a principal objective of which is the conservation of biodiversity. Commitment to the CBD led to the preparation of the 1994 UK Biodiversity Action Plan (UK BAP), the overall goal of which is to conserve and enhance biodiversity within the UK and to contribute to efforts to conserve global biodiversity. The UK BAP identifies our most threatened biodiversity assets and includes action plans for the recovery of priority species and habitats.¹⁰ A Biodiversity Strategy for England was subsequently published in 2002¹¹ and includes the broad aim that planning, construction, development and regeneration should have minimal impacts on biodiversity and enhance it wherever possible. PPS9 on Biodiversity and Geological Conservation emphasises that the Government's objectives for planning include ensuring that biodiversity is conserved and enhanced as an integral part of social, environmental and economic development, so that policies and decisions about the development and use of land integrate biodiversity with other considerations¹². Importantly, the Natural Environment and Rural Communities Act 2006 placed a duty on public authorities to have regard to the conservation of biodiversity in exercising their functions. According to the Government, the duty aims to raise the profile and visibility of biodiversity, clarify existing commitments with regard to biodiversity, and to make it a natural and integral part of policy and decision-making¹³.

⁸ Adapted from Davies et al. (2006) *Green Infrastructure Planning Guide* [online] available at: http://www.greeninfrastructure.eu/images/GREEN_INFRASTRUCTURE_PLANNING_GUIDE.pdf (accessed 09/09)

⁹ Council of the European Union (2006) *Renewed EU Sustainable Development Strategy* [online] available at: <http://register.consilium.europa.eu/pdf/en/06/st10/st10917.en06.pdf> (accessed 09/09)

¹⁰ For further information on the UK BAP see: <http://www.ukbap.org.uk/>

¹¹ Defra (2002) *Working with the Grain of Nature: A Biodiversity Strategy for England* [online] available at: <http://www.defra.gov.uk/wildlife-countryside/pdf/biodiversity/biostrategy.pdf> (accessed 09/09).

¹² ODPM (2005) *Planning Policy Statement 9: Biodiversity and Geological Conservation* [online] available at: <http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/historicenvironment/pps9/> (accessed 09/09)

¹³ Defra (2007) *Guidance for Public Authorities on Implementing the Biodiversity Duty* [online] available at: <http://www.defra.gov.uk/wildlife-countryside/biodiversity/key-docs.htm> (accessed 09/09).

- 4.2.2 In relation to biodiversity and climate change, Defra have agreed a list of five ‘headline’ principles (see **Figure 4.1**) and, underneath these, a host of more specific principles.¹⁴

Figure 4.1: Defra’s headline principles to ensure biodiversity is able to adapt to climate change



- 4.2.3 The East of England Plan¹⁵ (now revoked) contained several policies which provide a context for considering issues of biodiversity and green infrastructure. Policy ENV1 stated that LPAs should seek to secure the effective protection of the environment by considering the nature and location of proposed development as part of a broadly based concern for, and awareness of, biodiversity and other environmental assets. The policy provided specific guidance for green infrastructure in which LDDs play an important role in identifying, creating, protecting, enhancing and managing areas and networks of green infrastructure. The policy also stated that green infrastructure should be developed in part to maximise its biodiversity value. The Lee Valley Regional Park and Epping Forest were both identified as areas of landscape, ecological and recreational importance. Policy ENV3: Biodiversity and Earth Heritage required planning authorities to ensure that the Region’s wider biodiversity, earth heritage and natural resources are protected and enriched through the conservation, restoration and re-establishment of key resources. Policy HA1 referred to the Harlow Area and stated that LDDs should provide for the creation and maintenance of a network of multi-functional greenspaces around the town which take into consideration the principles of the Green Infrastructure Plan for Harlow.¹⁶ This Strategy put both Epping Forest and the Lee Valley at the heart of the vision. It is also important to note that the Epping Forest Local Plan includes a policy specifically relating to the protection of ‘urban open spaces’. The policy sought to take account of visual importance, nature conservation interest and recreational potential.

¹⁴ Defra (2008). *Conserving biodiversity in a Changing Climate* [online] available at: <http://www.defra.gov.uk/environment/biodiversity/documents/ebs-ccap.pdf>

¹⁵ EERA (2008). *East of England Plan* [online] available at: http://www.gos.gov.uk/qoee/docs/Planning/Regional_Planning/Regional_Spatial_Strategy/EE_Plan1.pdf (accessed 09/09).

¹⁶ Harlow District Council (2005). *A green infrastructure plan for the Harlow Area* [online] available at: <http://www.harlow.gov.uk/default.aspx?page=8615> (accessed 09/09)

4.2.4 The Epping Forest District Biodiversity Action Plan was published in April 2008 to help steer biodiversity projects within the district. The targets set out in the Biodiversity Action Plan reflect priorities and targets that have been developed in the Essex Biodiversity Action Plan and the UK's National Biodiversity Action Plan. The Epping Forest District Biodiversity Partnership was also formed bringing together a range of partners dealing with a whole range of nature conservation issues.

4.3 What are the key objectives that we need to consider?

4.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:

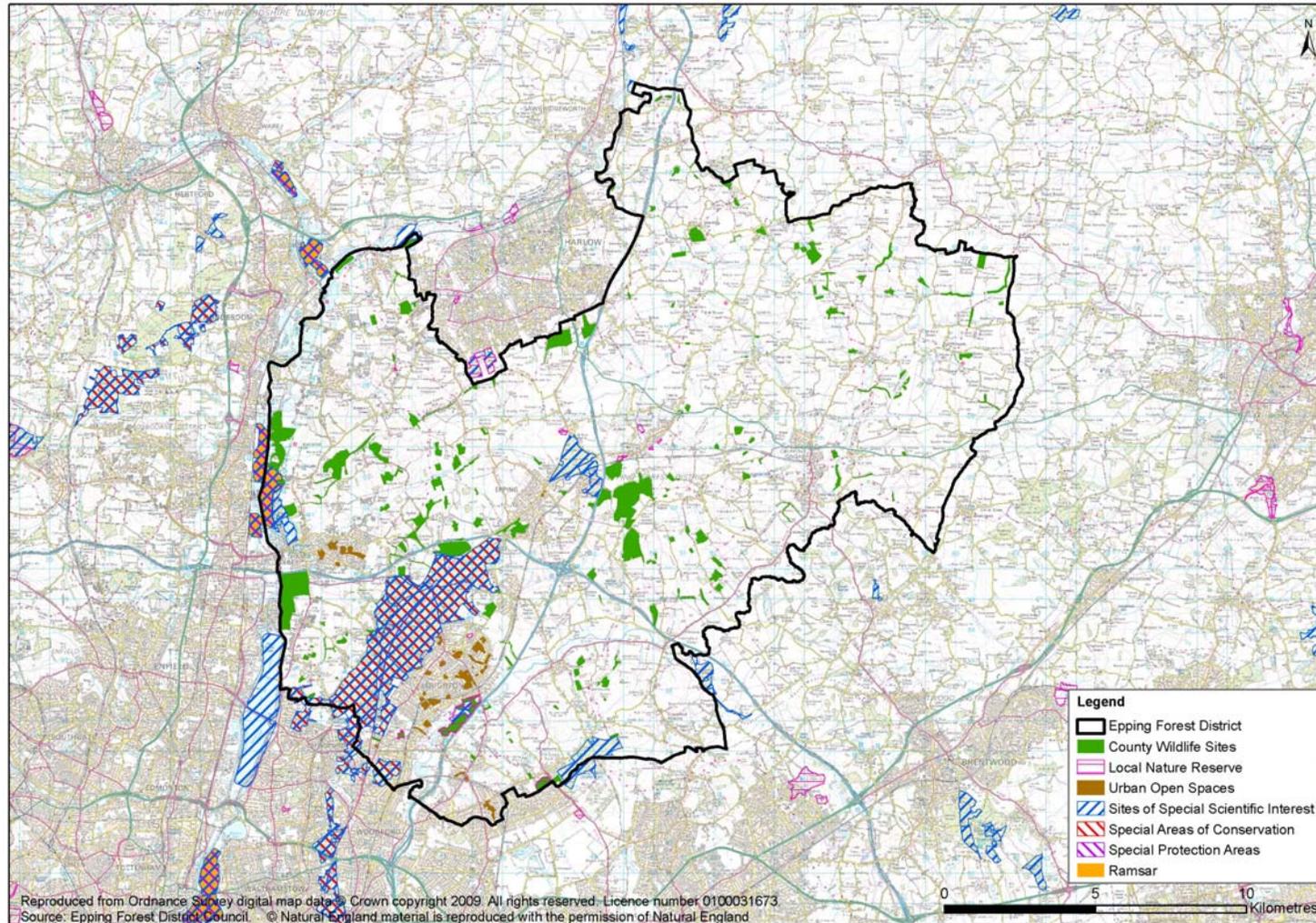
- Promote sustainable growth within environmental limits
- Reduce poverty and inequality and promote social inclusion
- Adapt to the impacts of climate change
- Conserve, restore and enhance the region's natural and built environment
- Move goods and people sustainably

4.4 What is the situation now?¹⁷

4.4.1 **Figure 4.2** shows the location of sites in and around Epping Forest District that have been designated for their nature conservation value.

¹⁷ The majority of the information within this Section has been taken adapted from the Epping Forest Biodiversity Action Plan (2008)

Figure 4.2: Designated biodiversity sites in and around Epping Forest District



Internationally designated sites

- 4.4.2 The Habitats Directive 1992 required EU Member States to create a network of protected wildlife areas, known as Natura 2000, across the European Union. This network consists of SACs and SPAs, established to protect wild birds under the Birds Directive. These sites are part of a range of measures aimed at conserving important or threatened habitats and species. The district has one SAC (Epping Forest covering 1605 ha¹⁸) and one SPA (Lee Valley covering 448 ha¹⁹).
- 4.4.3 The Convention on Wetlands of International Importance (the Ramsar Convention) was signed in Ramsar, Iran in 1971. It was an intergovernmental treaty which provided for the conservation and wise use of wetlands. The district has one of 157 Ramsar sites in the UK - the Lee Valley. This great wildlife resource comprises a series of embanked water supply reservoirs, sewage treatment lagoons and former gravel pits which straddles 24km of the valley.
- 4.4.4 The scope of issues in relation to the protection of internationally designated sites is considered further within **Chapter 19**

Sites of Special Scientific Interest (SSSIs)

- 4.4.5 SSSIs are the country's very best wildlife and geological sites (Ramsar sites and SPAs and SACs are also SSSIs) and are designated by Natural England. They are selected for their value in terms of flora or fauna, or their geological or physiographical (i.e. landform) features. The Government's Public Service Agreement (PSA) target to have 95% of the SSSI area in favourable or recovering condition by 2010.
- 4.4.6 There are around four thousand sites across the country with eighty six in Essex. There are eight designated SSSIs which are partially or wholly in the district covering 2506ha. These are:
- Epping Forest (including Wintry Wood, Epping; Gernon Bushes, Coopersale; Yardley Hill, Sewardstonebury; and Lord's Bushes, Buckhurst Hill). The SSSI extends into the London Boroughs of Redbridge and Waltham Forest (total area 1790 ha²⁰).
 - **83.66%** favourable or unfavourable recovering condition²¹
 - Hainault Forest, Chigwell and Lambourne, extends into the London Borough of Redbridge (total area 136ha)
 - **100%** favourable or unfavourable recovering condition
 - Royal Gunpowder Factory Woodlands, Waltham Abbey (34.2ha).
 - **0%** favourable or unfavourable recovering condition
 - Roding Valley Meadows, Loughton and Chigwell. (19.8ha)
 - **47%** favourable or unfavourable recovering condition
 - Cornmill Stream and Old River Lee, Waltham Abbey. (24.6ha)
 - **100%** favourable or unfavourable recovering condition

¹⁸ JNCC (2010) Epping Forest SAC [online] available at:

<http://www.jncc.gov.uk/ProtectedSites/SACselection/sac.asp?EUCode=UK0012720> (accessed 02/10)

¹⁹ JNCC (2010) Lee Valley SPA [online] available at: <http://www.jncc.gov.uk/default.aspx?page=2047> (accessed 02/10)

²⁰ Nature on the Map (2010) [online] available at: <http://www.natureonthemap.org.uk/identify.aspx> (accessed 02/10)

²¹ *Ibid.*

- Turnford and Cheshunt Pits (extends into Broxbourne Borough 173.28ha).
 - **100%** favourable or unfavourable recovering condition
- Chingford Reservoirs - extends into the London Boroughs of Enfield and Waltham Forest. (total area not all in the district 391ha)
 - **100%** favourable or unfavourable recovering condition
- River Lee diversion (a very small part of the Chingford Reservoirs SSSI)

4.4.7 Three SSSIs abut the district boundary. These are Curtismill Green (near Stapleford Abbots); Harlow Woods (Harlow); and Hunsdon Mead (north of Roydon). A further two SSSIs are very close to, but do not abut, the district. These are Parndon Wood, Harlow and Rye Meads near Stanstead Abbots.

Local Nature Reserves (LNRs)

4.4.8 Under Section 21 of the National Parks and Access to the Countryside Act 1949, local authorities (including district, town and parish councils) have the power to establish Local Nature Reserves. An area of land can be declared as an LNR if it has a high value for nature conservation, provides special opportunities for study and research or if the natural features of the site are of special interest to the public because they are used for recreation and education.

4.4.9 There are now 1050 LNRs in England. Epping Forest District Council has declared 9 LNRs to date between 1986 and 2007. These are:

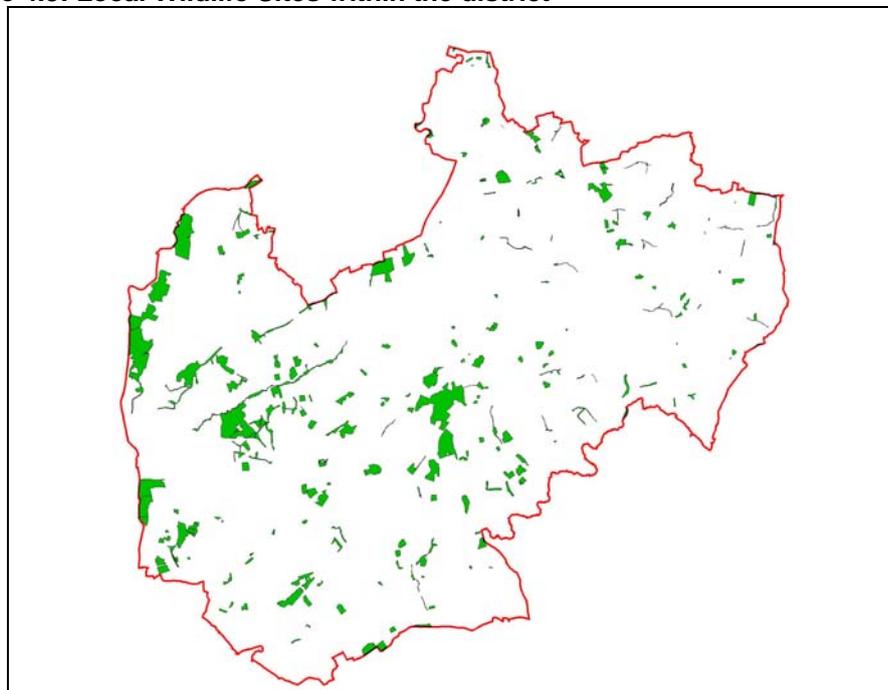
- | | |
|-----------------------------|-------------------------------|
| • Roding Valley Meadows; | • Nazeing Triangle; |
| • Chigwell Row Wood; | • Home Mead; |
| • Linder's Field; | • Thornwood Flood Meadow; and |
| • Roughtalley's Wood; | • Weald Common Flood Meadow. |
| • Church Lane Flood Meadow; | |

4.4.10 Natural England has put forward a target of one hectare of LNR per 1,000 head of population if LNRs are to play a role in sustainability.

Local Wildlife Sites (LoWS)

4.4.11 Local Wildlife Sites are discrete areas of land which are considered to be of significance for their wildlife features in at least a District context. Planning policy is the key mechanism by which LoWS are afforded protection. A draft Review of LoWS within the district has recently been completed. The Review identified 222 sites in total - see **Figure 4.3**.

Figure 4.3: Local Wildlife Sites within the district²²



- 4.4.12 The Review revised the list of LoWS taking into account changes in policy relating to SSSIs and the application of more rigorous site selection criteria. Many of the sites that were removed from the network are now considered to be of insufficient quality when measured against the new criteria. Some of the sites that have been removed (other than SSSIs) were or are Essex County Council Special Roadside Verges, which were adopted in their entirety during the original SINC review of 1992.
- 4.4.13 A better appreciation of nature conservation issues and increased breadth of coverage of the selection criteria has seen the addition of areas of parkland or groups of veteran trees, areas of brownfield land and sites where their urban context and use by the local community are important considerations.
- 4.4.14 Whilst development is seen as the big threat to the countryside, loss of LoWS land between 1992 and 2009 to development has been very slight. It has taken the form of garden encroachment for properties located next to or already within woodlands, the construction of a church car park and the like.
- 4.4.15 It may well be the case that planning consent for development already exists for pieces of land identified as being of LoWS quality, particularly brownfield sites. In such cases there should be a focus on how impacts can be mitigated through design.
- 4.4.16 Geographically, there is a strong concentration of Sites across the centre of the district, just to the north of the M25. There is probably no one single explanation for this, but rather the combination of geology, geomorphology and land ownership (large, private estates). A chain of large sites down the Lee valley signifies the ecological value of brownfield land, with the Sites comprising flooded gravel pits and other ex-industrial land.

²² EECOS (2010). Epping Forest District Local Wildlife Sites Review

Key areas of nature conservation importance in Epping Forest District

- 4.4.17 **The Lee Valley Regional Park** incorporates the western border of the district and is characterised here by an almost continuous mosaic of floodplain grassland, flooded gravel pits and wet woodland. Key sites include Gunpowder Park, Cornmill Meadows, Royal Gunpowder Mills and the River Lee Country Park. It includes a number of component SSSIs.
- 4.4.18 **Hainault Forest** constitutes a remaining fragment of a once much larger medieval wood pasture. It is thought to have been declared a specially protected Forest by Henry I around 1130. Traditionally it would have been managed through livestock grazing and pollarding. In 1851 an Act of Parliament led to large scale destruction of the Forest with, in just six weeks, an estimated 100,000 trees felled. The ensuing public outrage did serve to save Epping Forest from a similar fate and eventually led to the creation of a Hainault Forest Country Park in 1906. The remains of this ancient woodland are hugely significant for the district and of historic, cultural and landscape importance on a national scale. The Forest has a broad range of habitat types including ancient wood pasture with old growth stands, native broadleaved woodland, mature scrub and open grassy margins, amenity grassland, semi-improved acid grassland, and a small area of heathland. Some 135ha is designated as a SSSI.²³
- 4.4.19 **Epping Forest** is by far the largest public open space near to London. At almost 2428 ha it stretches for about 12 miles from Manor Park in East London to just north of Epping. Since 1878, the Forest has been managed under the Epping Forest Act which stipulates; “*The Conservators shall at all times keep Epping Forest unenclosed and unbuilt on as an open space for the recreation and enjoyment of the people.*” Saved Policy HC5 of the Epping Forest District Local Plan seeks to protect the ‘historic nature and wildlife value of Epping Forest’, in accordance with the requirements of the City of London as owners and Conservators of the Forest. As well as being a huge recreational resource the Forest is the key biodiversity resource of the district with over 1790 ha²⁴ being designated as a SSSI. The ecological value of the Forest lies in the mosaic of habitats that are present, including ancient wood-pasture (up to 50,000 veteran trees are thought to exist) old grasslands, heaths, wetlands and ponds. This varied geology gives rise to a mosaic of soil types from neutral soils to acidic loams and from impervious clays to well-drained gravels. To a large extent these soil patterns have dictated the pattern of vegetation in Epping Forest.
- 4.4.20 **The Roding Valley Meadows** Local Nature Reserve (LNR) includes the largest traditionally managed lowland hay meadows in Essex running along the banks of the River Roding through Loughton, Chigwell and Buckhurst Hill on the southern edge of the district. Incorporating herb-rich flood-plain pasture and sedge fen, the meadows represent a huge regional biodiversity resource of national importance. This is recognised in the site’s designation as a Local Nature Reserve, LoWS and part SSSI. At 56.5 hectares the meadows are easily the largest single block of grassland in the district which has otherwise lost much of its herb rich grassland. In addition to the important SSSI grassland and fen habitats, the reserve has a fine network of hedgerows, scrub and secondary woodland. Being close to a large urban area, the meadows offer a unique place for local people to come into contact with wildlife.
- 4.4.21 It is also important to note that there is potential to increase the extent of floodplain grassland in the upper reaches of the Roding valley, although here water flow levels are also a concern.²⁵

²³ Nature on the Map (2010) [online] available at: <http://www.natureonthemap.org.uk/identify.aspx> (accessed 02/10)

²⁴ *Ibid*

²⁵ EECOS (2010) Epping Forest Local Wildlife Sites Review

‘Living Landscapes’

4.4.22 Essex Wildlife Trust has identified 80 ‘Living Landscapes’ within the County, of which ten either fall partly within the district or abut the district boundary:

- The Lee Valley
- Parndon Woods
- Cobbins Wood
- Stort Valley
- Stort Valley: Harlow
- Cobbins Brooks
- Epping Forest
- Upper Roding
- The Lower Roding
- Havering and Brentwood Ridge

4.4.23 Living Landscapes are large areas of the countryside where the aim is to maintain or recreate a situation where there is a typical mosaic of semi-natural habitat that is valued by local communities. The vision of Living Landscapes is to bring these fragmented landscapes back to life; to work with a wide range of owners and partners so that these important areas can function as a whole so they benefit both wildlife and the people who live there.

Key Habitats of the district

4.4.24 Within the district’s **urban areas**, public open spaces, cemeteries, allotments, derelict land and gardens all support a huge variety of wildlife. It is important to note that, in the south of the district, the densely populated urban areas directly abut Epping Forest. The implication of this is that efforts must be taken to ensure that they do not act as complete barriers to wildlife movement, but rather are permeable to species movement, at least to some degree. In particular, there must be wildlife corridors between important sites such the Forest and the Roding Valley Meadows.

4.4.25 Around 90% of the district could still be described as **countryside** with agriculture being by far the largest land use. This land also forms the vital corridors linking the “hotspots” of biodiversity which still remain.

4.4.26 Only 9.8% of the district is in fact **woodland** (EFBP (2008) citing EWT Phase 1 habitat survey 1996) and of this just 2501.6 ha is biologically rich semi-natural ancient woodland (7.38% of the land area of the district). Since 1945 Essex has lost 24% of all its ancient woodland. This district is fortunate in having part of Hainault Forest and Epping Forest within its borders. As one of the UK’s most coherent blocks of ancient woodland it is a hugely important site not only for the district, but nationally too. Across the farmland areas of the district there are numerous small semi-natural broad-leaved woods. Of these some 119 are designated LoWS. These are almost exclusively neglected hornbeam coppice woodlands. Despite the lack of recent management the woods still support a wide range of birds, mammals, plants and fungi.²⁶

²⁶ EFBP (2008) *Epping Forest District Local Biodiversity Action Plan 2008 – 2012* [online] available at: http://www.eppingforestdc.gov.uk/Library/files/planning/Countryside/Final-%20EFDC_LBAP%202008%20to%202012.pdf (accessed 02/10)

- 4.4.27 Hainault and Epping Forests include a collection of **veteran trees** of European importance, but such trees are by no means confined to the Forest areas. The widespread practice of pollarding (the successive cutting of trees above the browsing height of deer and cattle) has left a legacy of many veteran trees across the whole of the district. In addition, numerous deer parks include large numbers of old trees. Within the district a 'Veteran Tree Survey' has been undertaken.
- 4.4.28 Across England since 1945 the average **hedgerow** loss in each parish has been around 50% and this figure can be fairly accurately applied to this district. Despite this loss, the ancient nature of much of the district's landscape means that there is still a significant hedgerow network.²⁷
- 4.4.29 **Unimproved grassland** has suffered catastrophic losses as a result of 20th Century agricultural intensification. Across the county there has been a 99% loss of all its flower rich grasslands. In Epping Forest District there are only 106.3 ha remaining equating to just 0.31% of the district's land area. (EWT Phase 1 habitat survey 1996), and there is still the potential for further areas to disappear unnoticed. Many of the larger important sites which remain, such as the Roding Valley Meadows LNR (at 66.7ha), are being looked after but it is the smaller sites such as the old churchyards, village greens, roadside verges and small fields which are gradually being lost. Often these small areas are the only remnants within a parish, an oasis of unploughed, unsprayed meadowland.²⁸
- 4.4.30 **Heathland** was never a widespread habitat across the district, but was restricted to the Forest areas on poor sands and glacial gravels overlying the London Clay. Historically the heaths were maintained by grazing, but in the last 70 years this has largely ceased. Consequently, heathland sites have been lost to encroachment by woodland. The exact area of heathland that still remains is hard to calculate, but the area of stand-alone heathland sites amounts to under 3 hectares.²⁹
- 4.4.31 In the EWT Phase One habitat survey 1996 some 982 **ponds** were recorded in the district (315 ha given as open water) and in terms of pond density this equates to a figure of 2.89 ponds per kilometre square. Ponds are found scattered across the whole district, but many are now under threat from lack of management through land use changes, particularly on agricultural land.³⁰
- 4.4.32 **Rivers and wetlands** are also a key habitat in the district. The River Lee is of national and international importance and it is notable that the River Roding has also been identified as supporting a relatively strong otter population.³¹

Geodiversity

- 4.4.33 Epping Forest is very interesting geologically as there are several geological strata within the forest. The Solid Geology, around 50 million years old, ranges from the London Clay, up through the sandier Claygate Beds with a capping of Bagshot Sands on the higher hills. The superficial geology (dating from the last 2 million years or so) is also interesting with two different gravels deposited by rivers flowing from the Weald to the south to join the ancestral River Thames to the north. Clues to the underlying geology can be found in the topography, vegetation and spring lines which makes it an interesting area for Geowalks as well as being an educational resource. The excellent meanders of the Loughton Brook are an added resource.

²⁷ *Ibid*

²⁸ *Ibid*

²⁹ *Ibid*

³⁰ *Ibid*

³¹ Essex Wildlife Trust (2009) *Essex Otter Survey 2009* [online] available at: <http://www.essexwt.org.uk/uploads/file/2008EssexOtterSurveyLoRes.pdf> (accessed 09/09)

4.5 What will be the situation without the plan?

4.5.1 There can be many factors that might influence the district's biodiversity baseline in the future. It is safe to assume that protected sites (at least those that are internationally and nationally protected) will not come under direct pressure from development any time in the near future; however, there is potential for biodiversity to be impacted in more indirect and insidious ways. For example, habitats along the River Lee and River Roding are dependent upon water quality and water flow regimes, which in turn can be impacted by development or land-use choices taken anywhere within the water catchment. Climate change could also increase pressure on the good conservation status of other habitat.

4.6 What issues should be a particular focus for the appraisal?

4.6.1 There is a need to:

- prevent direct impacts to important biodiversity sites and linear features;
- ensure multifunctional green infrastructure is carefully planned and implemented, particularly in proximity to areas of growth;
- consider the potential for the planning system to minimise more indirect impacts (e.g. minimising pollution and helping biodiversity to adapt to climate change);
- Consider the potential for biodiversity benefits through targeted habitat creation and enhancement; and
- Consider planning for biodiversity at a 'landscape scale'.

5 Climate change (mitigation and adaptation)

5.1 Introduction

5.1.1 Climate change mitigation aims to promote measures to reduce greenhouse gas emissions. The LDF must contribute towards climate change mitigation, including through:

- promoting energy efficient building;
- encouraging development and use of renewable and low carbon sources of energy (particularly community and micro-scale energy generation);
- reducing the need to travel and ensuring good accessibility by sustainable modes of transport; and
- promoting land uses that act as carbon sinks and reducing the amount of biodegradable waste sent to landfill (largely outside the scope of the LDF).

5.1.2 The LDF must also seek to put in place the adaptation measures that will improve the resilience of the district to the unavoidable adverse effects of climate change. Alongside climate change mitigation, adaptation is a key cross-cutting theme of spatial planning. Climate change adaptation means tackling the following issues (amongst others):

- Flooding – from fluvial and surface water "flash" flooding
- Water scarcity - impacting on growth, industry, agriculture and ecosystems
- Pressures on biodiversity - in the context of vulnerable habitats and species populations within a fragmented landscape

5.1.3 Flooding is a key adaptation consideration. As a consequence of climate change, the Pitt Review into the 2007 floods emphasised that 'flood risk is here to stay'. Government guidance on flood risk emphasises that, although flooding cannot be wholly prevented, its impacts can be avoided and reduced through good planning and management.

5.2 What is the policy context?

Climate change mitigation

- 5.2.1 The Climate Change Act 2008³² sets targets for greenhouse gas emission reductions through action in the UK of at least 80% by 2050, and reductions in CO₂ emissions of at least 26% by 2020, against a 1990 baseline.
- 5.2.2 Essex has set a county-wide target of reducing CO₂ emissions by 11.8% against the 2005 baseline of 6.7 CO₂ tonnes per capita by 2011/12. This target is set under National Indicator (NI) 186, which is concerned with a per capita reduction in CO₂ emissions within the local authority area and includes emissions from all domestic housing, business and public sectors, and road traffic with the exception of motorways.³³
- 5.2.3 PPS1 supplement on Planning and Climate Change³⁴ requires local authorities to mitigate and adapt to climate change through appropriate location and patterns of development, promoting the reduction in car use, conserving and enhancing biodiversity and ensuring that new development is resilient to the effects of climate change. PPS22 on Renewable Energy³⁵ includes a requirement for local authorities to allocate specific sites for renewable energy and to encourage developers to provide on-site renewable energy generation as appropriate.
- 5.2.4 The UK National Strategy for Climate Change and Energy: Transition to a Low Carbon Society sets out plans to deliver emission cuts of 18% on 2008 levels by 2020 (and over a one third reduction on 1990 levels). A huge range of measures are set out, only some of which are of direct relevance to spatial planning. Measures set out in the strategy include:
- Getting 40% of our electricity from low carbon sources by 2020
 - Making homes greener
 - Helping the most vulnerable:
 - including through focusing on the needs of older pensioners on the lowest incomes; and
 - piloting a community-based approach to delivering green homes in low income areas, helping around 90,000 homes.

³² The Climate Change Act 2008 is available at: <http://www.defra.gov.uk/environment/climatechange/uk/legislation/> (accessed 10/09)

³³ EERA (2009) *Report to the East of England Regional Assembly: Environment & Resources Panel - National Indicators 185 & 186, and Local Area Agreements* [online] available at:

<http://www.eera.gov.uk/GetAsset.aspx?id=fAAyADMAMgAwAHwAfABGAGEAbABzAGUAFAB8ADAAfAA1> (accessed 08/09)

³⁴ Communities and Local Government (2007) *Planning Policy Statement: Planning and Climate Change* [online] available at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/ppsclimatechange.pdf> (accessed 07/09)

³⁵ ODPM (2004) *Planning Policy Statement 22: Renewable Energy* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/pps22> (accessed 07/09)

- 5.2.5 The Code for Sustainable Homes³⁶ sets out the national standard for sustainable design and construction of new homes. From April 2008, achieving Level 3 of the Code became mandatory for new social housing developments. From 2010 all new residential developments will have to meet the equivalent of Level 3 of the Code for Energy Use under the Building Regulations. The Building Regulations for energy use for new residential development will be progressively tightened requiring buildings to be effectively 'carbon neutral' from 2016 onwards, which is equivalent to Level 5/6 of the Code. In terms of carbon emissions, Level 3 equals a 25% energy/carbon improvement relative to current 2006 standards in the Building Regulations. New housing developments will have to comply with Level 4 by 2013 (44% energy/carbon improvement relative to current 2006 standards in the Building Regulations) and Level 5 by 2016 (zero carbon).
- 5.2.6 Policy ENG1 of the East of England Plan (now revoked) stated that to help meet national targets for reducing climate change emissions, DPDs should set ambitious proportions of the energy supply that new developments must secure through decentralised and renewable or low-carbon sources. The Plan stated that, by 2010, 10% of the region's energy and by 2020, 17% of the region's energy should come from renewable sources.
- 5.2.7 In terms of energy, one of the Plan's objectives was "*to reduce the region's impact on, and exposure to, the effects of climate change by...maximising the energy efficiency of development and promoting the use of renewable and low carbon energy sources.*" Policy ENG1: Carbon Dioxide Emissions and Energy Performance highlighted the roles played by both location and design to optimise carbon performance and Policy ENG2: Renewable Energy Targets supported the development of new facilities for renewable energy power generation.
- 5.2.8 Epping Forest District Council has its own Climate Change Strategy³⁷, its main objective is to reduce the green house gas emissions from its own operations and from the district as a whole. It also aims to prepare the Council and District for the potential impacts of climate change.

³⁶ CLG (2008) *The Code for Sustainable Homes: setting the standard in sustainability for new homes* [online] available at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/codesustainhomesstandard.pdf> (accessed 07/09)

³⁷ Epping Forest District Council (2009) *Climate Change Strategy 2009* [online] available at: http://www.eppingforestdc.gov.uk/Library/files/Environmental_Health/EFDC_Climate%20Change%20Strategy%20Final.pdf (accessed 02/10)

Climate change adaptation

- 5.2.9 Planning Policy Statement 25 (PPS25)³⁸ sets out Government policy on development and flood risk. Its aims are to ensure that flood risk is taken into account at all stages in the planning process, to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas of highest risk. Where new development is, exceptionally, necessary in such areas, the policy aims to make it safe, without increasing flood risk elsewhere, and, where possible, reducing flood risk overall.
- 5.2.10 PPS25 requires a Strategic Flood Risk Assessment (SFRA) to be carried out to inform the Sustainability Appraisal and preparation of the authority's Local Development Documents (LDDs). Epping Forest District is undertaking a joint SFRA with Harlow Council. The aim of an SFRA is to provide a detailed and robust assessment of the extent and nature of the risk of flooding and its implications for land use planning. In addition, the SFRA sets the criteria with respect to flood risk for the submission of planning applications and for guiding subsequent development control decisions.
- 5.2.11 Within the East of England Plan (now revoked), Policy WAT4: Flood Risk Management identified the significant risk of coastal and river flooding in parts of the East of England and emphasises priorities to defend existing properties from flooding and locate new development where there is little or no risk of flooding. In addition, Policy ENV1: Green Infrastructure recognised the contributions of green infrastructure towards flood alleviation, including the Lee Valley Regional Park.
- 5.2.12 The Thames Catchment Flood Management Plan (CFMP)³⁹ estimates that between 2,000 and 5,000 homes within Epping Forest District are at risk from a 1% annual probability river flood. This is significantly more than East Herts (1,000 - 2,000 homes at risk), Broxbourne (500 - 1,000 homes at risk), Uttlesford and Harlow (both of which have 100 - 250 homes at risk).
- 5.2.13 Within the CFMP, the 'Upper Roding' sub-area is described as an area of low to moderate flood risk where there is potential to take action to store water or manage run-off in locations that provide overall flood risk reduction or environmental benefits. The number of properties with a 1% risk of flooding from rivers in the Upper Roding is currently 1,970. This figure is expected to increase to 2,140 by 2010. While the total number of people and properties in any one location may be small, widespread flooding such as experienced in 2007 can have a considerable impact.

³⁸ Communities and Local Government (2006) *Planning Policy Statement 25: Development and Flood Risk* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/pps25floodrisk> (accessed 07/09)

³⁹ Environment Agency (2009) *Thames Catchment Flood Management Plan* [online] available at: <http://www.environment-agency.gov.uk/research/planning/114391.aspx> (accessed 01/10)

5.2.14 Actions proposed for the Upper Roding include:

- Maintain the existing capacity of the river systems in developed areas that reduces the risk of flooding from more frequent events.
- Identify locations where the storage of water could benefit communities by reducing flood risk and providing environmental benefits (by increasing the frequency of flooding) and encourage flood compatible land uses and management. The River Roding Flood Risk Management Strategy has identified an area of farmland and woodland just north of the M25, at Shonks Mill Bridge, that may be suitable for flood storage.
- Retain the remaining floodplain for uses that are compatible with flood risk management and ensure long-term adaptation of urban environments in flood risk areas.

5.2.15 South of the M25, the Catchment Flood Management Plan (CFMP) identifies different policy for the River Roding. Here it is described as the 'Middle Roding'. The Middle Roding is described as an area of 'low, moderate or high flood risk' where flood risk is already being managed effectively but where there may be a need to take further action to keep pace with climate change. Along the Middle Roding (which stretches as far south as Redbridge) 4,240 homes are currently at a 1% annual risk of flooding. This figure is expected to increase to 4,880 by 2010.

5.2.16 Proposed measures include:

- Reduce flood risk through regeneration.
- Adopt a strategic approach to planning so that wider community objectives as well as flood risk objectives can be met.
- Continue to maintain the existing flood defences and when redevelopment takes place, improve them so that they are more effective against the impacts of climate change.
- Reduce flood risk by recreating river corridors in urban areas, allowing space for water, habitat, wildlife and recreation.

5.2.17 Waltham Abbey falls within the Lower Lee sub-area, which is described as an area of moderate to high flood risk where there is some potential to take further action to reduce flood risk. It is recognised that it will not be possible to reduce the risks everywhere.

5.2.18 Proposed actions include:

- Deliver the actions recommended in the Lower Lee Flood Risk Management Strategy.⁴⁰ The Strategy identifies Waltham Abbey as being one of the key areas of flood risk, as a result of flooding from Cobbin's Brook. On Cobbin's Brook a flood storage area has recently been developed. Another flood storage area has been considered along Nazeing Brook.
- Develop policies, strategies and initiatives to increase the resistance and resilience of all new development at risk of flooding.
- Identify and protect land that may be needed to manage flood risk in the future.
- Recreate river corridors in urban areas.
- Refurbish existing buildings to increase resilience and resistance to flooding.

⁴⁰ Environment Agency (2006). *The Lower Lee Flood Risk Management Strategy Consultation* [online] available at: <http://www.environment-agency.gov.uk/research/library/consultations/54675.aspx> (accessed 01/10)

5.3 What are the key objectives that we need to consider?

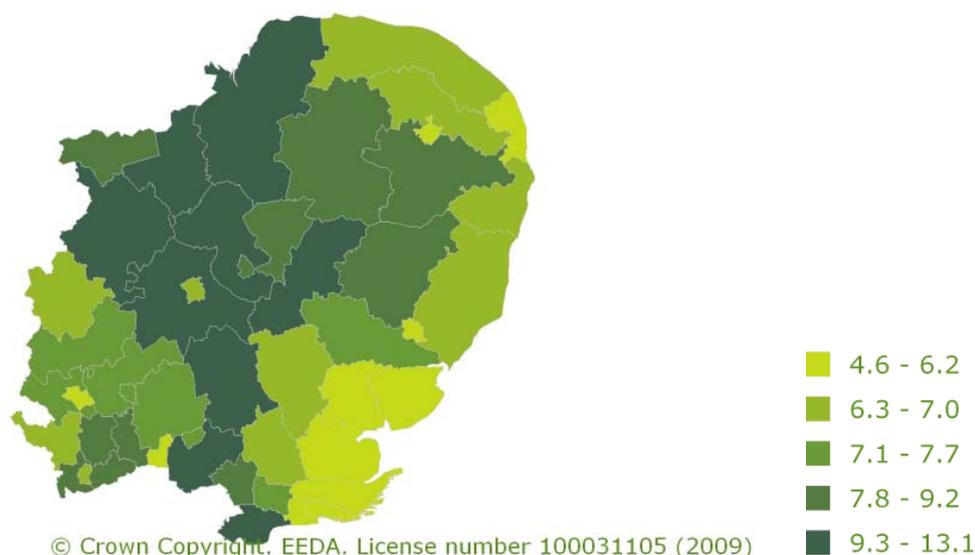
5.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:

- Promote sustainable growth within environmental limits
- Reduce greenhouse gas emissions
- Adapt to the impacts of climate change
- Increase resource efficiency and reduce resource use and waste
- Move goods and people sustainably
- Provide decent, affordable and safe homes for all

5.4 What is the situation now?

5.4.1 **Figure 5.1** shows how CO₂ emissions (tonnes) per capita (based on 2007 figures) vary across the Region. Epping Forest District does not perform well in terms of this indicator. A closer examination of the figures shows that the reason for Epping Forest District's poor performance is high level of emissions as a result of car travel.⁴¹

Figure 5.1: tCO₂ emissions per capita across the East of England⁴²



5.4.2 There is currently only a negligible amount of renewable energy generation in the district, and in 2008/9, no schemes involving renewable energy were completed although four applications were granted. The Council has identified that until newer policies are in place that hold specific targets for the amount of energy to be generated via renewable sources, it will remain difficult for

⁴¹ The latest CO₂ estimates for local authorities are based on 2007 figures. They can be found under the link to the 'full dataset' @ http://www.decc.gov.uk/en/content/cms/statistics/climate_change/gg_emissions/uk_emissions/2007_local/2007_local.aspx (accessed 04/10)

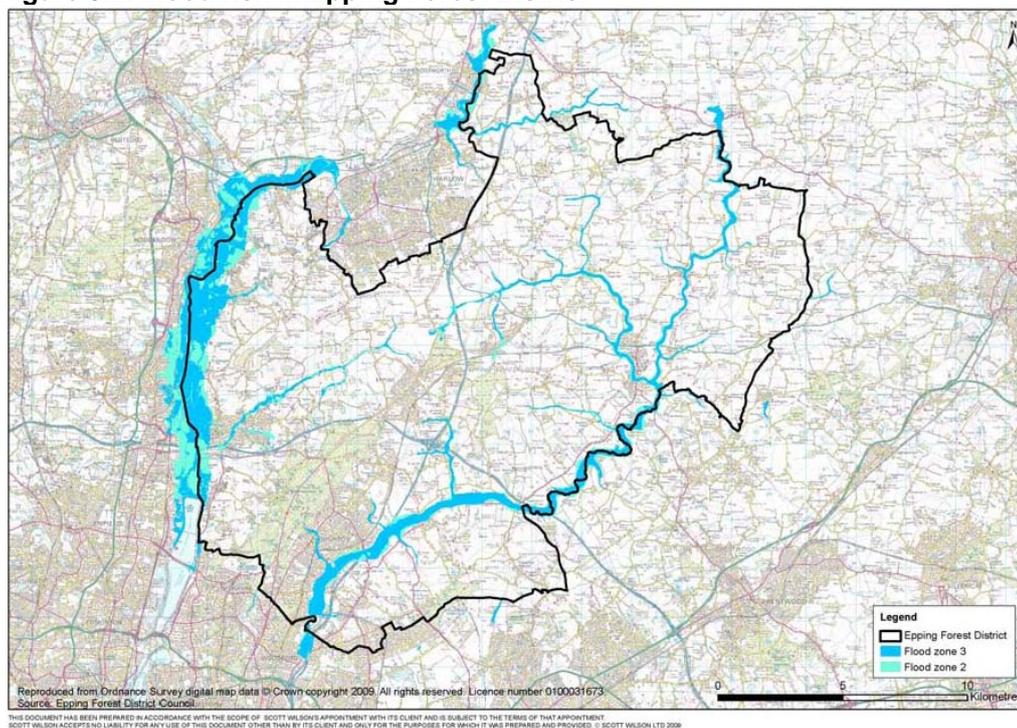
⁴² Insight East (2007) East of England Regional Economic Atlas: District & Unitary Indicators [online] available at: http://www.insighteast.org.uk/WebDocuments/approved/FTPUploads/RES/RESIndicators_SingleMap_District/atlas.html (accessed 02/10)

Development Control planners to request that renewable energy schemes be incorporated within prospective developments.⁴³ However, Policy ENG1 of the East of England Plan (now revoked) required at least 10% of renewable energy generation on sites of 10+ residential dwellings or 1000m² of non residential floorspace.

Flood Risk

- 5.4.3 **Figure 5.2** illustrates flood risk within the district. Areas of notable flood risk are associated with the River Lee and Roding, as well as their tributaries. The River Lee flows southwards, along the western extent of the district, with its floodplain extending a significant way into the district, although for the most part it does not encroach on settlements. Lower Nazeing is one notable settlement that experiences a degree of flood risk associated with Nazeing Brook, a small tributary of the River Lee. Also, further to the south, Waltham Abbey experiences significant flood risk associated with the River Lee and Cobbin's Brook, which flows through the town to meet the River Lee just to the south of the town. At the southern extent of the district, the floodplain of the River Roding separates Loughton and Chigwell. A significant tributary of the Roding flows through Loughton (from the Epping Forest Ridge) and another defines the northern extent of the town. Elsewhere in the district, the Roding skirts the northern edge of Abridge and is joined by Cripsey Brook just south of Chipping Ongar. Cripsey Brook creeps to the north-west, and then westwards, as far as Thornwood Common (its source), where there is a degree of flood risk. The north-western extreme of the district is marked by the meeting of the Rivers Lee and Stort, with the floodplain of the Stort extending into the northern extremities of the district, most notably to the north of Roydon. Finally, to the north of the district, east of Harlow, Pincey Brook is a tributary of the River Stort that flows south-westwards to meet the Stort on the northeast edge of Harlow, without impacting significantly on any settlement.

