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Sustainability Appraisal Scoping Report

A Report Prepared for Forest Heath District Council

June 2015

Report for

Forest Heath District Council

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Document Revisions

No.	Details	Date
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1. Introduction

1.1 Background to this Document

This report has been prepared by Johns Associates Ltd on behalf of Forest Heath District Council (FHDC) as part of the integrated Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the Single Issue Review (SIR) of Forest Heath Core Strategy Policy CS7 and the Site Specific Allocations DPD (SSA). For as long as its contents remain up to date, it should also substantially meet the scoping requirements for other planning documents, subject to review of some sections (notably 4.2) which depend on which policies are in force and any new or amended policies being appraised on each occasion.

Policy CS7 relates to the quantum, distribution and phasing of housing allocation across the District.

The SSA DPD considers the site specific locations for housing.

The SIR has been prompted by the decision of the High Court to quash the original policy due to failure to comply with the legal requirement for Sustainability Appraisal and Strategic Environmental Appraisal in respect of the proposals for North East Newmarket. This was related to insufficient consideration of alternatives. Table 1.1, below, taken from the CS7 SIR Document shows the sequence of events.

Date	Stage in Core Strategy Preparation
September - October 2005	Issues and Options Consultation
October - December 2006	Preferred Options Consultation
August - September 2008	Final Policy Option Consultation
March - June 2009	Proposed Submission Document Publication Period
August 2009	Submission of Core Strategy to the Secretary of State
December 2009 - January 2010	Examination in Public, (EiP), into the soundness of the Core Strategy DPD
April 2010	Inspectors report on EiP received with Core Strategy DPD being found 'Sound'.
May 2010	Adoption of Core Strategy DPD by Full Council
June 2010	Challenge to the adopted Core Strategy DPD lodged with the High Court
February 2011	High Court Hearing in London
March 2011	Outcome of High Court Challenge - Challenge successful and the majority of Policy CS7 is revoked with consequential amendments made to Policy CS1 & CS13. Ruling prompts a 'Single Issue Review'.
Ongoing	Single Issue Review of Core Strategy Policy CS7

Table 1.1 Chronology of Core Strategy and SIR, from CS7 SIR Issues and Options Document, 2012

1.2 This Document

This is a Scoping Document for the SA of the draft combined SIR and SSA submission document. The work done includes a review of the Sustainability Appraisal of the LDF undertaken in 2010 (appended).

Figure 1.1 shows a flow diagram of the SA process, and the place of the Scoping Report within this.

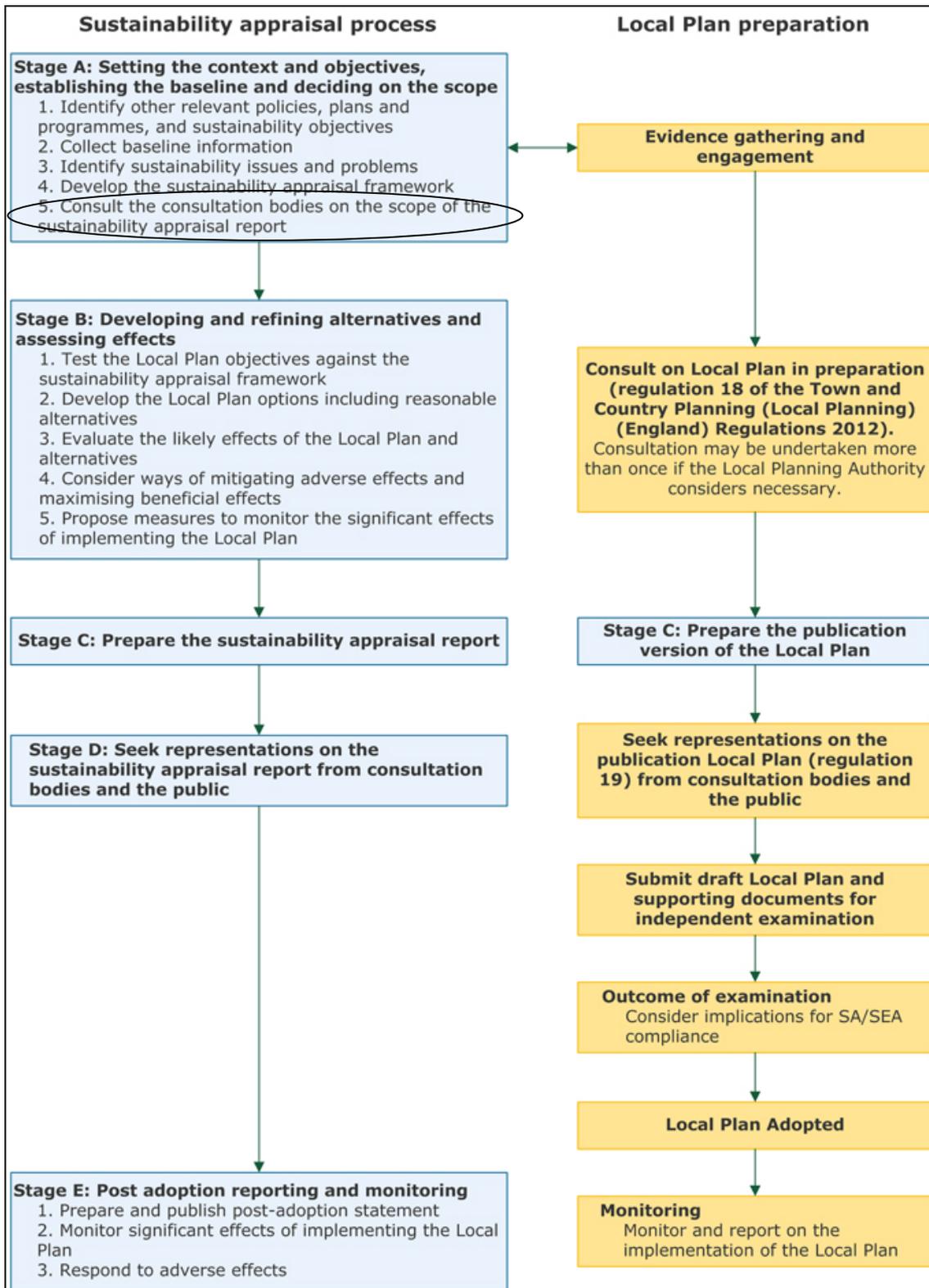


Figure 1.1 The Sustainability Appraisal Process in Local Plan Preparation from Planning Practice Guidance (March 2014). The black oval shows the place of the Scoping Report.

1.3 Introduction to Forest Heath

Forest Heath District is in Suffolk in the East of England. It is among the smallest rural Districts in the UK and is extremely constrained by environmental designations and areas of flood risk, among other issues. The town of Newmarket is in the District, and is notable for its links to horseracing, which gives it a special character and constrains development.

Two USAF bases, at Lakenheath and Mildenhall affect the district’s demographic and social character and produce impacts from aircraft noise. In January 2015 the USAF announced that the base at Mildenhall would be closing, with the transfer of operations to other bases complete by 2020¹ and new aircraft stationed at Lakenheath² from 2020.

As the leader of FHDC has commented, “Both announcements mean huge changes to the landscape of Forest Heath”.

There will have implications for spatial planning and the SA/SEA process. With the Plan due for adoption not before November 2016, it is likely that the Mildenhall redeployment will be underway.

These changes are not reflected in this report, which describes the position at January 2015.

Forest Heath and its main centres of population are shown in Figure 1.2, below.

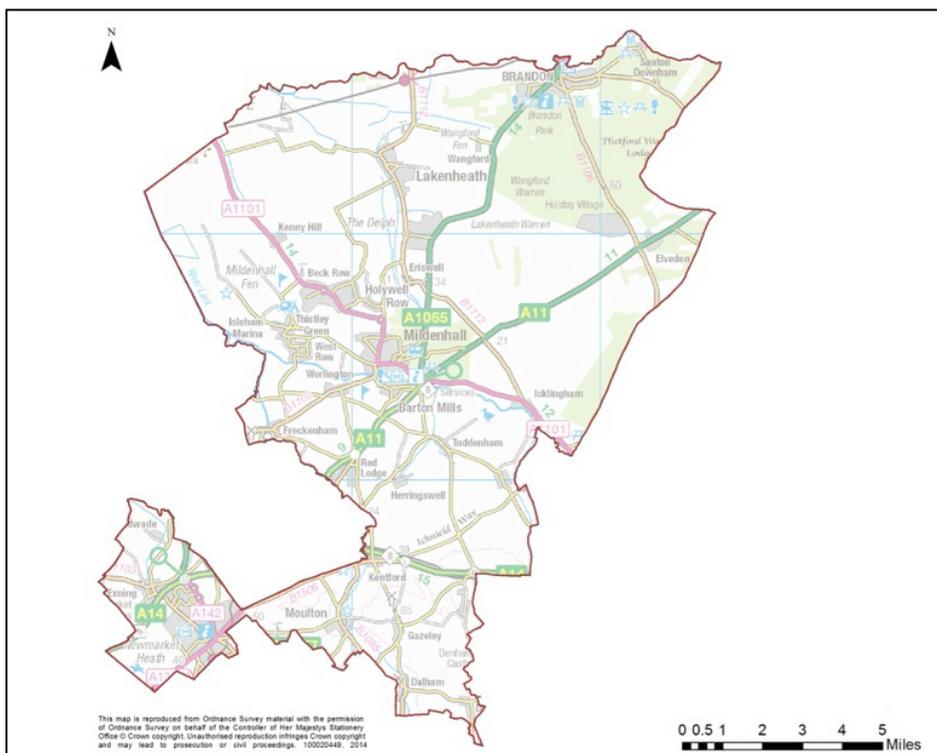


Figure 1.2 Settlements within Forest Heath

¹ USAF News (2015) *US Air Force’s European Consolidation Announced* <http://www.af.mil/News/ArticleDisplay/tabid/223/Article/559865/us-air-forces-european-consolidation-results-announced.aspx>

1.4 Sustainability Appraisal and Strategic Environmental Assessment

Throughout this document, references to Sustainability Appraisal, (SA), or the SA Report, mean sustainability appraisal under Section 39(2) of the Planning and Compulsory Purchase Act, (2004), incorporating the requirements of the SEA Directive transposed by the Environmental Assessment of Plans and Programmes Regulations 2004.

Sustainability Appraisal is required under the Planning and Compulsory Purchase Act 2004 to ensure that Local Plans maximise the contribution that a plan makes to sustainable development.

Strategic Environmental Assessment is required under EU Directive 2001/42/EC transposed into the UK by SEA Regulations (Statutory Instrument 2004, Number 1633) for all plans which meet various criteria. The CS7 SIR plainly qualifies because it is prepared for "... town & country planning or land use"; "and "sets the framework for future development consent of projects listed in the EIA Directive".

Table 1.2 shows how the requirements of the SEA Directive are met within this report or will be in later stages of the SEA.

Table 1.2 How this Documents Meets the Requirements of the SEA Directive

SEA Directive Requirements	Where covered in the SA process
Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme are identified, described and evaluated.	The full SA report will constitute the 'environmental report'. This will be produced at a later stage.
a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes	In this report: Section 1
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme	In this report: Sections 3 & 4
c) The environmental characteristics of areas likely to be significantly affected	In this report Sections 3 & 4
d) Any existing environmental problems which are relevant to the plan or programme, including in particular those relating to any area of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC	In this report Sections 3 & 4
e) The environmental protection objectives established at International, Community, or National level which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation	In this report Section 2
f) The likely significant effects on the environment including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects)	Will be met later
g) 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	Will be met later
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information	Will be met later
i) A description of measures envisaged concerning monitoring in accordance with Art. 10;	Will be met later
j) a non-technical summary of the information provided under the above headings	Will be met later
The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Art. 5.2)	This Scoping Report will meet this requirement
Consultation: Authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Art. 5.4)	Authorities will be consulted on this Scoping Report
Authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Art. 6.1, 6.2)	Will be undertaken
Other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Art. 7).	Not relevant
Taking the environmental report and the results of the consultations into account in decision-making (Art. 8)	

SEA Directive Requirements	Where covered in the SA process
<p>Provision of information on the decision: When the plan or programme is adopted, the public and any countries consulted under Art.7 must be informed and the following made available to those so informed:</p> <ul style="list-style-type: none"> · the plan or programme as adopted · a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report of Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Art. 7 have been taken into account in accordance with Art. 8, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and · the measures decided concerning monitoring (Art. 9) 	Will be met later
Monitoring of the significant environmental effects of the plan's or programme's implementation (Art. 10)	Will be met later

2. Review of Key Plans, Policies and Programmes

2.1 Introduction

Annex 1 of the SEA Directive specifies that the environmental report should include 'an outline of the contents, main objectives of the plan or programme and relationship [of the plan or programme being appraised] with other relevant plans and programmes.'

This section gives an overview of the most general and overarching 'relevant plans and programmes'. More specific ones are summarised at the start of each topic section in chapter 3. To improve clarity and minimise repetition, these summaries highlight policies and requirements at levels which directly affect the Local Plan, and do not restate requirements from higher level plans and programmes which these implement.

Following the abolition of regional strategies and administration, and the Government's commitments to 'localism', much of the relevant policy is at the county (Suffolk) or sub-county level. Forest Heath is part of local agglomerations such as the Cambridge Sub-Region Housing area, and West Suffolk (with St Edmundsbury District).

2.2 Key International Plans, Policies and Programmes

As a signatory to the **United Nations Millennium Development Goals** (UN MDG) the UK is committed to eight objectives:

- Eradicate extreme poverty and hunger;
- Achieve universal primary education;
- Promote gender equality and empower women;
- Reduce child mortality;
- Improve maternal health;
- Combat HIV/AIDS and other diseases;
- Ensure Environmental Sustainability; and
- Global Partnership for Development.

This means that the Local Plan should be delivering:

- Benefits in an equitable fashion;
- Environmentally sustainable development; and
- Health and wellbeing outcomes.

The Local Plan should also fulfil the aspirations of the Kyoto Protocol and the **United Nations Framework Convention on Climate Change** (UNFCCC). The protocol's objective is to reduce greenhouse gas emissions. The SA should guide the Local Plan to help reduce GHG emissions where appropriate.

2.3 Key EU Plans, Policies and Programmes

Table 1.1 of the European Directive 2001/42/EC, the SEA Directive, sets out the requirements of how the SA process should fulfil the Directive.

Other directives are indirectly implemented, e.g. Floods Directive (2007/60/EC) through the SA process.

2.4 Key National Plans, Policies and Programmes

The National Planning Policy Framework (NPPF) (March 2012) and the Planning Practice Guidance (PPG) (March 2014) now set the foundations for planning policy and practice in England.

The NPPF states, and defines, a 'presumption in favour of sustainable development'. It replaces much previous legislation and guidance, particularly Planning Policy Guidance (PPG) and Planning Policy Statements (PPS).

Other relevant legislation includes the Natural Environment and Rural Communities (NERC) Act (2006) and the Environmental Protection Act (EPA) (1990) which set out environmental protection policies.

2.5 Key Local Plans, Policies and Programmes

Following the abolition of regional strategies and administration, and the Government's commitments to 'localism', local administration has assumed greater significance. There is a great deal of legislation and policy at the county (Suffolk) level. Forest Heath is part of local agglomerations such as the Cambridge Sub-Region Housing area, and West Suffolk (with St Edmundsbury District).

3. Summary of Baseline Information

This section presents a summary of baseline information for the District. It is not intended to provide exhaustive detail on every aspect of the District, but to provide an indication of the character of the district, and major existing and potential issues relevant to local planning.

This has been divided into topics for ease of reference.

3.1 Air

Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
Forest Heath Air Quality Strategy 2012	Improving air quality and ensure that air pollution remains below proscribed levels	Local plan policies to deliver air quality improvements

Air Quality Strategy

The latest Air Quality Strategy for Forest Heath was published in 2012.

This identifies that the Council monitors at 42 sites for Nitrogen Dioxide (NO₂), using diffusion tubes (non-automatic). Screening assessments had previously identified monitoring to not be necessary for Carbon Monoxide (CO), benzene, 1,3-butadiene, lead and Sulphur Dioxide (SO₂). No automatic monitoring is undertaken.³

Air Quality Management Areas

The district's monitoring programme shows that air quality is generally good. However, since the Forest Heath Air Quality Strategy was published, an Air Quality Management Area (AQMA) has been declared in Newmarket due to NO₂ emissions from vehicle traffic exceeding the UK health-based standard. The area is described as

- An area incorporating the High Street (from the White Hart Hotel), in Newmarket, to the Clock Tower gyratory and Old Station Road up to the junction with Rous Road.⁴

The extent of the AQMA is shown on the figure below:

³ Forest Heath District Council, 2013, 2013 Air Quality Progress Report for Forest Heath District Council

⁴ Defra AQMA Details, 2002, accessed at http://aqma.defra.gov.uk/aqma-details.php?aqma_id=582 March 2014

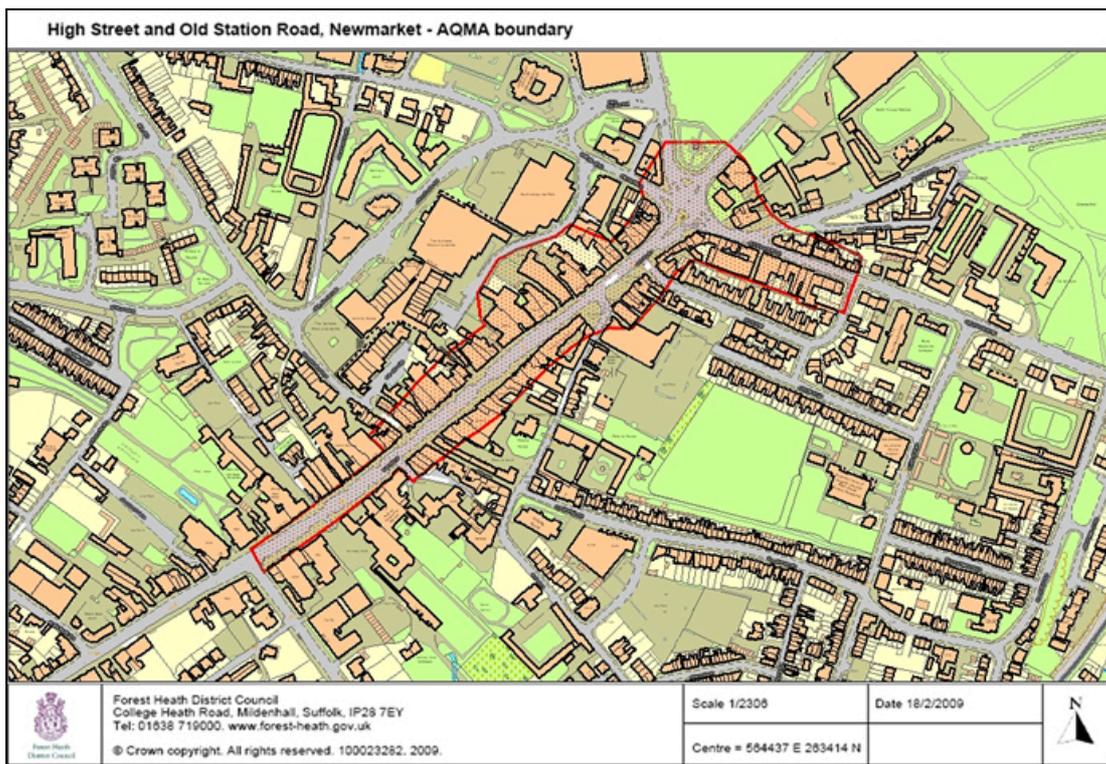


Figure 3.1 Newmarket AQMA

The 2014 Progress Report for air quality in Forest Heath reports that three exceedences of the NO₂ running annual mean were recorded. One of these occurred at Brandon on the London Road, and two in the AQMA in Newmarket (High Street [later discounted due to poor data] and Taxi Rank). Detailed monitoring is not considered to be necessary because:

- The location at Newmarket is within the boundary of the Air Quality Management Area (AQMA), and work has begun on the proposals within the Action Plan. The principal points of the action plan are:
 - No-idling zone;
 - Coordination of traffic signals on High Street;
 - Parking restrictions on Old Station Road;
 - Parking restrictions in bays on High Street;
 - Air Quality awareness campaign;
 - Adoption of Air Quality SPG;
 - Walking initiative; and
 - Maintain air quality monitoring.
- Concentrations outside of the AQMA are all below the objectives at relevant locations.