Figure 5.2: Flood risk in Epping Forest District



⁴³ EFDC (2009) *Local Development Framework – Annual Monitoring Report – December 2009*

Are there any evidence gaps?

5.4.4 A Strategic Flood Risk Assessment is soon to be published.

5.5 What will be the situation without the plan?

5.5.1 Although national building regulations are tightening (with the aim currently to require all new housing to be 'zero carbon' by 2016), in the more short-term there is a requirement for planning policy to drive forward step change in terms of energy efficiency and the incorporation of renewable energy within the built environment. Without strong planning policy, it is unlikely the necessary changes will occur fast enough, and it is likely that CO₂ emissions for the district will continue to rise.

5.5.2 Climate change is anticipated to have a major effect on the extent and frequency of future flooding.⁴⁴ Furthermore, the Regional Flood Risk Assessment states that: *"Demand for more housing is likely to put increased pressure on surface water and sewer drainage systems. The flooding situation will get worse as sewers reach the limits of their capacity and flood more frequently."*⁴⁵ There is a need to take cross-cutting action through spatial planning to address flood risk. Without this there will be missed adaptation opportunities and the effects of climate change may be more severe.

5.6 What issues should be a particular focus for the appraisal?

5.6.1 There is a need to:

- lower greenhouse gas emissions;
- explore alternative ways to increase the amount of energy generated by decentralised or renewable sources;
- consider the impact of development on fluvial and surface water flood risk and consider how a pro-active approach can be taken to reducing flood risk; and
- take the findings of the SFRA (when complete) into account in preparing policies and allocating sites for development.

⁴⁴ Environment Agency (2008) *Thames Region Catchment Flood Management Plan (CFMP)* [online] available at: <http://www.environment-agency.gov.uk/research/planning/33592.aspx> (accessed 08/09)

⁴⁵ Capita Symonds on behalf of EERA (2009) *Regional Flood Risk Appraisal* [online] available at: <http://www.eera.gov.uk/publications-and-resources/studies/topic-based-studies/environment-studies/regional-flood-risk-appraisal/> (accessed 08/09)

6 Community and wellbeing

6.1 Introduction

- 6.1.1 The Department for Communities and Local Government (CLG) has defined sustainable communities as “*places where people want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to a high quality of life. They are safe and inclusive, well planned, built and run, and offer equality of opportunity and good services for all*”.⁴⁶
- 6.1.2 As such, sustainable communities embody the principles of sustainable development by “*balancing and integrating the social, economic and environmental components of their community, meeting the needs of existing and future generations and respecting the needs of other communities in the wider region or internationally to make their own communities sustainable*”.⁴⁷
- 6.1.3 Social inclusion is a key aspect of sustainable communities and many interlinked factors are important in ensuring that individuals and areas are able to fully participate in society. Factors such as low income, bad health, unemployment and family breakdown can be compounded by poor housing, high crime, and discrimination. A combination of problems can create a vicious cycle and lead to social exclusion. Thus, we see that community wellbeing is influenced by a number of crosscutting factors.⁴⁸

6.2 What is the policy context?

- 6.2.1 Sustainable Communities: Building for the Future⁴⁹ (the ‘Sustainable Communities Plan’) was launched in 2003 and sets out a long-term programme of action for delivering sustainable communities in urban and rural areas, including through:
- addressing housing shortages through the provision of housing and affordable housing, as well as through tackling homelessness;
 - ensuring all social housing is brought up to a decent standard by 2010;
 - improving the local environment of all communities (liveability); and
 - protecting the countryside and using land more effectively.

⁴⁶ CLG (2010) [online] available at: <http://www.communities.gov.uk/archived/general-content/communities/whatis/> (accessed 02/10)

⁴⁷ *Ibid*

⁴⁸ CLG (2003) *Sustainable Communities: Building for the Future* [online] available at: <http://www.communities.gov.uk/publications/communities/sustainablecommunitiesbuilding> (accessed 07/09)

⁴⁹ *Ibid*

- 6.2.2 Planning Policy Statement (PPS)1: Delivering Sustainable Development⁵⁰ sets out the overarching planning policies on the delivery of sustainable development through the planning system. PPS1 stresses the importance of a strong, stable and productive economy and requires local planning authorities to ensure that the necessary infrastructure is provided to support new and existing development and housing. It also states that accessibility to jobs and services should be addressed as a means of achieving social cohesion and inclusion. PPS3: Housing⁵¹ emphasises that housing developments should be in suitable locations, which offer a good range of community facilities and good access to jobs, services and infrastructure. The Government's White Paper, Strong and Prosperous Communities⁵² introduced a new performance framework tailored to local needs through the preparation of Local Area Agreements, and encourages councils to develop neighbourhood charters setting out local standards and priorities.
- 6.2.3 The Government's strategy for neighbourhood renewal – A New Commitment to Neighbourhood Renewal (2001) – included a commitment to social inclusion and stated that within 10 to 20 years no one should be seriously disadvantaged by where they live. This should be done by addressing the underlying problems of declining areas such as high unemployment, weak economies and poor schools and using Local Strategic Partnerships (LSPs) to unite public, private, community and voluntary sector and drive change forward.
- 6.2.4 The East of England Plan (now revoked) contained several key policies on issues that affect community and wellbeing. In particular, it promoted the creation of sustainable communities which are active, inclusive and safe, with a good degree of community identity and cohesion. Policy SS2 sought to ensure that local level policies improve quality of life, community cohesion and social inclusion by making suitable and timely provision for health, social services sectors and education needs. Policy ENV7: Quality in the Built Environment directed new developments to “address crime prevention, community safety and public health”. In addition, several policies directly addressed the challenge of deprivation.
- 6.2.5 One Epping Forest is the Local Strategic Partnership (LSP) for the district and has developed the district's Sustainable Community Strategy⁵³ that must be taken into account when preparing the LDF. The first Community Strategy was agreed in 2004 and in 2009 the LSP began a process to review the Strategy to address emerging issues and concerns, with anticipated delivery for March 2010. The 2004 Strategy was guided by a set of strategic principles and is based around the following seven themes:
- Green & Unique
 - Homes & Neighbourhoods
 - Economic Prosperity
 - Getting About
 - A Safe Community
 - Fit For Life
 - Lifelong Learning

⁵⁰ ODPM (2005) *Planning Policy Statement 1: Delivering Sustainable Development* [online] available at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/planningpolicystatement1.pdf> (accessed 10/09)

⁵¹ ODPM (2000) *Planning Policy Statement 3: Housing* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/pps3housing> (accessed 07/09)

⁵² CLG (2006) *Strong and Prosperous Communities - The Local Government White Paper* [online] available at: <http://www.communities.gov.uk/publications/localgovernment/strongprosperous> (accessed 07/09)

⁵³ Epping Forest Local Strategic Partnership (undated) *Epping Forest District Community Strategy 2004-2021* [online] available at: http://www.oneeppingforest.org.uk/pdf/community_strategy.pdf (accessed 10/09)

Rurality

- 6.2.6 PPS7: Sustainable Development in Rural Areas⁵⁴ states that LDDs should facilitate and promote sustainable patterns of development and sustainable communities in rural areas. Policies should be designed to sustain, enhance and, where appropriate, revitalise country towns and villages (including through the provision of affordable housing) and for strong, diverse, economic activity, whilst maintaining local character and a high quality environment. According to PPS7, planning authorities should also ensure that development respects and, where possible, enhances the considerable historic and architectural value that may be found in country towns and villages. Policy SS4 of the East of England Plan (now revoked) described a strategy for rural areas. It stated that there is a need to “*support the viability of agriculture and other economic activities, diversification of the economy, the provision of housing for local needs and the sustainability of local services.*”

Equality

- 6.2.7 The Equality Act (2006) and other equality legislation introduce specific measures to protect certain groups in society from discrimination and hence promote equality of opportunity. There has also been a range of other Acts relating to various types of discrimination. However, much of the legislation relating to discrimination has little or no relevance to spatial planning in Epping Forest District. The Race Relations (Amendment) Act 2000 does have some important implications as it protects against racial discrimination in the fields of housing and the provision of goods, facilities and services. The Race Relations (Amendment) Act 2000 gives public authorities general and specific duties. The general duty is that public authorities must make the promotion of racial equality central to their work.
- 6.2.8 At the regional level, the Regional Social Strategy (RSS) and the Regional Economic Strategy (RES) both address equality and diversity. The RSS vision is to achieve social inclusion throughout the East of England. The RSS has more specific objectives to directly tackle issues of equality and diversity, whereas the RES’s approach is to treat equality and diversity as an underlying principle informing the overall strategy for the economic and social vitality of the region.

6.3 What are the key objectives that we need to consider?

- 6.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:
- Reduce poverty and inequality and promote social inclusion
 - Promote employment, learning, skills and innovation
 - Meet the needs of the changing regional demographic
 - Provide decent, affordable and safe homes for all

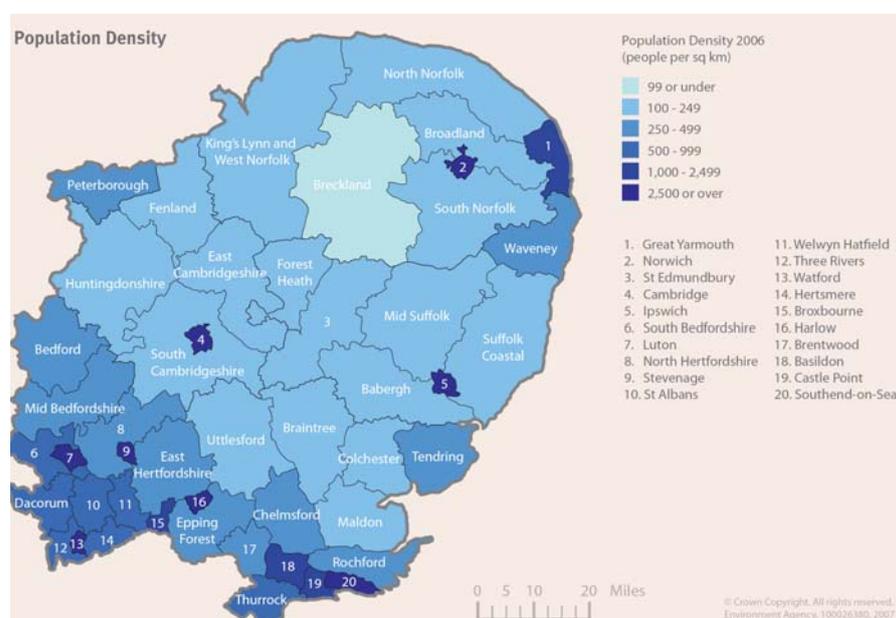
⁵⁴ ODPM (2004). PPS7: Sustainable development in rural areas [online] available at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/147402.pdf> (accessed 07/09)

6.4 What is the situation now?⁵⁵

Population

- 6.4.1 The population of Epping Forest District in 2001 was 120,896 and this has risen to a mid-2008 estimate of 123,900.⁵⁶ Almost three quarters of the population live in the suburban areas of Loughton, Buckhurst Hill, Chigwell, Epping and Waltham Abbey. The remaining quarter live in more rural areas, including the large villages of Roydon, Nazeing, North Weald and Theydon Bois.⁵⁷ Epping Forest District has a higher population density (3.57 persons per hectare) than regionally (2.82), but marginally lower than nationally (3.77)⁵⁸ - see **Figure 6.1**. Finally, in terms of the population, it is notable that less people in the district's population are aged 16-29 (1.5% less than regionally and 2.6% less than nationally).⁵⁹

Figure 6.1: Population density in the East of England⁶⁰



- 6.4.2 In terms of ethnicity, **Table 6.1** shows that the ethnic composition of Epping Forest District contains a smaller proportion of white persons than the regional average, but a greater proportion than the national average. Within Essex, only Colchester and Southend-on-sea have a higher percentage of the population being from a non-white ethnic group. When compared to the region and nationally, a large proportion of the district's ethnic composition is Black or Black British.

⁵⁵ This section has taken into considered the six equality streams in line with EqIA guidance.

⁵⁶ AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

⁵⁷ *Ibid*

⁵⁸ ONS. *Population Density (UV02)* 2001 data [online] available at: <http://www.neighbourhood.statistics.gov.uk> (accessed 09/09)

⁵⁹ ONS (2001) *Age Structure (KS02)* [online] available at: <http://www.neighbourhood.statistics.gov.uk> (accessed 02/10)

⁶⁰ Environment Agency (2009). *An Environmental Snapshot of the East of England* [online] available at <http://publications.environment-agency.gov.uk/pdf/GEAN0309BPUI-e-e.pdf> (accessed 10/09)

Table 6.1: Population and migration (2007/2008)⁶¹

| | Epping Forest (%) | East of England (%) | England (%) |
|-------------------------------|-------------------|---------------------|-------------|
| White | 89.9 | 91.6 | 88.2 |
| Mixed | 1.6 | 1.5 | 1.7 |
| Asian or Asian British | 4.4 | 3.6 | 5.7 |
| Black or Black British | 2.9 | 1.9 | 2.8 |
| Chinese or Other Ethnic Group | 1.1 | 1.3 | 1.5 |

6.4.3 In terms of religious background, Epping Forest District has a notably large Jewish population (3.07%) compared to the region (0.56%) and nation (0.52%). The percentage of the population that is Muslim (1.17%) is smaller than the regional (1.46%) and, in particular, the national average (3.10%). Compared to the region overall, the district has a larger proportion of Sikh and Hindu faiths in its resident population; although not as many as nationally.⁶²

6.4.4 In terms of migration, Epping Forest District has a social history of successive waves of new settlers with “two major waves of settlement by people from London in the early and middle decades of the last century”, particularly due to the location and geography of the area. It is expected that this pattern of “new residents mixing well with established communities” will continue with plans for development along the M11 corridor.⁶³

Deprivation and social inclusion

6.4.5 According to the Learning Skills Council: “Essex is perceived as affluent but the true socioeconomic structure is more complex and extremes of wealth and deprivation exist within the area”.⁶⁴ This is particularly the perception of Epping Forest District as an area “of large houses and great wealth”. In reality, the district faces a number of social challenges affecting local people, from access to affordable housing to difficulty in recruiting and retaining staff both in essential care services in other service areas.⁶⁵

6.4.6 The Indices of Multiple Deprivation (IMD) 2007 measures deprivation for seven sub-domains and also calculates an overall index score. In 2007, Epping Forest District was ranked 229/354 nationally, where the lowest number is the most deprived. In 2004, Epping Forest District was ranked as being slightly more deprived than in 2004 by 5 places in the national rankings.

6.4.7 Comparatively to England and the region, the district has only a small proportion of residents in the most deprived Super Output Area (SOA) – a subdivision of a ward - although not as many residents in the least deprived SOAs as regionally (see **Figure 6.2**). Within Epping Forest District, the most deprived SOA is an area within the south of Loughton Alderton and is ranked 5988th out of 32,482 nationally (where 1 is the most deprived). The least deprived SOA in the district is Theydon Bois Village which is ranked 31907th nationally. Seven of the ten most deprived areas have improved and have scored as slightly better to live in whereas seven of the ten least deprived areas have worsened slightly.

⁶¹ ONS. *Key Figures for People and Society: Population and Migration* [online] available at: <http://www.neighbourhood.statistics.gov.uk> (accessed 10/09)

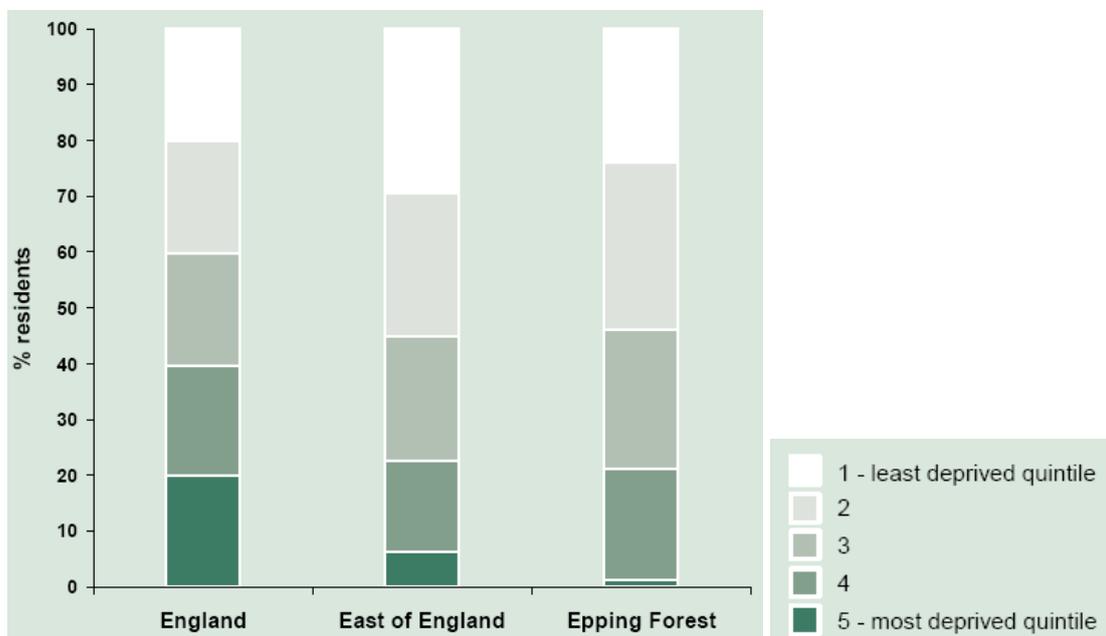
⁶² ONS (2001) Religion (KS07) [online] available at: <http://www.neighbourhood.statistics.gov.uk/> (accessed 02/10)

⁶³ Epping Forest Local Strategic Partnership (undated) *Epping Forest District Community Strategy 2004-2021* [online] available at: http://www.oneeppingforest.org.uk/pdf/community_strategy.pdf (accessed 10/09).

⁶⁴ LSC Essex (2008) *Local Needs Assessment – Essex* [online] available at: http://readingroom.lsc.gov.uk/lsc/EastofEngland/LNA_Essex_08.pdf (accessed 10/09)

⁶⁵ Epping Forest Local Strategic Partnership (undated) *Epping Forest District Community Strategy 2004-2021* [online] available at: http://www.oneeppingforest.org.uk/pdf/community_strategy.pdf (accessed 10/09)

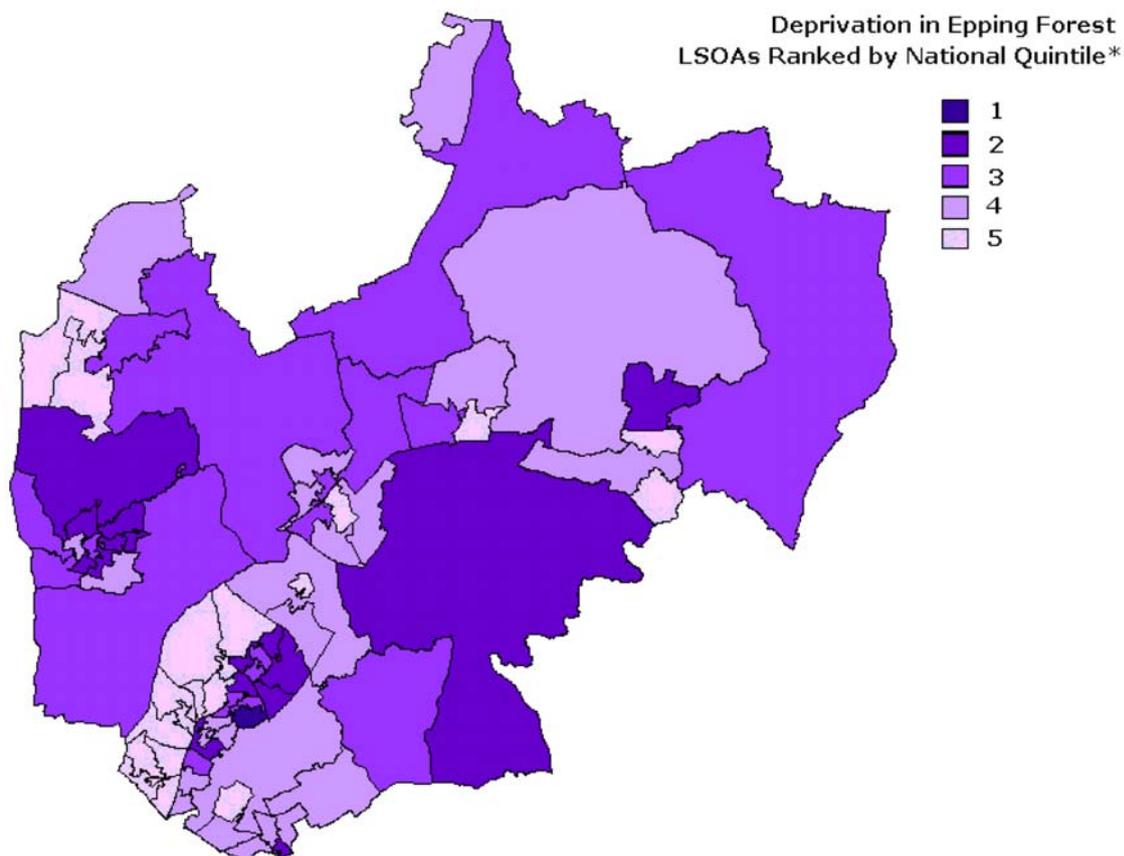
Figure 6.2: Index of Multiple Deprivation 2007⁶⁶



6.4.8 **Figure 6.3** shows graphically how multiple deprivation varies across the district. The most deprived SOAs in the district are clustered in Loughton and Waltham Abbey. There is also one deprived SOA at the southernmost tip of the district – at Grange Hill, near Chigwell. Epping, North Weald Basset and Chipping Ongar are all less deprived, but all do have a significant degree of variation within them in terms of deprivation. There is a corridor of prosperity to the south of the district, running to the west of Loughton. Other than this, the most prosperous areas are associated with Chipping Ongar and Epping. There is a degree of deprivation associated with the more rural areas, but to a lesser extent in the north of the district.

⁶⁶ The Association of Public Health Observatories (2009) *Epping Forest Health Profile 2009* [online] available at: http://www.apho.org.uk/default.aspx?QN=P_HEALTH_PROFILES (accessed 10/09)

Figure 6.3: Multiple deprivation by Super Output Area within Epping Forest District⁶⁷



Source Data: 2001 Census Output Area © 2003 ONS
Material reproduced by permission of the controller of HMSO
* Deprivation Source Data: 2007 Indices of Multiple Deprivation © DCLG
Quintiles are at the national level

Health and disability

- 6.4.9 In 2006-08, average life expectancy for males and females was higher in Epping Forest District (78.85 and 82.09 respectively) than for England (77.93 and 82.02 respectively), but lower when compared to the region (78.94 male and 82.75 female).⁶⁸
- 6.4.10 Health inequalities exist within the district. The life expectancy of men in the least deprived areas is at least five years longer than in the most deprived areas.⁶⁹ Within Epping Forest District, in terms of the health deprivation and disability index, the least deprived Super Output Area (SOA) – a subdivision of a ward - in 2007 was Chigwell Village (31,407/32,482) – previously Lower Nazeing in 2004 – and the most deprived SOA was Waltham Abbey Paternoster for both 2004 and 2007 (9,512/32,482).

⁶⁷ EFDC (2010) Shaping the Future, Key Facts – 1 – District Profile

⁶⁸ ONS. *Life Expectancy at Birth, 2005-2007* [online] available at: <http://neighbourhood.statistics.gov.uk> (accessed 08/09)

⁶⁹ The Association of Public Health Observatories (2009) *Epping Forest Health Profile 2009* [online] available at: http://www.apho.org.uk/default.aspx?QN=P_HEALTH_PROFILES (accessed 10/09)

- 6.4.11 The health of Epping Forest District is generally better than the England average and the district performs significantly better nationally against a number of health indicators. However, road injuries are one area where the district performs significantly worse. In terms of younger people, the level of obese children is significantly better than the England average.⁷⁰
- 6.4.12 Epping Forest District generally has a smaller percentage of disability living allowance claimants in its population than nationally and, especially, in the regional population. Claimants aged over 60 is the one notable exception, where the district has a higher percentage of claimants than regionally and nationally.⁷¹
- 6.4.13 21.8% of adults in Epping Forest District participate in sport and active recreation at least three days a week for 30 minutes. This is up slightly from 20.9% in 2006/07 and compares to the national average of 21.3%, regional average of 21.2% and county average of 20.5%.⁷² There is a considerable decrease in participation amongst older residents. However, Epping Forest District had higher rates of participation than the regional figure for residents aged over 55 years. Zero participation was higher in the lower socio-economic groups when compared to the higher socio-economic groups. In 2007 the population of Epping Forest District had a lower level of satisfaction with local sports provision than the regional and national figures.⁷³

Crime

- 6.4.14 Epping Forest District has significantly lower levels of violent crime (12.7%) than nationally (17.6%).⁷⁴ Within Epping Forest District, in terms of the crime and disorder index, the least deprived (lower crime levels) Super Output Area (SOA) – a subdivision of a ward - in 2007 was Moreton & Fyfield (24,427/32,482) – previously Loughton St Mary's in 2004 – and the most deprived (higher crime levels) SOA was Grange Hill in 2007 (5,702/32,482) – previously Broadley Common in 2004.
- 6.4.15 Data from 2003/4 suggests that 18.74% of residents in Epping Forest District think that being attacked because of their skin colour, ethnic origin or religion is a very big or fairly big problem in their local area, which is significantly lower than the national average (22.42%) and notably below the percentage of residents in neighbouring districts Harlow and Broxbourne and neighbouring London Boroughs.⁷⁵

⁷⁰ The Association of Public Health Observatories (2009) *Epping Forest Health Profile 2009* [online] available at: http://www.apho.org.uk/default.aspx?QN=P_HEALTH_PROFILES (accessed 10/09)

⁷¹ ONS (2008) Disability Living Allowance Claimants [online] available at: <http://www.neighbourhood.statistics.gov.uk/> (accessed 02/10)

⁷² Sport England (2009) *Active People Survey 2 results: East region 2007/08* [online] available at: http://www.sportengland.org/research/active_people_survey/active_people_survey_2/regional_results.aspx (accessed 10/09)

⁷³ Sport England (2007) *Activity Profile: Epping Forest* [online] available at: http://www.sportessex.com/docs/csn/essex_eppingforestfinal.pdf (accessed 26 October 2009).

⁷⁴ The Association of Public Health Observatories (2009) *Epping Forest Health Profile 2009* [online] available at: http://www.apho.org.uk/default.aspx?QN=P_HEALTH_PROFILES (accessed 10/09)

⁷⁵ Audit Commission (2004) *Data Profile for Epping Forest* [online] available at: <http://www.areaprofiles.audit-commission.gov.uk/> (accessed 10/09)

6.4.16 Crime reported in Epping Forest District generally represents less than 3% of the regional total. However; the percentage of burglary in a dwelling and theft of a motor vehicle are notably high with 3.54% and 3.92% of the regional total, respectively. Other wounding (1.90%), theft from a person (0.66%) and criminal damage including arson (1.46%), form a notably low proportion of crime compared to the region.⁷⁶

Are there any evidence gaps?

6.4.17 The Council is reviewing the Sustainable Community Strategy to address emerging issues and concerns, with anticipated delivery for March 2010.

6.5 What will be the situation without the plan?

6.5.1 Although the district generally has good levels of health and low levels of crime, for example, it is likely that without the plan, an increase in social exclusion and deprivation could worsen. In addition, national trends (such as an increasingly ageing population) will put additional pressure on health care and other services.

6.5.2 In the absence of a spatial plan, Epping Forest LSP, the Community Strategy, registered charities and the voluntary sector (VCS) will play a vital role in the district's community well-being; but will not be in a position to shape development to the extent possible with a Core Strategy. Without planned development and other supporting policies (e.g. for community, leisure, employment, housing, green and physical infrastructure etc), the disparity between disadvantaged and more prosperous areas within the district will likely continue. The vision and plans set out within the Sustainable Community Strategy will also be harder to attain and implement.

6.6 What issues should be a particular focus for the appraisal?

6.6.1 There is a need to:

- address pockets of deprivation;
- meet the health and social needs of a growing and ageing population, including through ensuring good access to community infrastructure;
- address all aspects of equality, where relevant to spatial planning;
- consider issues specific to rural communities; and
- provide facilities and infrastructure to support active living.

⁷⁶ Source: ONS. *Key Figures for Crime and Safety, 2007-2008* [online] available at: <http://neighbourhood.statistics.gov.uk> (accessed 10/09).

7 Economy and employment

7.1 Introduction

7.2 The Government's overarching objective is sustainable economic growth, which it defines as *"Growth that can be sustained and is within environmental limits, but also enhances environmental and social welfare and avoids greater extremes in future economic cycles."*⁷⁷

7.2.1 There are many drivers of sustainable economic growth that must be taken into account through spatial planning. This is recognised by the Government policy, which seeks to create a 'positive planning' environment that takes account of different drivers of economic development, from town centres through to rural enterprise.

7.3 What is the policy context?

7.3.1 Planning Policy Statement (PPS)1: Delivering Sustainable Development (2005)⁷⁸ stresses the importance of a strong, stable and productive economy and requires planning authorities to ensure that the necessary infrastructure is provided to support new and existing economic development and housing. Accessibility to jobs and services are also addressed as a means of achieving social cohesion and inclusion. The document sets out how authorities can contribute to delivering sustainable economic development including recognising that economic development can deliver environmental and social benefits; recognising the wider benefits of economic development alongside any adverse local impacts; ensuring suitable locations are available for economic sectors; providing infrastructure and services to support new and existing economic development and housing; taking account of the relevant economic strategies in DPDs; and, identifying opportunities for future investment to deliver economic objectives.

7.3.2 According to PPS4: Planning for Sustainable Economic Development, to help achieve sustainable economic growth, the Government's objectives for planning are to:

- Build prosperous communities by improving the economic performance of cities, towns, regions, sub-regions and local areas, both urban and rural;
- Reduce gaps in economic growth rates, promoting regeneration and tackling deprivation;
- Deliver more sustainable patterns of development, reducing the need to travel, especially by car;

⁷⁷ CLG (2009). *Planning Policy Statement 4: Planning for Sustainable Economic Growth* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement4> (accessed 01/10)

⁷⁸ ODPM (2005) *Planning Policy Statement 1: Delivering Sustainable Development* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement1> (accessed 06/09)

- Promote the vitality and viability of town and other centres as important places for communities. To do this, the Government wants:
 - New economic growth and development of main town centre uses to be focused in existing centres, with the aim of offering a wide range of services to communities in an attractive and safe environment and remedying deficiencies in provision in areas with poor access to facilities;
 - The provision of adequate amounts of shopping and facilities for leisure, entertainment, arts, and culture and tourism; and
 - The historic, archaeological and architectural heritage of centres to be conserved and, where appropriate, enhanced to provide a sense of place and a focus for civic activity.
- Raise the quality of life and the environment in rural areas by promoting thriving, inclusive and locally distinctive rural communities whilst continuing to protect the open countryside for the benefit of all.

7.3.3 PPS4 promotes:

- Setting out a clear economic vision and strategy for their area which positively and proactively encouraging sustainable economic growth identifying priority areas with high levels of deprivation that should be prioritised for regeneration investment, having regard to the character of the area and the need for a high quality environment;
- Supporting existing business sectors, taking account of whether they are expanding or contracting and, where possible, planning for new or emerging sectors, such as those producing low carbon goods or services;
- Positively planning for the location, promotion and expansion of clusters or networks of knowledge driven or high technology industries (guided by regional planning);
- Seeking to make the most efficient and effective use of land, prioritising previously developed land which is suitable for re-use, but recognising the different location requirements of businesses;
- Identifying, protecting and promoting key distribution networks, and locating or co-locating developments which generate substantial transport movements in locations that are accessible (including by rail and water transport where feasible), avoiding congestion and preserving local amenity as far as possible;;
- Planning for the delivery of the sustainable transport and other infrastructure needed to support planned economic development;
- Encouraging new uses for vacant or derelict buildings, including historic buildings;
- Consideration of how sites for different business types can be delivered; and
- Facilitating new working practices such as live/work.

- 7.3.4 The Regional Economic Strategy (RES) for the East of England 2008-2031⁷⁹ sets out an overall vision for the region in 2031, which is based on achieving high levels of international competitiveness, developing a global reputation for innovation and business growth, and attracting and retaining the best talent. The RES identifies the main economic challenges for the East of England as raising rates of productivity, increasing entrepreneurship and the need to better manage the impacts of economic success in terms of economic participation and environmental quality. Key to this strategy is the identification of larger urban areas, regional cities and their surrounding rural areas as the drivers of physical growth and economic success. The RES sets headline targets in a number of areas including:
- growth in Gross Value Added (GVA) per employee over 2008-2031 of 2.1% p.a., and in GVA per capita of 2.3% p.a.;
 - employment rate of 80% for the working population and of 70% for the 16-74 population by 2031;
 - National Vocational Qualification (NVQ) Level 2 or above held by 90% of working-age population by 2020, NVQ 3 or above held by 68%, and NVQ Level 4 or above held by 40%; and
 - Raising the ratio of lower-quartile to average incomes to 60% by 2031.
- 7.3.5 Within the *Stansted/Harlow sub-region* the RES aims to establish the area as an important regional centre for growth by maximising the opportunities provided by its proximity to London, Stansted Airport and Cambridge. Key goals for the *London Arc Sub Region* (page 101 of the Strategy) include ensuring a supply and mix of employment land and premises in sustainable locations that meet the needs of business, supporting the requirements of key sectors, growing businesses, innovators and start-ups.
- 7.3.6 Within the East of England Plan (now revoked), Policy E1: Job Growth set an indicative target for net growth in jobs in 2001-2021 of 56,000 for the Rest of Essex' which includes Epping Forest District. Policy E2, amongst a number of targets, sought to minimise loss of, or damage to, environmental and social capital, and minimise commuting whilst maximising use of public transport. Policy E6: Tourism stated that LDDs should "*include policies to encourage realistic and sustainable investment in the maintenance, improvement, regeneration, extension and diversification of the region's tourist industry*". Policy SS5: Priority Areas for Regeneration stated that LDDs and relevant non-statutory plans should set out policies to tackle the problems of economic, social and environmental deprivation.
- 7.3.7 The Combined Local Plan (1998) and Alterations (2006) Policy Document⁸⁰ contains a suite of policies for employment. Policy E4A of the Local Plan Alterations seeks to protect employment land. As stated in the Epping Forest District AMR (2009), this will become more important in the future if the Council seeks jobs growth in the district.

⁷⁹ EEDA (2008) *The regional economic strategy for the East of England 2008–2031* [online] available at: <http://www.eastofengland.uk.com/res/> (accessed 26 October 2009).

⁸⁰ EFDC Local Plan (1998) and Alterations (2006) [online] available at: http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/local_plan_obtaining.asp (accessed 10/09)

- 7.3.8 One Epping Forest is the Local Strategic Partnership (LSP) for the district and has developed the district's Sustainable Community Strategy⁸¹ that must be taken into account when preparing the LDF. The current Strategy includes the theme 'Economic Prosperity' with a vision for the district:

"Epping Forest will be a district that has a thriving and sustainable local economy, which extends opportunity for local residents and promotes prosperity throughout the district."

7.4 What are the key objectives that we need to consider?

- 7.4.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:

- Promote sustainable growth within environmental limits
- Reduce poverty and inequality and promote social inclusion
- Promote employment, learning, skills and innovation

7.5 What is the situation now?

- 7.5.1 The Index of Multiple Deprivation ranks Epping Forest District 173rd out of the 354 local authorities nationally in terms of income deprivation (where 1 is most deprived) and 211th in terms of employment.

- 7.5.2 Within Epping Forest District, in terms of the income index, the least deprived Super Output Area (SOA) – a subdivision of a ward - in 2007 was Chipping Ongar (31,159/32,482) – previously Loughton Forest in 2004 – and the most deprived SOA was Grange Hill in 2007 (3,073/32,482) and 2004.

- 7.5.3 In terms of the employment index, the least deprived SOA in 2007 was Chigwell Village (31,561/32,482) – again, previously Loughton Forest in 2004 – and the most deprived SOA was Loughton Alderton in 2007 (6,845/32,482) and Waltham Abbey Paternoster in 2004.⁸²

- 7.5.4 **Figure 7.1** shows Gross Value Added (GVA) *per head* for each Local Authority in the region. Epping Forest District (£13,800) does not perform as well as other authorities in the 'London Arc' and with the exception of two local authorities in the Thames Gateway (Rochford and Castle Point), the performance of Epping Forest District is more closely related to the more 'economically isolated' authorities (i.e. distant from London). In terms of GVA *per worker* the performance of Epping Forest District relative to its neighbours and authorities in the wider region is very similar. The performance of Epping Forest District in terms of GVA per head and per worker in relation to its closest neighbours is given in **Table 7.1**.

⁸¹ Epping Forest Local Strategic Partnership (undated) *Epping Forest District Community Strategy 2004-2021* [online] available at: http://www.oneeppingforest.org.uk/pdf/community_strategy.pdf (accessed 10/09)

⁸² AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

Figure 7.1: Gross Value Added (GVA) per head for each local authority in the East of England⁸³

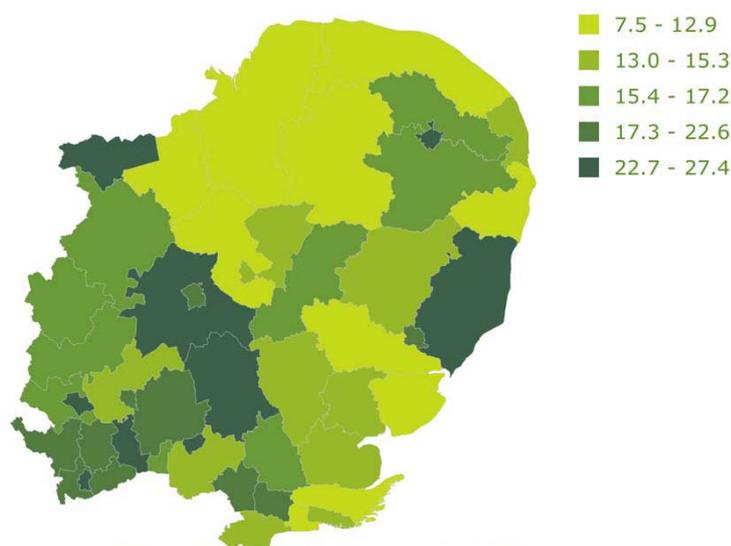


Table 7.1: Epping Forest and neighbouring districts GVA per head and per worker

| Authority | GVA per head | GVA per worker |
|---------------|--------------|----------------|
| Broxbourne | 16,400 | 36,000 |
| Brentwood | 21,500 | 41,200 |
| Chelmsford | 17,000 | 31,600 |
| East Herts | 17,700 | 35,000 |
| Epping Forest | 13,800 | 30,300 |
| Harlow | 22,800 | 43,000 |
| Uttlesford | 23,100 | 38,400 |

7.5.5 In Epping Forest District, GVA per head and GVA per worker increased at a fairly steady rate between 2001 and 2007. In terms of GVA per head, this increase has resulted in the ranking of Epping Forest District amongst other authorities in the region improving (i.e. GVA per head has improved at a relatively fast rate). However, in terms of GVA per worker, the rank of Epping Forest District in comparison to others actually worsens, despite the absolute increase in GVA. This is perhaps indicative of increasing levels of economic dependency being felt less within Epping Forest District.

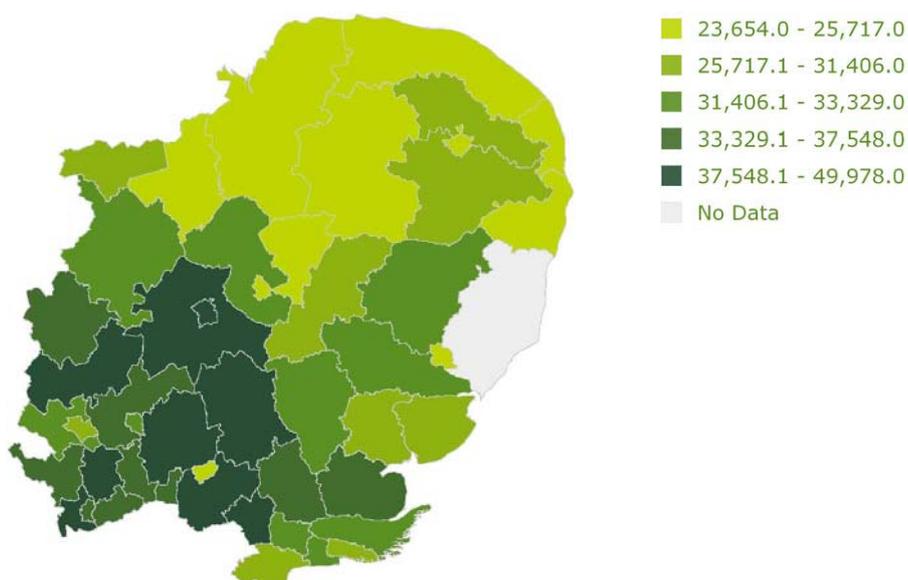
7.5.6 The 2009 East of England Economic Forecasting Model⁸⁴ predicted GVA into the future as far as 2031. The model predicted that, in the long term (i.e. up to 2031), 24 of the 30 other authorities in the Region that are in closest proximity to London (i.e. the authorities that, together with Epping Forest District, are found in roughly the southern half of the Region) will grow at a faster rate than Epping Forest District in terms of GVA per head.

⁸³ East of England Regional Economic Atlas [online tool] available at: <http://insighteast.org.uk/viewArticle.aspx?id=17174> (accessed 11/09)

⁸⁴ EERA (2009) [online] available at: <http://www.eera.gov.uk/publications-and-resources/studies/topic-based-studies/projections/> (accessed 11/09)

- 7.5.7 In terms of the employment rate amongst residents aged 16 – 74, Epping Forest District performs at roughly the median rate in comparison to other authorities in the region. In terms of neighbouring authorities, the district performs significantly better than Brentwood and marginally better than East Herts. This median performance has been fairly steady over time (since 2001). The EEEF model also makes predictions relating to employment rate into the future, up to 2031. The model predicts that the employment rate in the district will increase into the future at a greater rate than the majority of other nearby authorities (in fact the employment rate is predicted to stagnate or fall in some authorities). The result is that by 2031 the model predicts that Epping Forest District will sit well within the top performing 50% of authorities in terms of this employment rate.
- 7.5.8 In 2008, average earnings in Epping Forest District were £39,362, which placed it within the top 20% of local authorities in the region in terms of this indicator, with only seven authorities performing better (see **Figure 7.2**). Looking at trends over time it can be seen that this relative position has been fairly consistent since 2002.

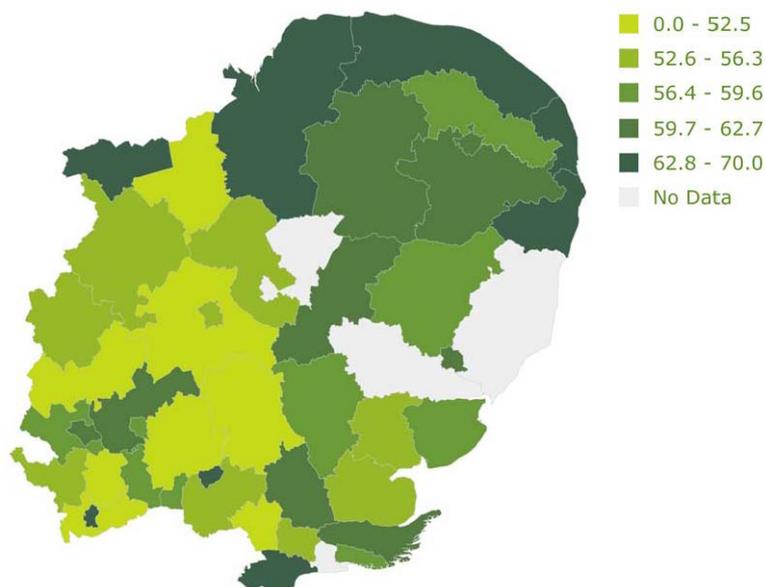
Figure 7.2: Average earnings in the East of England (2008)⁸⁵



- 7.5.9 In 2008, lower quartile average earnings (LQE) were £21,860. This figure is high compared to other authorities in the region, suggesting that the district performs well in terms of inequality. It is noticeable that Uttlesford is an authority with a very high *average* earning (the highest in the region), but a figure for lower quartile figure that is considerably less, indicating a degree of inequality. **Figure 7.3** shows 2008 LQE as a percentage of average earnings.