Given these actions the monitoring report concludes:

“Concentrations are all below the objectives at relevant locations, therefore there is no need to proceed to a Detailed Assessment” (p.14).

3.2 Biodiversity

Strategy/ Plan/ Programme	Policy aims	Implications for the Local Plan
The Birds Directive (Directive 2009/147/EC)	Protection of biodiversity, including through protection and maintenance of protected areas	Policies should avoid damage to habitats (especially designated ones) from development. Avoid pollution or deterioration of habitats or any other disturbances affecting birds. Enable appropriate public access to countryside
The Habitats Directive Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (amended most recently in 2006)	Right of public access to open land Where mitigation is not possible, compensate for losses incurred during development.	
Wildlife and Countryside Act (1981, as amended)	Enhance developments for biodiversity.	
Countryside and Rights of Way Act 2000	Ensure biodiversity is taken into consideration during, and after, the construction phase of development.	
Natural Environment & Rural Communities Act 2006		
Suffolk Local Biodiversity Action Plan –planning, 2012		
Suffolk's Nature Strategy, 2014	Sets biodiversity priorities for 5 year period: <ul style="list-style-type: none"> • Improvement of SSSI condition • Protection of priority habitats • Protection of landscapes • Incorporation of green space 	Local plan should incorporate and deliver biodiversity priorities through its policies
Biodiversity 2020: a strategy for England's wildlife and ecosystem services, 2014	Halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people.	

Designated Sites

Nearly 50% of Forest Heath district is designated for nature conservation value. There are 3 sites designated at European level, 27 nationally important Sites of Special Scientific Interest (SSSI) and over 70 County Wildlife Sites.

The internationally designated sites are:

- Breckland Special Protection Area (SPA) and Special Area of Conservation (SAC): designated SAC for a range of important habitats including inland dunes, natural eutrophic lakes, European dry heaths and semi-natural dry grasslands and scrubland facies on calcareous substrates. Great crested newts are also present within this site, and are a reason for the site's SAC

designation⁵;

The site is also designated as an SPA for supporting significant numbers of heathland-breeding birds. In particular, the site supports 12.2% of Great Britain's breeding population of nightjar, 74.7% of stone curlew and 28.7% of woodlark⁶;

- Rex Graham Reserve SAC: This site contains semi-natural dry grasslands and scrubland facies on calcareous substrates habitat, which is the basis for its designation. In particular the site supports the largest population of military orchid (*Orchis militaris*) in the UK⁷; and

The designated sites are concentrated predominantly in the east and northeast of the district (Figure 3.2), although some sites are scattered throughout the district, for example, Devil's Dyke SAC is on the border between the district and Cambridgeshire to the south west of Newmarket.

A fourth internationally designated site, Devil's Dyke SAC, is located with East Cambridgeshire District but is on the boundary of Forest Heath and will therefore need to be considered. Devil's Dyke SAC is designated for CG3 (*Bromus erectus*) and CG5 (*Bromus erectus* – *Brachypodium pinnatum*) calcareous grasslands present. These semi-natural dry grasslands are the only known site in the UK for lizard orchids (*Himantoglossum hircinum*)⁸.

There are also seven other international sites within 20 km of the district boundary. These are:

- Redgrave and South Lopham Fens Ramsar site: 19 km east of the District;
- Norfolk Valley Fens SAC: approximately 10 km north of the District;
- Fenland SAC: approximately 1 km north-west of the District;
- Chippenham Fen Ramsar site: approximately 1 km north-west of the District (within the extents of Fenland SAC);
- Wicken Fen Ramsar site: approximately 4 km north-west of the District;
- Ouse Washes site (which has three designations; SAC, Ramsar, SPA but the same site boundary): approximately 14 km north west of the District; and
- Waveney and Little Ouse Valley Fens SAC: approximately 13 km east of the District

⁵ JNCC (undated) SAC Citation <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?euocode=UK0019865>

⁶ JNCC (undated) SPA Citation <http://jncc.defra.gov.uk/default.aspx?page=2016>

⁷ JNCC (undated) SAC Citation <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?euocode=UK0019866>

⁸ JNCC (undated) SAC Citation <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?euocode=UK0030037>

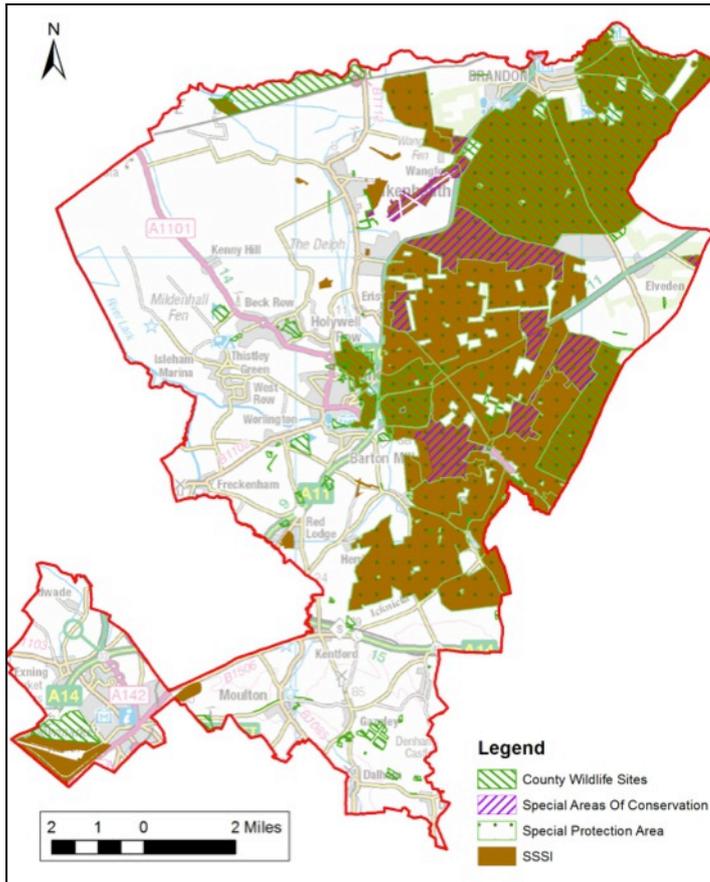


Figure 3.2: The extent of designated sites of nature conservation value throughout Forest Heath District

A substantial majority of Forest Heath’s SSSIs are in either ‘Favourable’ condition, meaning being managed effectively and sustainably to conserve the features for which it is designated, or ‘Unfavourable Recovering’ condition⁹ meaning that the necessary management mechanisms to achieve their conservation are in place but the targets set are not yet all being met.

Threats to the designated sites and associated qualifying species and habitats within the district potentially arising due to development include an overall increase in pollution, lighting, noise, cat predation and hydrological change. In addition, recreational pressure is known to impact negatively on a wide range of birds, particularly ground nesting species such as stone curlew, woodlark and nightjar, as well as other qualifying features of the European sites present within Forest Heath. Note that currently recreational activities do not appear to be significantly impacting these bird populations in the Breckland SPA, however, further investigation is being organised¹⁰; and it is acknowledged that increases in recreational pressure are to be avoided.

⁹ Environment Agency The state of our environment: biodiversity.

¹⁰ Natural England (2015) Breckland: Site Improvement Plan
<http://publications.naturalengland.org.uk/publication/5075188492271616>

Stone curlew are also known to be negatively affected by new built development and major trunk roads, with the density of stone curlew nests being significantly lower within 1500m and 1000m respectively¹¹.

Habitats & Species

The district is characterised by a range of different landscapes ranging from the Brecks, fens, chalk downland, clay downland to Britain's largest lowland pine forest¹². The Brecks is an area that straddles the Norfolk/Suffolk border, in the north and east of the district, and is characterised by sandy, free-draining soils, acid grasslands, dry heaths, arable fields and belts of scots pine.

Within these varied landscapes a number of habitats of nature conservation value have been highlighted as local biodiversity action plan habitats, including flood plain grazing marsh, arable field margins, lowland heath and reedbeds¹³.

Species such as stone curlew, nightjar and woodlark breed here in sufficient numbers for these populations to be considered internationally important, and to contribute to the designation of several of the sites discussed above. The district contains over 72% of the species of conservation note that are listed on the Suffolk Biodiversity Action Plan.

A high concentration of rare and notable plant species occur in the district: examples include fingered speedwell (*Veronica triphyllos*) which is not found elsewhere in Britain, tower mustard (*Arabis glabra*), red-tipped cudweed (*Filago lutescens*) and greater water parsnip (*Sium latifolium*).