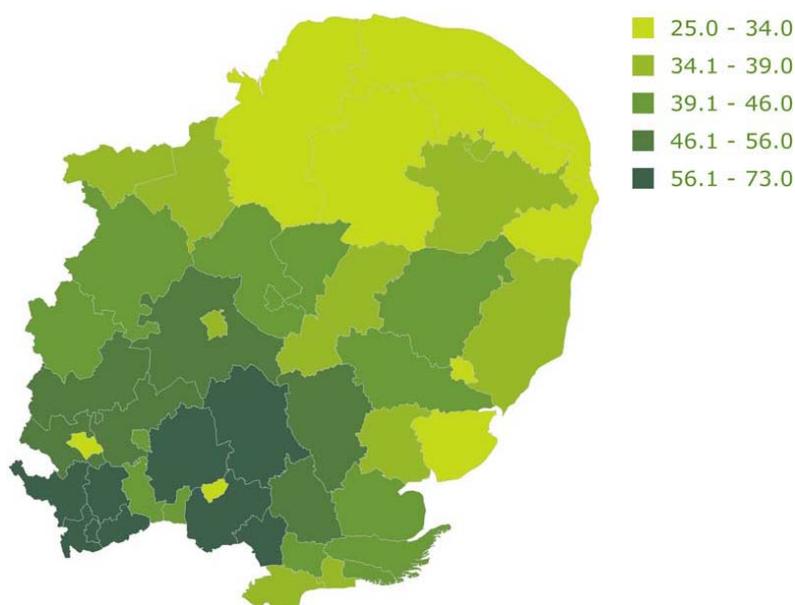
⁸⁵ East of England Regional Economic Atlas [online tool] available at: <http://insighteast.org.uk/viewArticle.aspx?id=17174> (accessed 11/09)

Figure 7.3: Lower quartile average earnings in the East of England (2008)⁸⁶



7.5.10 Epping Forest District performs very well in terms of the number of indicators that relate to 'enterprise'. In terms of VAT registered businesses per 1000 people, Epping Forest District performs particularly well (64), with only 2 authorities in the East of England have a higher score – see **Figure 7.4**. Epping Forest District has performed consistently high in terms of this indicator (in 2001 Epping Forest District had more VAT registered businesses per 1000 people than any other authority in the Region). Also, in 2007 Epping Forest District had more new businesses registering per 1,000 people than any other authority in the Region.

Figure 7.4: VAT registered businesses per 1000 people in the East of England⁸⁷

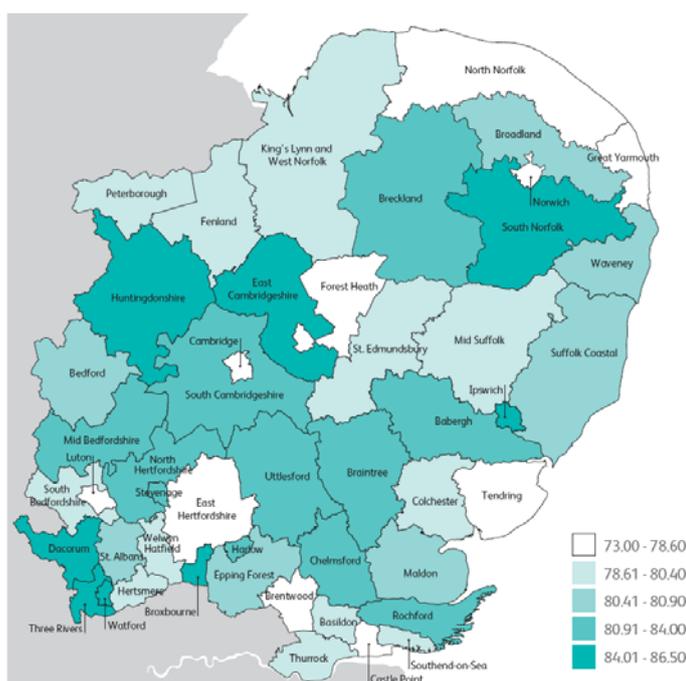


⁸⁶ *Ibid*

⁸⁷ *Ibid*

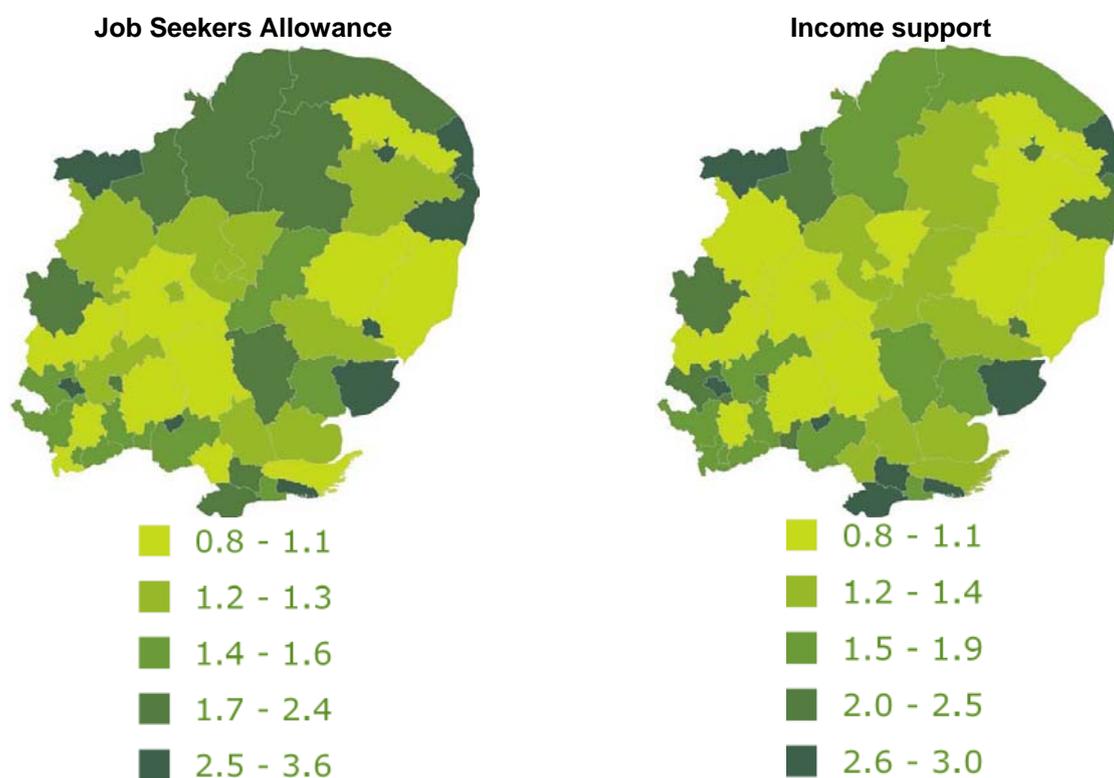
- 7.5.11 Epping Forest District had moderate economic activity rates in 2006 (see **Figure 7.5**). In Epping Forest District 21% of working age people were economically inactive, which placed the district well within the 30% worst performing authorities in the region in terms of this indicator. The performance of Epping Forest District relative to other authorities worsened considerably between 2007 – 2008, in comparison to the performance between 2005 – 2006.

Figure 7.5: Economic activity rates across the region, where lighter shading indicates lower economic activity rates, 2006



- 7.5.12 In August 2008 1.5% of working age residents were claiming Job Seekers Allowance, which is about average when compared to all authorities in the region. This situation has been fairly consistent over the past 5 years or so, although it is not clear what effect the recession has had. In terms of income support benefit, 1.9% of residents in Epping Forest District's were claimants in August 2008, placing Epping Forest District slightly above the median position in terms of poor performance for this indicator. **Figure 7.6** shows how the percentage of income support and JSA claimants varies across the region. Also, in August 2008 1.4% of working age people were claiming incapacity benefits (slightly higher than median) and 0.8% claiming disability benefits (slightly below median).

Figure 7.6: Percentage of Job Seekers Allowance and Income Support claimants in the East of England⁸⁸



- 7.5.13 In terms of qualifications / skills it is immediately noticeable that Epping Forest, Harlow and Broxbourne perform worse than neighbouring authorities. In terms of the percentage of people qualified to skills level 2, Harlow tends to perform worse (taking account of performance between 2005 – 2007); in terms of skills levels 3 and 4 it is difficult to identify as to whether Harlow or Epping Forest perform worse.⁸⁹
- 7.5.14 Within Epping Forest District, in terms of the education skills and training index, the least deprived SOA in 2007 was Buckhurst Hill West in 2007 (30,229/32,482) and 2004, and the most deprived SOA was Waltham Abbey Paternoster in 2007 (3,584/32,482) and 2004. There is a clear divide between the least and most deprived SOAs suggesting large inequalities within the district.
- 7.5.15 **Table 7.2** summarises the occupation of employment in the district. The majority of residents in the district are employed as managers and senior officials, and the proportion of the district's population in this occupation is notably greater than the proportion within Essex, the East of England and nationally. A greater proportion of the population is also employed in associate professional and technical positions than in the county, region and nation. A smaller proportion, however, is employed in occupations including sales and customer services, process plant and machine operatives and elementary occupations.

⁸⁸ East of England Regional Economic Atlas [online tool] available at: <http://insighteast.org.uk/viewArticle.aspx?id=17174> (accessed 11/09)

⁸⁹ *Ibid*

Table 7.2: Occupation of employment⁹⁰

| Occupation of employment | Epping Forest (%) | Essex (%) | East of England (%) | England (%) |
|--------------------------------------|-------------------|-----------|---------------------|-------------|
| Managers and senior officials | 23 | 15 | 15 | 16 |
| Professional occupations | 10 | 11 | 13 | 13 |
| Associate professional and technical | 19 | 14 | 15 | 14 |
| Administrative and secretarial | 12 | 13 | 12 | 12 |
| Skilled trades occupations | 12 | 12 | 12 | 11 |
| Personal service occupations | 9 | 8 | 8 | 8 |
| Sales and customer services | 5 | 8 | 8 | 8 |
| Process plant and machine operatives | 4 | 7 | 7 | 7 |
| Elementary occupations | 6 | 11 | 12 | 11 |

7.5.16 **Table 7.3** summarises the number of employees by business size. It illustrates that Epping Forest District tends to support smaller businesses.

Table 7.3: Number of private sector employees by business size⁹¹

| Business size | Epping Forest (number of employees) | Essex (number of employees) | East of England (number of employees) | England (number of employees) |
|---------------|---|-----------------------------------|--|-------------------------------------|
| 1-4 | 4,800 | 51,100 | 171,900 | 1,474,900 |
| 5-10 | 700 | 8,700 | 30,800 | 280,500 |
| 11-24 | 300 | 5,000 | 18,400 | 168,700 |
| 25-49 | 200 | 2,400 | 8,600 | 78,300 |
| 50-99 | 100 | 1,200 | 4,500 | 40,300 |
| 100+ | 0 | 800 | 3,300 | 31,900 |
| Total | 6,100 | 69,200 | 237,600 | 2,074,700 |

7.5.17 According to the Local Plan “Small employment sites within and close to rural settlements can make an important contribution to the local economy” and can “protect against the loss of Green Belt elsewhere”. Sites for small and medium enterprises (SMEs), however, have come under increasing pressure in recent years from proposals for residential development.

7.5.18 The glasshouse industry represents one important type of business in certain, more rural parts of the district. Due to advances in technology, the overall production has remained steady although the area of many crops has significantly reduced. Nevertheless, there is demand for expansion, most of which has occurred in, or adjacent to, the designated areas predominantly in the Lee Valley area. The total amount of land used for horticulture declined in the district until stabilising between 1996 and 2001 at about 75ha, the majority of which (59ha) is located in Roydon and Nazeing.⁹²

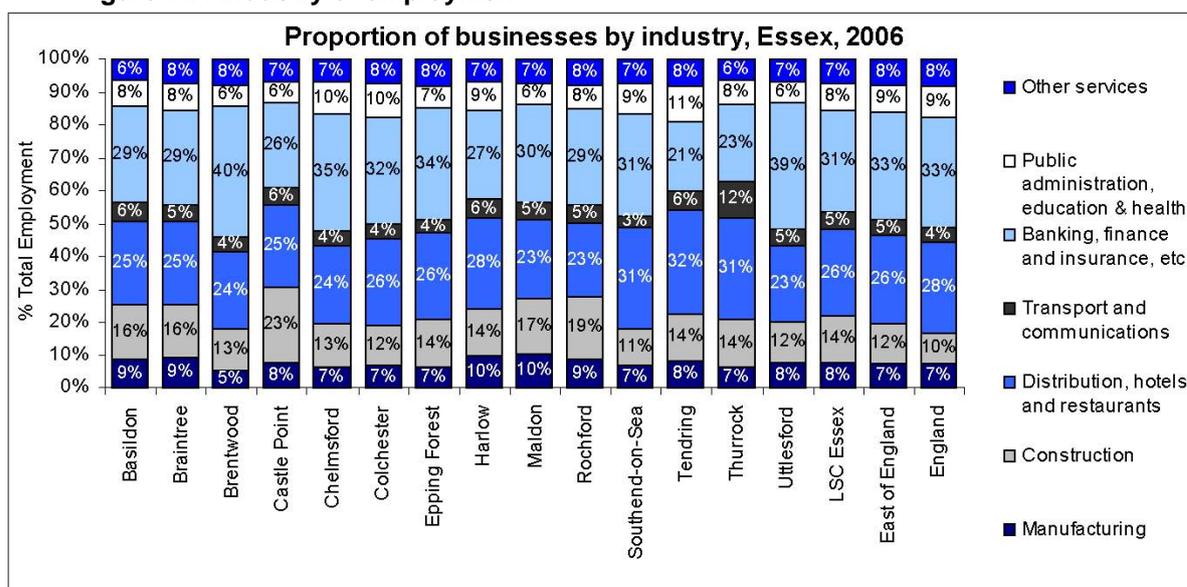
⁹⁰ LSC (2008) Local Need Assessment – Essex [online] available at: http://readingroom.lsc.gov.uk/lsc/EastofEngland/LNA_Essex_08.pdf (accessed 10/09)

⁹¹ *Ibid*

⁹² EFDC Local Plan (1998) and Alterations (2006) [online] available at: http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/local_plan_obtaining.asp (accessed 10/09)

7.5.19 **Figure 7.7** summarises key employment industries in the district in 2006. It shows that the manufacturing, distribution, hotels and restaurants and public administration, education and health are the district's key industries. Banking, finance and insurance is also a large employer in Epping Forest District.

Figure 7.7: Industry of employment⁹³



Source: Annual Business Inquiry, 2006. Agriculture and energy related industries have been omitted due to the suppression that would render no data at a district level

7.5.20 Agriculture (or more specifically horticulture) is a major industry in Epping Forest District and the Lee Valley. The main crops are salads, with cucumbers the most important and some tomatoes, lettuce and peppers also being produced. Fruit production has also increased and nurseries grow bedding plants and ornamental flowers. The industry in the district has a distinct advantage over imported goods and other significant UK locations for glasshouse horticulture due to its location, sourcing a major market in London and surrounding counties whilst minimising transport and energy costs. Major buyers effectively control the market and, coupled with competition from imports, there is a pressure to keep prices down. This led to a trend for building larger glasshouse units to achieve economies of scale.⁹⁴

7.5.21 As identified in the Local Plan Alterations (2006), the district is not a significant industrial and commercial centre in sub-regional terms as the Green Belt constrains large scale new developments. Approximately 60% of residents commute out of the district to work, with London being the largest source of employment for those living in the district, with approximately 45% of the working population commuting there to work. The presence of the Central Line through the district encourages the use of public transport to achieve this out-commuting.⁹⁵

⁹³ LSC (2008) Local Need Assessment – Essex [online] available at: http://readingroom.lsc.gov.uk/lsc/EastofEngland/LNA_Essex_08.pdf (accessed 10/09)

⁹⁴ EFDC Local Plan (1998) and Alterations (2006) [online] available at: http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/local_plan_obtaining.asp (accessed 10/09)

⁹⁵ *Ibid*

7.5.22 Within the district, the six main centres are:⁹⁶

- Queens Road, Buckhurst Hill
- High Street, Epping
- High Road, Loughton
- The Broadway, Loughton
- High Street, Ongar
- Sewardstone Road / Highbridge Street / Market Plac / Sun Street, Waltham Abbey

7.5.23 Policy T4 in the Local Plan Alterations (2006) specifies that the area designated 'key frontage' within one of the main centres must consist of a minimum of 70% retail use, with a limit of 30% for non-retail uses (measured by length of the shop frontage). Unfortunately, the most recent surveys show that of the six main centres, five have already breached the 30% non-retail limit within their key frontage, with Loughton Broadway the only one that is within the desired range and Ongar performing the worst.⁹⁷ This situation appears to be considerably worse than in 2005/06, when only two of the centres (Epping and Chipping Ongar) were recorded to be beyond the 30% threshold. Town Centre Surveys for each town centre are undertaken every six months on a cyclic basis.

7.6 What will be the situation without the plan?

7.6.1 It is always difficult to predict local economic trajectories and extremely difficult to consider what the situation within Epping Forest District will be without the plan. Within the case of economy and employment it is perhaps most appropriate to consider the spatial nature of economic development without the plan rather than identify broader trend possibilities. Within this framework two key issues stand out. First, without the plan it is not clear whether the main settlements within the district would be capable of providing the required facilities or supportive infrastructure to deliver growth ambitions set out in the RSS. Second, there is a likelihood that the development of rural areas and smaller villages within the district would not be sufficiently supported by an appropriate policy framework which allows these areas to retain their character but to develop in a sympathetic manner. An Employment Land Review currently being undertaken by Epping Forest District Council (with Brentwood Borough Council) is due to be completed in April 2010 and should be able to better inform these issues.

⁹⁶ AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

⁹⁷ *Ibid*

7.7 What issues should be a particular focus for the appraisal?

7.7.1 There is a need to:

- encourage a diversified economy whilst also supporting existing sectors, including in rural areas;
- support initiatives that capitalise on the strategic location of the district, including tourism potential resulting from attractive towns and countryside, Epping Forest itself and the Lee Valley Regional Park;
- support job creation of an appropriate scale and supported by appropriate facilities and infrastructure;
- recognise that the district has high levels of commuting and high earning residents;
- support the key functions of local centres; and
- recognise that there are significant pockets of deprivation within the district.

8 Historic environment

8.1 Introduction

- 8.1.1 Conservation of the historic environment involves more than just protection of individual features. Rather, England has a rich historic interest engrained in landscapes and townscapes at a range of scales. This is not something that lends itself easily to objective / evidence-based identification of sustainability issues, but is something that cannot be ignored.
- 8.1.2 Spatial planning mechanisms can directly influence the historic environment and also, as a result, have knock on effects on sustainability issues relating to community and wellbeing (see Chapter 5) and landscape (see Chapter 11) in particular. The historic environment is important to help sustain a sense of local distinctiveness and place and can also make a significant contribution to the local economy.

8.2 What is the policy context?

- 8.2.1 Planning Policy Statement (PPS)1: on Delivering Sustainable Development⁹⁸ highlights the need to protect and enhance the historic environment. PPS5 *Planning for the Historic Environment* of March 2010 brings together the previous PPG15 and PPG16, and provides guidance on the management and conservation of buildings, monuments, archaeological sites and landscapes. It maintains the same level of protection to the historic environment as before, but focuses on evaluating the significance/value of the heritage asset in question. In doing so, it encourages active understanding and use of the historic environment as an asset, rather than treating it as a potential barrier to development.
- 8.2.2 The issue of the historic environment was a cross-cutting theme within the East of England Plan (now revoked) and several policies and their supportive text made reference to its protection and utilisation for purposes such as cultural promotion and tourism. Policy ENV6: The Historic Environment provided direct guidance for LPAs and instructed them to identify, protect, conserve, and, where appropriate, enhance the region's historic environment. Clearly it is not the role of the LDF to provide all these functions; however, spatial planning will play a key part through the protection of certain key areas. The policy also provided a holistic definition of the region's historic environment as its *"archaeology, historic buildings, places and landscapes, including historic parks and gardens and those features and sites (and their settings) especially significant in the East of England."* In addition, Policy ENV7: Quality in the Built Environment provided criteria that new development should achieve in order to complement the distinctive character of a locality and to promote urban renaissance and regeneration.

⁹⁸ ODPM (2005) *Planning Policy Statement 1: Delivering Sustainable Development* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement1> (accessed 07/09)

8.2.3 Epping Forest itself is protected by the Epping Forest Act 1878 and is managed by the Corporation of London. Although the District Council has no statutory role in the Forest's management, it seeks to protect, interpret and enhance the Forest through traffic management and consideration given before the granting of planning permission. This is outlined in the current Local Plan along with a suite of other conservation policies covering Scheduled Monuments and other archaeological sites; Ancient Landscapes; Historic Parks and Gardens; Protected Lanes; common land and village greens; Epping Forest; Conservation Areas; and Listed Buildings.⁹⁹

8.3 What are the key objectives that we need to consider?

8.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:

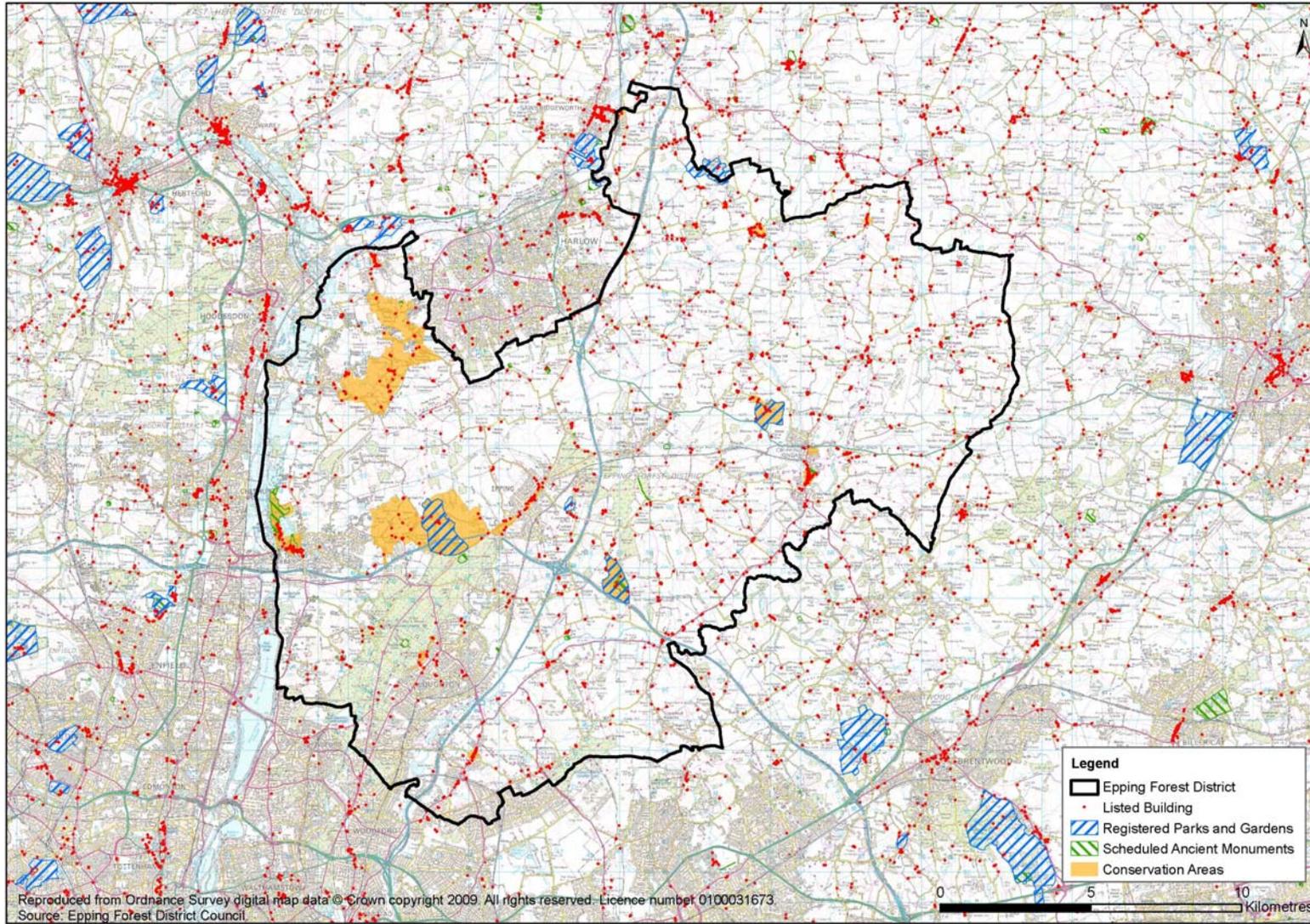
- Conserve, restore and enhance the region's natural and built environment.

8.4 What is the situation now?

8.4.1 **Figure 8.1** illustrates that there are a number of historic environment constraints in Epping Forest District and the wider area. However, it is important to consider that protection of the historic environment must go beyond simply the protection of designated features, sites and areas. To this end, **Figure 8.2** identifies the historic landscape areas that have been identified within the district.

⁹⁹ EFDC Local Plan (1998) and Alterations (2006) [online] available at:
http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/local_plan_obtaining.asp (accessed 10/09)

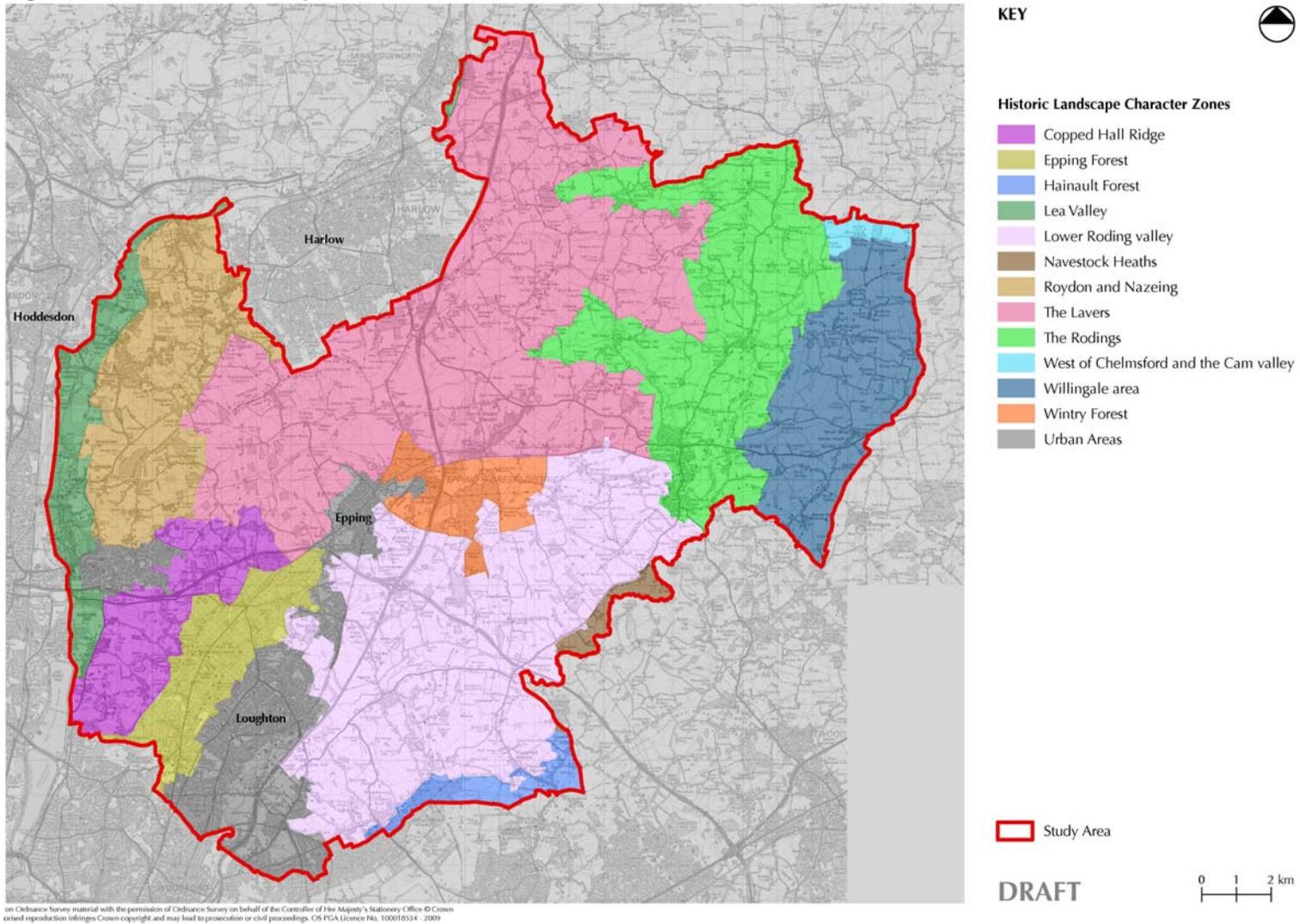
Figure 8.1: Historic environment constraints in Epping Forest District and the wider area



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Figure 8.2: Historic landscape character areas¹⁰⁰



¹⁰⁰ CBA (2009). *Epping Forest Landscape Character Assessment*. Draft

8.4.2 There are just over 1,300 Listed Buildings in Epping Forest District. These include 16 Grade I listed buildings such as Hill Hall at Theydon Mount, but the vast majority are Grade II.¹⁰¹ The Local List of buildings of local architectural or historic importance was finalised in July 2006 and contains approximately 300 entries and is subject to review and additions where identified and a full review every five years. This List includes a wide variety of buildings and structures that are of local interest, but do not meet the national criteria for inclusion on the statutory list.¹⁰²

8.4.3 The District also contains five areas of parkland that are on the Parks and Gardens Register:¹⁰³

- Copped Hall – Grade II*
- Blake Hall – Grade II
- Hill Hall – Grade II
- Coopersale House – Grade II
- Down Hall – Grade II

8.4.4 The Conservation Areas of Epping Forest District are parts of towns, villages or parishes that have special architectural or historic interest. Designation is intended to preserve or enhance this distinct character or appearance. Currently the district has twenty-five designated Conservation Areas:

Table 8.1: Conservation Areas in Epping Forest District¹⁰⁴

| Conservation Area | Description ¹⁰⁵ |
|--------------------------|---|
| Abness Roding | One of the eight hamlets and villages collectively known as "The Rodings" which lie either side of the River Roding between Great Dunmow and Chipping Ongar. |
| Abridge | The village of Abridge lies on the historically important coaching route between London and Chipping Ongar and has been an important crossing point of the River Roding for many centuries. |
| Baldwins Hill, Loughton | Baldwins Hill forms part of the area of Loughton known locally as "The Hills" - Baldwins Hill, York Hill, Kings Hill, Pump Hill and Woodbury Hill all lie on a ridge which overlooks Epping Forest. |
| Bell Common, Epping | Bell Common provides an important transition in the landscape between Epping Forest and the built-up area which forms the outskirts of Epping. |
| Blake Hall, Bobbingworth | Encompasses the Registered Historic Park and Gardens of Blake Hall and the historic hamlet of Bobbingworth. |
| Chigwell Village | Chigwell village once lay within the Forest of Essex on the main coaching route between London and Chipping Ongar (the High Road). The village has five Grade II* listed buildings. |
| Chipping Ongar | Chipping Ongar was one of the first Conservation Areas to be designated by the County Council and contains over 100 listed buildings and other structures. |
| Coopersale Street | Coopersale Street is a small, dispersed, linear settlement which lies one mile south-east of Epping at the bottom of Stonards and Houblons Hill. |

¹⁰¹ See EDFC Heritage Conservation [online] available at:

http://www.eppingforestdc.gov.uk/Council_Services/planning/conservation/default.asp (accessed 10/09)

¹⁰² AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

¹⁰³ EFDC (1998) *Epping Forest District Adopted Local Plan – Chapter 6 Heritage Conservation* [online] available at:

http://www.eppingforestdc.gov.uk/Library/files/planning/1998_local_plan/LP_Chapter_06.pdf (accessed 10/09)

¹⁰⁴ Source: EDFC Heritage Conservation [online] available at:

http://www.eppingforestdc.gov.uk/Council_Services/planning/conservation/default.asp (accessed 10/09)

¹⁰⁵ Text reproduced from:

http://www.eppingforestdc.gov.uk/Council_Services/planning/conservation/conservation_area_information.asp

| | |
|--|---|
| Copped Hall | An ancient hunting park and rural estate dating from the 12th century or earlier. |
| Epping | "Epinga", a small community of a few scattered farms and a chapel on the edge of the forest, is mentioned in the Domesday Book of 1086. |
| Great Stony School, Chipping Ongar | Great Stony School was built between 1903 and 1905 as an orphanage to house the children of paupers. |
| High Ongar | The village of High Ongar has existed since the beginning of the 17th century, although in the Middle Ages it was probably no more than a tiny hamlet. |
| Hill Hall, Theydon Mount | Hill Hall is a substantial country house, converted into flats in 2000. The Hall is a Grade I Listed, Early Renaissance brick house built 1569-75. |
| Lower Sheering | Conservation Area (in Hertfordshire) to the north-west, sharing a contiguous boundary along Station Road and the River Stort. Lower Sheering Conservation Area adjoins Sawbridgeworth and comprises of an extensive group of mid-late 19th century Maltings which lie either side of the London-Cambridge railway line. |
| Matching | Matching comprises a unique collection of vernacular village building types that are all Grade II* listed buildings. |
| Matching Green | The name Matching is probably of Saxon origin. Matching Green has one of the largest village greens in Essex. |
| Matching Tye | The word "Tye" means a settlement around a common or green and is a fitting description for this small hamlet. |
| Moreton | Encompasses the historic core of the village from Moreton Bridge in the south, to the centre of the village at the junction of Church Road and Bridge Road. |
| Nazeing and South Roydon | This Conservation Area is the largest in the district and covers a wide expanse of historic and attractive countryside between Harlow and Lower Nazeing. |
| Royal Gunpowder Factory, Waltham Abbey | Located to the north of Highbridge Street, Waltham Abbey, and extends northwards for 2.1km to Fishers Green. The site covers an area of 77 hectares. |
| Roydon Village | Roydon Conservation Area extends from the parish church of St.Peter-ad-Vincula, which stands at the north end of the High Street opposite The Green, to Harlow Road. Roydon has been a distinct rural community for over 900 years. |
| Staples Road, Loughton | Staples Road comprises an attractive, linear group of houses and a school on the edge of Epping Forest. |
| Upshire | Includes the historic park and gardens of "Warlies" and the linear hamlets of Upshire, Copthall Green and Wood Green. |
| Waltham Abbey | Waltham Abbey is a small market town lying on a gravel terrace between the River Lee and the rising ground of Epping Forest. |
| York Hill, Loughton | A peaceful residential area that benefits from the tranquillity and views of the adjoining Epping Forest, as well as the survival of hedges which follow and define the historic road pattern. |

8.4.5 The Essex Historic Environment Record holds approximately 2953 entries relating to Epping Forest District, ranging from the Palaeolithic through to the Cold War. The records include 1643 archaeological records, with 34 archaeological sites designated as Scheduled Monuments. Essex County Council also highlight that there is the potential for geo-archaeological remains along the Lee/Stort river valley.¹⁰⁶

¹⁰⁶ Information provided as part of the consultation on this report

- 8.4.6 Several lanes have been designated by the County Council as "Protected Lanes" on the basis that they give a significant contribution to the character of the countryside and have a particular historic value.¹⁰⁷ Although not formally designated, it is also important to note that numerous footpaths and bridleways are of historic importance. The Loughton and District Historical Society identify the following as the 'predominant linear monument of the District':

The Roman Road that enters the district at Woodford Bridge, and follows the A113 in some stretches, and then proceeds via Abridge, Hobbs Cross, and Stanford Rivers to Leaden Roding (some parts of being followed by modern bridleways and lanes).

- 8.4.7 The agricultural landscape is a key element of the historic environment within the district. During the Medieval period, the landscape was divided into estates and subdivided into manors owned by lords and farmed by tenants in networks of fields. This feudal form of landscape management would have been prevalent across the district. However, both during and after the medieval period much of the landscape was subject to piecemeal enclosure, whereby the land was been rationalised into consolidated private ownership through a series of private land exchanges and gradual enclosure of woodland, forest, heath and common. The exception is the area around Nazeing and south of Roydon, where significant remains of the intricate field systems survive. In the 20th century, changes in agricultural practice brought about by the Common Agricultural Policy led to the further rationalisation of fields within the landscape, with the stripping out of field boundaries to create large 'prairie' fields.¹⁰⁸
- 8.4.8 In addition, the horticultural industry has a long history within the western half of the district, with its roots in the medieval market gardens in the fertile river valleys. The industry blossomed after the removal of tax on glass in 1845, after which, the landscapes in the parishes of Roydon and Nazeing were dominated by a 'sea of glass'. The industry continues today in a reduced form at Roydon, Nazeing and Lower Nazeing, and historic elements of older greenhouses and water towers can still be identified within the landscape.¹⁰⁹
- 8.4.9 Epping Forest is a "particularly important component of the historic landscape of the district, this value being all the greater because of its public accessibility". A large proportion of the original forest remains intact, the majority of which lies within the district, running northeast from Sewardstonebury to Wintry Wood just north of Epping. The Forest has numerous outlying greens, green lanes and verges. It is one of only a few large scale examples of ancient wood-pasture remaining in England. However, the Forest is under continuous and growing public pressure for recreational use, and is showing signs of overuse.¹¹⁰
- 8.4.10 Parks, and the large residences often associated with parks, are a distinctive feature of the landscape of the district, developed from the medieval period onwards. These include: Warlies Park and Copped Hall between Waltham Abbey and Epping; Coopersale House and Gaynes Park to the east of Epping; and Ongar Great Park abutting North Weald to the east. Hill Hall (SW of Epping), Blake Hall (NW of Ongar) and Down Hall (SE of Sheering and straddling the boundary with Uttlesford District) are also included on English Heritage's Parks and Gardens register (as also are Coopersale House and Copped Hall).

¹⁰⁷ EFDC (1998) *Epping Forest District Adopted Local Plan – Chapter 6 Heritage Conservation* [online] available at: http://www.eppingforestdc.gov.uk/Library/files/planning/1998_local_plan/LP_Chapter_06.pdf (accessed 10/09)

¹⁰⁸ CBA (2010) *Epping Forest Landscape Studies Landscape Character Assessment*, Epping Forest District Council

¹⁰⁹ Ibid

¹¹⁰ Epping Forest District (1998) *Epping Forest District Adopted Local Plan, Conservation*, [online] available at: http://www.eppingforestdc.gov.uk/Library/files/planning/1998_local_plan/LP_Chapter_06.pdf (accessed 02/10)

- 8.4.11 Another important feature is North Weald airfield, which was founded in the summer of 1916 during the First World War by the Royal Flying Corps. The airfield played an important part in the air defence strategy of the UK during the Second World War. Today, the airfield is still operational for non military use.

Heritage at Risk

- 8.4.12 English Heritage identify the following heritage assets as 'at risk':¹¹¹

- Essex Redoubt at Ongar Radio Station, Bobbingworth
- Roman villa 300m south of Long Shaw, Loughton
- Littlebury Farmhouse, Romford Road, Stanford Rivers
- Gaynes Park, Theydon Garnon
- Quinan Stove, Waltham Abbey Royal Gunpowder Mills, Waltham Abbey
- Grand Magazine, Waltham Abbey Royal Gunpowder Mills, Waltham Abbey
- Waltham Abbey monastic site, including gatehouse and stoney bridge, Waltham Abbey,

Are there any evidence gaps?

- 8.4.13 Landscape Character Assessment work and the evidence provided by the Epping Forest District Settlement Edge Study together gives a good indication of historic environment issues surrounding settlements, but there is less evidence to inform a consideration of the relative sensitivity of town and village centres. Conservation Area appraisals could potentially provide this information.

8.5 What will be the situation without the plan?

- 8.5.1 Growth around Harlow could impact upon the historically rich landscapes to the west of the District. It is also worth noting that opportunities might be lost for the historic environment to contribute towards sustainable forms of growth in the district.

8.6 What issues should be a particular focus for the appraisal?

- 8.6.1 There is a need to:

- protect the district's heritage assets and their settings from inappropriate development; and
- ensure that development respects wider historic character.

¹¹¹ English Heritage (2010). Heritage at Risk Register [online] available at <http://risk.english-heritage.org.uk/2010.aspx?rs=1&rt=0&pn=1&st=a&di=Epping+Forest&ctype=all&crit=> (accessed 09/10)

9 Housing

9.1 Introduction

9.1.1 Housing is a key policy theme, high on the agenda of both the Government and the public. Part of the Government's aim to create prosperous, inclusive and sustainable communities is that everyone should have the opportunity of living in a decent home at a price they can afford, in a place in which they want to live now and in the future.

9.2 What is the policy context?

9.2.1 Planning Policy Statement (PPS)3: Housing¹¹² seeks to ensure that the planning system delivers a "sufficient quantity of housing taking into account need and demand and seeking to improve choice". Both PPS3 and PPS1: Sustainable development also emphasise the need to provide affordable housing.

9.2.2 Policy H1 of the East of England Plan¹¹³ (now revoked) stated that a minimum of 3,500 homes must be built within Epping Forest District between 2001 and 2021. This target equated to 175 homes per annum throughout the period. Of this allocation, between 2001/02 to 2008/09 1784 net units have been built. These figures excluded provision in urban extensions to Harlow. It was likely that some of the 16,000 homes proposed for areas within and around Harlow would have come forward within Epping Forest District.

9.2.3 In the context of the revocation of the RSS, it will be necessary for the Core Strategy (and the SA) to assess if recent and planned levels of housing completions meet the Council's local assessment of need and to work in co-operation with adjoining authorities to ensure cross-boundary needs are addressed.

9.2.4 Policy H2 of the East of England Plan stated that 35% of housing should be affordable. The supporting text identified that housing stress varies across the region and targets of more than 35% may be justified in the more pressurised areas. PPS3 indicates that separate targets should be set for social rented and intermediate housing where appropriate.

9.2.5 Relatively low numbers of affordable dwellings have been completed in recent years, and the level of need for such dwellings is increasing. As a result, the Council adopted new policies on the provision of affordable housing within the Local Plan Alterations (2006), which seek higher percentages (40%) to be provided on suitable sites. The definition of a 'suitable site' reflects the trend for smaller sites coming forward for development.

9.2.6 Policy SS4 of the East of England Plan stated that LDDs should define the approach to development in towns in rural areas. This includes market towns and others with the potential to increase their economic and social sustainability through securing "appropriate amounts of new housing, including affordable housing, local employment and other facilities".

¹¹² Communities and Local Government (2006) *Planning Policy Statement 3: Housing* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/pps3housing> (accessed 07/09)

¹¹³ GOEE (2008) *East of England Plan* [online] available at: http://www.gos.gov.uk/goeast/planning/regional_planning/ (accessed 10/09)

- 9.2.7 In February 2006 the Government issued revised guidance (Planning Circular 01/06¹¹⁴) in respect to Gypsies and Travellers. Evidence had shown that the previous guidance had failed to deliver adequate sites for Gypsies and Travellers in many areas in England.
- 9.2.8 Prior to being revoked, the East of England Plan gave guidance on the number of Gypsy and Traveller pitches that should be delivered. The Plan stated that Epping Forest District Council must make provision for 34 additional pitches between 2006 and 2011. Beyond 2011, provision should be made for 3% per annum growth in pitches to meet the estimated demand.¹¹⁵
- 9.2.9 The District Council completed its housing strategy in 2009.¹¹⁶ The document identifies current and future housing needs and sets out a vision for housing in the district: *"We want the Epping Forest district to be a safe, healthy and attractive place in which to live and work"*. It also sets out five key objectives:
- To ensure that growth in the number of homes in the district is properly planned, along with adequate infrastructures such as roads, health facilities, schools etc (i.e sustainable)
 - To make affordable housing available – both for rent and for low cost home ownership - in rural and urban locations, for people who want to live in the district
 - To ensure that people with special needs are able to live in suitable accommodation with appropriate levels of support
 - To quickly accommodate homeless people in suitable, permanent accommodation
 - To ensure that all homes in the district, in both the public and private sector, are in a decent condition

9.3 What are the key objectives that we need to consider?

- 9.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:
- Reduce poverty and inequality and promote social inclusion
 - Meet the needs of the changing regional demographic
 - Provide decent, affordable and safe homes for all.