Accessible Natural Greenspace (ANG)

Access to natural greenspaces has been shown to benefit people's physical and mental health. Forest Heath has the highest proportion of households in Suffolk that meet all of the targets for having access to natural greenspace. However, 18.3% of households in the district do not meet any of the ANG targets. These households are focused within the north-western corner of the district, and the south of the district, including parts of Newmarket¹⁴ (Figure 3.3).

¹¹ Clarke, R.T., Lily, D., Sharp, J.M. & Green, R.E. (2013) Building Development and Roads: Implications for the Distribution of Stone Curlews across the Brecks. DOI: 10.1371/journal.pone.0072984

¹² FHDC Biodiversity Action Plan 2010-15.

¹³ Suffolk Biodiversity Partnership (2013) Suffolk Priority Species and Habitats List.

¹⁴ Natural England (2010) Analysis of Accessible Natural Greenspace provision in Suffolk.

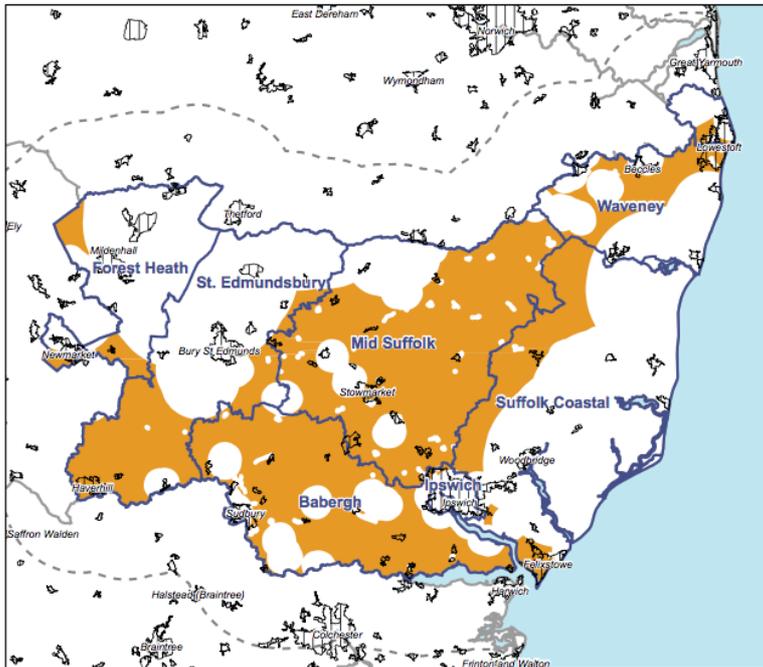


Figure 3.3. Areas within Suffolk with no Accessible Natural Greenspace (based on all ANG targets)

3.3 Climatic Factors

Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
Suffolk Climate Change Action Plan, 2012	<p>Adapt to future climate change and resource scarcity;</p> <p>Reduce carbon emissions associated with energy use;</p> <p>Support development of a green economy;</p> <p>Adapt to future climate change and resource scarcity.</p>	<p>Should promote climate change mitigation and adaptation;</p> <p>Should promote climate change mitigation and adaptation and low carbon economic development.</p>
Suffolk County Council's Environment Policy (2013)	Embed environmental performance in all Council functions including emissions control.	
Climate Local Initiative	Use the planning system to promote energy efficiency and low carbon community.	

Climate Change - Mitigation

CO₂ emissions per capita

According to data published by Defra (2014)¹⁵, CO₂ emissions per capita in 2012 stood at 8.4t. This has declined steadily from 9.8t in 2005.

This is higher than the UK average of 7.1 the England average of 7.0, and the East of England average of 7.0. The 2012 figure is the second highest per capita in the County, with Ipswich, for example, having an equivalent value of 4.5tCO₂/capita¹⁶.

Reducing emissions

Suffolk has committed to cutting CO₂ emissions by 60% by 2025 against the 2004 baseline.

In August 2014, the Suffolk Climate Change Partnership (SCCP) produced a report, which included an assessment of Suffolk's progress against its per capita emissions target.

This can be seen in Figure 3.4 and suggests that the current trajectory of emissions reduction is not in line with this target.

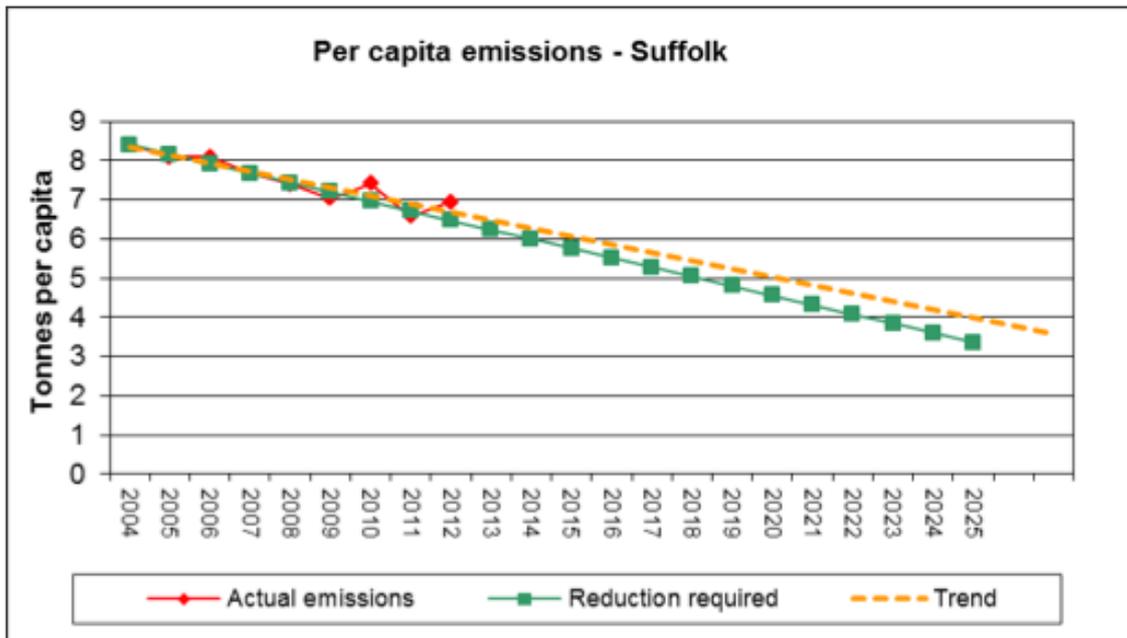


Figure 3.4 Per capita emissions trends in Suffolk

Renewable energy

Suffolk is also aiming to meet 15% of energy demand through renewable sources by 2020 in line with UK targets¹⁷.

¹⁵ Defra (2014) Local authority carbon dioxide emissions estimates, 2012, accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/322819/20140624_Statistical_release_Local_Authority_CO2_emissions.pdf

¹⁶ [Ibid.](#)

¹⁷ Suffolk Climate Action Plan 2: Supporting the Transition to a Green Economy

The East of England as a region has the highest renewable generation capacity of all the English regions. This is shown by the figure below showing relative renewable generation capacity by English region¹⁸, with over 2GW installed capacity – the only region to break this barrier (figures as of 31 December 2013). Most (1.3GW) is from wind (including offshore wind), with a large contribution from solar (0.34GW).

According to Renewable UK, the UK trade body for wind and offshore generation, there are no commercial scale wind turbines operational or approved in Forest Heath (December 2014) (Figure 3.6).

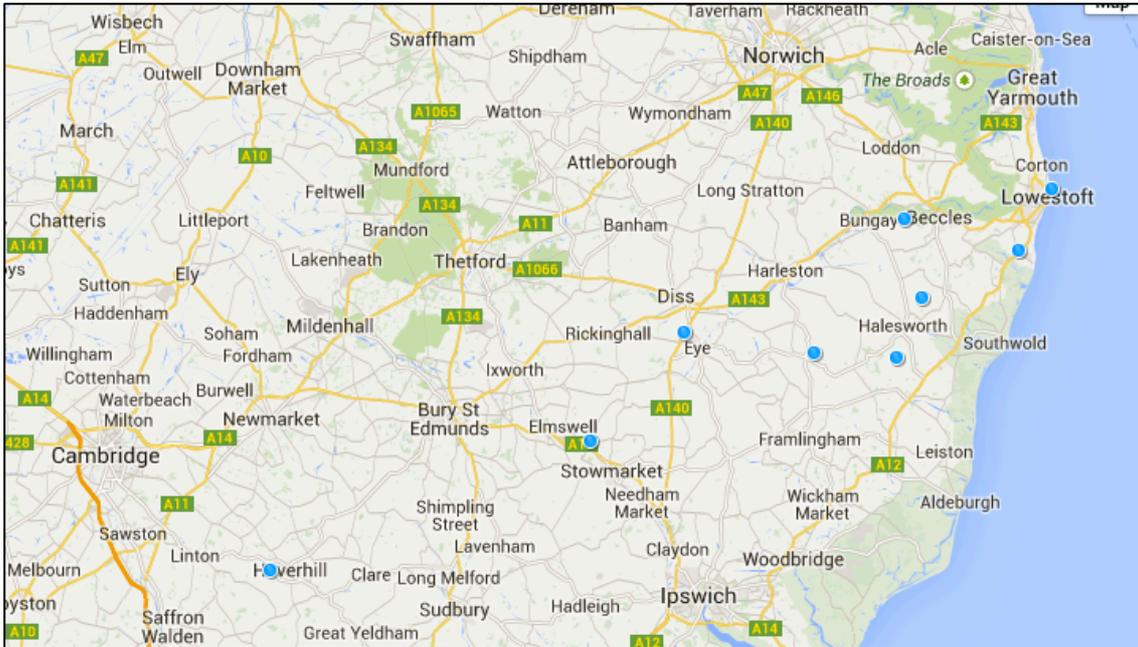


Figure 3.6 Locations of Operational and Approved Wind Turbines (Commercial Scale) in Suffolk (Dec 2014 – Renewables UK).