¹¹⁴ ODPM (2006) *Circular 01/06: Planning for Gypsy and Traveller Caravan Sites* [online] available at:

<http://www.communities.gov.uk/publications/planningandbuilding/circulargypsytraveller> (accessed 10/09)

¹¹⁵ GOEE (2009) *Accommodation for Gypsies and Travellers and Travelling Showpeople in the East of England: A Revision to the Regional Spatial Strategy for the East of England* [online] available at:

http://www.gos.gov.uk/goeast/planning/regional_planning/687221/?a=42496 (accessed 10/09)

¹¹⁶ EFDC (2009) *Housing Strategy 2009-2012* [online] available at:

http://www.eppingforestdc.gov.uk/Council_Services/housing_services/Housing_Strategy.asp (accessed 02/10)

9.4 What is the situation now?

9.4.1 There is consistent demand for further housing in the district due to:

- its proximity to central London and other employment centres;
- the accessibility of the urban areas to the motorway and rail networks and to the London Underground;
- the attractiveness of the surrounding countryside and villages;
- the generally high standard of housing and perceived quality of life; and
- changing national population trends such as more single households and greater longevity.

9.4.2 House prices are consequently high. The average house price (for all types of dwelling) in Epping Forest District in 2008 was £351,044 – this is far above the average regional price (£225,967) and national price (£220,310),¹¹⁷ and house prices in Epping Forest District are also high in relation to other neighbouring districts (see **Table 9.1**).

Table 9.1: Property price comparison with other London Commuter Belt local authorities (April 2008 average)¹¹⁸

| Local Authority | Detached Average | Semi Detached Average | Terraced Average | Flat / maisonette | Overall |
|-----------------|------------------|-----------------------|------------------|-------------------|----------|
| Epping Forest | £717,900 | £346,200 | £267,900 | £195,100 | £389,000 |
| Harlow | £338,300 | £235,600 | £184,400 | £135,200 | £193,500 |
| Brentwood | £552,653 | £293,036 | £220,411 | £191,898 | £329,075 |
| Uttlesford | £496,700 | £289,000 | £248,500 | £155,600 | £350,800 |
| Broxbourne | £494,800 | £280,700 | £232,800 | £156,100 | £256,600 |
| East Herts | £555,600 | £312,500 | £252,200 | £188,100 | £325,500 |

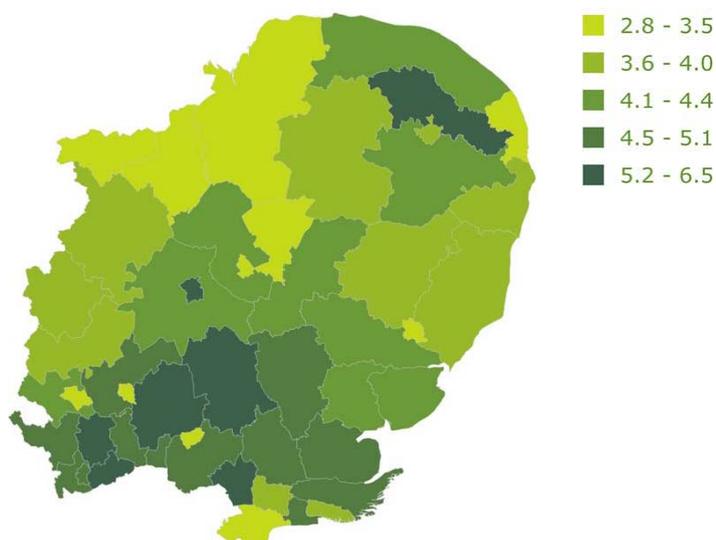
9.4.3 This means that most young people, whilst having been brought-up in the district, cannot afford to buy a property and are therefore obliged to either rent locally at high prices or move out of the district (e.g. to Harlow).

9.4.4 **Figure 9.1** shows how the ratio of lower quarter house prices to lower quartile household earnings (which is regarded as a robust indicator of housing affordability) varies across the Region. Epping Forest District has a relatively high ratio (9.4), although not as high as Brentwood (10.8), Uttlesford (10.9) or East Herts (10.9). Epping Forest's ratio has been relatively steady since 2002, prior to which it was increasing. This is in contrast to neighbouring authorities, which have all experienced steadily increasing ratios, or ratios that increased before levelling out in more recent years (in the case of Broxbourne the ratio has actually shown a decreasing trend since 2002). Epping Forest District appears to be performing better in terms of affordability than at any other time since 1997.

¹¹⁷ ONS (2009) *Key Figures for Housing* [online] available at: <http://neighbourhood.statistics.gov.uk> (accessed 10/09)

¹¹⁸ Source: Harlow Council (2008) *Harlow Housing Strategy and Action Plan 2008-2013* [online] available at: http://www.harlow.gov.uk/about_the_council/council_services/housing_services/housing_strategy/harlow_housing_strategy.aspx (accessed 10/09)

Figure 9.1: Ratio of lower quarter house prices to lower quartile household earnings¹¹⁹



9.4.5 In April 2008, 84.5% of dwellings in Epping Forest District were owner occupied or private rented, compared to 83.7% in the region and 81.8% nationally.¹²⁰ **Table 9.2** shows that the average weekly council rent is higher in Epping Forest District compared to surrounding districts, however, Registered Social Landlords (RSLs) rent is comparatively low compared to council rent, and Private Landlords (PLs) rent is low compared to neighbouring districts (apart from Harlow).

Table 9.2: Average weekly rent in Epping Forest District and surrounding areas¹²¹

| Local authority | Council rent (weekly rent £) | RSL rent (weekly rent £) | PLs rent (weekly rent £) |
|-----------------|------------------------------|--------------------------|--------------------------|
| Harlow | 63.32 | 77.66 | 128.82 |
| Brentwood | 67.82 | 89.41 | 161.97 |
| Epping Forest | 69.51 | 80.69 | 137.16 |
| Uttlesford | N/A | 77.10 | 139.64 |
| Broxbourne | N/A | 79.57 | 153.74 |
| East Herts | 71.27 | 87.41 | 155.06 |

9.4.6 A steady population increase in the over 65 years age group between 1996 and 2011 is anticipated to be a major challenge for housing in the district, with a 6.7% increase projected to occur between 2006 and 2011. By 2011, those aged 80 years and above (the 'older' retirement group) are also anticipated to rise by 13.9%. The retirement age group is more likely to require care and support needs and this has an impact on housing needs. In addition, in 2003 18% of households in the district contained someone with a disability – a proportion greater than the national average (15%). In 2003, 61% of wheelchair users were found to live in property without suitable adaptation (of the 7% of households in the district with a wheelchair user).¹²²

¹¹⁹ East of England Regional Economic Atlas [online tool] available at: <http://insighteast.org.uk/viewArticle.aspx?id=17174> (accessed 11/09)

¹²⁰ ONS (2009) *Key Figures for Housing* [online] available at: <http://neighbourhood.statistics.gov.uk> (accessed 10/09)

¹²¹ Source: Harlow Council (2008) *Harlow Housing Strategy and Action Plan 2008-2013* [online] available at: http://www.harlow.gov.uk/about_the_council/council_services/housing_services/housing_strategy/harlow_housing_strategy.aspx (accessed 10/09)

¹²² EDFC (2003) *2003 Housing Needs Survey* [online] available at: http://www.eppingforestdc.gov.uk/Library/files/housing/housing_needs_survey_summary.pdf (accessed 10/09)

9.4.7 Key housing statistics for Epping Forest District are summarised in **Table 9.3**. The average household size in Epping Forest District is larger than in the region and England and Wales. The district also has a lower percentage of vacant properties and a lower percentage of Council and Housing Association households. The district has a larger percentage of flats than the regional or national average. However, it has a smaller percentage of detached properties than the region. Flats and terraced houses generally represent smaller and more affordable housing, which is required in the district due to affordability issues.

Table 9.3: Key housing statistics for Epping Forest District (2008)¹²³

| | Epping Forest | East of England | England & Wales |
|---|---------------|-----------------|-----------------|
| Average household size | 2.37 people | 2.36 people | 2.36 people |
| Percentage of households in a Council or Housing Association property | 16.1% | 16.5% | 19.2% |
| Percentage of vacant properties | 2.3% | 2.8% | 3.4% |
| Percentage of detached properties | 23.4% | 30.2% | 22.8% |
| Percentage of semi-detached properties | 31.8% | 31.2% | 31.6% |
| Percentage of terraced properties | 23.5% | 23.5% | 26.0% |
| Percentage of flats | 17.5% | 11.4% | 13.6% |

9.4.8 **Table 9.4** shows the number of net additional dwellings completed in previous years, beginning at the start of the East of England Plan Period (2001). The figure for 2007/08 is much lower than in previous monitoring years and is attributed to the credit crunch, as confirmed in Council conversations with local developers that have revealed that companies are unwilling to complete dwelling units that they feel will be unlikely to sell.¹²⁴

Table 9.4: Net additional dwellings completed in previous years¹²⁵

| Monitoring Year | Net number of dwellings completed |
|-----------------|-----------------------------------|
| 2001/02 | 237 |
| 2002/03 | 271 |
| 2003/04 | 208 |
| 2004/05 | 240 |
| 2005/06 | 286 |
| 2006/07 | 277 |
| 2007/08 | 108 |
| Total | 1,627 |

¹²³ AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

¹²⁴ AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

¹²⁵ AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

9.4.9 During 2008/09, 31 affordable units were completed in the district which represents 17.13% of total completions.¹²⁶ The credit crunch doesn't appear to have impacted affordable housing completions with 2008/09 delivering a doubling of completions compared to 2007/08. **Table 9.5** shows the number of affordable housing units delivered in past years. In 2004/05 a large number of affordable units were delivered, equating to 41% of the total number of housing units delivered that year.

Table 9.5: Number of affordable housing completions in each monitoring year¹²⁷

| Monitoring Year | Net number of affordable housing completions |
|-----------------|--|
| 2001/02 | 68 |
| 2002/03 | 31 |
| 2003/04 | 5 |
| 2004/05 | 103 (41%) |
| 2005/06 | 78 (25.9%) |
| 2006/07 | 25 (7.72%) |
| 2007/08 | 14 (11.38%) |
| 2008/09 | 31 (17.13%) |

9.4.10 Over 82% of dwellings delivered in 2008/09 met the national indicative minimum of 30 dwellings per hectare housing density, of which over 75% were built to a density in excess of 50dph, **Table 9.6**.¹²⁸

Table 9.6: Density of dwelling completed per monitoring year

| Density achieved | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 |
|-----------------------|---------|---------|---------|---------|---------|
| less than 30 dph | 17.1 | 7.3 | 13.72 | 38.21 | 17.68 |
| between 30 and 50 dph | 10.8 | 32.2 | 20.58 | 28.46 | 6.63 |
| more than 50 dph | 72.1 | 60.5 | 65.7 | 33.33 | 75.69 |

Gypsies and Travellers

9.4.11 In 2008/09 ten additional Gypsy and Traveller Pitches were delivered and no Travelling Showpeople pitches.¹²⁹ **Figure 9.2** illustrates the trend in unauthorised and authorised pitches between 2004 and 2008. These numbers tend to fluctuate; however it appears that, since July 2004, the total number of pitches has slightly increased overall. The proportion of pitches that are unauthorised has decreased.

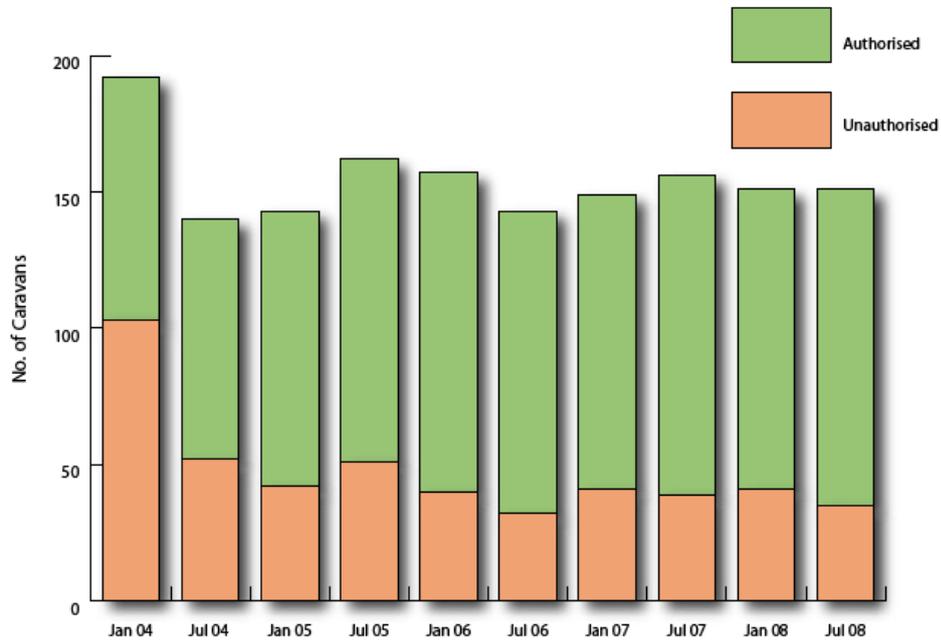
¹²⁶ *Ibid.*

¹²⁷ This data has been sourced from the Annual Monitoring Reports prepared by the Council over previous years. These reports are available online at http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/Forward_Planning_Publications.asp (accessed 03/10)

¹²⁸ AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

¹²⁹ AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

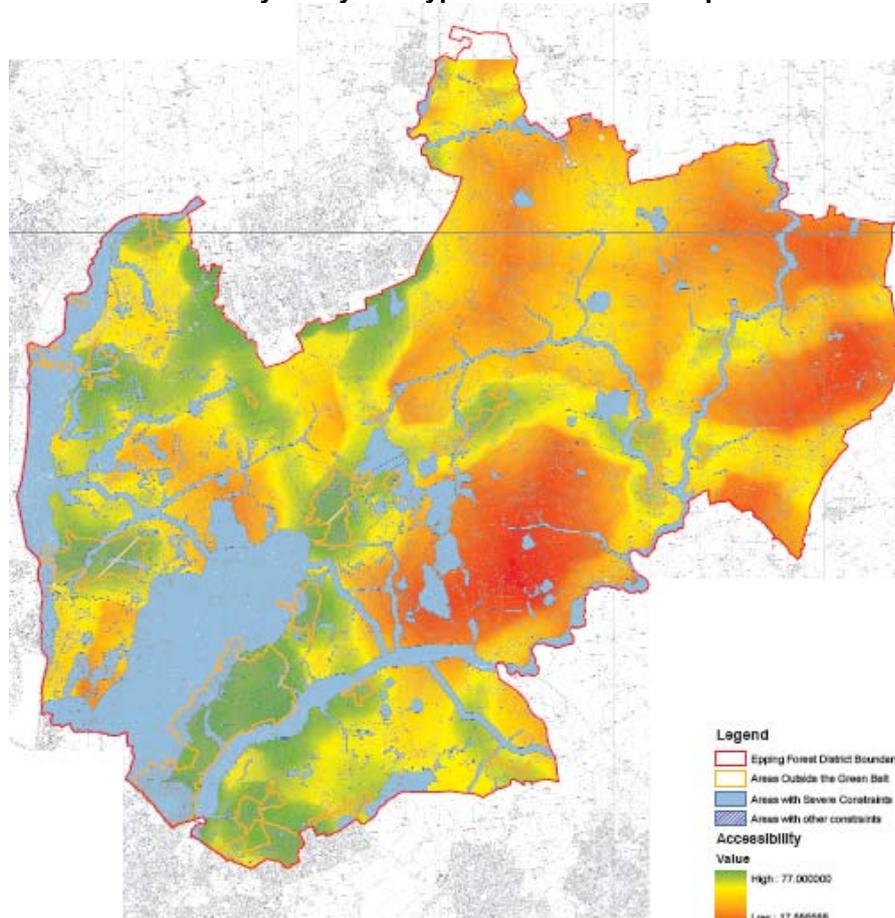
Figure 9.2: Trends in Bi-Annual Caravan Counts for Epping Forest District¹³⁰



9.4.12 **Figure 9.3** - produced for a consultation document considering Gypsy and Traveller 'issues and options', considers some elements of locational suitability. It is important to note that opportunity to deliver Gypsy and Traveller pitches may arise where significant new development comes forward.

¹³⁰ Source: Epping Forest District Council (2009) *Consultation on Options: Development Plan Provision for Gypsies and Travellers in Epping Forest District* [online] available at: http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/GandT/consultation_documents.asp (accessed 10/09)

Figure 9.3: Area suitability study for Gypsies and Travellers pitches¹³¹



9.5 What will be the situation without the plan?

9.5.1 The current national and international economic recession is already thought to have had an impact on the achievement of housing objectives at the national scale and within the district. In the absence of a clear strategy, there could be the potential for this situation to continue to worsen. Furthermore, without a Core Strategy, issues such as homelessness, housing density, housing mix, housing affordability and adequate provision of affordable housing, may be difficult to address.

9.6 What issues should be a particular focus for the appraisal?

9.6.1 There is a need to:

- ensure that the appropriate levels of new dwellings are provided over the plan period;
- increase the provision of affordable housing; and
- meet the needs of Gypsies and Travellers.

¹³¹ Source: Epping Forest District Council (2009) *Consultation on Options: Development Plan Provision for Gypsies and Travellers in Epping Forest District* [online] available at: http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/GandT/consultation_documents.asp (accessed 10/09)

10 Land and Waste

10.1 Introduction

10.1.1 This section will consider pressures on the land resources that exist in the district. In particular, we are concerned with the imperative of protecting the Green Belt and the most productive agricultural land, and the need to make best use of previously developed land. Epping Forest District is characterised by a number of towns and villages set within countryside with the majority of the district falling within the Green Belt (94%). However, the district lies on the edge of the metropolitan area and is under intense pressure for development, given its proximity to London and the high degree of accessibility afforded by the motorway network.

10.1.2 Waste has traditionally been seen as an unavoidable by-product of increased prosperity and economic activity. Disposal of waste has been predominantly to landfill, which has led to environmental problems, including greenhouse gas emissions and liquid pollutants (although modern landfill sites are now much more highly regulated). More recently, increasing concern about the environmental impacts of landfill has led to investigation into alternatives that are more sustainable. Integrated waste management planning is now seen as best practice. Integrated or sustainable waste management attempts to segregate the various components of the waste stream and to manage each in an environmentally sound and economically efficient manner, making use of waste as a resource wherever possible.

10.2 What is the policy context?

Land

10.2.1 Planning Policy Statement (PPS)3 on Housing¹³² sets a national target that 60% of new dwellings should be built on previously developed land. It also suggests that the density of new residential dwellings should be at least 30 dwellings per hectare to help ensure efficient use of land.

10.2.2 The East of England Plan (now revoked) stated that “*the re-use of previously developed land and buildings will be promoted as the first priority*”. Additionally, Policy SS2 stated that 60% of development is to be on previously developed land (this encompasses all development, not just housing).

10.2.3 PPG2: Green Belts¹³³ contains a presumption against any development in the Green Belt that detracts from its purposes which are:

- To check the unrestricted sprawl of large built-up areas;
- To prevent neighbouring towns from merging into one another;
- To assist in safeguarding the countryside from encroachment;
- To preserve the setting and special character of historic towns; and
- To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

¹³² ODPM (2000) *Planning Policy Statement 3: Housing* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/pps3housing> (accessed 07/09)

¹³³ ODPM (1995, amended 2001) *Planning Policy Statement 2: Green Belt* [online] available at: <http://www.communities.gov.uk/publications/planningandbuilding/ppg2> (accessed 07/09)

- 10.2.4 Policy SS7 of the East of England Plan (now revoked) related to Green Belt. It stated that the broad extent of Green Belt in the East of England is appropriate and should be maintained. However, it added that strategic reviews of Green Belt are needed in several areas to meet regional development needs at the most sustainable locations (including Harlow, East Herts and Epping Forest Districts).
- 10.2.5 PPS7 on Sustainable Development in Rural Areas states that new development in the open countryside should be strictly controlled and that priority should be giving to the re-use of previously developed or brownfield land, except in cases where there are no brownfield sites available or these brownfield sites perform poorly in terms of sustainability in comparison with greenfield sites, including accessibility by public transport, walking and cycling, high quality design and inclusiveness. PPS7 also mentions that where significant development of agricultural land is unavoidable, areas of poorer quality should be used in preference to the best and most versatile agricultural land (grades 1, 2 and 3a of the Agricultural Land Classification). Development plans should include policies that identify any major areas of agricultural land planned for developments and may also include policies that protect the best and most versatile areas from development.
- 10.2.6 Policy ENV4 of the East of England Plan (now revoked) stated that agri-environment schemes should be promoted to “*maintain and enhance the quality of soils*”, and that the sustainable use of soil resources should be encouraged, and where soil and land have been degraded, there is the need to maximise opportunities for restoration to beneficial after-uses such as agriculture, woodland, amenity and habitat creation schemes.
- 10.2.7 The 1990 Environmental Protection Act requires local authorities to secure the appropriate remediation of contaminated land and to maintain a register of contaminated land. Epping Forest Council published a Contaminated Land Strategy (2006)¹³⁴ for inspecting land within the district. The Council’s role is to:
- Inspect the area to identify any contaminated land;
 - Establish responsibilities for remediation of the land;
 - Ensure that appropriate remediation takes place through agreement with those responsible, or by serving a remediation notice, or in certain cases, carrying out the work themselves, or through other powers; and
 - Keep a public register detailing the regulatory action that they have taken under the new regime.

¹³⁴ EFDC (2000) *Statutory Contaminated Land Strategy Framework Document* [online] available at: https://www.eppingforestdc.gov.uk/Council_Services/environmental_health/Contaminated_LandStrategy.asp (accessed 10/09)

Waste

10.2.8 According to PPS10¹³⁵ all planning authorities should, to the extent appropriate to their responsibilities, prepare and deliver planning strategies that:

- help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be adequately catered for;
- enable sufficient and timely provision of waste management facilities to meet the needs of their communities;
- help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations;
- protect green belts but recognise the particular locational needs of some types of waste management facilities when defining detailed green belt boundaries; and
- ensure the design and layout of new development supports sustainable waste management.

10.2.9 The East of England Plan (now revoked) set out targets for waste management (Policy WM2). The objectives were to eliminate the landfilling of untreated municipal and commercial waste by 2021 and secure at least the following minimum levels of recovery:

- Municipal waste – recovery of 50% at 2010 and 70% at 2015;
- Commercial and industrial waste – recovery of 72% at 2010 and 75% at 2015.

10.2.10 Essex County Council has pledged to increase recycling of waste to over 45% in 2009, over 50% in the next three years, and towards a long term aim of 60% by 2020. Epping Forest District is a member of the Essex Waste Partnership. The Essex Waste Strategy¹³⁶ states that Essex authorities will work hard to reduce the amount of waste produced and to increase re-use of waste. The county favours composting technologies for organic wastes, and the introduction of new Mechanical Biological Treatment (MBT) plants to dispose of additional waste. An action plan is in preparation.

10.2.11 The Essex Design Guide¹³⁷ was adopted as a Supplementary Planning Document (SPD) by Epping Forest District Council in 1998. The guide:

- Recommends design actions for new homes such as provision of space for recycling – both inside and outside the building including details of space requirements;
- Requires provision for on-site composting for developments over 0.1 ha and provision of a composting bin for garden waste for each household;
- Requires the provision of cardboard compactors for commercial/retail units; and,
- Sufficient access for collection vehicles.

¹³⁵ CLG (2005) *Planning Policy Statement 10: Planning for Sustainable Waste Management* [online] available at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/147411.pdf> (accessed 10/09)

¹³⁶ Essex County Council (undated) *Essex Waste Strategy 2007-2032* [online] available at: http://www.essexcc.gov.uk/vip8/ecc/ECCWebsite/content/binaries/documents/Waste_Strategy_-_version_approved_by_ECC_Full_Council_on_15.07.08.pdf?channelOid=null (accessed 10/09)

¹³⁷ Essex County Council (1997) *Essex Design Guide* [online] available at: http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/SPG.asp (accessed 10/09)

10.3 What are the key objectives that we need to consider?

10.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:

- Promote sustainable growth within environmental limits
- Increase resource efficiency and reduce resource use and waste
- Conserve, restore and enhance the region's natural and built environment

10.4 What is the situation now?

Green Belt

10.4.1 The Council attributes very great importance to the character and appearance of the Green Belt, as well as its functions.¹³⁸ The Green Belt has been very successful in restricting the urbanisation of the countryside around London. However, there are some problems associated with the zone of transition between the two. This "urban fringe" can suffer from issues of poor environmental quality and dereliction. The Urban Fringe Special Advisory Group has suggested that the key to tackling the problems of the urban fringe in Green Belt areas is to develop its recreational role in ways that improve access but which, at the same time, protect and enhance the countryside.

Glasshouses

10.4.2 Horticultural glasshouses, mainly growing crops of cucumbers and tomatoes, are also a prominent feature in the district, particularly along the valleys of the River Lee and Stort. The Council supports the development of horticultural glasshouses in Green Belt areas providing that they are contained in appropriate areas.¹³⁹ According to the Local Plan, local councils, societies and residents have concerns about the existing glasshouse industry, including concerns relating to traffic, disturbance, dereliction leading to pressure for inappropriate development and gradual change to other inappropriate uses – e.g. retail outlets.¹⁴⁰

Agricultural land

10.4.3 **Figure 10.1** shows the quality of the agricultural land in the district and wider region. In addition to non-agricultural land, the district contains a mixture of Grade 2 and 3 land.

¹³⁸ EFDC (2006) *Local Plan Alterations* [online] available at:

http://www.eppingforestdc.gov.uk/Library/files/planning/alterations/Interim_doc/FINAL%20LP%20Alts%20combined%20PDF.pdf (accessed 10/09)

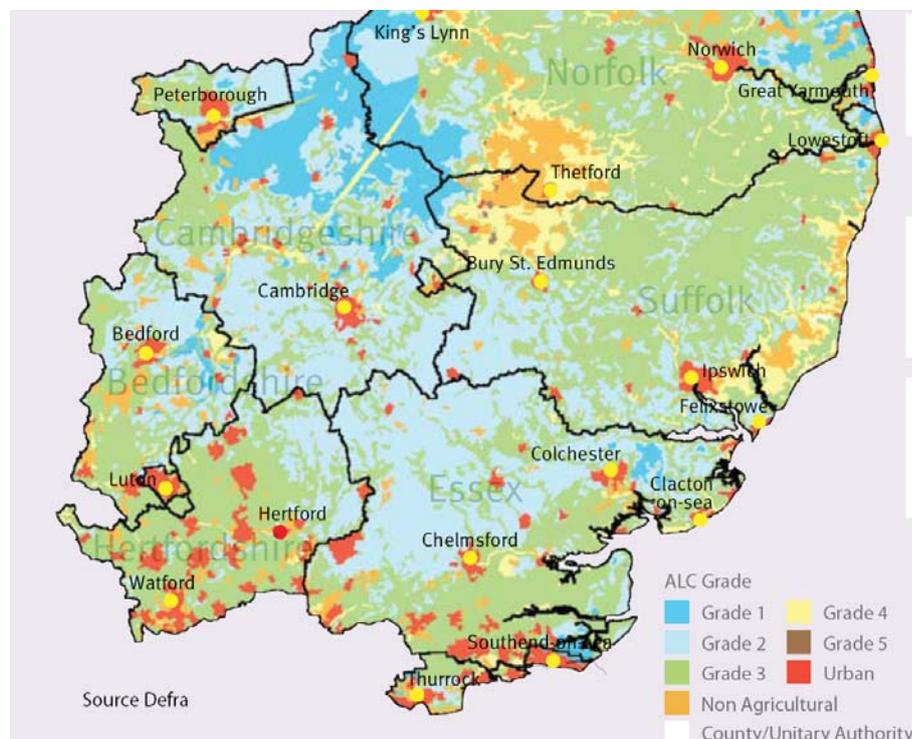
¹³⁹ EFDC (2006) *Local Plan Alterations* [online] available at:

http://www.eppingforestdc.gov.uk/Library/files/planning/alterations/Interim_doc/FINAL%20LP%20Alts%20combined%20PDF.pdf (accessed 10/09)

¹⁴⁰ EFDC Local Plan (1998) and Alterations (2006) [online] available at:

http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/local_plan_obtaining.asp (accessed 10/09)

Figure 10.1: Agricultural land classification in the East of England¹⁴¹



Land contamination

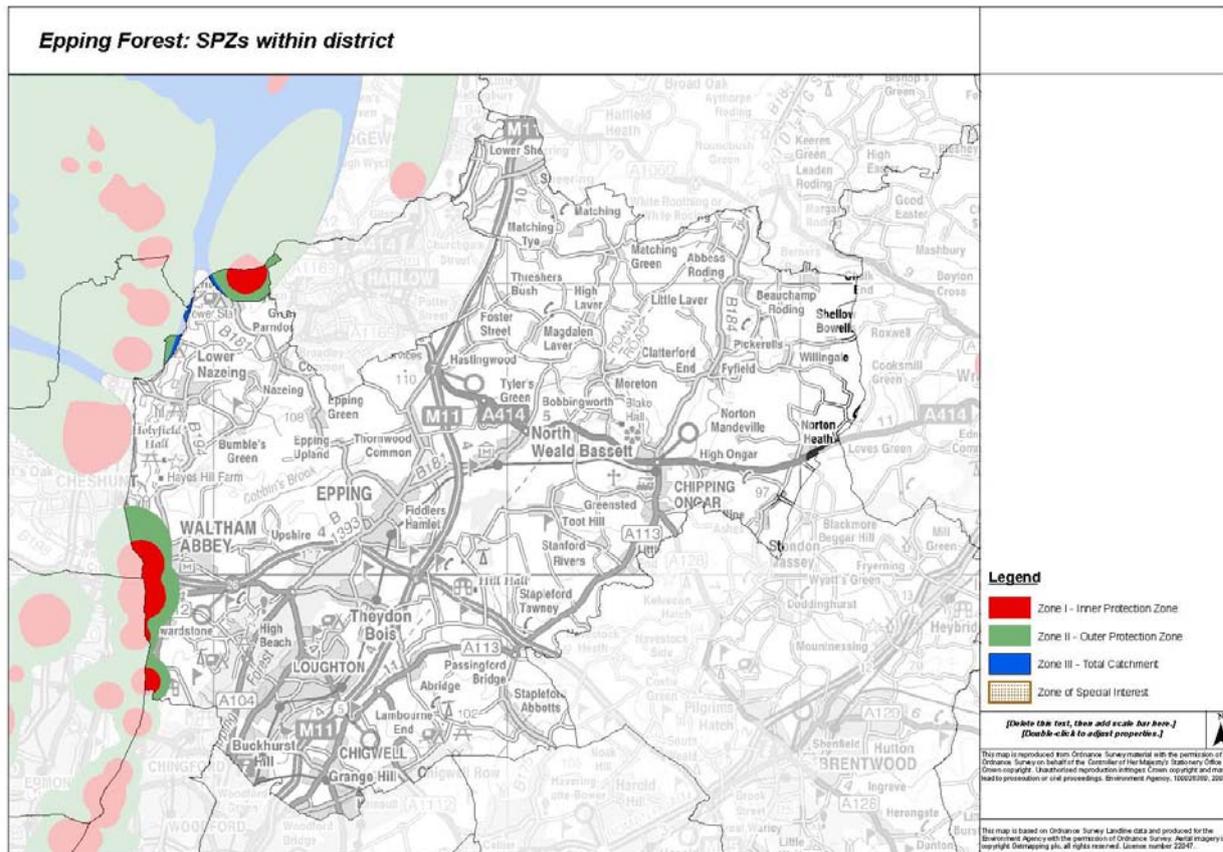
10.4.4 Extensive sand and gravel extraction has left a series of pits along the floodplains of the Rivers Lee and Stort in the west of the district, and to a lesser degree in the south, most of which are a potential source of contamination as they have been filled with wastes from domestic, industrial, commercial and building sources. Other pits have formed lakes and been used for fishing, water sports or as wetland habitats. The Lee Valley Regional Park Authority (LVRPA), own, manage and are expanding ownership of, most of the open land along the Lee. In addition to sand and gravel pits, other potential industrial sources of contamination include brick and tile pits, the Gun Powder Mills in Waltham Abbey, a former percussion cap manufacturer and plastics factory, and a 7 acre site until recently used to manufacture pesticides. Small businesses on previous glasshouse sites e.g. car repairers, scrap yards, haulage depots and bus companies that have set up on some of the redundant sites, have tended to follow traditional rural waste disposal methods of burning, burial or soakage on site. The district contains a large number of former and present garage sites, North Weald airfield (and former airfields at Ongar and Matching) and ex-MoD sites, scrap yard sites and local authority depots, where fuel may present a contamination risk. The 25km of drained electrified railway track in the district presents a contamination risk in terms of sub stations, cables, embankments containing Victorian waste fills and old goods yards and coal yards. Many fields in the district have been used for spreading sewage sludge and there are a number of present and former sewage works sites. There are a number of ex-hospital sites, iron work sites and smaller private gasworks in the district.¹⁴²

¹⁴¹ Source: Environment Agency (2009) *An Environmental Snapshot of the East of England* [online] available at: <http://publications.environment-agency.gov.uk/pdf/GEAN0309BPUI-e-e.pdf> (accessed 10/09)

¹⁴² EFDC (2000) *Statutory Contaminated Land Strategy Framework Document* [online] available at: http://www.eppingforestdc.gov.uk/Library/files/environmental_services/conlandstrat.pdf (accessed 02/10)

10.4.5 Land contamination can impact upon the quality of ground and surface water. **Figure 10.2** shows the location of groundwater 'Source Protection Zones' (SPZs) in the district. SPZs are delineated to protect potable water supplies against the polluting effects of human activity. These zones need to be considered in terms of land use planning. For example waste sites should not be located in SPZ1, which is the area closest to public water abstractions.

Figure 10.2: Source Protection Zones within Epping Forest District



Previously developed land

10.4.6 100% of the total employment floorspace completed in 2008/09 was on previously developed land (PDL), totalling 3.933 ha. In 2008/09, 172 of the 181 total dwellings (95.03%) completed in Epping Forest District were built on PDL. **Table 10.1** shows that this percentage is higher than in previous years and is considerably above the East of England Plan target of 60%.¹⁴³

¹⁴³ AMR (2009) Local Development Framework Annual Monitoring Report 2009, Epping Forest District Council

Table 10.1: Percentage of homes built on previously developed land

| | Percentage of homes built on previously developed land (%) |
|---------|--|
| 2002/03 | 72.7 |
| 2003/04 | 89.6 |
| 2004/05 | 94.4 |
| 2005/06 | 95.7 |
| 2006/07 | 93.5 |
| 2007/08 | 82.9 |
| 2008/09 | 95.03 |

Waste management

10.4.7 The waste and recycling performance of Epping Forest District is compared against other authorities within the county in **Table 10.2**, using the National Indicators (NIs) that took effect from April 2008. The amount of residual waste per household in Epping Forest (564kg) is below the county average (722kg), and the district also performs moderately well compared to others within the county. In terms of household waste sent for reuse, recycling, composting or anaerobic digestion (AD), Epping Forest (41.67%) performs above the county average (38.07%) and is one of the best performing local authorities in the county (behind Uttlesford and Braintree). Epping Forest also performs well in the county in terms of municipal waste landfilled (58.33%), below the county average of 60.24% and performing second best only to Uttlesford.

Table 10.2: Waste and Recycling performance of Epping Forest within Essex 2007/08¹⁴⁴

| | Residual household waste per household (not recycled, composted, reduced or sent for AD) (kg) – NI191 | Household waste sent for reuse, recycling, composting or AD (%) – NI192 | Municipal waste landfilled (%) – NI193 |
|---------------------------------|---|---|--|
| Basildon | 699 | 32.23 | 69.37 |
| Braintree | 538 | 42.79 | 59.71 |
| Brentwood | 529 | 41.20 | 62.94 |
| Castle Point | 691 | 27.07 | 74.21 |
| Chelmsford | 703 | 35.37 | 66.83 |
| Colchester | 567 | 33.09 | 67.77 |
| Epping Forest | 564 | 41.67 | 58.33 |
| Harlow | 627 | 23.88 | 76.12 |
| Maldon | 576 | 34.89 | 65.11 |
| Rochford | 758 | 19.39 | 80.61 |
| Tendring | 526 | 26.90 | 73.16 |
| Uttlesford | 429 | 54.26 | 51.32 |
| Essex CC (RCHW only) | 117 | 51.63 | 42.62 |
| Essex Total (incl. RCHW) | 722 | 38.07 | 60.24 |

10.4.8 A 2008 Audit Commission inspection of Epping Forest District's waste collection, recycling and street cleansing service rated it as "fair" with "uncertain prospects for improvement". The report acknowledged improvements in the waste collection and recycling service, in particular praising the recycling performance of the district, citing that the rates of recycling and composting had increased from 23.5% in 2005/06 to 41.67% in 2007/08.¹⁴⁵

10.5 What will be the situation without the plan?

10.5.1 Leaving aside the potential for the Green Belt to be reviewed as part of development associated with the expansion of Harlow, there could be potential for other development that comes forward in areas that do not make optimal use of the available land resource.

10.6 What issues should be a particular focus for the appraisal?

10.6.1 There is a need to:

- meet the objectives of the Metropolitan Green Belt;
- promote development in optimal locations that represent an efficient use of land; and
- support good waste management.

¹⁴⁴ Source: Essex County Council (undated) *Joint Municipal Waste Management Strategy for Essex (2007 to 2032)* [online] available at: <http://www.essexcc.gov.uk/vip8/ecc/ECCWebsite/dis/gui.jsp?channelOid=16959&guideOid=43565> (accessed 10/09)

¹⁴⁵ Audit Commission (2008) *Environment Inspection – Epping Forest District Council* [online] available at: <http://www.audit-commission.gov.uk/localgov/audit/inspection/reports/Pages/environmentinspection.aspx> (accessed 10/09)

11 Landscape

11.1 Introduction

- 11.1.1 Landscape is more than just a visual backdrop. It is an invaluable natural and socio-economic resource, which allows us to better understand our locality and helps us to define our sense of place. A short but comprehensive description of landscape is:

“an area, as perceived by people, whose character is the result of action and interaction of natural and/or human factors”

- 11.1.2 Nationally, the most valued landscapes might be found in the countryside, where semi-natural landscapes result from a long interaction of natural and socio-economic factors. However, landscape is a subjective concept that can be used in different situations and at a range of scales. Some landscapes might be of great local importance, even though they would not even be perceived as a distinct landscape by those without local knowledge. This can include landscapes that might be distinctive because of the way in which they have been modified by humans.

11.2 What is the policy context?

- 11.2.1 The UK Government is a signatory to the European Landscape Convention.¹⁴⁶ The Convention aims to encourage public authorities within member states to adopt policies and measures for the protection, management and planning of all landscapes, whether outstanding or ordinary, that determine the quality of people’s living environment. The Convention specially encourages local authorities to introduce exemplary and long lasting policies or measures to protect, manage and plan landscapes.
- 11.2.2 The European Landscape Convention defines ‘landscape character’ as: *“a distinct and recognisable pattern of elements that occur consistently in a particular type of landscape.”* Landscape Character Assessment (LCA) is a tool that allows landscape character to be understood, explained and described in a transparent and robust way. It does this by mapping and describing the variations in physical, natural and cultural attributes and experiential characteristics that make one area distinctive from another at a range of spatial scales. LCA also considers how landscapes have changed over time, and acknowledges the influences that human activities and the impacts of economic development have in shaping and changing landscapes. A better understanding of landscapes provided by Landscape Character Assessments – their diversity, character and distinctiveness, evolution, sensitivity to change and their management needs – is essential to effective spatial planning.
- 11.2.3 LCA is also recommended in PPS7 as a tool for creating carefully drafted criteria-based policies in Local Development Documents to protect valued landscapes outside nationally designated areas without the need for rigid local designations, which may restrict sustainable development and the economic vitality of rural areas.

¹⁴⁶ More information about the European Landscape Convention is available at: <http://www.coe.int/t/dg4/cultureheritage/Conventions/Landscape/> (accessed 07/09)

11.2.4 Planning Policy Statement (PPS)12 emphasises the need for evidence based policies and plans that have regard to the sense of local distinctiveness and community derived objectives, set within the framework of national policy and regional strategies. Spatial planning provides a means of safeguarding an area's environmental assets, both for their intrinsic value and for the contribution they make to social and economic well being.

11.2.5 Policy ENV2 of the East of England Plan (now revoked) related to landscape conservation. It stated that planning authorities should recognise the importance of diversity and local distinctiveness, including through developing area-wide strategies and criteria-based policies based on LCA.

11.3 What are the key objectives that we need to consider?

11.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:

- Promote sustainable growth within environmental limits
- Adapt to the impacts of climate change
- Conserve, restore and enhance the region's natural and built environment

11.4 What is the situation now?

11.4.1 A Landscape Character Assessment Study from Chris Blandford Associates (CBA) has been recently completed. The findings of this study have been taken into account within this Scoping Report. Other studies at a national and county scale have identified two Joint Character Areas within the district (**Figure 11.1**) and three County Landscape Character Types (**Figure 11.2**). The CBA study has identified seven Landscape Character Types and 33 Landscape Character Areas (**Figure 11.3**). The CBA study includes a description of each of the Landscape Character Areas identified within the district. These descriptions have been taken into account within **Chapters 14 - 18** of this Scoping Report.