According to the Planning database for renewables (DECC), applications for a total of 31.5MW of solar PV capacity have been made. Of these, 5MW are operational and the others are awaiting construction, having gained approval. The operational site is located on Fordham Road, Newmarket.

Climate Change – Vulnerability

There is currently little information about Forest Heath’s vulnerability as a District to climate change. Because of the uncertainty surrounding climate change forecasts and the resolution of the available data, an appropriate level to consider projections is the regional level. The map below shows¹⁹ that East Anglia has high vulnerability compared with much of Europe and other regions of the UK.

¹⁸ <https://www.gov.uk/government/statistics/regional-renewable-statistics>

¹⁹ Directorate General for Regional Policy, 2009, The Climate Change Challenge for European Regions.

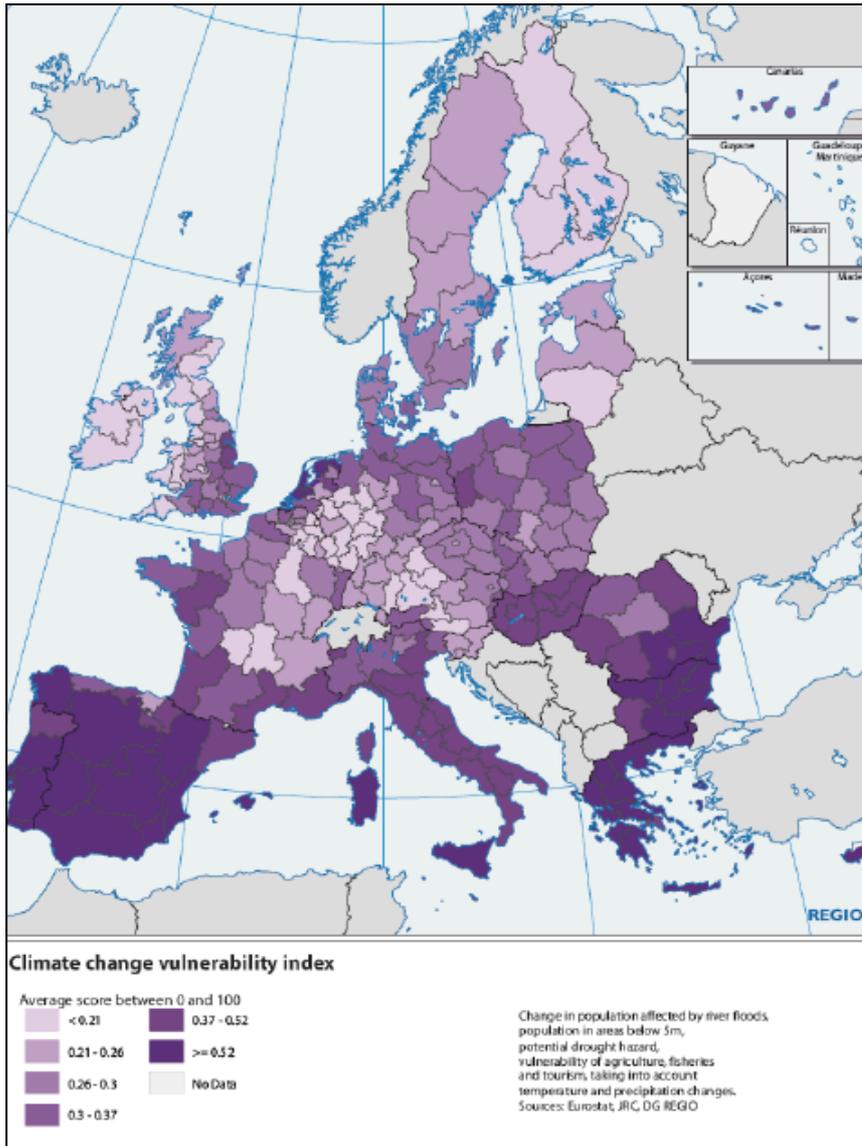


Figure 3.7 Climate Change Vulnerability index for Europe, Directorate General for Regional Policy, 2009, *The Climate Change Challenge for European Regions*

The impacts of climate change present a key challenge in Forest Heath.

Climate Change – Adaptation

The potential impacts of climate change need to be taken into account in planning for all new development, both in terms of location and design. Better energy and water efficiency, more water storage, sustainable drainage systems, and more renewable energy generation will all be needed.

There is currently little information about climate change adaptation and resilience at the district level. However, Government bodies have made forecasts of potential impacts and proposed appropriate responses^{20 21 22 23}:

²⁰ Environment Agency, Responding to Changing Climates, 2010-2015

²¹ Health Protection Agency (2012) Health Impacts of Climate Change

Table 3.1. Compiled Climate Change Response guidance from Environment Agency and Health Protection Agency (now Public Health England)

WATER			
<i>Sub-topic</i>	<i>Climatic mechanism</i>	<i>Impact</i>	<i>Response</i>
Flood	Rising sea-levels	Coastal flooding	Flood risk management measures including soft measures such as warnings, and hard such as wall construction.
	Increased storminess	Surface water/ fluvial flooding	
Water scarcity	Reduced overall precipitation, increased evaporation	Reduced water for domestic use	Demand management such as metering
		Reduced water for agriculture	Alteration of abstraction licences.
AGRICULTURE			
<i>Sub-topic</i>	<i>Climatic mechanism</i>	<i>Impact</i>	<i>Response</i>
Efficient use of chemical inputs	Changing temperature and precipitation patterns	Changes in crop types grown and therefore chemical inputs (and application techniques) required. Excess chemical application or inappropriate application techniques leading to pollution of watercourses.	Protect watercourses from increased pollution through changing farming and land management practices.
Soil structure		Increased erosion of topsoil from water	Implement improved farming and land management practices
Reduced food production		Changes in crop types grown, and resultant potential impacts on livelihoods	Maintain and encourage dynamic and adaptive agricultural community, encouraging income diversification.
HEALTH			
<i>Sub-topic</i>	<i>Climatic mechanism</i>	<i>Impact</i>	<i>Response</i>
Air pollution	Increase in ground level Ozone (O ₃) as a result of temperature changes	Adverse impact on health (death or hospital admittance) – levels unquantifiable	Warning systems, and increase public awareness of impacts of ground-level ozone, particularly on

²² A summary of Climate Risks for the East of England (Climate UK, 2012) <http://www.greensuffolk.org/assets/Greenest-County/Adaptation/General/Summary-of-climate-change-risks-to-East-of-England.pdf>

²³ UK Climate Projections (UKCP09): <http://ukclimateprojections.metoffice.gov.uk/>

			vulnerable groups
	Impact of aeroallergens ('Hay fever')	Variation in plant species distribution, potency and seasonality due to changing temperature patterns	Expand aeroallergen-monitoring network. Monitor and control spread of invasive species; improve knowledge among public and professionals
Health impacts associated with the built environment	Changing temperature and precipitation patterns	Overheating, internal air pollution, flood damage. Poor ventilation/lack of air conditioning leading to increased risk of airborne infectious diseases. Exacerbation of inequalities in building standards	Understanding of existing and emerging infrastructure Promotion of best practice building design
Health Impacts of UV	Increase in UV radiation	Increased risk of melanoma and non-melanoma skin cancers	Public awareness
Health impacts of flooding	Increased storminess leading to flooding	Increased mortality risk (especially among the elderly), impacts on mental health, impacts on health infrastructure	Protection of health infrastructure Flood defence and warning
Health impacts of food and water borne diseases	Altered temperature patterns	Seasonal variations in pathogens, plus climatic impacts on human behaviour. Changed availability of nutritious food	Improve public health infrastructure Strengthening of monitoring Communication of risks
Health impacts of vector borne diseases	Altered temperature patterns	Change in distribution of tick and mosquito species. Possible impact of mitigation actions such as wetland creation	Improve understanding and communication of risks

Climate East has produced a report in association with PwC to give guidance to Local Authorities in the east of England in dealing with climate change, including reducing their exposure to climate related risks. The report, called "Climate Compatible Efficiency Framework" is available at: <http://www.sustainabilityeast.org.uk/climate-compatibility-with-pwc/> (accessed April 2015).

The key aims of the report are to provide a framework to:

- collect data and understand climate analytics;
- create opportunities for climate initiatives; and
- understand climate impacts of all decisions.

3.4 Cultural Heritage

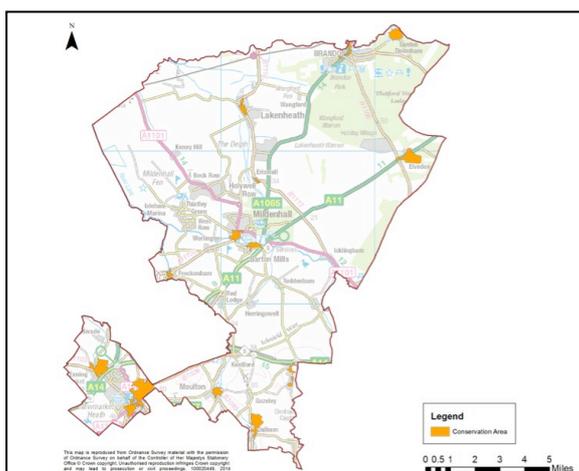
Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
Planning (Listed Buildings and Conservation Areas) Act, 1990	Seeks to protect, conserve, and enhance understanding of heritage assets including Listed Buildings.	Local Plan must be in accordance with the Act.
Suffolk Heritage Strategy, 2014	Promote positive action and support initiatives that secure the future and ensure the preservation and enhancement of Suffolk's heritage assets Actively promote the role and opportunities presented by conservation and heritage in terms of wider regeneration and economic development of the county and develop a framework for investment	Deliver heritage strategy aims

Forest Heath contains a wealth of listed buildings, Scheduled Monuments and conservation areas. These add to the special built quality and environmental character of many areas of the district and their protection and enhancement is recognised as an important ingredient for economic and neighbourhood renewal.