Figure 11.1: Joint Character Areas

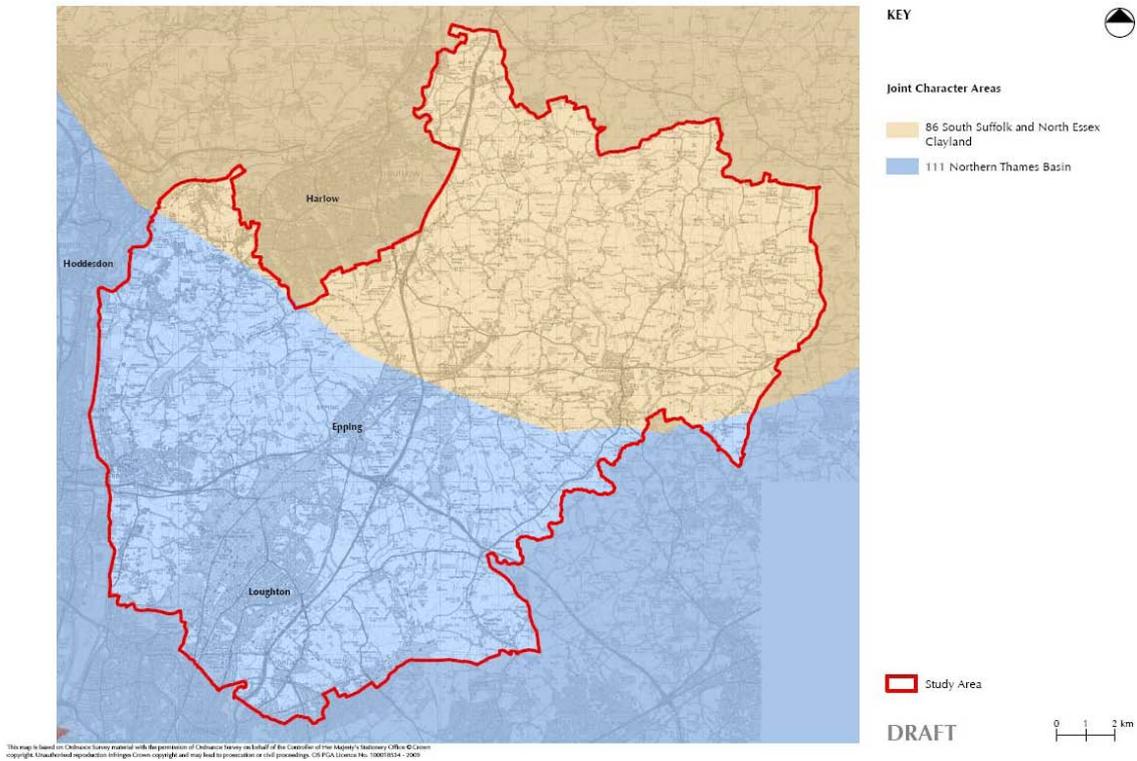


Figure 11.2: County Landscape Character Types

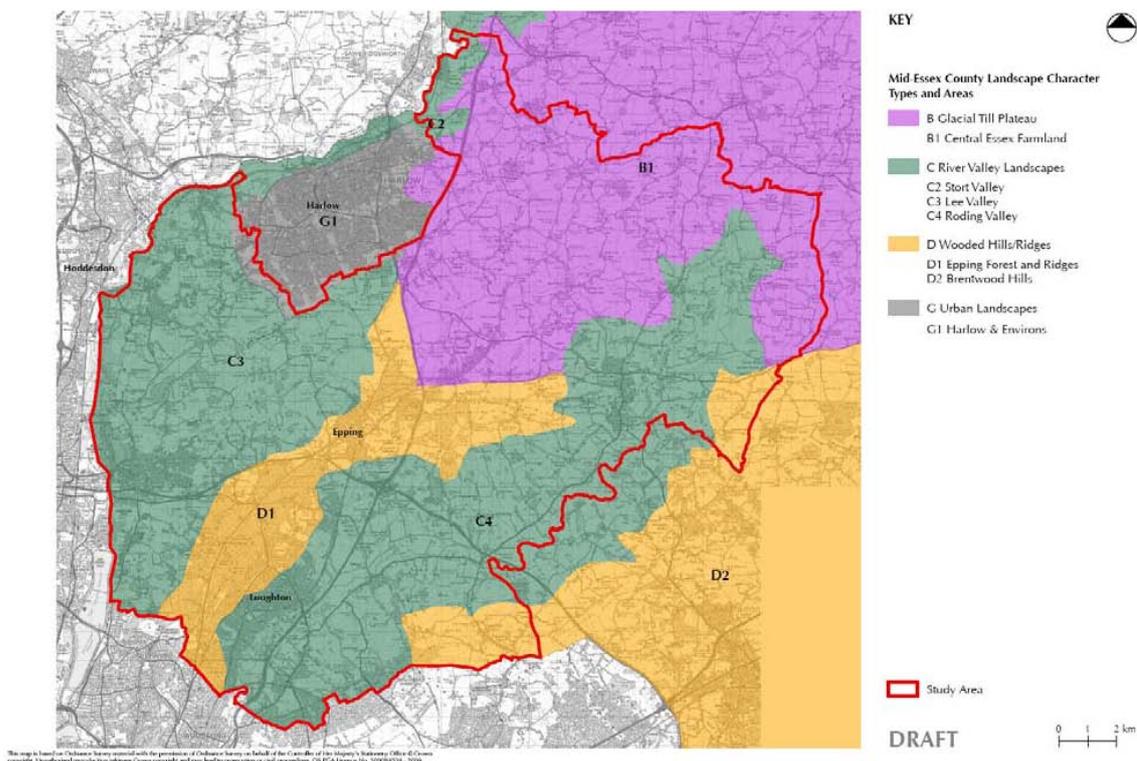
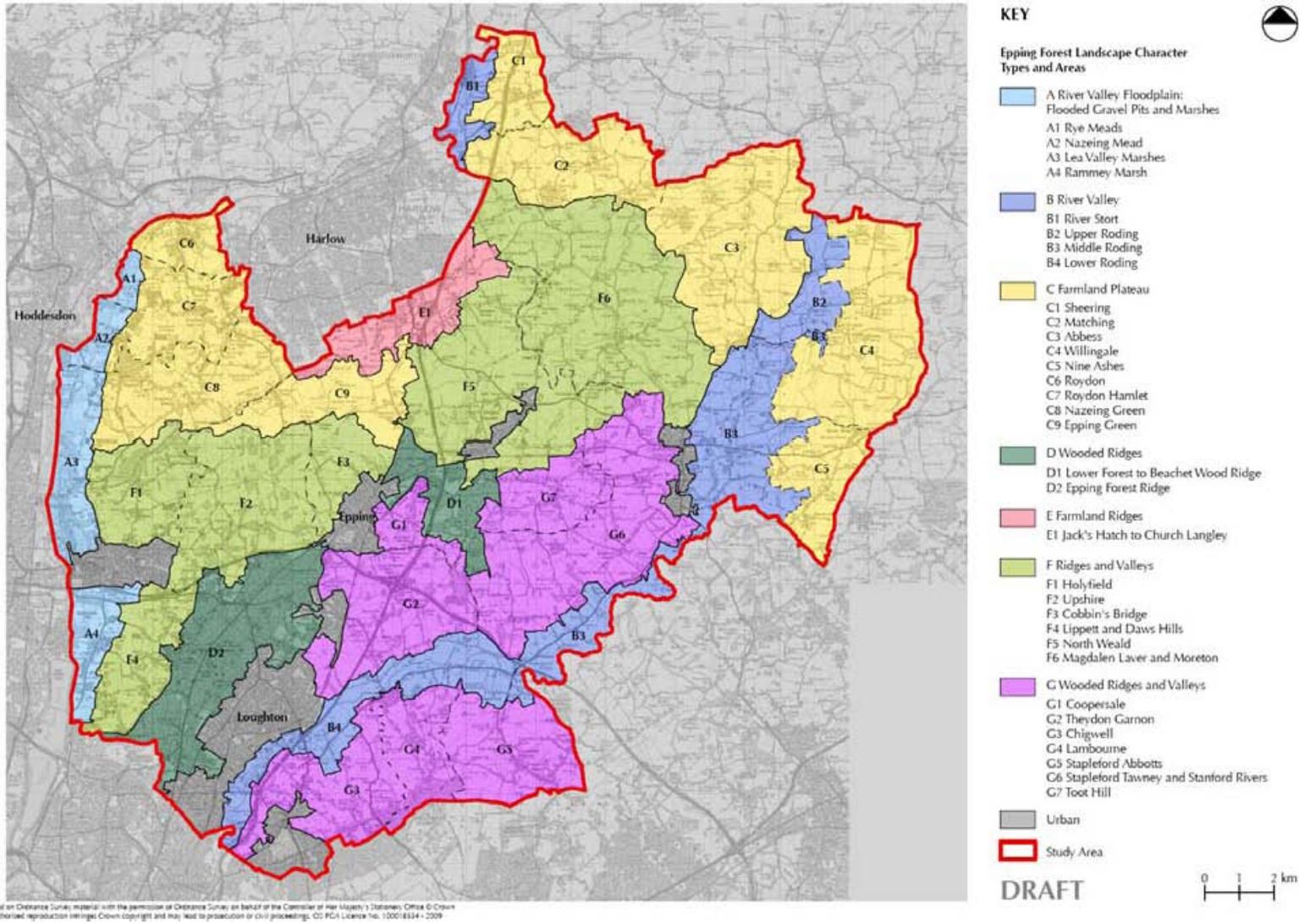




Figure 11.3: Landscape Character Types and Landscape Character Areas (as identified by CBA, 2010)



11.4.2 The Epping Forest District Landscape Character Assessment (2010) identifies a long list of key issues affecting landscape character in the district. From this list, the following are considered to be particularly relevant to spatial planning:

- Decrease in woodland and tree cover and loss of small woodlands
- Loss of veteran trees
- Continuing decline/loss of landscape features such as hedgerows, hedgerow and field trees, field margins and farm ponds
- Increased pressure for new uses of 'marginal' land, including small holdings, leisure uses and pony paddocks
- Increase in pony paddocks giving rise to poor hedgerow and grassland management and intrusive post and wire fencing/ranch fencing, stable facilities and ménages;
- Increase in large arable farm units which may lead to further homogenisation of the landscape and reduction in biodiversity (the implication being that we need to value those historic landscapes that show a more 'ancient' field pattern)
- Farm diversification such as the adoption or reuse of farm buildings for commercial, industrial and storage uses which may conflict with historical/architectural character and the introduction of new industrial crops.
- The expansion of out of town shopping centres into the surrounding countryside with the associated loss of characteristic farmland.
- Increase in congestion surrounding routes to key employment and residential areas;
- Increased pressure for widening and expansion of the rural road network as a result of increased traffic.
- Construction of new roads, bypasses etc.
- Road improvements that can have an urbanising effect, especially on rural lanes (pressure on rural lanes is particularly strong around Waltham Abbey and Nazeing as a result of large delivery vans and lorries associated with the nurseries).
- Increased requirement for parking provision in villages and towns which are popular with tourists
- Quality of built environment
- Loss/erosion of urban open spaces and of tree cover
- Decline in the condition of landscapes in the urban fringe, with problems such as lack of management of hedgerows/trees and fly-tipping
- Housing growth at the periphery of towns can extend the urban character of these areas into the landscape (including as a result of noise and light pollution)
- New strategic initiatives to maintain and enhance existing green spaces and corridors and to create new provision of green infrastructure, as an integral part of new development
- Disturbance of habitat by inappropriate recreation
- Continued demand for golf courses and other recreational land uses

11.4.3 Furthermore, the Epping Forest District Settlement Edge Sensitivity Assessment considers the sensitivity of the landscapes directly surrounding the district's major settlements. Focusing on just these areas, the study was able to consider the landscape at a finer resolution than the district-wide characterisation study. Outcomes of this study are considered in Chapters 14 – 18 of this Scoping Report.¹⁴⁷

11.5 What will be the situation without the plan?

11.5.1 Despite the increasing use of landscape character assessment as a tool over recent years, there undoubtedly remains only a limited understanding amongst the public of the factors that make local landscapes distinctive. Thus, there is potential for the erosion and homogenisation of landscape character that has occurred over the second half of the 20th century to continue unabated.

11.6 What issues should be a particular focus for the appraisal?

11.6.1 There is a need to:

- direct development away from the most sensitive landscapes and support efforts to maintain and enhance characteristic landscape features.

¹⁴⁷ CBA (2009) *Epping Forest Settlement Edge Landscape Sensitivity Assessment*. Draft Version

12 Transport

12.1 Introduction

12.1.1 Transport plays a vital role in supporting sustainable development. In economic terms an efficient and well managed transport network connects localities and regions to national and international markets, secures the localised benefits of agglomeration economies and underpins private sector productivity gains. In social terms, good connectivity can stimulate labour market flexibility through improvements in accessibility, allowing a wider range of the population to access employment opportunities. Environmental impacts can be reduced by sustainable transport schemes which may include fast, efficient and affordable public transport as well as the provision of walking and cycling infrastructure. Epping Forest District's Local Development Framework should play a key role in encouraging spatial development that leads to sustainable transport patterns in the district and beyond.

12.2 What is the policy context?

12.2.1 Planning Policy Guidance (PPG)13: Transport (2002)¹⁴⁸ states that quality of life depends upon transport and easy access to jobs, shopping, leisure facilities and services. PPG13's objectives include the integration of planning and transport to promote more sustainable transport choices; promote accessibility to jobs and services by public transport, walking and cycling; and reduce the need to travel, especially by car. For rural areas, the guidance states that Local Authorities should be, "...realistic about the availability, or likely availability, of alternatives to access by car." *The guidance also recognises the role of walking and cycling in reducing air pollution.*

12.2.2 Transport 2010: The Ten-Year Plan (July 2000)¹⁴⁹ and Progress Report (2003) set out a strategy to tackle congestion and pollution by improving all types of transport. Targets include: a 50% increase in rail use (measured by passenger kilometres); an 80% increase in rail freight; and a 10% increase in bus passenger journeys, and the approach is based on:

- integrated transport;
- public and private partnership between the government and private sector; and
- new projects to modernise the transport network.

12.2.3 The Future of Transport: A Network for 2030 White Paper (2004)¹⁵⁰ updated the 'Transport 2010' policies and examined the factors that will shape travel and transport over the next thirty years. It sets out how the Government will respond to the increasing demand for travel, maximising the benefits of transport while minimising the negative impact on people and the environment. Key objectives include: improving the flow on local roads; improving the reliability of buses; encouraging walking and cycling; better management of road networks; using technology to keep people better informed; promoting school and workplace travel plans and public transport improvements; more demand responsive transport; and making services more accessible to improve travel choice.

¹⁴⁸ ODPM (2001) *Planning Policy Guidance 13: Transport* [online] available at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155634.pdf> (accessed 06/09)

¹⁴⁹ DfT (2000) *Transport Ten Year Plan 2000* [online] available at: <http://www.dft.gov.uk/pgr/regional/policy/transport2010/transport2010meetingthelocal3735> (accessed 06/09)

¹⁵⁰ DfT (2004) *Future of Transport* [online] available at: <http://www.dft.gov.uk/about/strategy/whitepapers/previous/fot> (accessed 06/09)

- 12.2.4 The East of England Plan (now revoked) identified Epping Forest District as part of the London Arc – the areas closest to and most strongly influenced by London¹⁵¹. The Plan also contained the Regional Transport Strategy (RTS) to support the spatial development strategy in the plan and provide a framework for the delivery of transport infrastructure and service improvements within the region.
- 12.2.5 The RTS gave a clear priority to increasing travel by more sustainable modes, whilst also recognising the importance of the road network. Objectives included:
- managing travel behaviour and the demand for transport with the aim of reducing the rate of road traffic growth;
 - encouraging efficient use of existing transport infrastructure;
 - enabling the provision of the infrastructure and transport services necessary to support both existing development and that proposed in the spatial strategy; and
 - improving access to jobs, services and leisure facilities.
- 12.2.6 Policy SS4 of the East of England Plan (now revoked) stated that LDDs should define the approach to development in towns in rural areas other than those listed in the Plan as Key Centres for Development and Change. This included market towns and others with the potential to increase their economic and social sustainability through measures to include improving “*the town’s accessibility, especially by public transport*”.
- 12.2.7 Policy T15: Transport Investment Priorities, identified the London to Stansted corridor amongst a number of areas likely to come under increasing transport pressure as a result of underlying traffic growth and the regional development strategy.
- 12.2.8 Policy HA1: Harlow Key Centre for Development and Change of the Plan set out that, as a matter of urgency, Harlow, East Herts and Epping Forest District Councils should “*work with the county transport authorities, the Regional Assembly, the Government Office and Harlow Renaissance to undertake an appraisal of planning and transport options to inform the preparation of joint or coordinated Local Development Documents*”.
- 12.2.9 The scale of these proposals for the Harlow Area combined with the need to plan the regeneration of the Harlow area led to the establishment of the Harlow Area Working Party (HAWP) now replaced by the Gateway Transportation Board and several other working groups.¹⁵² Transportation issues in the area were examined by a HAWP sub-group and a strategic transport model has been used for the Harlow area.
- 12.2.10 The Second Essex Local Transport Plan (LTP2) 2006 to 2011¹⁵³ concentrates on how the county will deliver ‘shared priorities’ for transport through a transport strategy. LTP2 uses an area-based approach to tailor strategies with a regional and local perspective. The Area Transport Delivery Strategy for Harlow and the Stansted/M11 Corridor (including Epping Forest, Harlow and parts of Uttlesford) identifies the wider challenges facing transport in this area, such as from the housing allocation in the Harlow Area, current ongoing development, existing congestion, and possible airport expansion.

¹⁵¹ GOEE (2008) *East of England Plan* [online] available at:

http://www.gos.gov.uk/goee/docs/Planning/Regional_Planning/Regional_Spatial_Strategy/EE_Plan1.pdf (accessed 09/09)

¹⁵² Information provided by Epping Forest District Council in response to comments on draft report (02/10)

¹⁵³ Essex County Council () *Second Essex Local Transport Plan (LTP2) 2006 to 2011* [online] available at:

<http://www.essexcc.gov.uk/vip8/ecc/ECCWebsite/dis/guc.jsp?channelOid=16819&guideOid=39939&guideContentOid=44746> (accessed 09/09)

12.2.11 One Epping Forest is the Local Strategic Partnership (LSP) for the district and has developed the district's Sustainable Community Strategy¹⁵⁴ that must be taken into account when preparing the LDF. One of the guiding principles for the Strategy was that: *“Travel around the district, and transport links beyond, must be improved in a sustainable and accessible manner to enable everyone to benefit from community services, business opportunities and leisure activities”*. The current Strategy includes the theme ‘Getting About’ with a vision for the district:

“Epping Forest will be a district that has a safe, accessible, efficient and affordable means of getting about, using public transport, private cars and other means, such as cycling.”

12.2.12 A determinant of opportunities for walking and cycling will be the proximity of new housing to community infrastructure, such as education and childcare facilities. For example, for Early Years and Childcare provision a 'pram pushing' distance of around 400m is often quoted as reasonable. The Children & Young People's Plan; The School Organisation Plan and the Childcare Sufficiency Assessment provide further evidence.¹⁵⁵

12.2.13 With regard to the Central Line, there is a need to take account of the Mayor's Transport Strategy.

12.3 What are the key objectives that we need to consider?

12.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:

- Promote sustainable growth within environmental limits
- Reduce poverty and inequality and promote social inclusion
- Reduce greenhouse gas emissions
- Move goods and people sustainably
- Meet the needs of the changing regional demographic.

12.4 What is the situation now?

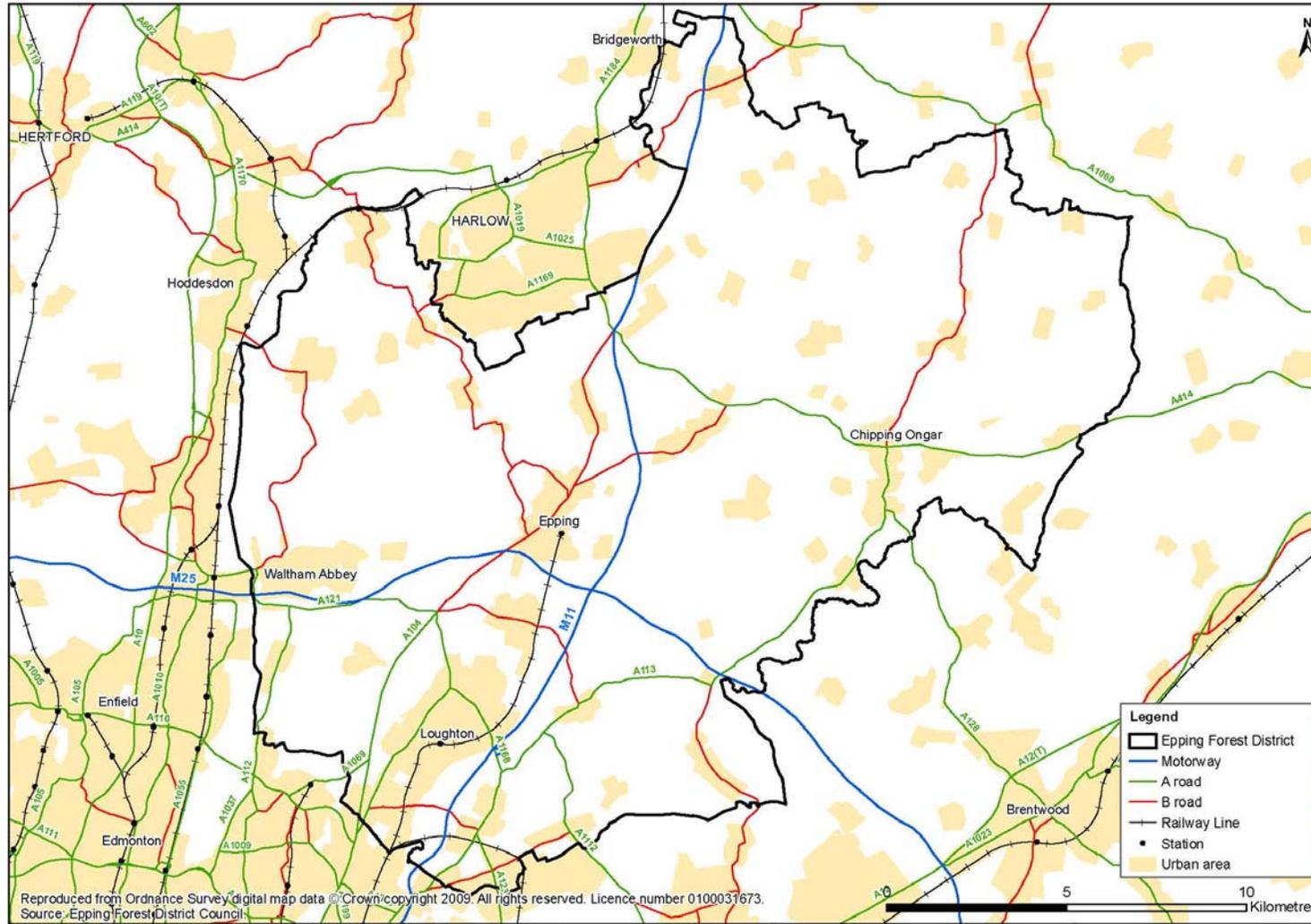
12.4.1 **Figure 12.1** illustrates the main transport network in Epping Forest District. The M25 runs west-east and the M11 runs north-south (to/from London) through the district. The south of the district is well-served by a number of A roads that allow the district to connect to London, and the A414 connects the east of the district and Chipping Ongar to the M11 and the A road network of Harlow town. Other parts of the district are served by a small number of B roads (the B181 – runs north-south from Roydon to Epping and provides access to the A414; and the B1393 – runs north-south from Hastingwood to Epping), although the rural areas of the district are quite isolated.

12.4.2 The central line of the London Underground has tube stations in Epping, Theydon Bois, Debden and Loughton, all located in zone 6, and also at Buckhurst Hill (zone 5). Furthermore, the stations of Chigwell, Grange Hill and Roding Valley (zone 4) are situated on the border between Epping Forest District and the London Borough of Redbridge. The only mainline station in the district is at Roydon.

¹⁵⁴ Epping Forest Local Strategic Partnership (undated) *Epping Forest District Community Strategy 2004-2021* [online] available at: http://www.oneeppingforest.org.uk/pdf/community_strategy.pdf (accessed 09/09)

¹⁵⁵ Evidence provided by Essex County Council as part of the consultation on this report.

Figure 12.1: Transport routes in and around Epping Forest District



- 12.4.3 Epping Forest District falls within the London Travel to Work Area (TTWA) which has a “*strong pull effect*”. Harlow is a large town with 80,000 residents and 44,000 employees that is located within the northern edge of the district. Epping Forest District falls within the ‘Harlow Sub Region’ catchment area that includes over 400,000 people and 195,000 jobs and partly within the Harlow Travel to Work Area (TTWA). Between 1981 and 2002 the Harlow Sub Region gained almost 15,000 people (40% via net in-migration).¹⁵⁶ It should be noted that the area around Stansted airport in Essex is another employment pull, and a major economic driver for the region as a whole.¹⁵⁷
- 12.4.4 The Essex Local Transport Plan (LTP)2 identifies Epping Forest District as being part of the Harlow and Stansted / M11 Corridor. According to the LTP2, “*This corridor is at risk from unsustainable airport expansion, excessive water extraction, fluvial flooding, high road traffic levels and the resulting poor level of air quality especially around Epping Forest*”.¹⁵⁸
- 12.4.5 The isolation of rural areas and a lack of public transport can result in high levels of car dependency. Moreover, London is the largest source of employment for the district (only approximately 38% of the resident population work within the district). The central line does encourage the use of public transport and facilitates out-commuting, and as a result the percentage of people who travel to work by public transport is higher in the district (22%) than regionally (10.9%) and in nationally (14.5%). However, the availability of public transport is still a key issue for the district. According to the LSP: “*within the district itself, transport services are generally inadequate, leaving people without their own cars unable to benefit from local services and these wider connections*”.¹⁵⁹
- 12.4.6 The Council’s AMR identifies that, in 2008/2009, the majority of new residential development was within 30 minutes public transport of a GP’s surgery, a primary school, and a major retail centre. In the same monitoring period, however, significantly lower proportions were within 30 minutes public transport of a secondary school and an employment area, and less than half of new residential developments were within 30 minutes public transport of a hospital. Essex LTP2 identifies the rural areas of Epping District as a pocket of poor access to healthcare within Essex for the elderly and those within areas with a high health deprivation index.¹⁶⁰
- 12.4.7 The Harlow and Stansted / M11 Corridor experiences peak period traffic congestion throughout the strategy area. The impact of expansion at Stansted Airport is still under investigation and may well have impacts on Epping Forest District as a through-point for traffic from London. According to Essex County Council, the expansion of Stansted Airport may require widening of the M11 north of Junction 8; and major infrastructure will be required in the Harlow area including improvement of the M11 Junction 7, an A414 bypass and dedicated high quality passenger transport corridors.¹⁶¹

¹⁵⁶ PACEC and Halcrow Group Limited (2005) *Harlow Regeneration Strategy - Evidence Base and Analysis of Needs – Final Report* [online] available at:

http://www.harlow.gov.uk/about_the_council/council_services/business_services/regeneration_unit/harlow_regeneration_strategy.aspx (accessed 10/09)

¹⁵⁷ LSC (2008) Local Need Assessment – Essex [online] available at:

http://readingroom.lsc.gov.uk/lsc/EastofEngland/LNA_Essex_08.pdf (accessed 10/09)

¹⁵⁸ Essex County Council (undated) *Second Essex Local Transport Plan (LTP2) 2006 to 2011*, p.68-69 [online] available at:

<http://www.essexcc.gov.uk/vip8/ecc/ECCWebsite/dis/guc.jsp?channelOid=16819&guideOid=39939&guideContentOid=44746> (accessed 10/09)

¹⁵⁹ *Ibid*

¹⁶⁰ *Ibid*

¹⁶¹ *Ibid*

- 12.4.8 Concerns have been raised about the amount of traffic currently passing through the district and the impact that this is having on the sensitive local environment. Roads that have already been observed carrying traffic flows in excess of their operational capacity include the:¹⁶²
- M25
 - A121 Woodricken Hill through Epping Forest
 - B194 Crooked Mile north of Waltham Abbey
 - A414 through Harlow and West of Ongar to North Weald
 - A113 London Road and Ongar Road
 - A1168; and
 - Chigwell Lane at Loughton.
- 12.4.9 There are also capacity issues on Epping High Street, on the Loughton High Road, and at problem junctions in Waltham Abbey, Chigwell, Loughton and Epping, as well as congestion problems at Junction 7 of the M11. The London Underground Central Line creates parking problems at a number of stations, with potential repercussions for the efficiency of these stations, particularly during peak commuting hours. Essex County Council has planned improvements for bus links to these stations.¹⁶³
- 12.4.10 The LTP2 seeks improvements in the quality and reliability of existing bus services in the long term, including through the provision of a dedicated high quality passenger transport link from Epping to the north of Harlow in order to serve any future housing growth in the Harlow Area.¹⁶⁴
- 12.4.11 Essex County Council measures to specifically address problems being experienced in Epping Forest District include plans to reduce congestion and rat-running, and improve safety and accessibility to key services. This includes the promotion of recreational opportunities in the forest and studying the impact of major residential developments.¹⁶⁵

Are there any evidence gaps?

- 12.4.12 Anecdotal evidence gathered through the consultation on this document has suggested that considerable problems arise as a result of an inadequate bus service. There appears to be a need to explore this further.

¹⁶² *Ibid*

¹⁶³ *Ibid*

¹⁶⁴ *Ibid*

¹⁶⁵ *Ibid*

12.5 What will be the situation without the plan?

12.5.1 Without planned development through the Core Strategy, it will be difficult to deliver the Second Local Transport Plan, which includes plans for improvements to congestion and infrastructure problems in Epping Forest District. Future transport problems, such as those that may potentially arise as a result of the expansion to Stansted Airport, may also be harder to mitigate.

12.5.2 Issues relating to urban-rural connectivity, that are particularly relevant to the district, may go unaddressed and may worsen. More generally, it will be more difficult to address existing localised issues of poor access to services and facilities and reduce overall car dependency.

12.6 What issues should be a particular focus for the appraisal?

12.6.1 There is a need to:

- bring about a modal shift in terms of commuting patterns, away from dependency on the private car;
- recognise that the district does not have in place a comprehensive sustainable transport infrastructure; and
- recognise that access to services and employment is an issue in rural areas.

13 Water

13.1 Introduction

- 13.1.1 This section will consider both water quality and water ‘quantity’, which will be termed water ‘resources’.
- 13.1.2 Water quality is assessed by the percentage of river length that has good chemical and ecological status. Ecological status, in turn, is defined as a combination of physico-chemical elements (e.g. nutrients, pH, dissolved oxygen), biological elements (e.g. fish, algae), specific pollutants and hydromorphology (e.g. depth, width, flow). Poor water quality is typically due to a combination of agricultural runoff, untreated drainage from built-up areas and roads, and discharge from wastewater treatment works. It can affect people’s health, and that of plants and animals.
- 13.1.3 The pressures on our water resources are growing. More houses are being built, our population is increasing and we are all using more water. Climate change will only add to these pressures. UK-wide, roughly 48% of the water abstracted in England and Wales is for household use, 22% for non-domestic use, and 22% is lost due to leakage¹⁶⁶.

13.2 What is the policy context?

- 13.2.1 The EU Water Framework Directive (WFD)¹⁶⁷ requires all inland and coastal waters to achieve at least ‘good status’ by 2015 or, where this is not possible, by 2021 or 2027. The Environment Agency has prepared draft River Basin Management Plans¹⁶⁸ that show how these requirements will be met by 2025. This includes a plan for the Thames River Basin District which covers Epping Forest District. Ongoing actions with relevance to LPAs include influencing the location of development, developing specific policies for contaminated land, and complying with published advice on sustainable drainage systems (SuDS). In addition, a number of actions may be taken by the Environment Agency past 2015, which is a further consideration for spatial planning (i.e. there is a need to ensure flexibility).
- 13.2.2 The Environment Agency highlight the importance of Integrating development planning and water planning. For example, there is a need to:¹⁶⁹
- adopt stringent water efficiency policies;
 - take account of the findings of Water Cycle Studies;
 - set policy relating to SuDS, contamination and ecological enhancement; and
 - identify suitable development for groundwater sensitive areas.

¹⁶⁶ Environment Agency (2007) *Water supply in England and Wales 2000 to 2007* [online] available at: <http://publications.environment-agency.gov.uk/pdf/GEHO0907BMXP-e-e.pdf?lang=e> (accessed 06/09)

¹⁶⁷ European Union (2000) *EU Water Framework Directive* [online] available at: http://ec.europa.eu/environment/water/water-framework/index_en.html (accessed 06/09)

¹⁶⁸ Environment Agency (2008) *Draft River Basin Management Plans* [online] available at: <http://www.environment-agency.gov.uk/research/planning/33106.aspx> (accessed 06/09)

¹⁶⁹ Environment Agency (2009). *Water for life and livelihoods: annex C – actions to deliver objectives*.

- 13.2.3 Future Water: The Government's water strategy for England (2008)¹⁷⁰ sets out the Government's vision for how the water sector will look by 2030 and some of the steps necessary to achieve it. The Strategy requires planning authorities to work closely with the water companies and the Environment Agency on timing and numbers of new households in areas likely to see the greatest growth.
- 13.2.4 The CLG/Defra report 'Water efficiency in new buildings'¹⁷¹ outlines policies and measures that aim to reduce domestic consumption in new properties to 125 litres per head per day (l/hd/d) through the introduction of new building regulations. The Code for Sustainable Homes¹⁷² outlines various target levels for the construction of sustainable homes, one aspect of which is the efficient use of water. From 2010, all affordable housing will have to be constructed to Code Level 3, which sets water consumption at 105 l/hd/d for internal use for an average year.
- 13.2.5 The Environment Agency is developing Catchment Abstraction Management Strategies (CAMS)¹⁷³ which consider how much water can be abstracted from watercourses without damaging the environment within a catchment – the most appropriate scale for planning for water. They recognise the needs of abstractors whilst also fitting in with the requirements of the Water Framework Directive. Epping Forest District is within the Thames region CAMS area.
- 13.2.6 The East of England Plan (now revoked) contained several specific policies to manage water resources within the Region. These included Policy WAT1: Water Efficiency which aimed to reduce per capita consumption rates and advocates a 'twin track' approach to meeting the increasing demand for water in the region (i.e. demand management and resource development). Policy WAT2: Water Infrastructure advised that LDDs should plan to site new development so as to maximise the potential of existing water/waste water treatment infrastructure and minimise the need for new/improved infrastructure. Supportive text for this policy stated that a particular challenge for certain parts of the region will be to reconcile growth ambitions with environmental limits. This is the case for the Rye Meads Sewage Treatment Works (STW) catchment area which includes part of Epping Forest district. Here a strategic review of the options is required which look beyond incremental expansion to new facilities or other possible works to cope with restrictions at Rye Meads. Policy WAT3: Integrated Water Management stated that LPAs should work with partners to ensure their plans, policies, programmes and proposals take account of relevant water-related plans, studies, and sites of European importance for wildlife.
- 13.2.7 The Rye Meads Water Cycle Strategy (WCS) (2009)¹⁷⁴ provides an evidence base for Local Authorities to ensure they comply with Policy H1: Regional Housing Provision of the Regional Spatial Strategy. The WCS extends to 2031 encompassing the current Regional Spatial Strategy (RSS) (to 2021) and the future RSS Review (to 2031).

¹⁷⁰ Defra (2008). *Future Water: The Government's water strategy for England* [online] available at: <http://www.defra.gov.uk/environment/water/strategy/pdf/future-water.pdf> (accessed 06/09)

¹⁷¹ CLG / Defra (2007) *Water efficiency in new buildings* [online] available at: <http://www.communities.gov.uk/documents/planningandbuilding/pdf/WaterEfficiencyNewBuildings.pdf> (accessed 06/09)

¹⁷² CLG (2006) *Code for Sustainable Homes: a step-change in sustainable home building practice* [online] available at: http://www.planningportal.gov.uk/uploads/code_for_sust_homes.pdf (accessed 06/09)

¹⁷³ For more information on catchment abstraction management strategies see: <http://www.environment-agency.gov.uk/research/planning/33372.aspx> (accessed 06/09)

¹⁷⁴ Stevenage Borough Council (2009) *Rye Meads Water Cycle Strategy, Detailed Study Report, Final Report*, [online] available at: <http://www.harlow.gov.uk/> (accessed 02/10)

13.3 What are the key objectives that we need to consider?

13.3.1 Key objectives from the East of England Integrated Regional Sustainability Framework include:

- Promote sustainable growth within environmental limits
- Adapt to the impacts of climate change
- Increase resource efficiency and reduce resource use and waste
- Conserve, restore and enhance the region's natural and built environment

13.4 What is the situation now?

13.4.1 Epping Forest District is located within the Thames River Basin District. There are 17 river catchments in the Thames River Basin. Epping Forest District falls within the river catchment areas of London and Roding, Beam and Ingrebourne, and the north of the district borders the Upper Lee catchment area.¹⁷⁵ **Table 13.1** summarises key information regarding these catchment areas.

Table 13.1: Summary of River Basin Catchment Areas for Epping Forest District¹⁷⁶

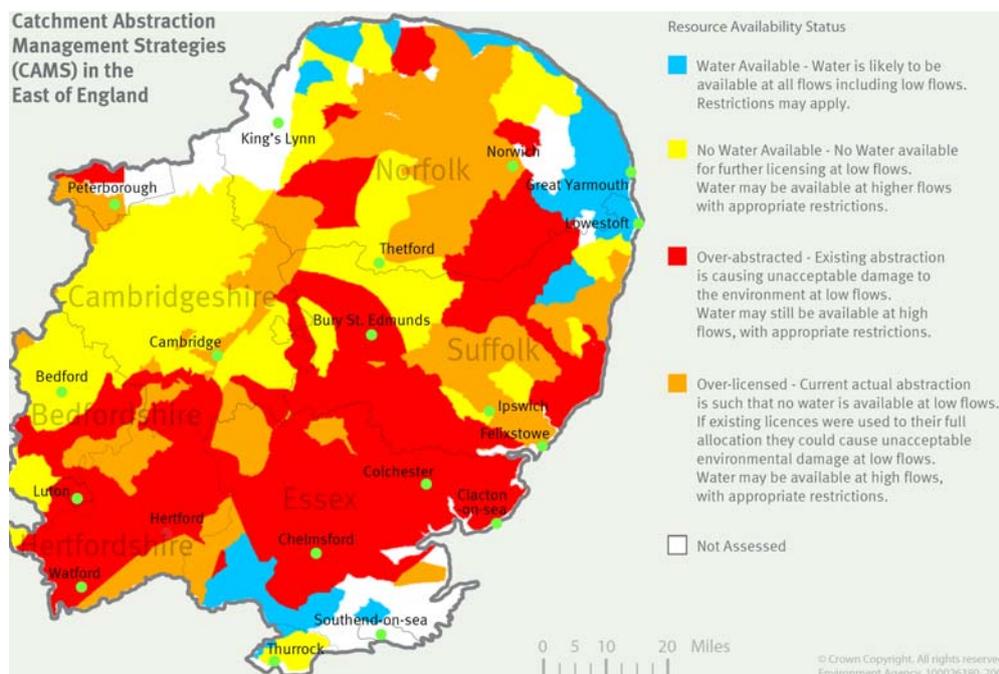
| London catchment area | | | Roding, Beam and Ingrebourne catchment area | | |
|---|-----|------|--|-----|------|
| 28 river water bodies and 17 lakes in the catchment. 41 are artificial or heavily modified | | | There are 16 river water bodies and no lakes in the catchment. 7 are artificial or heavily modified | | |
| Main reasons for not achieving good status or potential: Physical modification urbanisation Physical modification and barriers to fish migration Diffuse source mixed urban run-off Point source water industry sewage works | | | Main reasons for not achieving good status or potential: Diffuse source agricultural Diffuse source mixed urban run-off Physical modification urbanisation Physical modification flood protection Point source water industry sewage works | | |
| River and lake water bodies: | | | | | |
| | now | 2015 | | now | 2015 |
| % at good ecological status of potential | 18 | 20 | % at good ecological status of potential | 0 | 0 |
| % assessed at good or high biological status | 23 | 23 | % assessed at good or high biological status* | 0 | 0 |
| % assessed at good chemical status | 44 | 67 | % assessed at good chemical status** | 50 | 75 |
| % at good status overall (chemical and ecological) | 18 | 20 | % at good status overall (chemical and ecological) | 0 | 0 |
| % rivers improving for one or more elements | - | 32 | % rivers improving for one or more elements | - | 31 |
| * 30 water bodies assessed | | | * 9 water bodies assessed | | |
| ** 9 water bodies assessed | | | ** 4 water bodies assessed | | |

¹⁷⁵ Environment Agency (2008) *River Basin Management Plan for the Thames River Basin District* [online] available at: <http://wfdconsultation.environment-agency.gov.uk/wfdcms/en/thames/Intro.aspx> (accessed 10/09)

¹⁷⁶ *Ibid*

- 13.4.2 The Thames district is one of the driest in the UK due to low rainfall levels. Groundwater is very important, providing around 40% of public water supplies. However, current assessments show that groundwater is fully utilised over much of the Thames River Basin District. (see **Figure 13.1**).¹⁷⁷

Figure 13.1: CAMS in the East of England¹⁷⁸



- 13.4.3 Within Epping Forest District the daily domestic water use (per capita consumption, litres) was 181 litres in 2004. This was significantly higher than the national average of 154 litres for that year and the sustainable level of consumption advised by the Environment Agency (110 litres).¹⁷⁹
- 13.4.4 **Figure 13.2** illustrates watercourses in the Thames CFMP that are of significance to Epping Forest District. The River Stort is a main river in the region and its most significant tributary, Pincey Brook, flows through the northern part of Epping Forest District¹⁸⁰. The Rivers Lee and Stort form the county boundary with Hertfordshire in the west of the district and the River Roding runs through the mainly agricultural eastern part of the district. Water is abstracted from the River Lee just downstream from the district and many surface waters are used for agricultural irrigation. The Lee and the upper flood relief channel and its lagoons receive high volumes of effluent from Rye Meads STW.¹⁸¹

¹⁷⁷ Environment Agency (2008) *River Basin Management Plan for the Thames River Basin District* [online] available at: <http://wfdconsultation.environment-agency.gov.uk/wfdcms/en/thames/Intro.aspx> (accessed 08/09)

¹⁷⁸ Environment Agency (2009) *An Environmental Snapshot of the East of England* [online] available at: <http://publications.environment-agency.gov.uk/pdf/GEAN0309BPUI-e-e.pdf> (accessed 10/09).

¹⁷⁹ Audit Commission (2009). *Area profile – Harlow* [online] available at: <http://www.areaprofiles.audit-commission.gov.uk> (accessed 08/09)

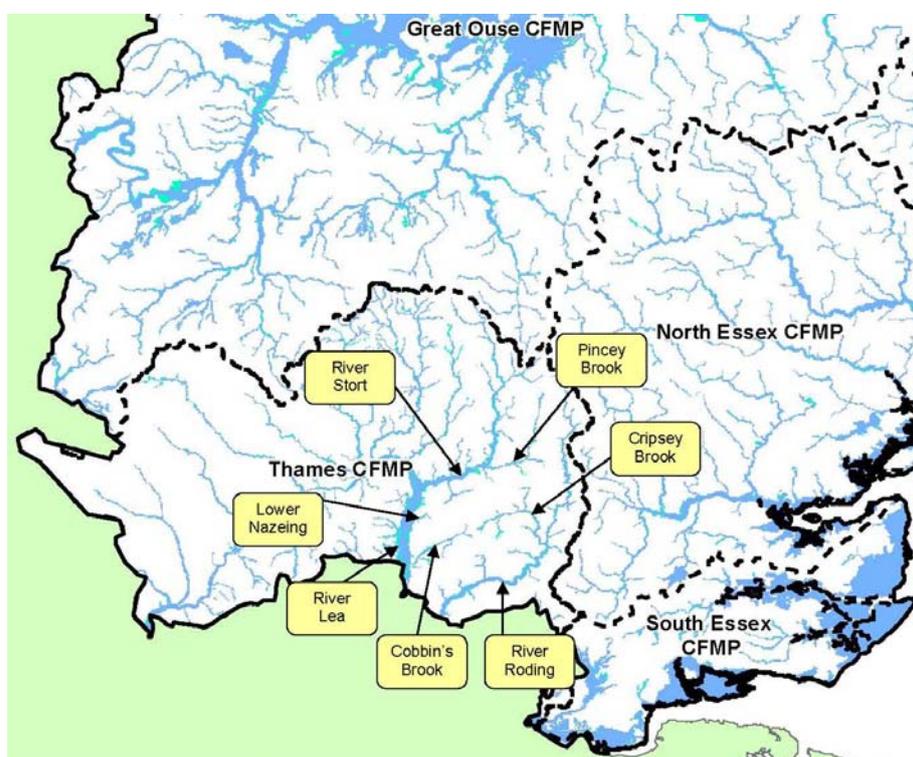
¹⁸⁰ East Herts District Council (2008) *Strategic Flood Risk Assessment* [online] available at: http://80.168.51.108/media/pdf/l/i/East_Herts_SFRA_16_10_08FINAL.pdf (accessed 08/09)

¹⁸¹ EFDC (2000) *Statutory Contaminated Land Strategy Framework Document* [online] available at:

https://www.eppingforestdc.gov.uk/Council_Services/environmental_health/Contaminated_LandStrategy.asp (accessed 10/09)

13.4.5 Epping Forest District lies over the upper chalk aquifer of the London Basin, which is an Environment Agency Major Aquifer. This aquifer and the overlying Lower London Tertiaries supply potable water to thousands of users via Three Valleys Water's public supply boreholes and hundreds of users via private water supply boreholes. According to the Epping Forest Contaminated Land Strategy, the confinement of the majority of the aquifer by 20-120 metres of London Clay provides protection from contamination by surface pollution and shallow subsurface contaminants. The Rivers Lee, Stort and Roding are classified by the Environment Agency as Minor Aquifers, along which shallow gravel aquifers are present that are used for both domestic water and irrigation. These rivers, however, are unprotected from surface and subsurface pollutants. Other EA Minor Aquifers in the district (which consist of numerous smaller shallow aquifers in gravel terraces left by the old course of the pre-Anglian River Thames and also in the Boulder Clay), are also used for domestic water supplies and are susceptible to contamination.¹⁸²

Figure 13.2: Watercourses of significance to Epping Forest District¹⁸³



13.4.6 The percentage of river length assessed as good biological quality was assessed as 55.64% in 2005, having decreased annually since 2002. This figure compares poorly with the neighbouring districts of Uttlesford, Chelmsford, Harlow and East Herts; although better than for neighbouring London Boroughs and Broxbourne District.¹⁸⁴

¹⁸² EFDC (2000) *Statutory Contaminated Land Strategy Framework Document* [online] available at:

https://www.eppingforestdc.gov.uk/Council_Services/environmental_health/Contaminated_LandStrategy.asp (accessed 10/09)

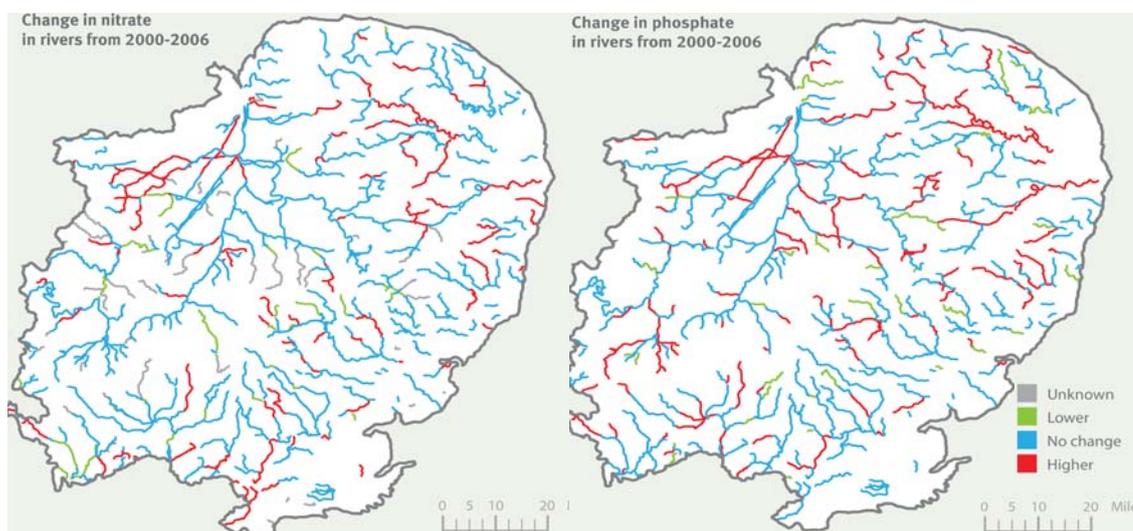
¹⁸³ Adapted from: EFDC (2000) *Statutory Contaminated Land Strategy Framework Document* [online] available at:

https://www.eppingforestdc.gov.uk/Council_Services/environmental_health/Contaminated_LandStrategy.asp (accessed 10/09)

¹⁸⁴ Audit Commission (2009). *Area profile – Epping Forest* [online] available at: <http://www.areaprofiles.audit-commission.gov.uk> (accessed 08/09)

- 13.4.7 The percentage of river length assessed as good chemical quality was assessed as 46.51% in 2005 and, although this figure does not show a clear trend, it has not been above 80% in the period 2000-2005. This figure compares poorly with Uttlesford, Chelmsford, Broxbourne, Harlow and East Herts; but performs well compared to neighbouring London Boroughs.¹⁸⁵
- 13.4.8 **Figure 13.3** illustrates that between 2000 and 2006, whereas part of the River Lee has seen a decrease in nitrate levels, the River has seen an increase in phosphate levels as has Cripsey Brook. Cobbin's Brook and the River Roding have experienced an increase in nitrate levels. Part of the River Stort has seen a lowering of phosphate levels and the other watercourses of significance to Epping Forest District have experienced negligible change in nitrate and phosphate levels.

Figure 13.3: Changes in nitrate and phosphate levels in the region's watercourses (2000-2006)¹⁸⁶



13.5 What will be the situation without the plan?

- 13.5.1 Without the plan, key ambitions may not be achieved including locating new development where there is adequate existing water/waste water treatment infrastructure. Also, without intervention many of the Government targets with respect to water efficiency may not be realised. This is an issue of serious concern given the problem of water stress and the potential for high levels of growth in the Harlow Area. Combined with the predicted effects of climate change, water quality and quantity would be likely to be adversely affected by new development, particularly in the absence of a plan that sets out the appropriate distribution and phasing of development to take into account infrastructure and environmental constraints.

¹⁸⁵ Audit Commission (2009). *Area profile – Epping Forest* [online] available at: <http://www.areaprofiles.audit-commission.gov.uk> (accessed 08/09)

¹⁸⁶ Adapted from: Environment Agency (2009) *An Environmental Snapshot of the East of England* [online] available at: <http://publications.environment-agency.gov.uk/pdf/GEAN0309BPUI-e-e.pdf> (accessed 10/09)

13.6 What issues should be a particular focus for the appraisal?

13.6.1 There is a need to:

- recognise that Epping Forest District is located in an area of serious water stress, which will be exacerbated due to climate change and future growth and development;
- maintain and improve the water quality of Epping Forest District's water courses in line with the Water Framework Directive requirements;
- ensure distribution and location of new development takes water supply and sewerage infrastructure into account; and
- reduce per capita consumption of water and maintain high levels of drinking water quality.

14 Waltham Abbey & Nazeing Area

14.1 Introduction

14.1.1 This chapter scopes the sustainability issues that are specific to the 'Waltham Abbey and Nazeing' functional area. The boundary of this functional area, which has been defined solely for the purposes of this SA, can be seen in **Figure 14.1** below. In order to illicit the relevant issues that should go on to be a focus of the forthcoming appraisal of the Core Strategy (and potentially other DPDs) this chapter asks a number of specific scoping questions.

14.2 What is the policy context?

14.2.1 For an understanding of the policy context that is of relevance to this functional area, it is also necessary to read the policy context that has been collected for each of the thematic topics. However, specific to this functional area, it is notable that Policy ENV1 of the East of England Plan (now revoked) identified Epping Forest as an asset of regional significance in terms of Green Infrastructure; and identifies the Lee Valley as another area of ecological, landscape and recreational importance.

14.2.2 From examining the Epping Forest District Adopted Local Plan (1998) Proposals Map we note the following points:

- This area falls almost entirely within the Green Belt, with only Waltham Abbey, Roydon, Nazeing and some small areas to the west being excluded from the Green Belt.
- Waltham Abbey is a historic town, with the centre designated as a Conservation Area.¹⁸⁷ There is also an area designated as a Conservation Area to the north-west of the town.¹⁸⁸
- The area surrounding Copped Hall is designated as a Conservation Area.¹⁸⁹ N.B. This area is shared with the functional area to the east (Rural North & Harlow).
- To the west of Copped Hall (lying almost entirely within this functional area) is another historic Park and Garden that is designated as a Conservation Area, known as Upshire.¹⁹⁰
- A number of the woodland patches are considered outliers of Epping Forest.
- There is an extensive rural area designated as a Conservation Area, running from Bumbles Green north as far as Roydon.¹⁹¹

¹⁸⁷ Waltham Abbey is a small market town lying on a gravel terrace between the River Lee and the rising ground of Epping Forest. It was a market town from early in its history and was the last monastic house to be dissolved by Henry VIII in 1540 (Conservation Areas in Epping Forest District. Available at <http://www.eppingforestdc.gov.uk/Library/files/planning/ConservationAreas.pdf>).

¹⁸⁸ The former Royal Gunpowder Factory covers an area of 77 hectares to the north of Waltham Abbey. The site has the longest known continuous association with the manufacture of explosives of any site in the country. The site can be divided into two main areas. The northern half is covered almost entirely by alder woodland (the original source of charcoal), and is designated as a Scheduled Ancient Monument and a Site of Special Scientific Interest. The area to the south contains most of the buildings on the site, twenty-one of which are listed (eight at Grade I and II*).

¹⁸⁹ Copped Hall is a Georgian mansion that stands on the site of an earlier Tudor Mansion. It is sited on a ridge overlooking landscaped parkland that still shows signs of its medieval origins. The mansion is visible from the M25 which passes through a corner of the park. From 1986-1995 a campaign was successfully fought against development proposals for the mansion and parkland. The Corporation of London purchased the Parkland in 1992, in recognition of its role as part of Epping Forest's 'buffer lands'.

¹⁹⁰ Upshire Conservation Area includes the historic park and gardens of "Warlies" and the linear hamlets of Upshire, Cophthall Green and Wood Green.

- Horticultural glasshouses are an important part of the local economy.
- The area is bordered by the Lea Valley and Epping Forest SSSIs.
- An extensive area to the west / south west of Roydon is designated as being of importance for tourism (Glen Faba, part of the Lee Valley Regional Park).

14.2.3 It is also important to note that, because a large part of this functional area falls within the Lee Valley Regional Park, the policies set out within the Park Development Framework apply.

14.3 What are the key sustainability objectives that we need to consider?

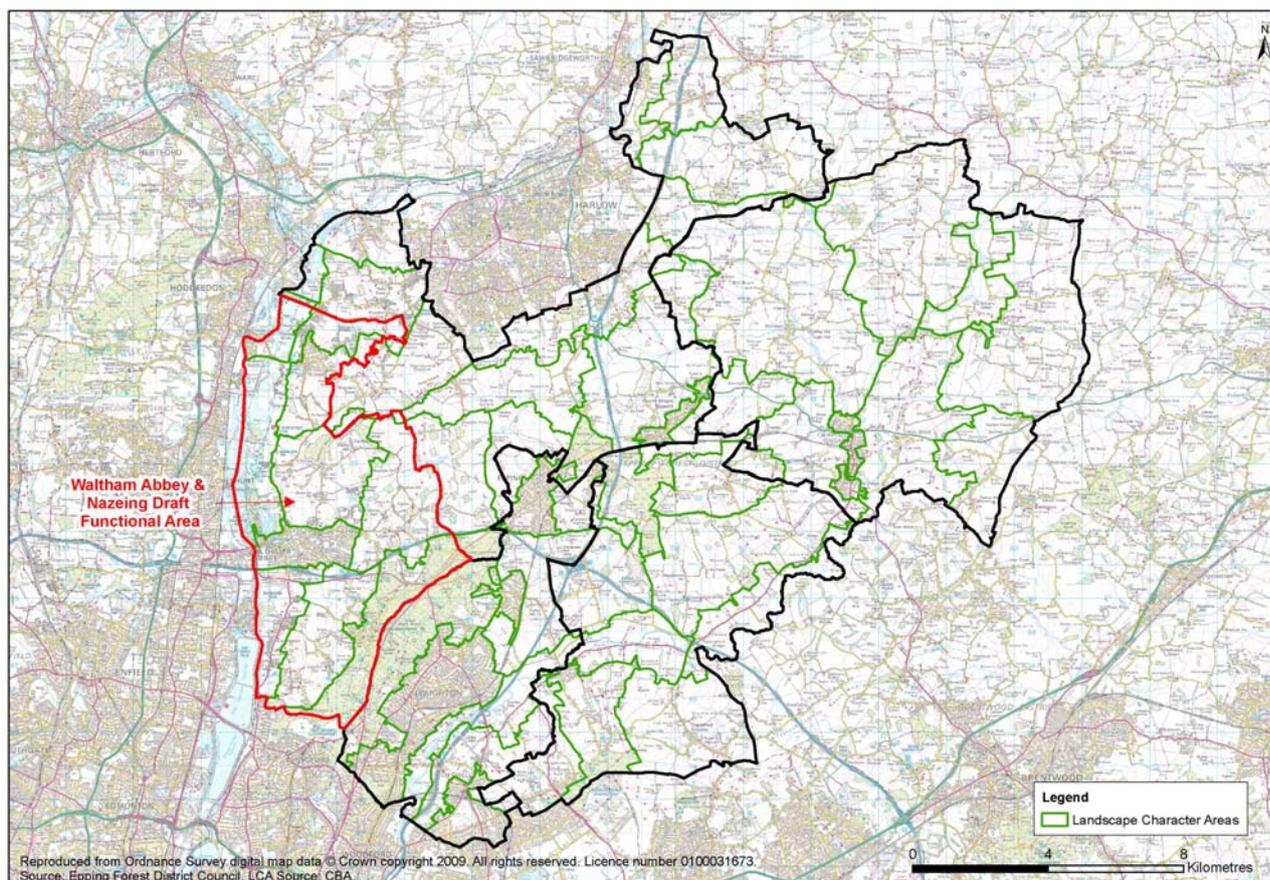
14.3.1 All of the objectives set out in the Integrated Regional Sustainability Framework for the East of England – see **Table 2.1** - are relevant when considering the key sustainability issues that are specific to the 'Waltham Abbey and Nazeing' functional area.

¹⁹¹ This Conservation Area includes: the medieval "long green" settlements of Middle Street and Halls Green; Bumble's Green and the medieval "closed field" system to the north; and the medieval settlements of Nazeing, Broadley Common and Roydon Hamlet. The well-preserved medieval settlements and "closed field" patterns are important landscape features that form a fundamental part of the character and appearance of the Area. Together with the open or common field systems, these landscape features give each settlement a distinctive setting. Although the field enclosures and patterns are not discernible close to, the area can be clearly distinguished from viewpoints at Nazeing Church and Perry Hill. The area retains its quiet, intimate, small-scale rural qualities characterised by small-grassed fields that are dissected by narrow, winding lanes and footpaths and bounded by tall hedgerows and mature trees. (Conservation Areas in Epping Forest District. Available at: <http://www.eppingforestdc.gov.uk/Library/files/planning/ConservationAreas.pdf>).

14.4 What is the situation now?

Introduction to the evidence base

Figure 14.1: The Waltham Abbey and Nazeing Draft Functional Area



14.4.1 Much of the information in this section has been taken from the Epping Forest District Landscape Character Assessment.¹⁹² This study identified seven Landscape Character Types (LCTs)¹⁹³ within the district. Each LCT was also broken down into several Landscape Character Areas (LCAs)¹⁹⁴. The boundaries of the LCAs (there are 33 in total) can be seen in **Figure 14.1**. This figure should be referred to alongside **Figure 11.3** within the Landscape Chapter of this Scoping Report, which identifies each LCA by name, and also shows how the LCAs come together within LCTs.

¹⁹² CBA (2009) *Epping Forest Landscape Character Assessment*.

¹⁹³ A Landscape Character Type is 'a generic unit of landscape with a distinct and recognisable pattern of elements that occur consistently throughout the type' CBA (2010) *Epping Forest Landscape Character Assessment*

¹⁹⁴ A Landscape Character Area is 'a discrete geographical area of a particular Landscape Character Type with a distinct and recognisable pattern of elements that occur consistently throughout the area' CBA (2010) *Epping Forest Landscape Character Assessment*

- 14.4.2 Other information within this section has been taken from the Epping Forest District Settlement Edge Landscape Sensitivity Study,¹⁹⁵ and the Ward Profiles¹⁹⁶ that have recently been produced by the Council.

Introduction to the area

- 14.4.3 The Waltham Abbey and Nazeing functional area runs along the western boundary of the district, stretching to the north and south of Waltham Abbey. The western boundary is defined by the valley of the River Lee and its floodplain. The River Lee and associated floodplain is defined as its own LCT, and is divided into three LCAs. The other two LCTs present within this functional area are the 'Ridges and Valleys' LCT to the south and the 'Farmland Plateau' LCT to the north around the large village of Lower Nazeing. The south-eastern boundary of this functional area is defined by the 'Wooded Ridge' LCT.

The 'River Valley Floodplain' LCT

- 14.4.4 The majority of this LCT is comprised by the 'Lee Valley Marshes' LCA, whilst the northern section is referred to as 'Nazeing Mead' LCA and the section to the south of Waltham Abbey is referred to as 'Rammey Marsh' LCA.
- 14.4.5 All three sections of the valley contain extensive water bodies that are the result of minerals extraction. There is a strong and recognisable sense of place resulting from both the semi-natural elements of the landscape as well as engineered features. There are few historic landscape elements (the sand and gravel workings began in the early 20th Century), although the Waltham Abbey fishponds to the north of Waltham Abbey date from the medieval period.
- 14.4.6 There is a diversity of important habitat along the length of the river, although the northernmost section (Nazeing Mead) does not have any areas designated as being of importance. The central stretch (Lee Valley Marshes) falls within or encompasses several sites designated as being of international, national and local nature conservation importance. South of Waltham Abbey (Rammey Marsh), there is one area designated as a County Wildlife Site. This area is quite extensive and includes 'Gunpowder Park', which is identified as an area where the historic landscape remains recognisable. Through the central and southern sections there is good access via footpaths (with the area falling within the Lee Valley Regional Park).
- 14.4.7 Overall, the northern and southern LCAs are considered to have moderate sensitivity to change with the central section considered to have a moderate to high sensitivity.

The Ridges and Valleys LCT

- 14.4.8 The area to the north of Waltham Abbey is associated with the 'Holyfield Ridges and Valleys' LCA, whilst the area to the north east of Waltham Abbey is associated with the 'Upshire Ridges and Valleys' LCA and the area to the south of Waltham Abbey is associated with the 'Lippett and Daw Hills Ridges and Valleys' LCA.

¹⁹⁵ CBA (2009) *Epping Forest Settlement Edge Landscape Sensitivity Assessment*. Draft Version

¹⁹⁶ Epping Forest District Council (2010) *Ward Profiles* [online] available at:

http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/Forward_Planning_Publications.asp

14.4.9 To the north and east of Waltham Abbey there are extensive areas of farmland showing an ancient 'assart' field pattern (fields cut from woodland). Across the area, although some of the fields have suffered from post 1950's boundary loss, historic integrity of field boundaries is generally strong. There are also numerous patches of woodland, the majority of which are ancient in origin and designated as being of local wildlife importance. Some landscape features are associated with the fact that this area once formed part of the extensive Waltham Forest, the larger precursor of Epping Forest.

14.4.10 The topography is often strongly undulating and there is a need to maintain characteristic open views, particularly to the south of Waltham Abbey. The LCA highlights the need to conserve the relatively strong sense of tranquillity and to conserve the landscape setting of Waltham Abbey. Aside from Waltham Abbey, settlement primarily consists of small historic linear roadside settlements, such as Upshire and Lippits Green, in addition to scattered farmsteads. These settlements are connected by a series of narrow, sometimes sunken lanes.

Waltham Abbey – Settlement Edge Sensitivity

14.4.11 The following have been identified as the key elements of landscape sensitivity:

- There are several patches of sensitive historic landscape within the north, south and eastern fringes of the town, which encompass patches of surviving pre 18th Century and 18th to 19th century enclosure.
- The Lee Valley Regional Park at the north-western edge of Waltham Abbey provides an important greenspace resource, and significantly influences the character of the northern fringe.
- Within the northern fringe of the town, along the River Lee valley there is a large block of woodland which forms a significant landscape element and sensitive woodland area, whilst elsewhere around the fringes of the settlement smaller blocks of woodland contribute toward local landscape character.
- There are several floodplains within the settlement fringes of Waltham Abbey including the wide floodplain of the River Lee to the west, and the narrower floodplain of Cobbin's Brook and a smaller tributary to it which stretch into the eastern fringes of the settlement.

14.4.12 The majority of the landscape areas surrounding Waltham Abbey are described as having a moderate or high sensitivity to change, although there is one area that is identified as having a low sensitivity to change.

Sewardstone – Settlement Edge Sensitivity

14.4.13 The following have been identified as the key elements of landscape sensitivity:

- There are a few small patches of pre 18th century fields within the eastern and southern fringes of the village and one larger area of 18th to 19th century enclosure within the northern fringes which constitutes a sensitive historic landscape.
- There are several blocks of woodland within the eastern fringes of the village which contribute toward landscape character and there are some Veteran trees located within the south eastern fringes of the village which contribute to the historic character of the area.
- To the west of the village, the floodplain of the River Lee abuts the western edge of the village.

14.4.14 Of the two landscape areas surrounding Sewardstone, one is described as having high sensitivity to change and one is described as having low sensitivity to change.

The Farmland Plateau LCT

14.4.15 The area to the north of Lower Nazeing is associated with 'Roydon Hamlet Farmland Plateau' LCA, whilst the area to the south is associated with 'Nazeing Green Farmland Plateau' LCA. Both LCAs are considered to have moderate to high sensitivity to change.

14.4.16 These are both rural, farmed landscapes with fields often showing a medieval field pattern and having mature boundaries that are of ecological and historical importance. The undulating landscape means that views of farmland and treed horizons tend to 'unfold' as one moves through the landscape. There are also more long distance views into and across the Lee Valley. Tranquillity is relatively strong throughout most of the area, particularly to the south. There are several minor road corridors and a network of rural lanes, which would be susceptible to impacts from increased levels of traffic.

14.4.17 Lower Nazeing, the main settlement within the LCA, contains a mixture of historic buildings and more modern housing. Also prominent are the clusters of horticultural glasshouses. It is the view of the Landscape Character Assessment that they add considerably to the strong sense of place that exists.

Lower Nazeing – Settlement Edge Sensitivity

14.4.18 The following have been identified as the key elements of landscape sensitivity:

- There are several large patches of Pre 18th century fields and 18th to 19th century enclosure surrounding the village which form significant areas of sensitive historic landscape.
- There are several patches of sensitive woodland within the southern fringes of the village.
- The wide floodplain of the River Lee valley abuts the western edge of the village, whilst a tributary of the River Lee is also within the floodplain (crossing the village west-east).

14.4.19 Of the five landscape areas surrounding Lower Nazeing, three are described as having moderate sensitivity to change, and two as having low sensitivity to change.

Ward profile Evidence

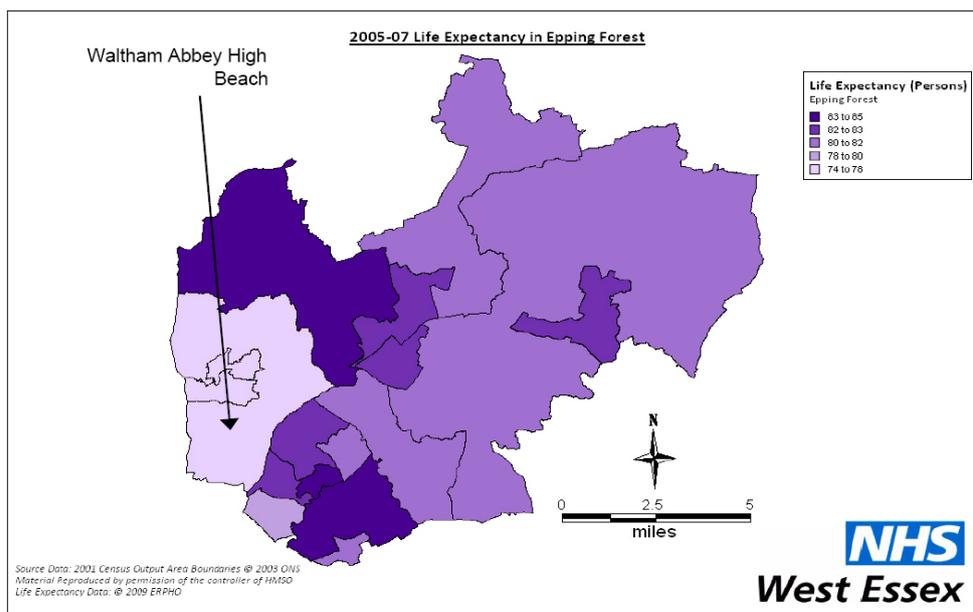
14.4.20 The Waltham Abbey and Nazeing functional area includes the following wards: Lower Nazeing; Waltham Abbey High Beach; Waltham Abbey Honey Lane; Waltham Abbey North East; Waltham Abbey Paternoster; and Waltham Abbey South West.

14.4.21 Ward level population data within Waltham Abbey and Nazeing identifies the ethnic make up of the area to be predominantly white¹⁹⁷ with individual wards having only between 3 to 6% of the population being non-white. In general the wards have a higher percentage of white population compared to Epping Forest District (95%), as a whole, apart from Waltham Abbey South West which has 6% non-white population.

¹⁹⁷ 'White' incorporates White: British, White: Irish and White: Other.

14.4.22 The general health of residents within these wards is slightly below that of Epping Forest District apart from Waltham Abbey Honey Lane Ward, which, according to 'self description' data is the same with 72% of residents claiming good health. Correspondingly, life expectancy across the majority of this functional area is lower than the rest of Epping Forest District - see **Figure 14.2**.

Figure 14.2: Life Expectancy in Epping Forest District¹⁹⁸



Source: Eastern Region Public Health Observatory, 2009

14.4.23 The majority of residents across the wards either own their properties outright or own with a mortgage or loan. However, across the functional area the percentage of ownership varies considerably. For example, 51% of properties in Waltham Abbey High Beach and 40% in Lower Nazeing are owned outright and 32% (Waltham Abbey High Beach) and 47% (Lower Nazeing) are owned with a mortgage or loan. This compares to only 19% being owned outright and 37% owned with a mortgage or loan in Waltham Abbey Paternoster. In this ward 36% of tenure is council rented. This compares to an average of 14% for Epping Forest District as a whole.

14.4.24 The main industry of employment for all wards in 2001 was "wholesale and retail trade / repairs". The second and third most important industries in each ward are "manufacturing" and "real estate, renting and business activities". All wards have experienced an increase in Job Seekers Allowance Claimants since the end of 2007; the highest increases (around 2.5% since October to December 2007) noted in Waltham Abbey Paternoster and Waltham Abbey South West.

14.4.25 The majority of residents in each ward travel to work by car. Travel to work modes correspond broadly to the wider Epping Forest District values, although slightly fewer people use the underground to get to work. In particular, 66% of Lower Nazeing residents travel to work by car or van compared to only 55% for Epping Forest District as a whole.

¹⁹⁸ Epping Forest District Council (2010) Key Facts - 2 - Ward Profiles, Waltham Abbey High Beach

14.5 What will be the situation without the plan

14.5.1 The glasshouse industry is one important element of this functional area that does have the potential to change in the future, largely irrespective of planning policy. If the glasshouse industry were to decline then there could be considerable effects on the locality, in terms of the visual landscape, road traffic and local employment. Furthermore, if these sites were to become available for alternative uses then it is likely that this area would attract considerable development pressure. However, it is important to note that this land is within the Green Belt, and there are long standing policies which exist to deal with this pressure.

14.6 What issues should be a particular focus for the appraisal?

These issues draw on all of the evidence presented within this Scoping Report (not just the evidence presented within this Section).

14.6.1 There is a need to:

- address pockets of socio-economic deprivation, particularly within Waltham Abbey;
- protect landscape character and the integrity of the historic settlements;
- support the objectives of the Corporation of London, as the stewards of Epping Forest;
- support the objectives of the Lee Valley Regional Park;
- address water quality issues due to human recreational activity and over-extraction of surface water;
- address flood risk (including through recognising the potential need for flood alleviation measures);
- consider the potential for traffic impacts on the rural road network;
- meet housing needs, including affordable housing;
- ensure good access to services, facilities, employment, etc. by a range of modes of transport, including by walking, cycling and public transport; and
- support local business and industry.

15 Rural North & Harlow

15.1 Introduction

15.1.1 This chapter scopes the sustainability issues that are specific to the 'Rural North and Harlow' functional area. The boundary of this functional area, which has been defined solely for the purposes of this SA, can be seen in **Figure 15.1** below. In order to illicit the relevant issues that should go on to be a focus of the forthcoming appraisal of the Core Strategy (and potentially other DPDs) this chapter asks a number of scoping questions.

15.2 What is the policy context?

15.2.1 **Policy HA1** of the East of England Plan (now revoked) stated that Development Plan Documents should provide for a total of 16,000 additional dwellings between 2001 and 2021 in Harlow, including urban extensions in Epping Forest and East Hertfordshire districts to the north, east, and on a smaller scale the south and west. In relation to potential locations for an extension to Harlow, the supporting text to Policy HA1 stated that "*The landscape and environmental character of the local area and the importance of the M11 as a potential boundary are likely to constrain capacity south of the Stort Valley.*"

15.2.2 Policy HA1 described the importance of delivering a network of multi-function greenspaces around the town, taking forward the principles of the Green Infrastructure Plan for Harlow (including maintaining 'green wedges' penetrating the urban fabric of the town and urban extensions). Furthermore, the supporting text stated that "*Opportunities should be taken to retain and enhance attractive existing environmental and historic features within green infrastructure provided in association with urban extensions. The Stort Valley represents a major such opportunity between the town centre and development to the north of Harlow.*"

15.2.3 Policy HA1 also mentioned the possibility of a Harlow by-pass, although it also makes clear that it would be more likely that funding for this would not be possible until later in the plan period. The Highways Agency state that there would be a need for considerably more work to be undertaken before this scheme could be identified as more favourable than the alternatives.

15.2.4 Furthermore, from examining the Epping Forest District Adopted Local Plan (1998) Proposals Map we note the following points:

- This area falls almost entirely within the Green Belt, with only Epping Green, Thornwood, North Weald Basset, Lower Sheering and Sheering being excluded.
- There is an extensive rural area designated as a Conservation Area, running from Bumbles Green north as far as Roydon (see **Section 3** for further details).
- The area surrounding Copped Hall is designated as a Registered Park and Garden, with a wider surrounding area designated as a Conservation Area. N.B. This area is shared with the functional area to the east (Rural North & Harlow) and is described further in **Section 3**.
- A large area to the south east of North Weald Basset is identified in the Local Plan as being the site of a former Radio Station, and is now used for recreation.
- A number of Policies have been developed to guide any potential development of the extensive North Weald Airfield to the north west of North Weald.

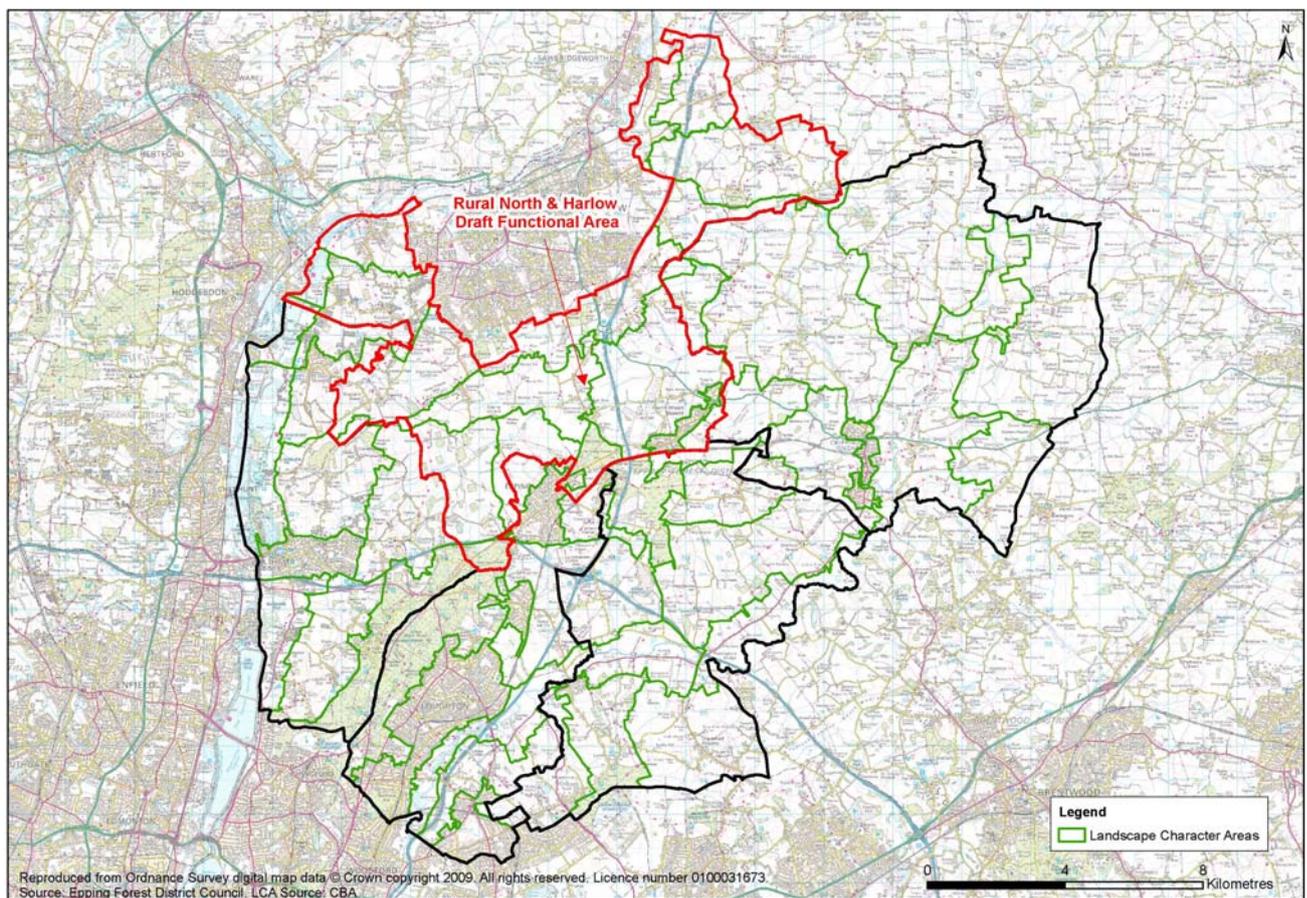
15.3 What are the key sustainability objectives that we need to consider?

15.3.1 All of the objectives set out in the Integrated Regional Sustainability Framework for the East of England – see **Table 2.1** - are relevant when considering the key sustainability issues that are specific to the 'Rural North and Harlow' functional area.

15.4 What is the situation now?

Introduction to the evidence base

Figure 15.1: Rural North and Harlow Functional Area



- 15.4.1 Much of the information in this section has been taken from the Epping Forest District Landscape Character Assessment.¹⁹⁹ This study identified seven Landscape Character Types (LCTs)²⁰⁰ within the district. Each LCT was also broken down into several Landscape Character Areas (LCAs)²⁰¹. The boundaries of the LCAs (there are 33 in total) can be seen in **Figure 15.1**. This figure should be referred to alongside **Figure 11.3** within the Landscape section of this Scoping Report, which identifies each LCA by name, and also shows how the LCAs come together within LCTs.
- 15.4.2 Other information within this section has been taken from the Epping Forest District Settlement Edge Landscape Sensitivity Study,²⁰² and the Ward Profiles²⁰³ that have recently been produced by the Council.

Introduction to the area

- 15.4.3 This functional area skirts around three sides of Harlow and also extends some distance to the south, as far as Epping. Within this functional area six different LCTs can be identified and 14 different LCAs.

The Farmland Plateau LCT (West of Harlow)

- 15.4.4 The area to the west and south west of Harlow is associated with the 'Farmed Plateau' LCT, which is sub-divided into four LCAs.
- 15.4.5 The northern-most LCA surrounds the large historic village of Roydon. This is known as the 'Roydon Farmland Plateau' LCA. There is a mixture of field sizes, but in the environs of the village there is a 'patch-work' of fields with mature hedges. Further from Roydon, and within the area to the west known as Roydon Park, there are extensive 'prairie' fields, where field boundaries have been lost. There are a number of important views out of the area and tranquillity is described as strong. Roydon includes a designated Conservation Area, and there is also a designated SSSI to the north of the area (Hunsdon Mead) and four areas designated as being of local importance. The LCA is assigned a moderate to high sensitivity to change.
- 15.4.6 The LCA to the south of Roydon is the 'Roydon Hamlet Farmland Plateau' LCA. This includes a more ancient field pattern that has suffered less from agricultural intensification and is dominated by visible glasshouses that contribute to sense of place. Several minor road corridors run across the character area, connecting Harlow to the east, with Roydon to the north and Nazeing to the south. Settlement pattern comprises small-scale linear settlements such as Roydon Hamlet and Hall's Green (both historic settlements) and scattered, isolated farmsteads.

¹⁹⁹ CBA (2009) *Epping Forest Landscape Character Assessment*.

²⁰⁰ A Landscape Character Type is 'a generic unit of landscape with a distinct and recognisable pattern of elements that occur consistently throughout the type' CBA (2010) *Epping Forest Landscape Character Assessment*

²⁰¹ A Landscape Character Area is 'a discrete geographical area of a particular Landscape Character Type with a distinct and recognisable pattern of elements that occur consistently throughout the area' CBA (2010) *Epping Forest Landscape Character Assessment*

²⁰² CBA (2009) *Epping Forest Settlement Edge Landscape Sensitivity Assessment*. Draft Version

²⁰³ Epping Forest District Council (2010) *Ward Profiles* [online] available at:

http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/Forward_Planning_Publications.asp

15.4.7 Further to the south, the 'Nazeing Green Farmland Plateau' LCA includes the settlements of Nazeing and Bumbles Green. Nazeing was a possession of Waltham Abbey until the Dissolution and includes a Grade I listed church. This area does not contain glasshouses, although they are visible to the north. The area includes Nazeing Triangle Local Nature Reserve as well as the corridor of Nazeing Brook. The historic field pattern within this area is dominated by large, regular, prairie fields, which have suffered post 1950's boundary loss. Some small remnants of the historic field system can be seen within these.

15.4.8 To the east (and more directly south of Harlow) is the Epping Green Farmland Plateau LCA, which is a higher, flatter area of land that shows considerable signs of 20th Century agricultural intensification. An important feature is Thornwood Common Flood Meadow Local Nature Reserve. This area is considered to have a moderate sensitivity to change, where as the other areas that make up the 'farmed plateau' LCA to this side of Harlow all have a moderate to high sensitivity.

Roydon – Settlement Edge Sensitivity

15.4.9 The following have been identified as the key elements of landscape sensitivity:

- There are patches of sensitive historic landscape scattered to the west, south and east of the village which comprise pre 18th Century fields and some 18th to 19th century enclosure.
- There are two medium sized patches of sensitive woodland within the fringes of the village which contribute to local landscape character.
- The wide floodplain of the River Stort borders the northern edge of the village, whilst the wide floodplain of the River Lee is situated in relatively close proximity to the western edge of the village.

15.4.10 Of the four landscape areas surrounding Roydon, all are described as having high sensitivity to change.

Epping Green - Settlement Edge Sensitivity

15.4.11 The following have been identified as the key elements of landscape sensitivity:

- A large portion of the landscape within the northern fringe of the village comprises 18th and 19th century enclosure (including Nazeingwood Common) while to the north, east, south and west there are several patches of Pre 18th century fields. Both of these areas are considered to be sensitive historic landscapes.
- There are some small patches of sensitive woodland belonging to Epping Forest within the fringes of Epping Green which make a small contribution toward local landscape character.

15.4.12 Of the two 'landscape setting areas' surrounding Epping Green, one is considered to have moderate sensitivity, whilst the other is considered to have high sensitivity.

The Ridges and Valleys LCT

- 15.4.13 The area to the south of this functional area, to the north and west of Epping, is associated with a 'Ridges and Valleys' LCT. This is a more strongly undulating landscape with frequent woodland blocks being highly visible. The area to the west (Upshire Ridges and Valleys LCA) has a rural feel, and is considered to have a moderate to high sensitivity to change. To the east, Cobbin's Bridge Ridges and Valleys LCA is less undulating and is dominated by 20th agricultural fields. It is considered to have a low to moderate sensitivity to change.
- 15.4.14 The land to the north of North Weald Bassett, is also associated with a 'Ridges and Valleys' LCT. The land extending to the north of the town almost as far as Harlow falls within the North Weald Ridges and Valleys LCA and to the east of this LCA is the Magdalen Laver and Moreton Ridges and Valley's LCA. In the south of this area, the large mass of North Weald airfield, with its surrounding metal railings, introduces a strong human element into this otherwise predominantly arable landscape. Aside from the large linear settlement of North Weald Bassett towards the centre of the area there is a small-scale settlement pattern of scattered farmsteads and occasional nurseries. Two Local Nature Reserves fall within the LCA. Overall, this LCA is considered to have a moderate sensitivity to change.
- 15.4.15 To the north-east of Epping is a large area of woodland, which is associated with a separate LCT - the 'Wooded Ridges' LCT (the LCA is known as 'Lower Forest to Beachet Wood Ridge'). This ridge of higher land extends to the south east, separating Epping and Thornwood Common. This is ancient woodland that forms part of the Epping Forest SSSI.

Thornwood Common – Settlement Edge Sensitivity

- 15.4.16 The following have been identified as the key elements of landscape sensitivity:
- Several large tracts of landscape within the fringes of Thornwood are of a sensitive historic nature, most of which are located within the western fringes of the settlement and predominantly comprise fields of 18th to 19th century enclosure.
 - Epping Forest which is situated within the southern fringes of the village forms a key visually significant landscape element and area of sensitive woodland. Elsewhere within other areas of the settlement fringe smaller blocks of woodland contribute to a varied sense of enclosure.
 - There is a floodplain situated within the eastern fringes of the settlement, following a tributary of Cripsey Brook.
- 15.4.17 All areas around Thornwood Common are considered to have a moderate or high sensitivity to growth.

North Weald Basset – Settlement Edge Sensitivity

15.4.18 The following have been identified as the key elements of landscape sensitivity:

- There are significant patches of sensitive historic landscape within the north-eastern and south-western edges of the village, which encompass patches of surviving pre 18th Century and 18th-19th century fields.
- There are five sensitive woodland areas within the fringe, which are significant elements within the local landscape. Several of these are defined as Ancient Woodland and County Wildlife Sites, highlighting their importance as wildlife and nature conservation assets.
- A floodplain runs north south through the settlement, as well as through land to the north and south of the settlement.

15.4.19 Of the five landscape setting areas that surround North Weald Basset, two are designated as highly sensitive, two as moderately sensitive and one a having a low sensitivity.

Farmland Ridge LCT

15.4.20 Along the southern boundary of Harlow is the Jack's Hatch to Church Langley Farmland Ridge LCA. Encompassing varying-sized arable fields, this area is dominated by large woodland blocks. Patches of open common, used for horse and pony grazing, provide variation in landscape pattern. The gradually sloping topography, culminating in a ridge at Rye Hill, allows extensive views northwards towards Harlow. This area includes land that was formerly part of an extensive common that stretched as far as Nazeingwood Common in the west. The common edge historically formed a focus for settlement, and a number of historic east-west and north-south communication links have been retained throughout the west of the area, along which a number of historic buildings are situated.

The Farmland Plateau LCT (East of Harlow)

15.4.21 The north of this functional area, to the east of Harlow, is dominated by the Sheering and Matching Farmland Plateau LCAs, and also includes a section of the River Stort Valley LCA. The Sheering Farmland Plateau LCA to the north is dominated by a series of large prairie fields, which are lined with gappy hedgerows and interspersed with small pockets of deciduous woodland. The corridor of the M11 which crosses the area north-south has a dominant influence on the character of the landscape. Towards the centre of the area, the small, nucleated village of Sheering, with its landmark church, contributes to the settlement pattern, which otherwise comprises occasional scattered farmsteads. The area is described as having a moderate sensitivity to change.

15.4.22 To the south, the Matching Farmland Plateau LCA is dominated by arable farmland showing a 20th Century field pattern, but punctuated by areas where the historic field pattern remains apparent and by patches of woodland (much of which is semi-natural and ancient). Several small, narrow stream corridors dissect the plateau (including the corridor of Pincey Brook) creating intimate landscape features and contributing to the gently undulating landform. Small, nucleated historic hamlets and villages, such as Matching Green, Matching and Matching Tye punctuate the surrounding fields and contribute to a dispersed and isolated settlement pattern. Halls (such as Matching Hall) with associated designed, formal landscapes are also key landscape features. Sense of tranquillity is strong throughout most of the area away from the M11 corridor, and overall there is a moderate sensitivity to change.

15.4.23 The final LCA within this functional area is associated with the Stort Valley LCT. This is an important landscape, with a high sensitivity to change. It also includes the historic village of Lower Sheering.

Lower Sheering/Sheering – Settlement Edge Sensitivity

15.4.24 The following have been identified as the key elements of landscape sensitivity:

- The landscape to the southeast of Lower Sheering and several fields to the north and south of Sheering represent a sensitive historic landscape, encompassing patches of Pre 18th Century fields and small areas of 18th to 19th century enclosure.
- There are a few, small patches of sensitive woodland within the north-eastern fringes of Lower Sheering.

15.4.25 Of the five landscape areas surrounding Sheering, four are described as having a high sensitivity to change and one is described as having a moderate sensitivity to change.

Ward profile Evidence

15.4.26 The Rural North and Harlow functional area include the following wards: Broadley Common, Epping Upland and Nazeing; Epping Lindsey and Thornwood Common; Hastingwood, Matching and Sheering Village; Lower Sheering, North Weald Bassett and Roydon.

15.4.27 Ward level population data within Waltham Abbey and Nazeing identifies the ethnic makeup of the area to be predominantly white²⁰⁴ with individual wards having only between 2 to 4% of the population being non-white. All wards have a higher percentage of white population compared to Epping Forest District (95%). North Weald Basset and Hastingwood, Matching and Sheering Village have 98% White population.

15.4.28 Ward data indicates that Epping Lindsey and Thornwood Common Ward has a high proportion (compared to Epping Forest District) of elderly residents over the age of 70 whereas Lower Sheering has a younger population with a higher than average proportion of 20 to 50 year olds, compared to Epping Forest District.

15.4.29 Approximately half of the wards indicate higher than average “good health” among their residents, with the healthiest wards identified as Broadley Common, Epping Upland and Nazeing and Lower Sheering. The ward with the lowest “good health” is Epping Lindsey and Thornwood Common, likely as a result of its high elderly population.