The Forest Heath historic built environment includes 13 Conservation Areas, 374 Listed Buildings, some 38 Scheduled Monuments, numerous archaeological sites and buildings of local interest (designation numbers relate to items recorded – these could be more than one building or monument). There are no World Heritage Sites or Registered Parks and Gardens within the district, although there are at least two historic parks and gardens (Brandon Park and the July Racecourse)²⁴. There is also a large number of non-designated heritage assets.

Conservation Areas

There are 13 Conservation Areas within Forest Heath (Figure 3.8).



²⁴ <http://whc.unesco.org/en/list/> Date Accessed: 5/12/13

Figure 3.8 Conservation areas within the Forest Heath district

These are in:

- Barton Mills
- Brandon
- Dalham
- Elveden
- Eriswell
- Exning
- Freckenham
- Higham
- Lakenheath
- Mildenhall
- Moulton
- Newmarket
- Santon Downham

These conservation areas are intended to help the local planning authority preserve and enhance the character or appearance of an area that has special architectural or historic interest.

Scheduled Monuments

The Ancient Monuments and Archaeological Areas Act 1979 gives legal protection to nationally important sites and monuments. There are 44 Scheduled Monuments within the Forest Heath district including the Packhorse Bridge at Moulton, a Roman Villa near Icklingham, the remains of Freckenham Castle and bowl barrows (burial mounds, mainly from between 2400-1500 BC) throughout the district ²⁵.

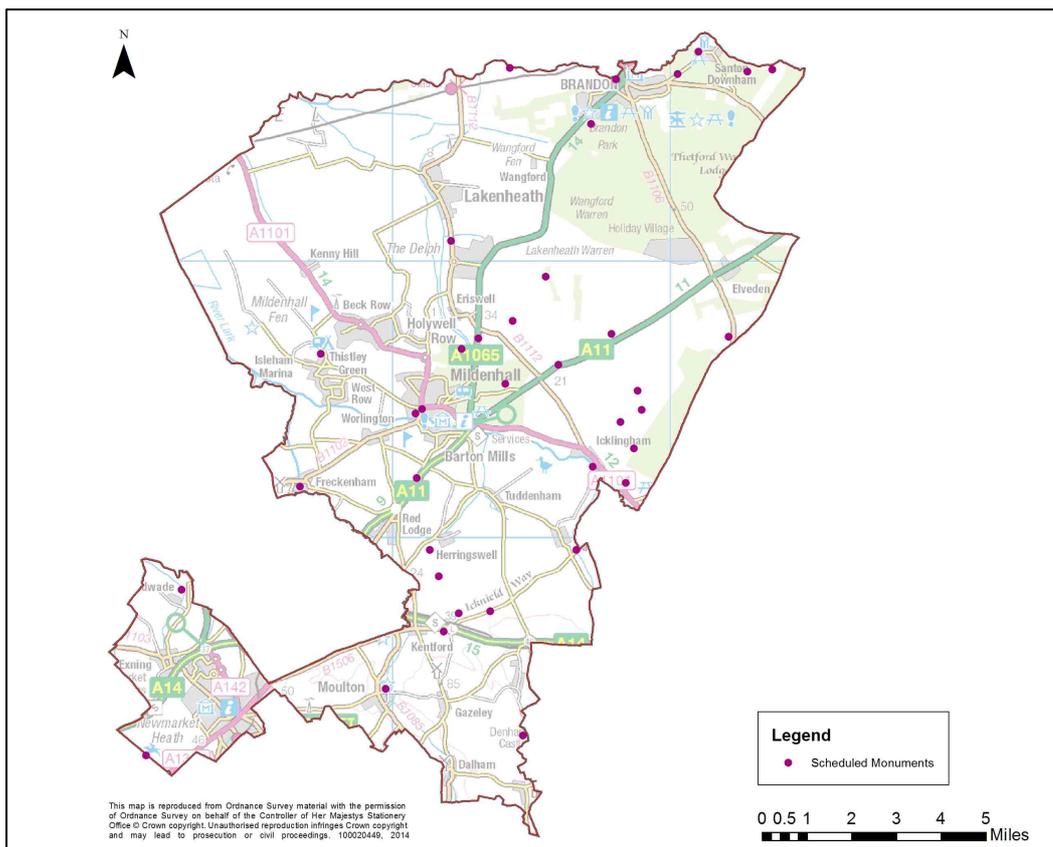


Figure 3.9: Scheduled Monuments within Forest Heath district

²⁵ <http://www.english-heritage.org.uk/professional/protection/process/national-heritage-list-for-england/> Date Accessed: 9/12/13

Listed Buildings

The district contains over 420 Listed Buildings and structures, of which 12 are Grade I, and 23 are Grade II* listed. All of the Grade I, and many of the Grade II*, listed buildings are churches constructed at least partly from flint, dating from as early as the 12th Century.

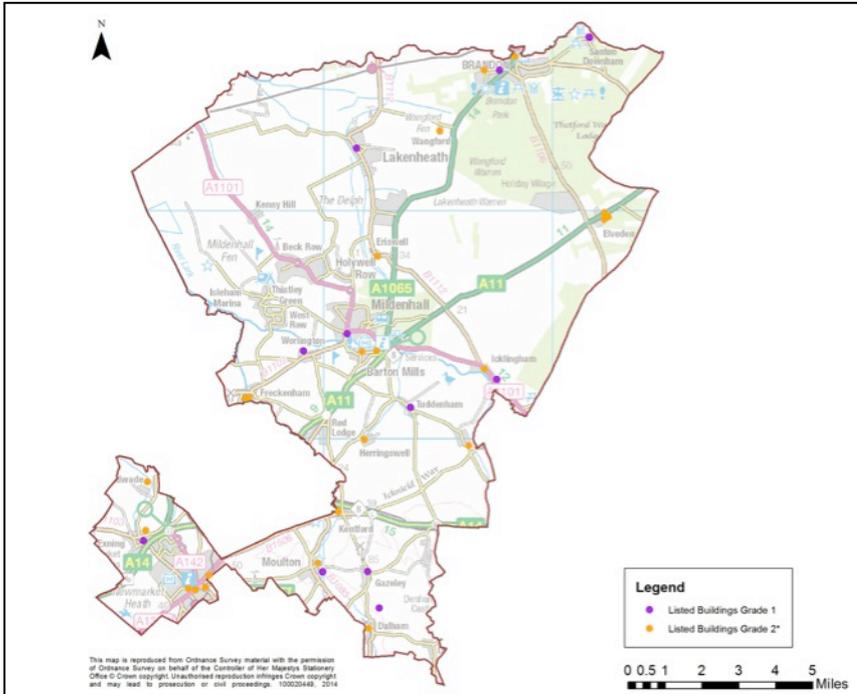


Figure 3.10 Grade I and II* listed buildings within Forest Heath district

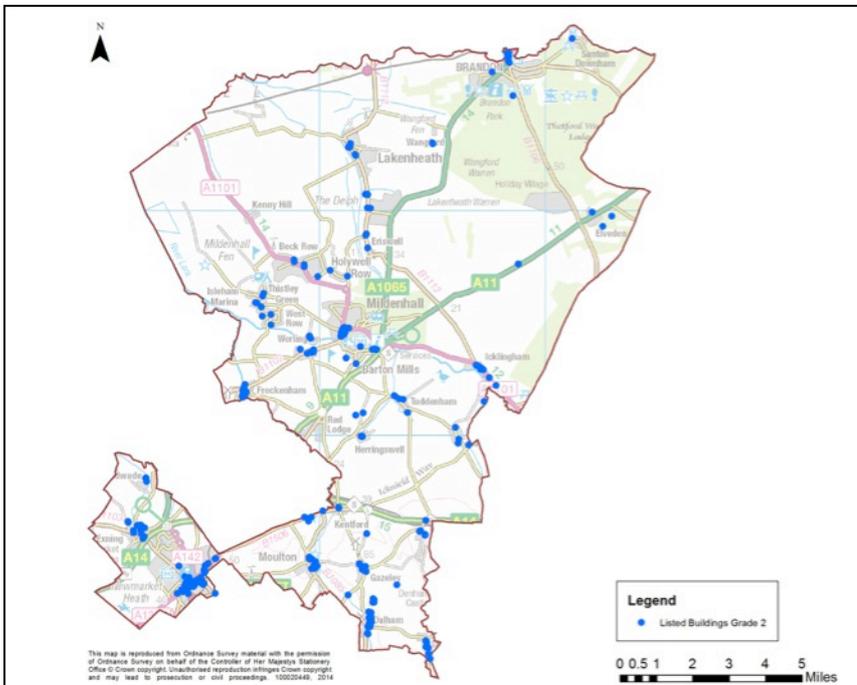


Figure 3.11 Grade II listed buildings within the Forest Heath district

Heritage At Risk Register

Within Forest Heath there are 4 Scheduled Monuments, and 1 conservation area listed on English Heritage's Heritage at Risk Register. The Scheduled Monuments consist of 6 bowl barrows on 3 sites, and a Roman site at Mildenhall, all of which are declining in condition, mainly due to arable ploughing. The listed building is the remains of a warrener's lodge from the 14th century. An English Heritage Grant has been approved and work has started on repairing it.

The conservation area in Newmarket is on the Heritage At Risk Register, and considered to be in a 'very bad' but improving condition, although its vulnerability is medium. The conservation area in Mildenhall is also listed, and although its current condition is considered to be very bad, it is improving²⁶.

Suffolk Planning Authorities also produce an 'At Risk' register, additionally considering Grade II Listed Buildings. This contains 9 records from within Forest Heath.