15.4.30 Over 70% of all properties in each ward are either owned outright or owned with a mortgage or loan. The highest tenure of ownership is in the wards of Roydon and Broadley Common, Epping Upland and Nazeing with 83 and 82% respectively (both above the Epping Forest District average of 74%). The lowest tenure of ownership is in the Epping Lindsey and Thornwood Common ward at 71%. This ward has a correspondingly higher percentage of rented accommodation with both council rented and housing association rented values higher than the district averages.

²⁰⁴ 'White' incorporates White: British, White: Irish and White: Other.

15.4.31 The most common industries of employment for each ward in 2001 were “manufacturing”, “wholesale and retail trade / repairs” and “real estate, renting and business activities”. All wards have experienced an increase in Job Seekers Allowance Claimants since the end of 2007; the highest increases of around 2% were noted in Lower Sheering and the least affected area being North Weald Bassett.

15.4.32 The majority of residents in each ward travel to work by car and apart from Epping Lindsey and Thornwood Common ward the proportion doing so is above the Epping Forest District average. Correspondingly, this ward is the only one where, compared to the district average, more people travel to work by underground.

15.5 What will be the situation without the plan?

15.5.1 There is potential for land within this functional area to receive large amounts of development as part of the expansion of Harlow. The precise locations for growth are currently uncertain. However, Policy HA1 provided some guidance on the expected directions of growth.

15.6 What issues should be a particular focus for the appraisal?

These issues draw on all of the evidence presented within this Scoping Report (not just the evidence presented within this Section).

15.6.1 There is a need to:

- support the objectives of the Green Infrastructure Plan for the Harlow Area”, which builds upon Gibberd’s original masterplan for Harlow new town;
- consider impacts relating to the expansion of Harlow;
- support the objectives of the Lee Valley Regional Park;
- consider the potential for traffic impacts on the road network;
- consider the potential for traffic impacts on the rural road network;
- meet housing needs, including affordable housing;
- ensure good access to services, facilities, employment, etc. by a range of modes of transport, including by walking, cycling and public transport; and
- support local business and industry.

16 Central Line Settlements

16.1 Introduction

16.1.1 This chapter scopes the sustainability issues that are specific to the 'Central Line Settlements' functional area. The boundary of this functional area, which has been defined solely for the purposes of this SA, can be seen in **Figure 16.1** below. In order to illicit the relevant issues that should go on to be a focus of the forthcoming appraisal of the Core Strategy (and potentially other DPDs), this chapter asks a number of scoping questions.

16.2 What is the policy context?

16.2.1 For an understanding of the policy context that is of relevance to this functional area, it is also necessary to read the policy context that has been collected for each of the thematic topics.

16.2.2 From examining the Epping Forest District Adopted Local Plan (1998) Proposals Map we note the following points:

- Much of this area falls within the Green Belt, with the exception of the urban areas.
- Chigwell Village, on the northern tip of Chigwell, is designated as a Conservation Area; also, Loughton has 3 conservation areas – Baldwins Hill, Staples Road and York Hill.
- Between Chigwell and Loughton lies the M11 Motorway, as well as an extensive area of floodplain and extensive areas designated as locally and nationally important for nature conservation.
- The Epping Forest SSSI lies primarily to the west of Buckhurst Hill and Loughton, but there is also a significant patch that lies within the urban area, to the south of Buckhurst Hill. The main part of the Forest reaches as far as the south-western edge of Epping, but there is also a large outlier of woodland associated with the Forest to the north west of Epping (within the functional area to the north).

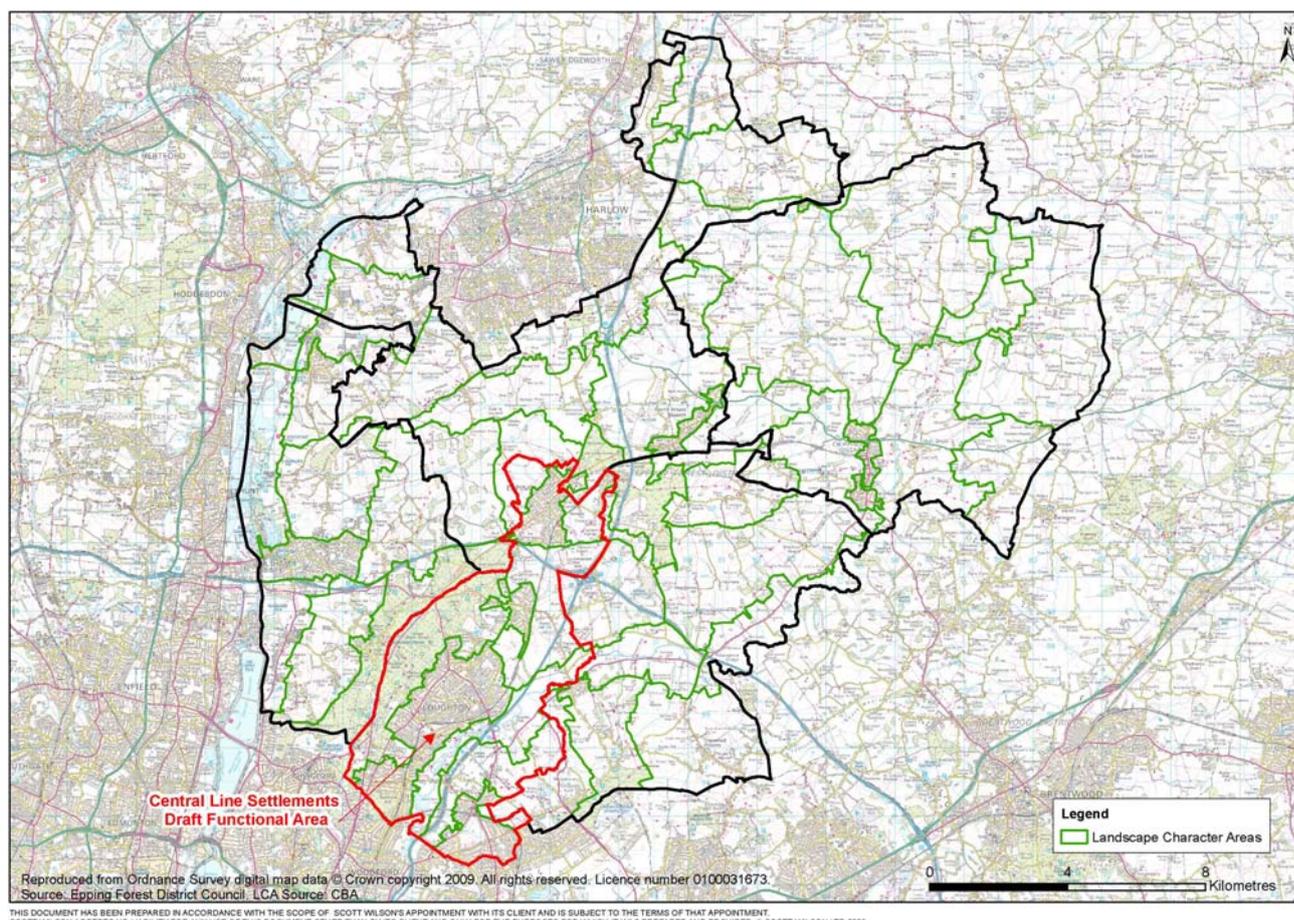
16.2.3 The East of England Plan Policy LA1 identified that towns within the London Arc (this area) are to *'retain and develop their existing individual roles ... making as much provision for new development within the built up areas'* in order to retain long-standing green belt restraint.

16.3 What are the key sustainability objectives that we need to consider?

16.3.1 All of the objectives set out in the Integrated Regional Sustainability Framework for the East of England – see **Table 2.1** - are relevant when considering the key sustainability issues that are specific to the 'Central Line Settlements' functional area.

16.4 What is the situation now?

Figure 16.1: The Central Line Settlements Functional Area



- 16.4.1 Much of the information in this section has been taken from the Epping Forest District Settlement Edge Landscape Sensitivity Study,²⁰⁵ and the Ward Profiles²⁰⁶ that have recently been produced by the Council.
- 16.4.2 As can be seen from **Figure 16.1**, a number of Landscape Character Areas fall within the boundary of this functional area. However, because most are more predominantly associated with other functional areas, descriptions of each are found in corresponding chapters of this report. This is not to suggest that landscape character is of lesser importance in this area. Indeed, as pointed out by the Loughton Residents Association, the interweaving of urban and diverse rural settings is a element of local character.

²⁰⁵ CBA (2009) *Epping Forest Settlement Edge Landscape Sensitivity Assessment*. Draft Version

²⁰⁶ Epping Forest District Council (2010) *Ward Profiles* [online] available at:

http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/Forward_Planning_Publications.asp

Introduction to the area

- 16.4.3 The Central Line Settlements functional area contains the district's most urbanised area, which forms a corridor of settlements running adjacent to the key transport routes of the M11 and Central Line Railway. A dominant feature in the south of the area is also the River Roding and its floodplain.
- 16.4.4 Through the consultation on this Scoping Report, a number of responses were received from local interest groups suggesting that Theydon Bois should not be considered within the Central Line Settlements functional area. It has been highlighted that:
- the population density of Theydon Bois (4.8) is considerably lower than for Buckhurst Hill (27.9) or Loughton (20);
 - part of Loughton is the most deprived SOA in the District, whilst Theydon Bois is the least;
 - of the six main centres in the District, three are located in Loughton and Buckhurst Hill, where as Theydon Bois has virtually no employment; and
 - vehicle access to Theydon Bois is via a weight restricted B road, where as access to the other settlements is via A-road.
- 16.4.5 This is important context, and demonstrates the need to consider how issues vary across the functional area. Further context is provided by the Loughton and District Historical Society, who point out that Epping, Theydon Bois, Loughton, and Buckhurst are unique in the District for having a form and structure that is a direct result of the communication with London afforded by the railway. They state that Theydon Bois is effectively a small 20th century commuter town grafted on to the nucleus of a former village; with a large swathe of 1930s planned development north of the B172; but this is just a later version of what happened in Loughton and Buckhurst Hill 30-40 years previously. The same may actually be said of North Weald, though there is an element of ribbon development there, absent from the other places.
- 16.4.6 Another point that came through strong from the consultation was the importance of the existing network of urban green spaces. In particular, numerous consultees highlighted that the Debden Estate - built just after the Second World War, to house many who had endured poor inner London housing - was designed with an integral network of green spaces (in a similar fashion to Harlow).
- 16.4.7 It is also important to highlight that all of the towns and villages are separated by important green areas, which prevent their becoming an agglomeration.

Chigwell/Chigwell Row Settlement Edge Sensitivity

- 16.4.8 In terms of the settlement edges, the following have been identified as the key elements of landscape sensitivity:
- There is a large area of sensitive historic landscape to the north of Chigwell Row and some small patches to the north east of Chigwell, encompassing Pre 18th century fields.
 - Several small patches of sensitive woodland within the fringes of Chigwell and Chigwell Row contribute to local character. Hainault Forest forms a large patch of sensitive woodland to the south of Chigwell Row.

- There are many Veteran trees located in a small area of woodland within the southern fringe of Chigwell Row. Veteran trees are also elsewhere scattered within the northern fringe of Chigwell Row and also in the northern fringes of Chigwell.
- There is a small floodplain within the western fringes of Chigwell.

16.4.9 All areas around Chigwell / Chigwell Row are considered to have a moderate or high sensitivity to growth.

16.4.10 To the north of Chigwell is the Chigwell Wooded Ridges and Valleys LCA. The Landscape Character Assessment describes this LCA as having a low to moderate sensitivity to change. It is described as having a strong historic field pattern with mature hedgerows and hedgerow trees, pockets of woodland, a small-scale historic settlement pattern and a strong sense of tranquillity.

Loughton, Buckhurst Hill and Theydon Bois – Settlement Edge Sensitivity

16.4.11 Loughton and Buckhurst Hill form an almost continuous urban area (separated by valued green spaces) running north-south, whilst Theydon Bois is a separate village which is situated to the northwest. All three settlements are located on relatively high ground and Loughton and Buckhurst Hill in particular are built on a ridge that rises from the floodplain of the River Roding to the east.

16.4.12 In terms of the settlement edges, the following have been identified as the key elements of landscape sensitivity:

- There are a few small areas of sensitive historic landscape scattered within the northern fringes of Loughton and Theydon Bois, including some small areas of Pre 18th century fields between Loughton and Theydon Bois and within the western fringes of Theydon Bois, plus two small fields of Pre 18th to 19th century enclosure within the eastern fringes of Theydon Bois.
- The sensitive woodland area of Epping Forest which bounds all three settlements to the west forms a significant landscape element within the western fringes of the settlements, while elsewhere within the fringes of the settlements smaller blocks of woodland make a contribution to the local landscape character.
- There is a wide floodplain along the River Roding within the eastern fringes of Loughton and Buckhurst Hill and two smaller floodplains to the north, one within the northern fringes of Loughton and the other within the eastern fringes of Theydon Bois.

16.4.13 The landscape setting of Loughton is provided primarily by the Lower Roding River Valley LCA to the east and the Epping Forest Wooded Ridge LCA to the west. Both of these areas represent absolute environmental constraints to development.

16.4.14 To the north-east of Loughton, and surrounding Theydon Bois on three sides, is the Theydon Garnon Wooded Ridges and Valleys LCA. This area is dominated by the M11/M25 Junction, although at a distance from the motorways this area has a predominantly rural character.

16.4.15 Overall sensitivity to change is high adjacent to the edge of Epping Forest. Everywhere else around Theydon Bois and Loughton/Buckhurst Hill sensitivity is moderate. To the south of Loughton sensitivity is regarded as low.

Epping/Coopersale Common Settlement Edge Sensitivity

- 16.4.16 In terms of the settlement edges, the following have been identified as the key elements of landscape sensitivity:
- Significant patches of sensitive historic landscapes within the eastern, southern and northern fringes of Epping and Coopersale which encompass patches of surviving Pre 18th Century fields and 18th-19th century enclosure.
 - Within the northern and southern fringes of the settlements large blocks of sensitive woodland form significant elements in the landscape, whilst within the settlement fringes elsewhere smaller blocks of woodland contribute toward local landscape character.
 - There are two narrow floodplains within the settlement fringes of Epping and Coopersale one to the north of Epping and one to the south.
- 16.4.17 The majority of areas around Epping/Coopersale Common are considered to have a moderate or high sensitivity to growth, although there is one area that is considered to have a low sensitivity.
- 16.4.18 To the east of Epping is the Coopersale Wooded Ridges and Valleys LCA. This area is designated as having a moderate to high sensitivity to change, despite being crossed by the M11. In particular, there are areas of ancient woodland and relics of Medieval Parkland, as well as the historic dispersed linear settlement of Coopersale Street.

Ward profile Evidence

- 16.4.19 The Central Line Settlements functional area includes the following wards: Buckhurst Hill East; Buckhurst Hill West; Chigwell Village; Epping Hemnall; Grange Hill; Loughton Alderton; Loughton Broadway; Loughton Fairmead; Loughton Forest; Loughton Roding; Loughton St John's, Loughton St Mary's and Theydon Bois.
- 16.4.20 Ward level population data within Central Line Settlements identifies the ethnic makeup of the area to be predominantly white²⁰⁷ with individual wards having only between 2 and 17% of the population being non-white. The wards of Chigwell Village and Grange Hill both have relatively high proportions of Asian or Asian British residents at 8 and 11% respectively. This compares to 2% for the Epping Forest District as a whole.
- 16.4.21 The health of the residents across the wards is generally in line with that of Epping Forest District as a whole, although some wards, namely Loughton Forest and Chigwell village have higher than average numbers of residents deeming themselves to be in good health (79 and 78% respectively compared to the district average of 72%). Due to the number of data sets it is difficult to identify the level of life expectancy across the functional area.
- 16.4.22 Tenure of ownership is higher than the Epping Forest District average for both "owns outright" and "owns with a mortgage or loan" in the wards of Buckhurst Hill West, Chigwell Village, Loughton Forest, Loughton St John's and Loughton St Mary's. These wards have also lower than average council rented tenured properties. Wards with high numbers of council and housing association rented properties include Loughton Fairmead (25% versus 14% for Epping Forest District as a whole), Loughton Broadway (35%) and Loughton Alderton (32%).

²⁰⁷ 'White' incorporates White: British, White: Irish and White: Other.

16.4.23 The main industries for employment for the Central Line Settlements' ward's residents in 2001 were "real estate, renting and business activities", "wholesale and retail trade / repairs", "manufacturing" and "Financial Intermediation". All wards have experienced an increase in Job Seekers Allowance Claimants since the end of 2007; the highest increases (nearly 3% since October to December 2007) noted in Loughton Boadway, Loughton Fairmead both experiencing around 5% claiming Job Seekers Allowance. Wards least affected include Chigwell Village and Loughton Forest.

16.4.24 Driving a car or van to travel to work is the main form of transport for people commuting in all wards, however, the percentage of people doing so is below the Epping Forest District average for all wards. The proportion of residents who commute to work by underground is, in all wards, above the district average with 28% in Buckhurst Hill East, 30% in Buckhurst Hill West and 28% in Loughton travelling to work in this way. This compares to the district average of 15%.

16.5 What will be the situation without the plan?

16.5.1 The rail and road infrastructure is clearly of vital importance to the continued prosperity of this part of the district. There is no evidence currently to suggest that there are any major changes planned regarding either. Similarly, the River Roding is a highly managed river for which the Environment Agency have prepared a draft Flood Risk Management Strategy, but there is little evidence to suggest that there will be significant changes to the river that will influence the functioning of the wider area.

16.6 What issues should be a particular focus for the appraisal?

These issues draw on all of the evidence presented within this Scoping Report (not just the evidence presented within this Section).

16.6.1 There is a need to:

- address pockets of socio-economic deprivation, particularly within Loughton;
- protect settlement boundaries and accessible greenspace;
- support the objectives of the Corporation of London, as the stewards of Epping Forest;
- take account of the objectives of the Environment Agency and work to minimise flood risk.
- consider the potential for traffic impacts on the road network, including relating to air quality
- meet housing needs, including affordable housing;
- ensure good access to services, facilities, employment, etc. by sustainable modes; and
- support local business and industry.

17 Rural South East

17.1 Introduction

17.1.1 This chapter scopes the sustainability issues that are specific to the 'Rural South East' functional area. The boundary of this functional area, which has been defined solely for the purposes of this SA, can be seen in **Figure 17.1** below. In order to illicit the relevant issues that should go on to be a focus of the forthcoming appraisal of the Core Strategy (and potentially other DPDs) this chapter asks a number of specific scoping questions.

17.2 What is the policy context?

17.2.1 For an understanding of the policy context that is of relevance to this functional area, it is also necessary to read the policy context that has been collected for each of the thematic topics.

17.2.2 From examining the Epping Forest District Adopted Local Plan (1998) Proposals Map we note the following points:

- This area falls almost entirely within the Green Belt, with the exception of the built up areas of Chigwell Row, Abridge, and Stapleford Abbots.
- A large area to the east of Theydon Garnon is designated as a Registered Park and Garden and Conservation Area.²⁰⁸
- To the south and east of Chigwell Row, along the southern boundary of the district, is woodland designated as locally and nationally important (associated with Hainault Forest).
- An extensive area of Roding Valley River Floodplain runs east / west across this functional area, to the north of Abridge.

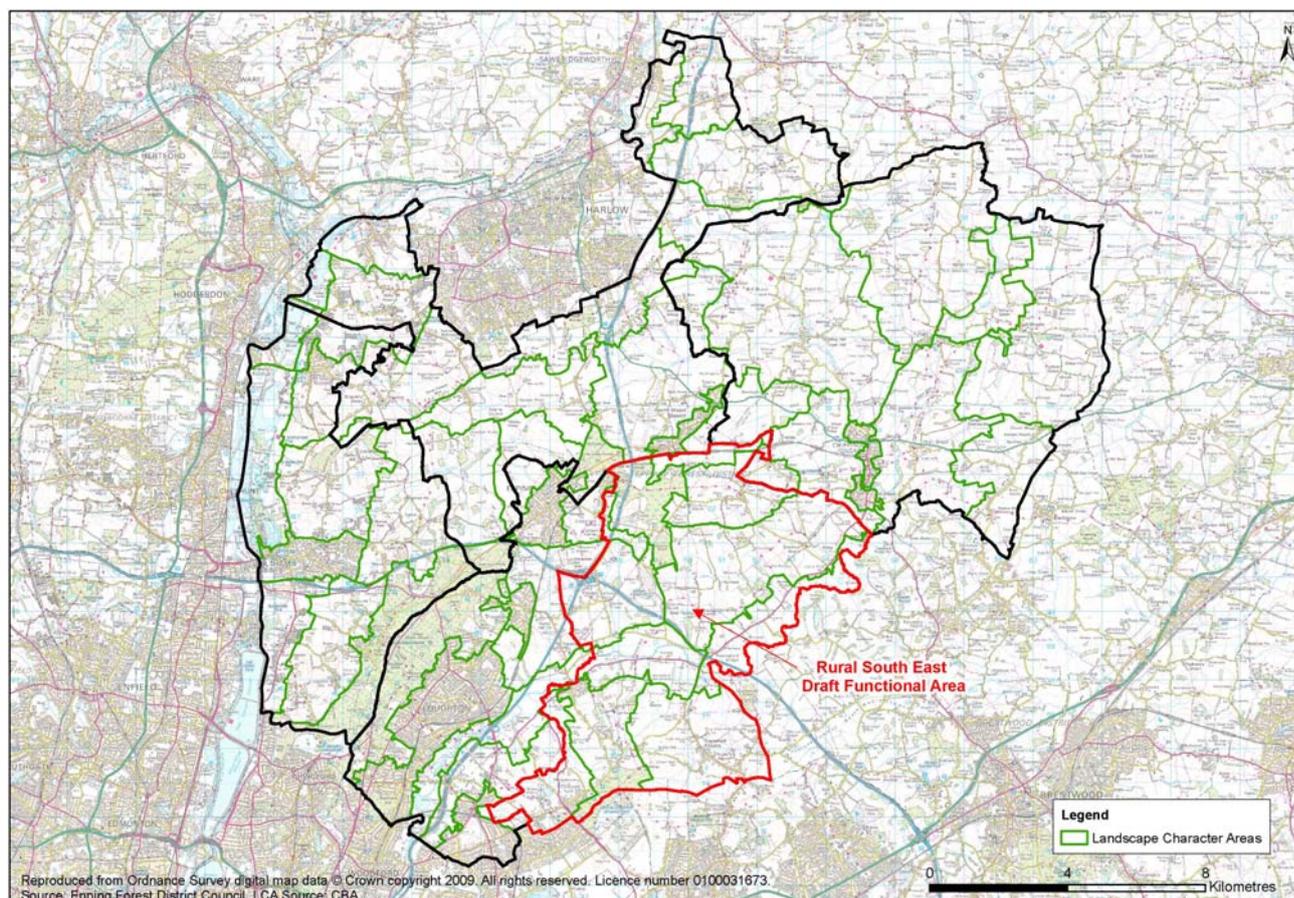
17.3 What are the key sustainability objectives that we need to consider?

17.3.1 All of the objectives set out in the Integrated Regional Sustainability Framework for the East of England – see **Table 2.1** - are relevant when considering the key sustainability issues that are specific to the 'Rural South East' functional area.

²⁰⁸ The conservation area of Hill Hall includes the historic house of Hill Hall, St Michael the Archangel church and the gardens and former parkland of the house.

17.4 What is the situation now?

Figure 17.1: The Rural South East Functional Area



- 17.4.1 Much of the information in this section has been taken from the Epping Forest District Landscape Character Assessment.²⁰⁹ This study identified seven Landscape Character Types (LCTs)²¹⁰ within the district. Each LCT was also broken down into several Landscape Character Areas (LCAs)²¹¹. The boundaries of the LCAs (there are 33 in total) can be seen in **Figure 17.1**. This figure should be referred to alongside **Figure 11.3** within the Landscape section of this Scoping Report, which identifies each LCA by name, and also shows how the LCAs come together within LCTs.
- 17.4.2 Other information within this section has been taken from the Epping Forest District Settlement Edge Landscape Sensitivity Study,²¹² and the Ward Profiles²¹³ that have recently been produced by the Council.

²⁰⁹ CBA (2009) *Epping Forest Landscape Character Assessment*.

²¹⁰ A Landscape Character Type is 'a generic unit of landscape with a distinct and recognisable pattern of elements that occur consistently throughout the type' CBA (2010) *Epping Forest Landscape Character Assessment*

²¹¹ A Landscape Character Area is 'a discrete geographical area of a particular Landscape Character Type with a distinct and recognisable pattern of elements that occur consistently throughout the area' CBA (2010) *Epping Forest Landscape Character Assessment*

²¹² CBA (2009) *Epping Forest Settlement Edge Landscape Sensitivity Assessment*. Draft Version

Introduction to the area

- 17.4.3 The majority of this functional area is associated with the Wooded Ridges and Valleys LCT. Furthermore, the River Roding Valley LCT bisects the functional area, and an area to the north is associated with the Wooded Ridges LCT

The Wooded Ridges and Valleys LCT (north of the River Roding)

- 17.4.4 North of the River Roding are four LCAs associated with the Wooded Ridges and Valleys LCT. The northern most LCA is the Toot Hill Wooded Ridges and Valley LCA. This is a raised, predominantly rural area with a strong sense of tranquillity. However, the area is dominated by modern agricultural fields. There is a small scale, historic settlement pattern. Overall, the LCA has a moderate sensitivity to change.
- 17.4.5 South of this, directly to the north of the River Roding Valley, is the Stapleford Tawney and Stanford Rivers LCA. This is another rural area with a strong sense of tranquillity (away from the M25), but with agricultural fields showing signs of agricultural intensification (boundary loss). There are some relatively large blocks of woodland, and a historic dispersed settlement pattern. Overall, the LCA has a moderate to high sensitivity to change.
- 17.4.6 To the west of this functional area is the Theydon Garnon Wooded Ridges and Valleys LCA. This LCA stretches to the west into the 'Central Line Settlements' functional area. This LCA is dominated by the M11/M25 Junction, although at a distance from the motorways this area has a predominantly rural character. Overall, the area is considered to have a low to moderate sensitivity to change.
- 17.4.7 To the north-west of this functional area is a large area of woodland, which is associated with a separate LCT. The LCA is known as 'Lower Forest to Beachet Wooded Ridge'. This is part of a ridge of higher land that extends to the north west, separating Epping and Thornwood Common. This is ancient woodland that forms part of the Epping Forest SSSI.

The Wooded Ridges and Valleys LCT (north of the River Roding)

- 17.4.8 The area to the south of the River Roding consists of three separate LCAs. The two eastern-most LCAs - Stapleford Abbots Wooded Ridges and Valleys and Lambourne Wooded Ridges and Valleys LCA – are both considered to have a moderate to high sensitivity to change. However, it is the Lambourne LCA that is perhaps more notable. This is described as a small scale, intimate landscape encompassing an intricate patchwork of fields and an intricate network of lanes. Tranquillity is high, and sense of place is added to by views towards London as well as the proximity to Hainult Forest SSSI.
- 17.4.9 The western-most of the three LCAs is Chigwell Wooded Ridges and Valleys LCA is considered to have a low to moderate sensitivity to change²¹⁴. However, it is described as having a strong historic field pattern with mature hedgerows and hedgerow trees, pockets of woodland, a small-scale historic settlement pattern and a strong sense of tranquillity.

²¹³ Epping Forest District Council (2010) *Ward Profiles* [online] available at:

http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/Forward_Planning_Publications.asp

²¹⁴ Epping Forest District Council (2010) Epping Forest Landscape Studies, Landscape Character Assessment, prepared by Chris Blandford Associates

Stapleford Abbots – Settlement Edge Sensitivity

17.4.10 In terms of the settlement edges, the following have been identified as the key elements of landscape sensitivity:

- There are a few patches of sensitive historic landscape within the fringes of the village which consist of some Pre 18th century fields and some 18th to 19th century enclosure;
- There are a few small areas of sensitive woodland within the village fringes which contribute to the landscape setting;

17.4.11 Of the three landscape setting areas surrounding Stapleford Abbots, one is described as having a high sensitivity to change, one is described as having moderate sensitivity and one is described as having low sensitivity.

Chigwell Row -Settlement Edge Sensitivity

17.4.12 See **Section 16**.

The River Roding LCT

17.4.13 The River Roding flows south-westwards along the district boundary (where it is defined as the Middle Roding River Valley LCA), before turning westwards towards Loughton (the Lower Roding LCA). Both LCAs are considered to have a moderate to high sensitivity to change, but it is the Middle Roding LCA that has a stronger sense of enclosure and accessibility.

Ward profile Evidence

17.4.14 The Rural South East functional area includes the following wards: Chigwell Row; Lambourne; and Passingford.

17.4.15 Ward level population data²¹⁵ within the Rural South East Functional area identifies the ethnic make up of the area to be predominantly white²¹⁶. Lambourne and Passingford have approximately 2% non-white residents and Chigwell Row has approximately 11% non-white residents, the majority of whom, 9%, are Asian or Asian British.

17.4.16 Residents in Passingford (74%) identified themselves to be in “good health” which compares to 72% for Epping Forest District, whereas, only 66% in Lambourne believed their health to be good. 72% of residents in Chigwell Row believed their health was good. Life expectancy for residents in Chigwell Row is between 83 to 85 years and in Lambourne and Passingford between 80 to 82.

17.4.17 In all three wards, around 40% of all properties are owned outright which is above the Epping Forest District average of 32%. A high proportion of residents across all wards also own their property with a mortgage or loan. Passingford and Chingwell Row have low levels of council rented accommodation at 6% of households which compares to an average of 14% across Epping Forest District.

²¹⁵ Epping Forest District Council (2010) Key Facts - 2 - Ward Profiles (Data source: Office for National Statistics, 2001)

²¹⁶ ‘White’ incorporates White: British, White: Irish and White: Other.

17.4.18 The main industries across the three wards were “wholesale and retail trade / repairs”, “real estate, renting and business activities”, “construction” and “manufacturing”. Since October to December 2007 all three wards have experienced an increased number of Job Seekers Allowance Claimants. Lambourne has experienced around a 2% increase in claimants whereas Passingford and Chigwell Row which have fared better experiencing around a 1.5% increase.

17.4.19 The main form of transport to work in each ward is driving a car or van. The percentage of commuters travelling by this means is above the district average in each ward. Each ward also has an above average number of people who work mainly at or from home. In Passingford 16% of people work mainly at or from home compared to the district average of 10%

17.5 What will be the situation without the plan?

17.5.1 As one of the more rural parts of the district there is the potential for inadequate investment to perpetuate and potentially lead to greater problems associated with housing affordability, delivery of affordable housing and access to services, facilities, employment and public transport.

17.6 What issues should be a particular focus for the appraisal?

These issues draw on all of the evidence presented within this Scoping Report (not just the evidence presented within this Section).

17.6.1 There is a need to:

- protect landscape character and the integrity of the historic settlements;
- manage the floodplain of the River Roding as well as land use across the wider catchment in order to reduce downstream flood risk;
- consider the potential for traffic impacts on the rural road network;
- meet housing needs, including affordable housing;
- ensure good access to services, facilities, employment, etc. by a range of modes of transport, including by walking, cycling and public transport; and
- support local business and industry.

18 Ongar & Rural North East

18.1 Introduction

18.1.1 This Chapter scopes the sustainability issues that are specific to the 'Ongar & Rural North East' functional area. The boundary of this functional area, which has been defined solely for the purposes of this SA, can be seen in **Figure 18.1** below. In order to illicit the relevant issues that should go on to be a focus of the forthcoming appraisal of the Core Strategy (and potentially other DPDs), this chapter asks a number of specific scoping questions.

18.2 What is the policy context?

18.2.1 For an understanding of the policy context that is of relevance to this functional area, it is also necessary to read the policy context that has been collected for each of the thematic topics.

18.2.2 From examining the Epping Forest District Adopted Local Plan (1998) Proposals Map we note the following points:

- This area falls almost entirely within the Green Belt, with the exception of Chipping Ongar and Fyfield.
- There is a large Registered Park and Garden to the north-west of Ongar, which is also designated as a Conservation Area.²¹⁷
- The Functional Area is dissected by a relatively narrow band of floodplain. The floodplain runs along the western edge of Chipping Ongar. Another floodplain runs along the east of Ongar with a tributary of this heading through High Ongar. The two narrow bands then meet each other to the east of Marden Ash.

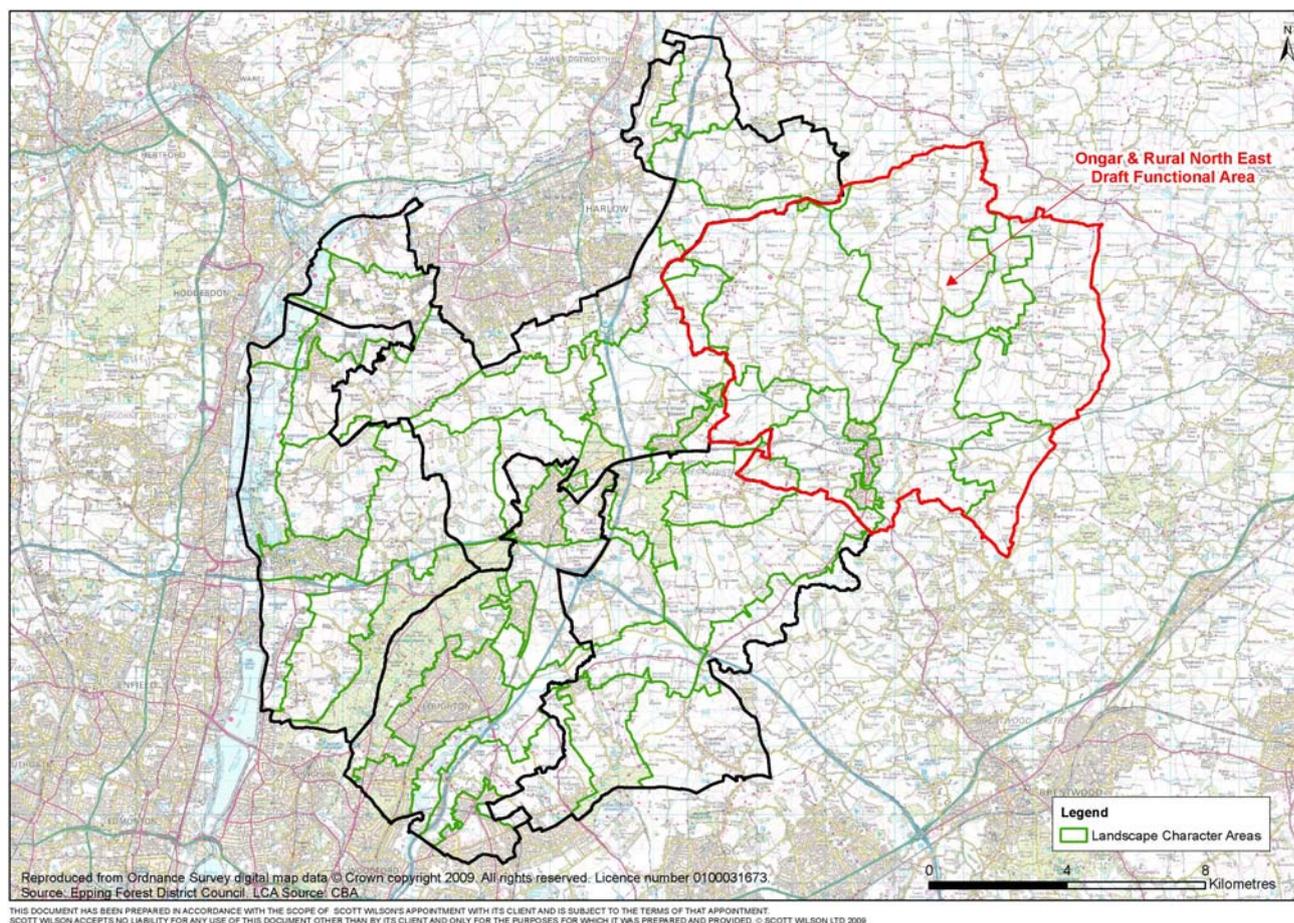
18.3 What are the key sustainability objectives that we need to consider?

18.3.1 All of the objectives set out in the Integrated Regional Sustainability Framework for the East of England – see **Table 2.1** - are relevant when considering the key sustainability issues that are specific to the 'Ongar & Rural North East' functional area.

²¹⁷ This Conservation Area encompasses the Registered Historic Park and Gardens of Blake Hall and the historic hamlet of Bobbingworth. Blake Hall is sited on a slightly raised spur of ground stretching down from Bobbingworth to the northwest. The ground falls gently away from the northeast round to the southwest. The setting of the Hall is characterised by its open parkland landscape, particularly to the east and west of the house.

18.4 What is the situation now?

Figure 18.1: The Ongar & Rural North East Functional Area



18.4.1 Much of the information in this section has been taken from the Epping Forest District Landscape Character Assessment.²¹⁸ This study identified seven Landscape Character Types (LCTs)²¹⁹ within the district. Each LCT was also broken down into several Landscape Character Areas (LCAs)²²⁰. The boundaries of the LCAs (there are 33 in total) can be seen in **Figure 18.1**. This figure should be referred to alongside **Figure 11.3** within the Landscape section of this Scoping Report, which identifies each LCA by name, and also shows how the LCAs come together within LCTs.

18.4.2 Other information within this section has been taken from the Epping Forest District Settlement Edge Landscape Sensitivity Study,²²¹ and the Ward Profiles²²² that have recently been produced by the Council.

²¹⁸ CBA (2009) *Epping Forest Landscape Character Assessment*.

²¹⁹ A Landscape Character Type is 'a generic unit of landscape with a distinct and recognisable pattern of elements that occur consistently throughout the type' CBA (2010) *Epping Forest Landscape Character Assessment*

²²⁰ A Landscape Character Area is 'a discrete geographical area of a particular Landscape Character Type with a distinct and recognisable pattern of elements that occur consistently throughout the area' CBA (2010) *Epping Forest Landscape Character Assessment*

²²¹ CBA (2009) *Epping Forest Settlement Edge Landscape Sensitivity Assessment*. Draft Version

Introduction to the area

- 18.4.3 A dominant feature within this functional area is the River Roding Valley LCT, which runs through the centre. Either side of the river valley are three different LCTs, which are sub-divided into nine different LCAs. At the south of the area is the town of Chipping Ongar.

The River Roding LCT

- 18.4.4 The River Roding Valley LCT is divided into two LCAs – one associated with the upper river valley, and one associated with the middle river valley. Both are important landscapes with a strong sense of enclosure, but the middle river valley is described as having a slightly higher sensitivity to change (moderate to high) than the upper valley (moderate). The Middle River Roding LCA contains the historic village of High Ongar.

The Farmland Plateau (east of the River Roding)

- 18.4.5 To the east of the river valley the Farmland Plateau LCT is subdivided into two LCAs. To the north, the Willingale Farmland Plateau LCA is considered to have a moderate to high sensitivity to change. In the more peripheral areas fields tend to be large-scale, but in close proximity to settlements such as Willingale a more small-scale and intimate pattern is apparent. There is a strong sense of remoteness and tranquillity. Several historic hamlets, historic moated sites and small patches of woodland are key landscape features.
- 18.4.6 Nine Ashes Farmland Plateau LCA to the south is considered to have a moderate sensitivity to change. There is a predominantly rural character, despite road corridors and the linear village of Nine Ashes. There is a historic field pattern in the vicinity of Nine Ashes and Paslow Common is also an important historic landscape feature. Elsewhere, fields show the signs of modern agricultural intensification.

The Farmland Plateau (west of the River Roding)

- 18.4.7 The Abbess Farmland Plateau is considered to have a moderate to high sensitivity to change. It encompasses a mosaic of large, gently undulating arable fields which are interspersed with small stream corridors and dotted with patches of deciduous woodland. A small-scale settlement pattern of small villages and hamlets alongside scattered, isolated farmsteads is apparent. These are served by a network of narrow, rural lanes, which often exhibit a strong sense of enclosure. Overall sense of tranquillity is strong throughout most of the area. Within the eastern half of the area, views into the corridor of the Roding River Valley contribute to a recognisable sense of place, whilst panoramic, often open views across arable farmland are characteristic of most of the area. In places, church spires or towers are landmark elements within views. The village of Abbess Roding is one of eight hamlets and villages between Great Dunmow (to the north of the Study area) and Chipping Ongar, collectively known as 'The Rodings' which lie either side of the River Roding.

²²² Epping Forest District Council (2010) *Ward Profiles* [online] available at:
http://www.eppingforestdc.gov.uk/Council_Services/planning/forward_planning/Forward_Planning_Publications.asp

The Ridges and Valleys LCT

- 18.4.8 The area of this LCT that falls within this functional area is primarily associated with the Magdalen Laver and Moreton LCA. This area is considered to have a moderate sensitivity to change. The area has an intimate historic character, provided by its two small, nucleated historic settlements, which are connected by a series of narrow, winding and sometimes sunken lanes. The villages of Moreton and Bobbingworth both have strong historic characters, with their timber-framed houses and historic churches. However, they are set within a landscape of modern agricultural fields. The earthworks of a previously abandoned medieval settlement are visible across the character area; the historic pattern of scattered manor houses indicated by the moat earthwork remains is continued in the present day landscape by the scattered farmsteads and roadside houses.
- 18.4.9 Stapleford Tawney and Stanford Rivers Wooded Ridges and Valleys LCA and Toot Hill Wooded Ridges and Valleys LCA are also both located to the south west of this LCT.

Chipping Ongar / High Ongar - Settlement Edge Sensitivity

- 18.4.10 In terms of the settlement edges, the following have been identified as the key elements of landscape sensitivity:
- There are a few patches of sensitive historic landscape within the fringes of Chipping Ongar and High Ongar, including a few Pre 18th century fields in the northern fringes of the settlements and a few small 18th to 19th century enclosure areas close to the west and east fringes of Chipping Ongar.
 - There are several patches of sensitive woodland within the fringes of Chipping Ongar and High Ongar which are significant elements within the local landscape.
 - Two areas of floodplain flow north south across the landscape, one of which is associated with the River Roding.
- 18.4.11 In terms of the sensitivity of the six landscape setting areas, three are described as high, one is described as moderate and two are described as low.

Moreton – Settlement Edge Sensitivity

- 18.4.12 In terms of the settlement edges, the following have been identified as the key elements of landscape sensitivity:
- There are several areas of sensitive historic landscape to the west and south fringes of the village which encompass pre 18th century fields.
 - There are a few small patches of woodland within the fringes of the village that contribute to the character of the landscape.
 - There are two floodplains within the village, one of which crosses land to the east and west of the village, whilst the other crosses land to the north.
- 18.4.13 Of the four landscape setting areas, three are described as having a high sensitivity and one as having a moderate sensitivity.

Fyfield – Settlement Edge Sensitivity

18.4.14 In terms of the settlement edges, the following have been identified as the key elements of landscape sensitivity:

- There are several areas of sensitive historic landscape that surround the village fringes which mostly consist of pre 18th Century fields.
- There are several small patches of woodland within the south and north western fringes of the village which contribute towards local landscape character;
- There is a linear strip of a few Veteran trees within the southern fringes of the village which are key landscape and historic features;
- There are two floodplains that run through the village and stretch into the north and south fringes of the village.

18.4.15 All three of the landscape setting areas are described as having a high sensitivity.

Ward profile Evidence

18.4.16 The Ongar and Rural North East functional area includes the following wards: Chipping Ongar, Greensted and Marden Ash; High Ongar, Willingale and The Rodings; Moreton and Fyfield; and Shelley.

18.4.17 Ward level population data²²³ within the Ongar and Rural North East functional area identifies the ethnic make up of the area to be predominantly white²²⁴ with individual wards having between 0 and 3% of their population being non-white. Moreton and Fyfield identifies itself to have no non-white groups.

18.4.18 The general health of the ward residents is slightly above the district average (72% for Chipping Ongar, Greensted and Marden Ash and High Ongar, Willingdale and The Rodings. Only 66% of residents in Shelly identified themselves as having “good health” and 72% thought they had “good health” in Moreton and Fyfield.

18.4.19 Housing tenure differs quite markedly between the four wards. Whereas around 81% of properties are owned outright or owned with a mortgage or loan in Chipping Ongar, Greensted and Marden Ash, only 56% are similarly owned in Shelly. Shelly has very high proportion of council rented properties (33%) compared to the Epping Forest District average of 14%.

18.4.20 The main industries of employment for each ward in 2001 was “wholesale and retail trade / repairs”, “real estate, renting and business activities” and “manufacturing”. “Construction” was identified as a relatively large employer for residents in High Ongar, Willingale and The Rodings ward. All wards have experienced an increase in Job Seekers Allowance Claimants since the end of 2007; the highest increase (over 2% since October to December 2007) was noted in Shelly whereas in other wards the increase was in the region of around only 1.3%.

²²³ Epping Forest District Council (2010) Key Facts - 2 - Ward Profiles (Data source: Office for National Statistics, 2001)

²²⁴ ‘White’ incorporates White: British, White: Irish and White: Other.

18.4.21 All wards have a higher than district average proportion of people who commute to work by car (from 61% to 63% compared to the Epping Forest District average of 55%). Very few people use the underground to commute to work. However, in High Ongar, Willingale and The Rodings and Moreton and Fyfield wards, 17% of people work mainly at or from home (compared to 10% on average across the district).

18.5 What will be the situation without the plan?

18.5.1 As one of the more rural parts of the district there is the potential for inadequate investment to perpetuate and potentially lead to greater problems associated with housing affordability, delivery of affordable housing and access to services, facilities, employment and public transport.

18.6 What issues should be a particular focus for the appraisal?

These issues draw on all of the evidence presented within this Scoping Report (not just the evidence presented within this Section).

18.6.1 There is a need to:

- protect landscape character and the integrity of the historic settlements; and
- manage the floodplain of the River Roding as well as land use across the wider catchment in order to reduce downstream flood risk.
- consider the potential for traffic impacts on the rural road network;
- meet housing needs, including affordable housing;
- ensure good access to services, facilities, employment, etc. by a range of modes of transport, including by walking, cycling and public transport; and
- support local business and industry.

19 Habitats Regulations Assessment

19.1 Background

- 19.1.1 It is a requirement of Article 6 of the EC Habitats Directive 1992 and the Conservation of Habitats & Species Regulations 2010 (**Box 19.1**) that 'land use plans' (including local authority Local Development Frameworks) are subject to an 'Appropriate Assessment' (AA) if it is likely that they will lead to significant adverse effects on a Natura 2000 site (Special Areas of Conservation, SACs, and Special Protection Areas, SPAs). As a matter of UK Government policy, Ramsar sites²²⁵, candidate Special Areas of Conservation (cSAC) and proposed Special Protection Areas (pSPA) are given equivalent status.

Box 19.1. The legislative basis for Appropriate Assessment

Habitats Directive 1992

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives."

Article 6 (3)

Conservation of Habitats & Species Regulations 2010

"A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that site's conservation objectives ... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site"

Regulation 102

- 19.1.2 The Habitats Directive applies the precautionary principle to protected areas; plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. This is in contrast to the Strategic Environmental Assessment (SEA) Directive which does not prescribe how plan or programme proponents should respond to the findings of an environmental assessment; it simply says that the assessment findings (as documented in the 'environmental report') should be 'taken into account' during preparation of the plan or programme. In the case of the Habitats Directive, potentially damaging plans and projects may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation will be necessary to ensure the overall integrity of the site network.
- 19.1.3 As assessment of plans has developed, the term Habitats Regulations Assessment (HRA) has come into currency for describing the overall assessment process (including screening to determine whether significant adverse effects are likely or not) and this term is used below when necessary to distinguish the process from the 'Appropriate Assessment' stage itself.

²²⁵ Wetlands of International Importance designated under the Ramsar Convention 1979

19.2 Introduction

19.2.1 This section of the Scoping Report is intended to serve three main purposes, all of which seek to define the processes and parameters of the HRA:

- To set out the methodological approach to undertaking the HRA of the Core Strategy DPD;
- To provide details of data sources that have been identified at this initial stage as being available to inform the HRA (the 'evidence base'); and
- To set out the 'scope' of the HRA (subject to agreement with Natural England) - The scope of the HRA will consist of three components:
 - The physical scope – the range of European sites that will be considered within the assessment.
 - The policy scope – the aspects of the Core Strategy that will need to be subject to HRA.
 - The 'in combination' scope – the range of other plans and projects that need to be considered 'in combination' with the Core Strategy. In practice, 'in combination assessment' is of greatest importance when the Core Strategy would otherwise be dismissed because the individual contribution is inconsequential.

19.2.2 This report is particularly intended to stimulate discussion over the scope and we would be very interested in the comments of Natural England concerning the data sources identified and the 'other plans and projects' to be considered in combination with the Core Strategy DPD.

19.3 Methodology

Principles

19.3.1 Scott Wilson has adhered to several key principles in developing the methodology – see **Table 19.1**.

Table 19.1: Key principles underpinning the proposed methodology

| Principle | Rationale |
|---|---|
| Use existing information | We will use existing information to inform the assessment. This will include information gathered as part of the SA of the emerging Local Development Framework and information held by Natural England, the Environment Agency and others. |
| Consult with Natural England, the Environment Agency and other stakeholders | We will ensure continued consultation with Natural England and the Environment Agency for the duration of the assessment. We will ensure that we utilise information held by them and others and take on board their comments on the assessment process and findings. |
| Ensure a proportionate assessment | We will ensure that the level of detail addressed in the assessment reflects the level of detail in the Core Strategy (i.e. that the assessment is proportionate). With this in mind, the assessment will focus on information and impacts considered appropriate to the local level. |
| Keep the process simple as possible | We will endeavour to keep the process as simple as possible while ensuring an objective and rigorous assessment in compliance with the Habitats Directive and emerging best practice. |
| Ensure a clear audit trail | We will ensure that the AA process and findings are clearly documented in order to ensure a clearly discernible audit trail. |
| Agree presentational format | We will agree the style of presentation early in the process, considering the audience for the work. |
| Flexibility | We will maintain a watching brief on all changes to HRA guidance from CLG and Natural England as well as advances in HRA best practice, in order to ensure that we provide the client with the best advice possible. |

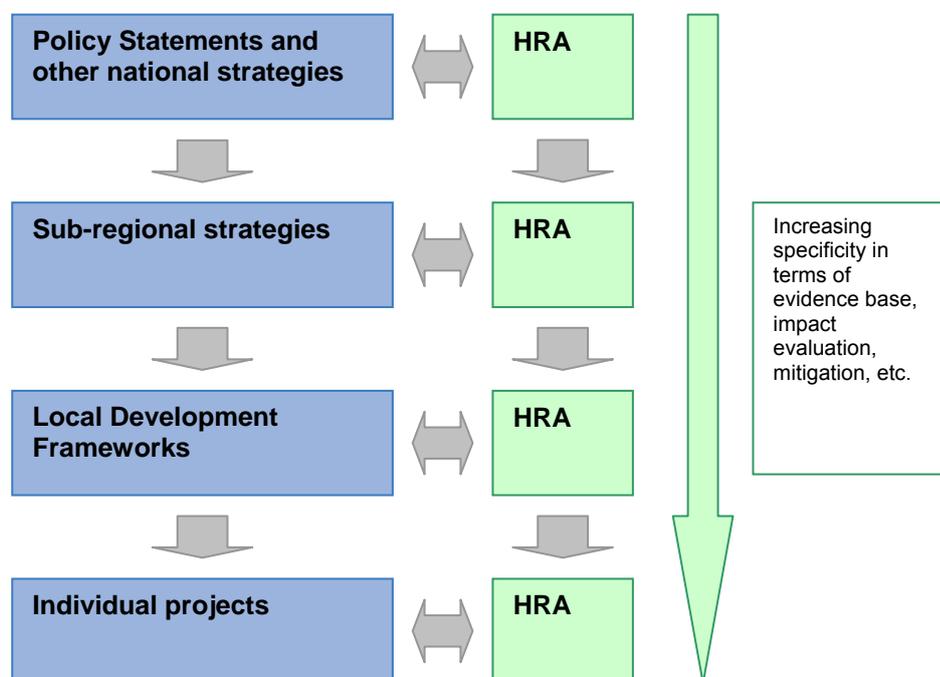
A Proportionate Assessment

- 19.3.2 Project-related HRA often requires bespoke survey work and novel data generation in order to accurately determine the significance of adverse effects. In other words, to look beyond the risk of an effect to a justified prediction of the actual likely effect and to the development of avoidance or mitigation measures.
- 19.3.3 However, the draft CLG guidance²²⁶ makes it clear that when implementing HRA of land-use plans, the AA should be undertaken at a level of detail that is appropriate and proportional to the level of detail provided within the plan itself:
- 19.3.4 *“The comprehensiveness of the [Appropriate] assessment work undertaken should be proportionate to the geographical scope of the option and the nature and extent of any effects identified. An AA need not be done in any more detail, or using more resources, than is useful for its purpose. It would be inappropriate and impracticable to assess the effects [of a strategic land use plan] in the degree of detail that would normally be required for the Environmental Impact Assessment (EIA) of a project.”*
- 19.3.5 There is a tacit acceptance that appropriate assessment can be tiered and that all impacts are not necessarily appropriate for consideration to the same degree of detail at all tiers (**Figure 19.1**).

²²⁶ CLG (2006) Planning for the Protection of European Sites, Consultation Paper

- 19.3.6 For an LDF, the level of detail concerning the developments that will be delivered is usually insufficient to make a highly detailed assessment of significance of effects. For example, precise and full determination of the impacts and significant effects of a new settlement will require extensive details concerning the design of the town, including layout of greenspace and type of development to be delivered in particular locations, yet these data will not be decided until subsequent stages.
- 19.3.7 The most robust and defensible approach to the absence of fine grain detail at this level is to make use of the precautionary principle. In other words, the plan is never given the benefit of the doubt; it must be assumed that a policy/measure is likely to have an impact leading to a significant adverse effect upon a European site unless it can be clearly established otherwise.

Figure 19.1: Tiering in HRA of Land Use Plans

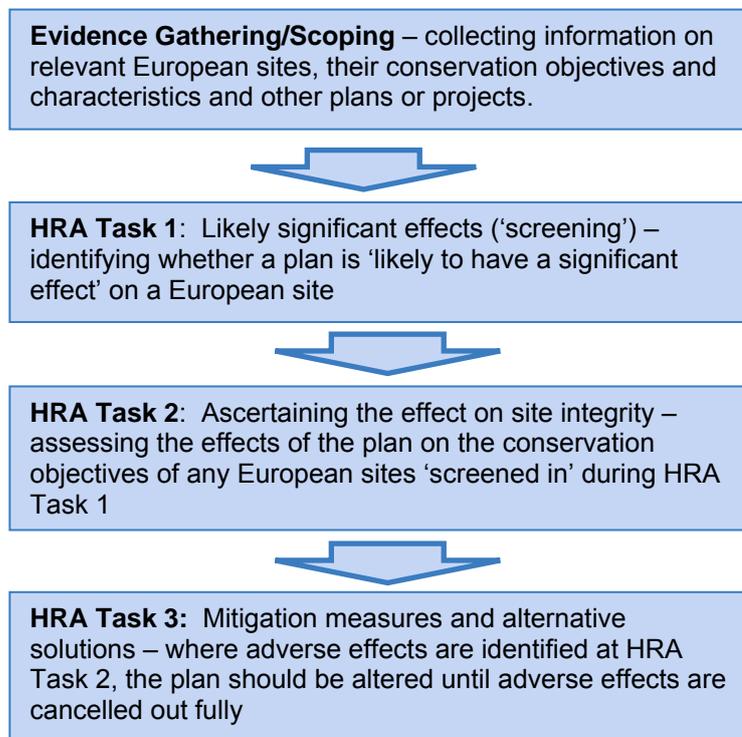


19.4 The Process of HRA

- 19.4.1 The HRA is likely to be carried out in the continuing absence of formal Government guidance. CLG released a consultation paper on AA of Plans in 2006²²⁷. As yet, no further formal guidance has emerged.
- 19.4.2 **Figure 19.2** outlines the stages of HRA according to current draft CLG guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

²²⁷ CLG (2006) Planning for the Protection of European Sites, Consultation Paper

Figure 19.2: Four-Stage Approach to Habitat Regulations Assessment



19.4.3 In practice, we and other practitioners have discovered that this broad outline requires some amendment in order to feed into a developing land use plan such as a Core Strategy.

19.4.4 The Evidence Gathering stage is the purpose of the remainder of this document.

19.5 The Scope of the HRA

19.5.1 The scope of the HRA has been divided for simplicity into three components. The purpose of this section is to define that scope as far as possible at this stage. We would be interested to receive Natural England's view on the various issues of scope that we raise below.

19.6 The physical scope

19.6.1 This defines the range of European sites that will be considered within the assessment. The following are typical of the issues that have to be considered during Appropriate Assessment of spatial development policies.

Table 19.2: Possible impacts of Local Development Framework upon European sites

| Impact | Comment |
|---|--|
| Landtake | <ul style="list-style-type: none"> • May cause fragmentation as well as habitat loss. • Land outside European site boundaries may be important for the integrity of the site (e.g. areas outside SPAs that are used by roosting or feeding birds) e.g. around the Lee Valley |
| Hydrology | <ul style="list-style-type: none"> • Demand for water could result in drawdown of water levels within the Lee Valley. • Development may have hydrological consequences, affecting surface water and/or groundwater flows upon which wetland sites are dependent. |
| Water quality | <ul style="list-style-type: none"> • Sewage treatment effluent (e.g. pressure on capacity at Rye Meads STW) • Effluent from industrial processes. • Polluted run-off from car parking areas and roads. |
| Air quality | <ul style="list-style-type: none"> • Industrial emissions. • Domestic heating. • Traffic |
| Recreational pressure | <ul style="list-style-type: none"> • Disturbance to sensitive species. • Trampling and erosion of sensitive habitats e.g. acid grassland • Eutrophication from dogs. |
| Other 'proximity effects' of urbanisation | <ul style="list-style-type: none"> • Introduction of invasive alien species, mainly from tipping of garden waste. • Increased risk of arson. • Effects on behaviour from lighting. • Noise disturbance. • Cat predation |

19.6.2 From our knowledge of the Epping Forest District area and the impact pathways identified above, it is our view that the physical scope of the HRA (at least at Screening) would be as follows:

Table 19.3: Physical scope of the HRA

| European site | Conceivable pathways identified at this initial stage that may connect European sites to Epping Forest District |
|---------------------------------|--|
| Epping Forest SAC | <p>Increased population levels could lead to possible recreational pressure causing damage to sensitive habitats.</p> <p>Increased population levels in Epping Forest District could lead to increased traffic levels on the road network and thus reduced air quality at Epping Forest SAC associated with nitrogen deposition and acidification.</p> |
| Lee Valley SPA and Ramsar site | <p>Increased population levels could lead to possible recreational pressure causing disturbance of bird interest and possible direct damage.</p> <p>Possible water quality issues through pressure on STW capacity and through run-off.</p> <p>Possible hydrological issues through increased demand for water.</p> <p>Natural England in their response to the initial scoping report identified that air quality impacts on the wet grassland in Rye Meads SSSI may also require consideration</p> |
| Wormley-Hoddesdonpark Woods SAC | <p>Increased population levels could lead to possible recreational pressure causing damage to nature conservation interest.</p> <p>Possible risk from effects normally associated with urbanisation – i.e. fly-tipping.</p> |

- 19.6.3 Further details regarding the interest features and vulnerabilities of the European sites included within the scope of the HRA are given below.

Epping Forest SAC

- 19.6.4 Epping Forest SAC is located within Epping Forest District. 70% of the 1,600 hectare site consists of broadleaved deciduous woodland, and it is one of only a few remaining large-scale examples of ancient wood-pasture in lowland Britain. Epping Forest supports a nationally outstanding assemblage of invertebrates, a major amphibian interest and an exceptional breeding bird community.

Reasons for Designation

- 19.6.5 Epping Forest qualifies as a SAC for both habitats and species. Firstly, the site contains the Habitats Directive Annex I habitats of:
- Beech forests on acid soils: an example of such habitat toward the north-east of its UK range, containing a notable selection of bryophytes, fungi and dead-wood invertebrates;
 - Wet heathland with cross-leaved heath; and
 - Dry heath
- 19.6.6 Secondly, the site contains the Habitats Directive Annex II species Stagbeetle *Lucanus cervus*, with widespread and frequent records.

Historic Trends and Current Pressures

- 19.6.7 Much of the value of Epping Forest stems from a long history of pollarding, and although this ceased at the end of the 19th century, re-pollarding of ancient beech trees was started in the early 1990s, and creation of maiden pollards was begun in 1995. This helped to reverse the decline of the forest's epiphytic bryophyte population. The slow recovery can also be attributed to the reduction of atmospheric pollutants since the passing of the 1956 Clean Air Act.
- 19.6.8 There is an active policy to leave felled timber on the ground to increase the habitat for stag beetle and other saproxylic insects. This is one of four outstanding localities for the beetle in the UK, and it is reliant on felled timber for development of its larvae, a process that takes several years.
- 19.6.9 In 1988, the Corporation of London, who own and manage the forest, agreed a management strategy with English Nature (now Natural England) to take forward the management. A comprehensive management plan was completed and consented in 1998. The site is subject to the provisions of the Epping Forest Act of 1878.
- 19.6.10 Deteriorating air quality and under-grazing are the two key pressures that currently affect the site.

Table 19.4: Critical nitrogen loads, actual rates of nitrogen deposition, NOx concentrations²²⁸ and sulphur dioxide concentrations for Epping Forest SAC. Red shading indicates exceedance of thresholds.

| Site | Grid reference | Most nitrogen sensitive habitat | Minimum ²²⁹ critical loads (Kg N/ha/yr) | Actual nitrogen deposition ²³⁰ (Kg N/ha/yr) | Actual NOx concentration ($\mu\text{g m}^{-3}$) | Actual SO ₂ concentration ($\mu\text{g m}^{-3}$) |
|-------------------|----------------|---------------------------------|--|--|---|---|
| Epping Forest SAC | TQ425985 | Beech woodland | 10 | 36.4 | 30 | 3.7 |

19.6.11 It is clear from Table 19.4 that nitrogen deposition is already a problem within Epping Forest SAC. According to the Air Pollution Information System (APIS) website, 20% of nitrogen currently deposited within Epping Forest derives from road transport exhaust emissions. Natural England identified in their comments on the initial scoping report that air quality and deposition vary considerably across Epping Forest SAC and it may therefore be more appropriate for the HRA to look at a range of locations rather than a single generalised point. We will take this forward in the HRA itself.

19.6.12 While recreational pressure is a considerable impact in some areas, these are localised; however, funding of management on the SAC is governed largely by donation and contributions from the Corporation of London and it is likely that the ability to adequately manage recreation on the SAC will come under increasing pressure as the population of northeast London, Epping Forest District and East Hertfordshire increases.

19.6.13 The environmental requirements of Epping Forest SAC are mainly:

- The need to continue to manage recreational access so as to minimise damage to the important habitats present.
- The need to counter negative changes to low-nutrient habitats resulting from atmospheric nutrient deposition and acid deposition. The site is adjacent to the busy M25 and is bisected by numerous ‘rat runs.’
- The need to provide optimal grazing input to manage heathland and grassland habitats.
- The need to avoid water pollution
- The need to avoid introduction of non-native species.

Lee Valley SPA and Ramsar

19.6.14 The Lee Valley comprises a series of embanked water supply reservoirs, sewage treatment lagoons and former gravel pits along approximately 24 km of the valley. These waterbodies support internationally important numbers of wintering gadwall and shoveler, while the reedbeds support a small but internationally important population of bittern. In addition to the ornithological interest, the site also qualifies as a Ramsar site on account of rare and scarce plants and invertebrates present.

²²⁸ Calculated as NO₂

²²⁹ APIS provides a critical load range – on a precautionary basis, this assessment uses the lowest figure in that range

²³⁰ To a resolution of 5 km

19.6.15 The Lee Valley SPA/Ramsar consists of four Sites of Special Scientific Interest, of which Turnford and Cheshunt Pits SSSI, Rye Meads SSSI and Amwell Quarry SSSI all lie on the Hertfordshire/Essex border. Walthamstow Reservoirs SSSI lies within London Borough of Waltham Forest. The Special Protection Area is managed by the Lee Valley Regional Park Authority, Hertfordshire & Middlesex Wildlife Trust (Amwell Nature Reserve), RSPB (Rye Meads) and Thames Water (Walthamstow Reservoirs).

Reasons for Designation

19.6.16 The Lee Valley site is designated as an SPA and Ramsar for its Birds Directive Annex I species that over-winter, and these are²³¹:

- Bittern *Botaurus stellaris*: 6 individuals = 6% of the wintering population in Great Britain;
- Gadwall *Anas strepera*: 445 individuals = 2.6% of the wintering population in Great Britain; and
- Shoveler *Anas clypeata*: 287 individuals = 1.9% of the wintering population in Great Britain.

19.6.17 In addition, the site qualifies as a Ramsar under criterion 2 (UN, 2005), by supporting the nationally scarce plant species whorled water-milfoil *Myriophyllum verticillatum* and the rare or vulnerable invertebrate *Micronecta minutissima* (a water-boatman).

Historic Trends and Current Pressures

19.6.18 The Lee Valley is vulnerable to eutrophic water quality; but this is being addressed via AMP4 (Asset Management Programme 4) funding under the Urban Waste Water Treatment Directive and a Water Cycle Study.

19.6.19 The other main threat is that of human recreational pressure, although this is regulated through zoning of water bodies within the Lee Valley Regional Park. The majority of the site is already managed in accordance with agreed management plans in which nature conservation is a high or sole priority.

19.6.20 Although there is a theoretical risk to the site associated with abstraction, the Environment Agency have indicated in their response to the initial Scoping Report that current licenced abstractions evaluated through their Review of Consents process identified no adverse effects on the integrity of the SPA/Ramsar site. Presently, the SPA/Ramsar is in favourable condition.

19.6.21 The HRA carried out for the Regional Park Authority's Park Development Framework identified the following vulnerabilities for the Lee Valley SPA/Ramsar site:

- Habitat loss/damage (recreation, adjacent development);
- Eutrophication (hydrological pollution);
- Disturbance (recreation);
- Abstraction (hydrological regime);
- Climate change/drought (hydrological regime);
- Food availability for wildfowl.

²³¹ All bird count data in this document is sourced from the SPA Review site accounts as available on the Joint Nature Conservation Committee website www.jncc.gov.uk/page-1412

19.6.22 The environmental requirements of Lee Valley SPA/Ramsar are mainly:

- The need to control recreational impacts so as to avoid bird disturbance.
- Maintenance of appropriate vegetation management through grazing, mowing and other relevant techniques.
- Continued inputs of freshwater at appropriate flow volumes
- The need to avoid further eutrophication of water bodies within the SPA/Ramsar, and to avoid any other pollution events.
- The need to avoid introduction of non-native species.
- The need to provide suitable habitat outside the boundaries of the designated area that can be utilised by key species as supporting habitats.

Wormley-Hoddesdonpark Woods SAC

19.6.23 This SAC consists of two SSSIs – Wormley-Hoddesdonpark Woods North and Wormley-Hoddesdonpark Woods South. The semi-natural woodland is of national importance as an example of lowland south-east sessile oak/hornbeam type with the pedunculate oak/hornbeam variant also present. Additionally, small ponds and streams are important habitats for bryophytes.

Reasons for Designation

19.6.24 Wormley-Hoddesdonpark Woods qualifies as a SAC through its habitats, containing the Habitats Directive Annex I habitat:

- Oak-hornbeam forests – this is one of only two outstanding locations for such habitat in the UK.

Historic Trends and Current Pressures

19.6.25 The majority of the woods in the complex are in sympathetic ownership, with no direct threat (Hoddesdonpark Wood for example, is managed by the Woodland Trust). There is some pressure from informal recreation, and there has been limited damage in the past (for example from four-wheel drive vehicles). However, most recreation is concentrated on well-established paths. Most of the complex is covered by a High Forest Zone Plan (Hertfordshire County Council 1996) which sets out a framework for woodland management across the whole area. It aims to restore a varied age structure and natural stand types through sustainable forestry.

19.6.26 There have been some instances of fly-tipping in the recent past, and this does increase the risk on non-native species, such as Cherry Laurel and Privet from garden waste. Coupled with instances of car dumping, this does indicate that the site attracts some urbanisation pressures.

19.6.27 The environmental requirements of Wormley-Hoddesdonpark Woods SAC are mainly:

- The need to minimise impacts from vandalism arson, fly-tipping and dumping, and coupled with this, to avoid introduction of non-native species.
- The need to ensure that recreational levels do not lead to excessive trampling of ground flora, or increased nutrient levels through dog fouling.

- The need to ensure continued hydrological balance on the site with high-quality streams running eastward along the shallow valleys (Wormleybury Brook and Spital Brook), and several ponds.
- The need to avoid negative changes to habitats resulting from atmospheric nutrient deposition.

19.7 Principal Other Plans and Projects

19.7.1 It is neither practical nor necessary to assess the ‘in combination’ effects of the Core Strategy within the context of all other plans and projects within Hertfordshire and west Essex. In practice therefore, in combination assessment is only really of relevance when the plan would otherwise be screened out because its individual contribution is inconsequential. For the purposes of this assessment, we have determined that, due to the nature of the identified impacts, the key other plans and projects relate to the additional housing and commercial/industrial allocations proposed for other Hertfordshire authorities over the lifetime of the Core Strategy.

19.7.2 The Regional Spatial Strategy for the East of England provides a good introduction to proposals for Hertfordshire as a whole, and surrounding counties. At this stage, we have identified a range of plans and projects that may act in combination with the Core Strategy.

Table 19.5. Housing levels to be delivered across Hertfordshire and west Essex under the East of England RSS

| Local Authority | Annual housing average | Total housing from 2001 to 2021 |
|-------------------------------|------------------------|---------------------------------|
| Broxbourne | 255 | 5,100 |
| Dacorum | 315 | 6,300 |
| East Hertfordshire | 1,040 | 20,800 |
| Hertsmere | 210 | 4,200 |
| North Hertfordshire | 790 | 15,800 |
| St. Albans | 350 | 7,000 |
| Stevenage | 320 | 6,400 |
| Three Rivers | 180 | 3,600 |
| Watford | 230 | 4,600 |
| Welwyn Hatfield | 290 | 5,800 |
| Epping Forest District | 150 | 3,500 |
| Harlow | 1,010 | 16,000 |

19.7.3 There are other plans and projects that are often relevant to the ‘in combination’ assessment, most notably Thames Water’s Water Resource Management Plan (2008) and the Environment Agency’s London Catchment Abstraction Management Strategy. These will all be taken into account in this assessment.

19.7.4 The Essex Waste Development Frameworks are also of some relevance, since this may well contribute to increased vehicle movements on the road network within Epping Forest district (and thereby contribute to air quality impacts). However, the major impact is likely to be that of housing and commercial development within the surrounding boroughs as set out in Local Development Frameworks and these have therefore been the main focus of cumulative 'in combination' effects with regard to this HRA. Reference will also be made to the Lee Valley Regional Park Authority Park Development Framework, although it is at an early stage of development.

19.8 Principal Data Sources

19.8.1 We would not propose undertaking bespoke survey or modelling for this project. In general, detailed survey/modelling is not proportionate or appropriate for a Core Strategy - the CLG draft guidance states that '*An AA [of a land use plan] need not be done in any more detail, or using more resources, than is useful for its purpose*' and that '*It would be inappropriate and impracticable to assess the effects [of a land use plan] in the degree of detail that would normally be required for the Environmental Impact Assessment (EIA) of a project*'. In other words, the level of detail in the AA should reflect the level of detail in the DPD. AA of land use plans needs to be tiered, just as the plans themselves are tiered, such that the assessment (and the baseline/modelling work that informs it) gains greater specificity as the development(s) covered by the plan gain greater detail. This should be down to the project-level AA where site surveys and detailed modelling are clearly appropriate as impacts can be explored in their fullest detail.

19.8.2 The detail contained within the plan is always the main limiting factor regarding the assessment and there is little to be gained from undertaking bespoke surveys if the level of detail within the plan would prevent that additional data from informing a more detailed assessment. A Core Strategy is essentially concerned with the principles (rather than details) of development and in establishing a policy framework; the AA of the plan needs to be pitched at this same level.

19.8.3 The most productive assessment can be generated in defining the environmental conditions and criteria that are fundamentally important for the persistence and favourable conservation status of the interest features for which the site was designated (e.g. minimal trampling, low grazing pressure, high water quality etc). By undertaking this short exercise, it is relatively easy to then identify the vulnerabilities of the European site to development.

19.8.4 It is our current intention that sources of evidence that we would propose to access in order to determine the relevant pressures for this HRA will primarily consist of:

- The Sustainability Appraisal for the Core Strategy and any data collated to inform it;
- The Lee Valley Biodiversity Action Plan, Epping Forest Biodiversity Action Plan and Essex Biodiversity Action Plan;
- Screening Statement (November 2009) for the HRA of the Lee Valley Regional Park Development Framework
- The East of England Regional Spatial Strategy HRA (2006)
- The East of England Regional Spatial Strategy: Proposed Changes and Further Proposed Changes HRA (2007)
- Draft Revision to the East of England Regional Spatial Strategy: HRA Technical Report on Water Quality, Water Resources and Flooding (2007)

- East of England Plan Review: Scoping Report for HRA (2008)
- London Plan (2004)
- Essex and Suffolk Water Water Resource Management Plan;
- Thames Water revised Water Resource Management Plan;
- Three Valleys Water (Veolia) Water Resource Management Plan;
- Upper Lee Catchment Abstraction Management Strategy (2006);
- London Catchment Abstraction Management Strategy (2006);
- Anglian Draft River Basin Management Plan (2008);
- Thames Draft River Basin Management Plan (2008);
- A Water Cycle Study for the Rye Meads catchment is in preparation and will form a key document in the HRA evidence base.
- Local Transport Plans 2006-2011;
- Recreational activity, tourism and European site recreational catchment data – where available we will use data that exists for individual European sites but in many cases these do not exist. In such circumstances we would intend to use appropriate proxy data such as the England Leisure Day Visits Survey data in conjunction with judicious use of the precautionary principle;
- A Green Infrastructure Plan for the Harlow Area (2005);
- East Hertfordshire Parks and Open Spaces Strategy 2007-2012;
- High Forest Zone Plan – Hertfordshire CC (1996)
- Lee Valley Regional Park Authority Site management Plan 2006-2011;
- Epping Forest Management Plan 2004-2010;
- Hoddesdon Park Wood Management Plan 2006-2011;
- European Site Management and Access Management Plans where available
- Stage 3 and 4 of the Environment Agency's Review of Consents process for the European sites covered in this assessment (where available);
- The UK Air Pollution Information System (www.apis.ac.uk);
- Nature on the Map and its links to SSSI citations and the JNCC website (www.natureonthemap.org.uk); and
- The Regional Biodiversity Strategy

19.8.5 These lists will be updated as the project proceeds but we would appreciate being notified of any additions to this list that Natural England or the steering group believes can be made at this stage.

19.9 HRA Scoping References

Department of Transport (2004). *Transport Analysis Guidance: Regional Air Pollution*. http://www.webtag.org.uk/webdocuments/3_Expert/3_Environment_Objective/3.3.4.htm

EC, 1979 – European Council (1979). *Council Directive of 2 April 1979 on the conservation of wild birds (79/409/EEC)*. http://europa.eu.int/eur-lex/en/consleg/pdf/1979/en_1979L0409_do_001.pdf

EC, 1992 – European Council (1992). *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora*. http://ec.europa.eu/environment/nature/nature_conservation/eu_nature_legislation/habitats_directive/index_en.htm

European Commission (2001). *Assessment of plans and projects significantly affecting Natura 2000 sites*. http://europa.eu.int/comm/environment/nature/nature_conservation/eu_nature_legislation/specific_articles/art6/pdf/natura_2000_assess_en.pdf

20 Next steps

20.1 SA of the Core Strategy and other DPDs

20.1.1 The framework and evidence base presented in this Scoping Report will provide the basis for undertaking the assessment of Core Strategy options and preferred options. In order to complete the assessment, for each functional area and thematic topic, we will ask:

- What are the sustainability effects of the preferred approach and/or alternative approaches?
- What are the SA recommendations?
- How can we best monitor the plan's impacts?

20.1.2 It is expected that assessment findings will firstly be reported in an Interim SA Report, which will be published alongside the Core Strategy Issues and Options document.

Annex I - Consultation Responses

A number of changes have been made to the Scoping Report to reflect evidence gathered through consultation. The changes that have been made are reflected in the table below. Issues raised through the consultation have been reflected in the Scoping Report where there is clear evidence that they are of 'strategic importance' and hence should be a focus of the LDF SA.

Not all issues raised through the consultation have been reflected in the Scoping Report. Rather, some issues have been 'scoped out' at this stage. Careful 'scoping' should help to ensure that the LDF SA is focused and concise.

However, it is important to note that scoping is a 'live' process, and as such there is potential to revise the scope of the SA in the future, should it become apparent that decisions taken through the LDF may result in significant impacts in terms of issues other than those currently highlighted within the Scoping Report.

| Change made to Scoping Report | ... to reflect evidence presented by |
|--|---|
| 3.2.4 - Air quality impacts to biodiversity discussed | Natural England - Gordon Wyatt Adrian J Liddle, Epping Forest Riders Association |
| 3.4.1 - Reference made to noise pollution from roads | Peter Saggars Linda Tilling |
| 3.6.1 - Air quality wording altered | Mike Newton, Broadway Malyan |
| 4.4.22 - Paragraph added regarding geodiversity | Diana Clements, member of Council of the Geologists' Association Laurie Baker, London Geodiversity Partnership Gerald Lucy, GeoEssex |
| 4.6.1 - Key issues raised regarding targeted habitat creation and enhancement | Claire Martin, LVRP |
| 4.6.1 - 'Key issues raised regarding the importance of green infrastructure being multifunctional. Issue also discussed in preceding text. | Roger Brewer, Moulton Walker (on behalf of clients) Paul Maison, British Waterway Claire Martin, LVRP Natural England - Gordon Wyatt |
| 6.6.1 - Key issue raised regarding 'active living' | Claire Martin, LVRP |
| 6.6.1 - Greater reference to rural issues (changes also made elsewhere in Community and Transport sections) | Sworders - Clare Hutchinson |
| 7.3.2 - Reference made to provision of shopping, leisure, tourism, and facilities | Theatres Trust - Rose Freeman |



| Change made to Scoping Report | ... to reflect evidence presented by |
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| for entertainment, arts, and culture and tourism in town centres | |
| 7.3.5 - Reference made to the RES goals for the London Arc. | East of England - Natalie Blaken (pp Tracey Mahoney) |
| 7.7.1 - Reference made to local centres as a key issue | Theatres Trust - Rose Freeman Loughton Residents Association - David linnell |
| 7.7.1 - Key issue' raised regarding tourism potential | Norma Green |
| 7.7.1 - Rural economy referenced as a key issue | Howard Green |
| 8.4.5 - Text added regarding archaeological assets | Adam Garwood Historic Buildings Advisor ECC |
| 8.4.6 - Text added relating to importance of historic paths and bridleway | Mr Frank Sidney Love |
| 8.4.6 - Text added relating to Roman Road | Loughton and District Historical Society - Richard Morris |
| 8.4.12 - Heritage at Risk Data added and reference made to evidence gaps | English Heritage - Katharine Fletcher |
| 9.2.3 - Text included regarding meeting housing need in the absence of regional targets, including reference to cross-boundary working | Mike Newton, Broadway Malyan |
| 9.4.12 - New wording - "Figure 9.3 - produced for a consultation document considering Gypsy and Traveller 'issues and options', considers some elements of locational suitability. It is important to note that opportunity to deliver Gypsy and Traveller pitches may arise where significant new development comes forward." | Ivan Le Gallais, on behalf of Epping Green Village Association |
| 10.4.2 - Issue regarding glasshouses clarified in Section 10 'Land and Waste' | Roger Gibbs Duncan Murdoch, Mount Walker Chartered Surveyors |
| 10.4.4 - Ground contamination - change made | Nick Birkbeck, Environment Agency |
| 12.2.2 - Greater emphasis given to the importance of accessibility to community infrastructure | Blaise Gammie - Planning Officer Planning & Admissions ECC |
| 12.2.13 - Reference made to Mayor's Transport Strategy | Phil Copsey, David Lock Associates (on behalf of Steve Biart, The Fairfield Partnership) |
| 12.4.2 - Reference made to bus service concerns. | Cllr Jill Sutcliffe |
| 14.2.3 - LVRP mentioned as important policy context for the Waltham Abbey and Nazeing functional area | Claire Martin, LVRP |



| Change made to Scoping Report | ... to reflect evidence presented by |
|---|---|
| 15.2.3 - Text added regarding link road | Darren Rhoden, Highways Agency |
| 16.4 - Reference to Theydon Bois being connected by a major arterial route removed | Jacq Dodman, TBAG Jim Watts, Theydon Bois & District Rural Preservation Society |
| 16.4.2 - Text altered regarding landscape character areas falling within this functional area | Loughton Residents Association - David linnell |
| 16.4.4 - New text added relating to Theydon Bois | Jacq Dodman, TBAG Muriel Lily Gage and Denis Harold Gage Donald Ball Delia Ball Jim Watts, Theydon Bois & District Rural Preservation Society Sally Crone, Theydon Bois Parish Council Ross Abbott Elliot Simmons Dr Sydney Scott David Watkins Philip Hacon Nik O'Flynn Robert Levene Caroline Gunnell Anthony Richards Jennifer Berry Mr & Mrs G. Law Dr J & Mrs S Warren Mr P J Newton Mrs D Gillespie Hugh Meteyard Mr. J. F. Watts Mrs Sally Crone, Parish Clerk Mike Hannibal John Philip julia venables Ricky White Clare Pollock malcolm heughan Phil Simmance |



| Change made to Scoping Report | ... to reflect evidence presented by |
|---|--|
| | Martin Oliver george smith Mark Harvey Aidan McEvoy Bernard Jackson |
| 16.4.5 - Text added relating to character of railway settlements | Loughton and District Historical Society - Richard Morris |
| 16.4.6 - Urban Open Space and Debden Estate reference | Theatres Trust - Rose Freeman Loughton Residents Association - David linnell Enid Walsh - Loughton Town Council Linda Moncur Cllr David Wixley |
| 16.4.7 - Reference made to green spaces separating Loughton and Buckhurst Hill | Enid Walsh - Loughton Town Council |
| 16.6.1 - Reference made to the effect of growth on infrastructure inc. community infrastructure | Aarti Oleary, Lawson Partnership, on behalf of West Essex Primary Care Trust |
| Figure 12.1 - (key transport routes) amended | Enid Walsh - Loughton Town Council Phil Copsey, David Lock Associates (on behalf of Steve Biart, The Fairfield Partnership) |
| Throughout - All references to the East of England Plan have been revised | Jacq Dodman, TBAG Jim Watts, Theydon Bois & District Rural Preservation Society |
| Throughout - Acronyms have been revisited | Roger Griffiths |
| Throughout - Use of the term 'Epping Forest' clarified throughout | Loughton Residents Association - David linnell |
| Throughout - HRA - changes made to reflect issues raised | Natural England - Gordon Wyatt Claire Martin, Lee Valley Regional Park Nick Birkbeck, Environment Agency |
| Throughout - Text deleted regarding highways investment strategy | Darren Rhoden, Highways Agency |

Comments made by the following respondents have also been duly considered, but have not caused an amendment to the Scoping Report at this time (please refer to discussion at the beginning of this Annex):

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|--|---|
| Alan Burgess, Chair PORA | Michael & Roger Compton |
| A F Loy | Mr Desmond Day |
| Andrew Kerr | Mr J Fitzwilliam |
| Ann Pegrum | Mr. & Mrs O'Connor |
| B and D Applin | Mrs Audrey Page |
| Bill Davies | Mrs P Moxey |
| CABE - Sarah Burgess (pp Andrew Davies) | Mrs V Evans |
| Caroline Haines | Ms A Antoniou |
| Christopher Stewart | Nazeing Parish Council |
| Cllr Caroline Pond | Nicola Wilkinson |
| Darren Crosby | P.T. Doe |
| East of England - Local Government Association - Paul Bryant | Peter Pleydell |
| Fiona Bradley | R. G. Smith |
| Graham Hayden | Andrew Martin Associates (on behalf of Mansel Fletcher) |
| Hilary Malyon | Robin Mingay |
| Hugh Kemsley | Roger Lowry |
| Janet Clements | S Hanks |
| Jay Coleman (acting as agent for Essex Police Headquarters) | Stephen McGoay |
| Jean Juniper | Susan McKinley |
| Lee Stiles | Tony O'Connor |
| M. Moriarty | Tony Oliva |
| Marshall Vance | |
| Mary Darwin | |

Annex II - Integration of SA with Other Assessment and Proofing Exercises

This SA process has been designed to ensure that full consideration is given to equalities, health and rural disadvantage effects, therefore negating the need for stand-alone assessments to be undertaken. The SA process has also been designed in such a way to allow Habitats Regulations Assessment to be undertaken in parallel to the SA, and reported within the same document.

Habitats Regulations Assessment / Appropriate Assessment (HRA / AA)

Our methodology is consistent with the requirements of the Planning and Compulsory Purchase Act 2004, the European Directive 2001/42/EC (the “SEA Directive”) and the Conservation (Natural Habitats, &c) (Amendment) (England and Wales) Regulations 2006 (Habitats Regulations). In this Scoping Report we have included a **Chapter on HRA Scoping**.

Equality Impact Assessment (EqIA), Health Impact Assessment (HIA) and Rural Proofing

The concept of integrating other assessments into the SA process is outlined in CLG guidance²³² and the new PPS12 adds further clarity, stating that: *“Where authorities are required by law or encouraged by government policy to undertake assessments of their plans, such assessments should feed into and be summarised in the sustainability appraisal”*.

Although SA can consider the full range of topics, the premise for integrating topic specific assessment exercises is to ensure that some topics receive explicit attention and prominence in the appraisal process. We have chosen the heading ‘Community and Wellbeing’ as one of the headings to structure the SA so that all issues relating to health and equalities can be given explicit attention within this Chapter. Similarly, rural deprivation issues are considered predominantly within the Chapters ‘Rural South East’ and ‘Ongar & Rural North East’. Locating the consideration of each of these issues in a single place within the SA (or two places in the case of rural issues) should mean that specialist stakeholders can easily comment during the consultation periods.

Boxes 1 – 3 consider EqIA, HIA and Rural Proofing further.

²³² CLG (2005) Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents, HMSO, Wetherby.

Box 1: Equality Impact Assessment (EqIA)

EqIA aims to anticipate the effects of a plan on different groups within the community (equality target groups). A key driver for EqIA is the Equality Act 2006, which places statutory obligations on public sector organisations to ensure that all equality groups are not discriminated against within public sector service delivery and employment. The forthcoming Single Equality Bill 2009, a new streamlined public sector equality duty, is due to replace existing race, disability and gender equality duties and will be extended to cover all strands of discrimination, including measures to tackle socio-economic disadvantage.

Guidance on EqIA suggests a six-stage process²³³ that very closely matches the SA process.

There are eight identified equality target groups, or equality strands, that are central to the equality agenda: race; gender; disability; sexual orientation; gender reassignment; age; religion and or belief; socio-economic disadvantage.

Box 2: Health Impact Assessment (HIA)

Health Impact Assessment (HIA) is an approach that ensures decision making at all levels considers the potential impacts of decisions on health and health inequalities. It identifies actions that can enhance positive effects and reduce or eliminate negative effects. HIA is a relatively new tool, and although there is no single agreed national approach or methodology, the value of HIA is increasingly being recognised, both nationally and internationally.²³⁴

HIA has been successfully integrated into the statutory process of SA and SEA undertaken for regional, sub-regional and local planning policy. In these instances the health input into policies has been strengthened.

Box 3: Rural Proofing

“Rural proofing is the scrutiny of public service delivery, to ensure that impacts on rural areas are considered when implementing new initiatives.”

- Improvement and Development Agency, I&DeA

The Rural White Paper 2000 included a Government commitment to *“establish a rural proofing mechanism to ensure that all major policies are assessed for their rural impact”*. Government departments and Government Offices for the regions are required to report annually on how their policies have been rural proofed.

The former Countryside Agency developed a rural proofing checklist containing 15 questions which policy makers should ask of their initiative. These questions include, for example:

- **Will the policy affect the availability of public and private services?** Might it encourage closure or centralisation and will this have a disproportionate effect in rural areas where services are already limited?
- **Will the cost of delivery be higher in rural areas where clients are more widely dispersed or economies of scale are harder to achieve?** Will longer travel times or distances to clients add to the cost of service provision? Will services need to be run out of smaller outlets, so losing economies of scale?
- **Does the policy rely on infrastructure (e.g. broadband ICT, main roads, utilities) for delivery?** How will the policy work in rural areas, where the existing infrastructure is typically weaker

²³³ Improvement and Development Agency (2008). *The EqIA process: six-step guide* [online] available at: <http://www.idea.gov.uk/idk/core/page.do?pageId=8017502> (accessed 09/09)

²³⁴ London Health Commission (no date). *Health Impact Assessment* [online] available at: <http://www.london.gov.uk/lhc/hia/> (accessed 06/09)