Parks & Gardens

There are two historic parks and gardens within Forest Heath: Brandon Park and the July Racecourse at Newmarket.

Brandon Park is the parkland of a country estate from the early 19th century that covers 119 hectares²⁷. The July Racecourse at Newmarket was first created in 1605 as a place for James I to hunt and race horses and it has remained a centre of horse racing since then whilst maintaining original characters including thatched roofs and old-style grandstands with mature parkland trees.

²⁶ <http://risk.english-heritage.org.uk/>

²⁷ <http://www.parksandgardens.org>

3.5 Human Health

Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
East of England Plan for Sport (2004)	Increase participation in sport in the region's isolated rural communities through innovation and creativity.	Policies to contribute to healthy, active communities
West Suffolk Contaminated Land Strategy September 2013	Protect human health, controlled waters and local ecosystems from the impact of contaminated land Prevent damage to property from the impact of contaminated land Encourage voluntary remediation Encourage the redevelopment of brownfield sites.	Human health not to be compromised by inappropriate land use. Remediation to be encouraged through policies.

Life Expectancy and Death Rates

Life expectancy in Forest Heath is higher than the national average²⁸, at 79.7 years for men, and 83 years for women born in Forest Heath between 2007 and 2009. Life expectancy is not significantly different between the most and least deprived areas of the district²⁹.

Since 1999 death rates in the Forest Heath district have roughly mirrored those for England as a whole³⁰, and since 2002 they have fallen³¹.

Lifestyle and Health

The Forest Heath population has, in comparison to the regional and national averages (Table 3.2)³²:

- More adult smokers,
- Fewer increasing and higher risk drinkers,
- More physically active adults and children,
- Fewer obese adults,
- But more obese children in Year 6,
- A higher incidence of malignant melanoma,
- Fewer people diagnosed with diabetes (when compared to the national average only)
- Fewer early deaths from cancer, but
- Significantly more road injuries and deaths.

²⁸ Suffolk County Council. The State of West Suffolk

²⁹ NHS (2011) Forest Heath Health Profile 2011

³⁰ NHS (2011) Forest Heath Health Profile 2011

³¹ Suffolk County Council. The State of West Suffolk

³² NHS (2011) Forest Heath Health Profile 2011

Table 3.2. A selection of summary health figures comparing Forest Heath and the average for England³³

	Forest Heath	England
Percentage of adults aged 18+ that smoke	24.5	21.2
Percentage of those aged 16+ who are increasing & higher risk drinkers	16.5	23.6
Percentage of those aged 16+ who are physically active	13.2	11.5
Percentage of year 1-13 pupils who spend at least 3 hours per week on high quality PE and school sport	57.2	55.1
Percentage of adults who are obese	23.4	24.2
Percentage of school children in Year 6 who are obese	21.1	18.7
Incidence of malignant melanoma rate per 100,000 population under 75	15.0	13.1
Percentage of people on GP registers with a recorded diagnosis of diabetes	5.23	5.4
Early deaths from cancer per 100,000 population under 75	99	112.1
Rate of road injuries and deaths per 100,000 population	63.6	48.1

On the ACORN system of population classification, Forest Heath has a mixture of “affluent towns and villages with excellent health and diet” (15.4%), “towns and villages with average health and diet” (13.8%) and “mixed communities with better than average health” (9.2%). It has higher levels of younger, affluent healthy professionals and affluent families with some dietary concerns compared to the country as a whole. However, it has higher levels of low-income families with some smokers³⁴.

Fuel Poverty

A key mechanism by which wealth translates to health is through fuel poverty.

The distribution of households in fuel poverty is shown below (Figure 3.12):

³³ NHS (2011) Forest Heath Health Profile 2011

³⁴ Suffolk County Council. The State of West Suffolk

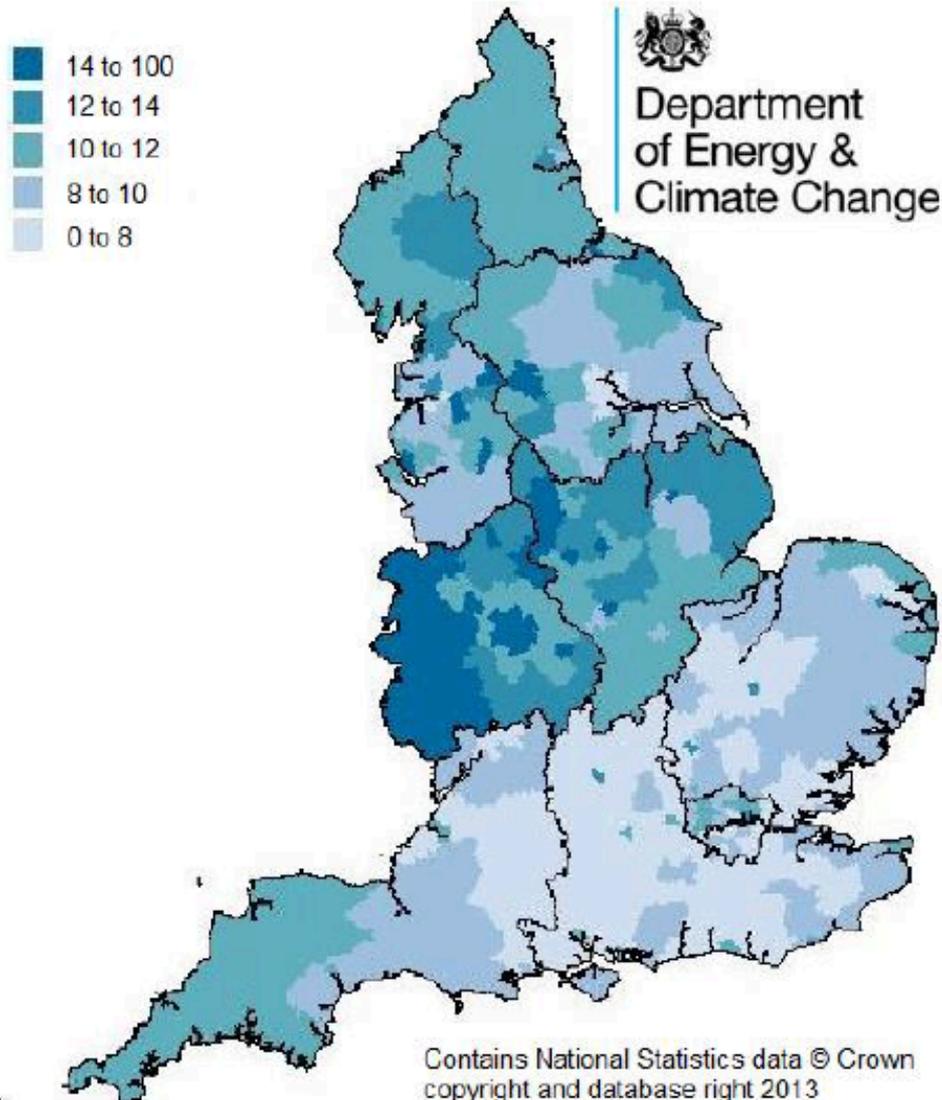


Figure 3.12 Distribution of Households in Fuel Poverty

It can be seen from Figure 3.12 that the East of England has relatively low levels of Fuel Poverty compared to other parts of the country, notably the North West.

The March 2015 publication of the Fuel Poverty Strategy for England uses the new Low Income-High Cost method for Fuel Poverty calculations (these are used to calculate the figures behind the map in Figure 3.12). This has calculated that district level fuel poverty at 7.6%, with the highest Lower Super Output Area is at 11.8%. The East of England average is 8.6%. Having said that the index of “Excess Winter Deaths” (measure of the increase in the death rate in winter) for Forest Heath is below that of England, which, given its rural nature is surprising.

Deprivation

On average, Forest Heath has a lower level of deprivation than England as a whole as measured by the Index of Multiple Deprivation (IMD)³⁵. The IMD is a measure used across England to understand the differences in standard of living and is used as

³⁵ NHS (2011) Forest Heath Health Profile 2011

quality of life index. It combines a range of economic, social and housing indicators into a single score for areas of about 1500 people.

Suffolk as a whole is a relatively affluent county, although the trend from 2007 – 2010 is that more areas have declined in their rank than have improved, i.e. trend towards increased deprivation relative to the rest of England ³⁶.

Forest Heath has no areas in the bottom 20% of all areas across the country, and overall is in the second least deprived 20% (i.e. 2nd quintile), making it less deprived than the national average. However there are small areas of Newmarket and Mildenhall that show greater levels of deprivation, and are ranked in the third quintile³⁷. See Figure 3.13.

Although Forest Heath enjoys lower overall deprivation levels than the national average, the trend over the period 2004 – 2010 is that the district is becoming relatively more deprived, with a rise of 54 places in Forest Heath's ranking nationally. Forest Heath has become more deprived relative to the rest of Suffolk, moving from the 2nd least deprived district in the county in 2004, to 5th in 2010 making it the 3rd most deprived district in the county ³⁸.

³⁶ Suffolk County Council (2011) The State of Suffolk Report: Healthy Standards of Living

³⁷ Suffolk County Council (2010) Forest Heath District Profile

³⁸ Suffolk County Council (2011) The State of Suffolk Report: Healthy Standards of Living

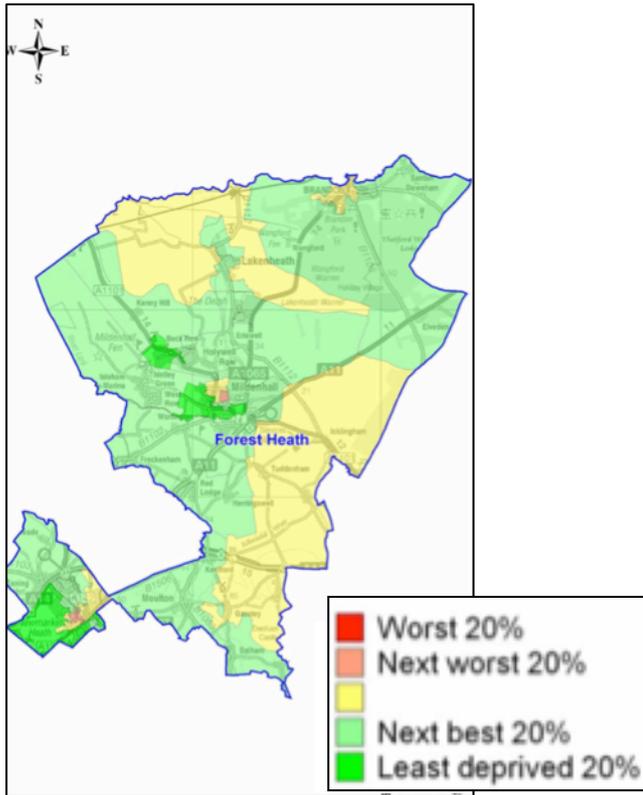


Figure 3.13 The national ranking of areas within Forest Heath in terms of the Index of Multiple Deprivation (IMD)³⁹

There has been a recent trend in Forest Heath for small areas to increase in deprivation in relation to other areas of the country⁴⁰, with the highest levels of deprivation in the district being concentrated in Newmarket and Mildenhall⁴¹. Note also that pockets of deprivation in some rural and urban communities can be obscured in statistics because of the average district level data⁴².

Generally across Suffolk the distribution of child poverty follows the distribution of IMD quintiles. However, in Forest Heath's Brandon ward, which is not ranked in the 40% most deprived areas, the proportion of children in poverty is between 10-15%, which is relatively high⁴³. See Figure 3.14.

³⁹ Suffolk County Council (2010) Forest Heath District Profile

⁴⁰ Suffolk County Council (2011) The State of Suffolk Report: Healthy Standards of Living

⁴¹ Cambridgeshire County Council (undated) Forest Heath Profile

⁴² Suffolk County Council. The State of West Suffolk

⁴³ Suffolk County Council (2011) The State of Suffolk Report: Healthy Standards of Living

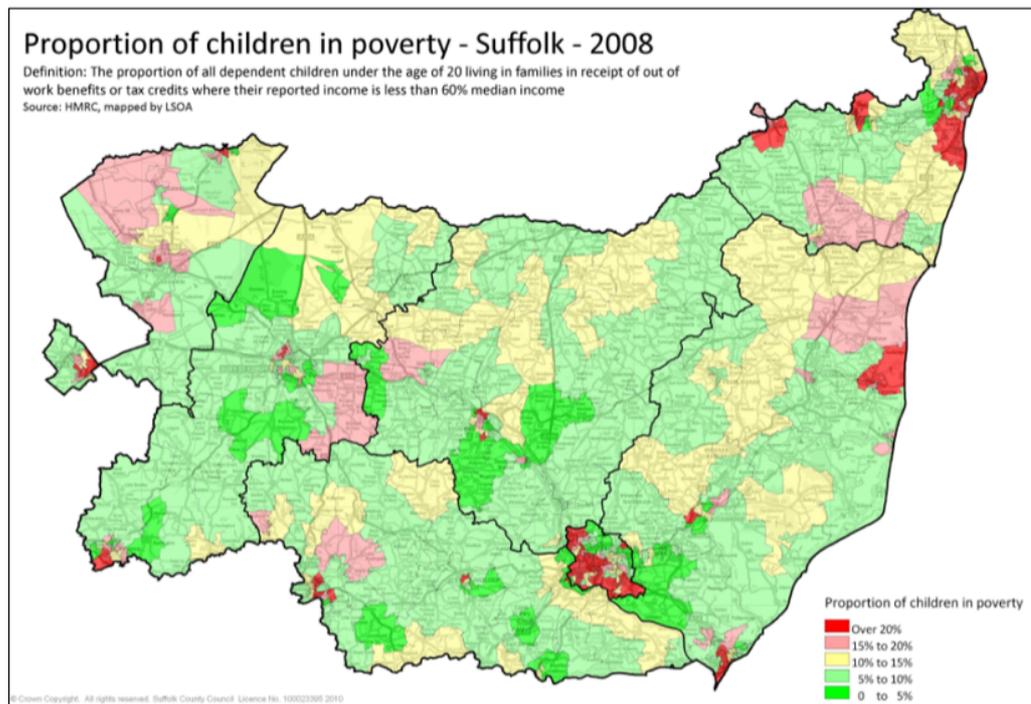


Figure 3.14. The proportion of children in poverty across Suffolk ⁴⁴

In Forest Heath 72% of children experiencing child poverty are in lone parent families, which is substantially more than the national average of 66.4%. This data seems to suggest a unique set of social difficulties, and it has been recommended that this is investigated further ⁴⁵.

Noise pollution

17% of Forest Heath district suffers from noise pollution of 70 dB(A) or above due to aircraft noise⁴⁶. This is predominantly due to the large American RAF bases at Lakenheath and Mildenhall (Figure 3.15). However, it should be noted that this data is based on surveys carried out in the 1990s. It is understood that data is being collated to allow this baseline to be updated in the future. Meanwhile it is reasonable to assume that aircraft noise is still an issue in the district.

A further additional future source of noise is the dualling of the road from the Five Ways roundabout, Barton Mills, to the village of Elveden.

There is a railway line that crosses through the north of the district. It travels close to Brandon, and westwards through a station some 2.5km to the north of Lakenheath and past properties in Sedge Fen.

There is also a section of railway line that runs through Newmarket and close to the village of Kentford.

⁴⁴ Suffolk County Council (2011) The State of Suffolk Report: Healthy Standards of Living

⁴⁵ Suffolk County Council (2011) Child Poverty Report

⁴⁶ Forest Heath District Council, 2012, 2011-12 Annual Monitoring Report, accessed at http://www.westsuffolk.gov.uk/planning/Planning_Policies/upload/Monitoring_Report_2011-2012.pdf

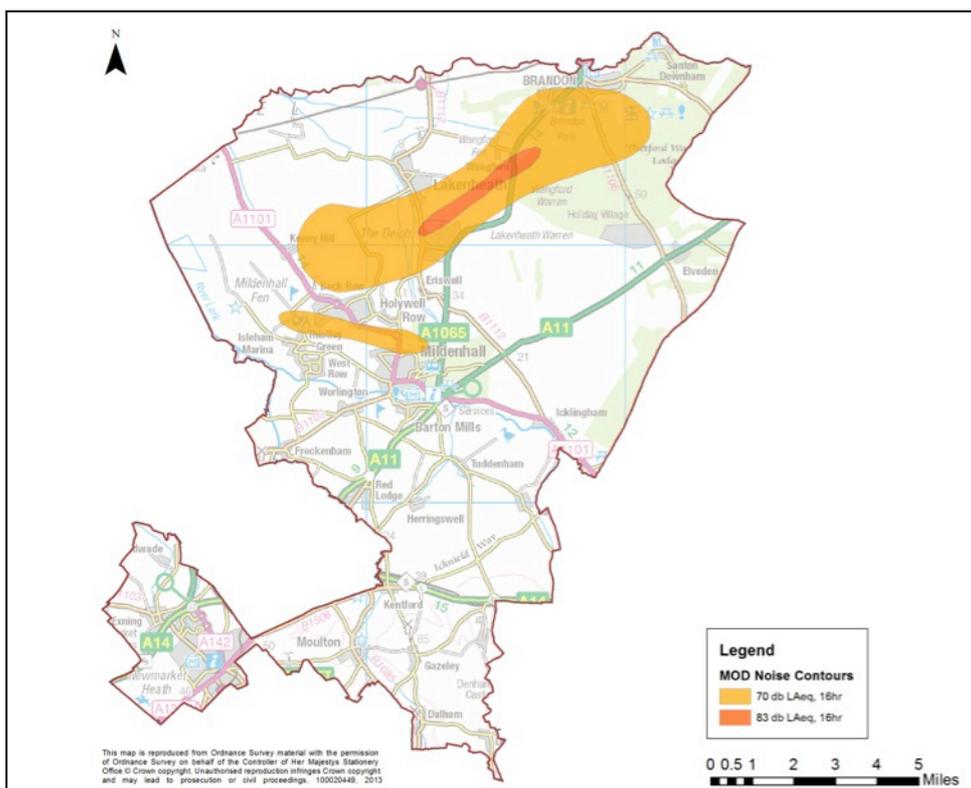


Figure 3.15. Map showing the areas within Forest Heath affected by aircraft noise

3.6 Landscape

Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
European Landscape Convention	Promotes the protection, management and planning of European landscapes	Strengthen character of and identity of areas.
Draft Forest Heath Landscape Character Assessment, 2008	Identification and maintenance of distinct landscape character areas in Forest Heath	

Landscape Designations

There are no Areas of Outstanding Natural Beauty (AONBs) or areas designated locally for their landscape value in the district.

National Character Areas

National Character Areas (NCAs) divide England into 159 areas, each defined by a unique combination of landscape, biodiversity, geodiversity and cultural and economic activity. The boundaries of the NCAs follow the lines in the landscape as opposed to county or district boundaries⁴⁷.

⁴⁷ <http://www.naturalengland.org.uk/publications/nca/default.aspx> Date accessed: 9/12/13

The main NCA covering Forest Heath is 85: The Brecks⁴⁸. Smaller proportions of the following NCAs also fall within the Forest Heath District: 46: The Fens in the north west of the district; 87: East Anglian Chalk around Newmarket; and 86: South Suffolk & North Essex Claylands in the south east of the district⁴⁹ (Figure 1). Each of these NCAs are described below (as applied to Forest Heath district)

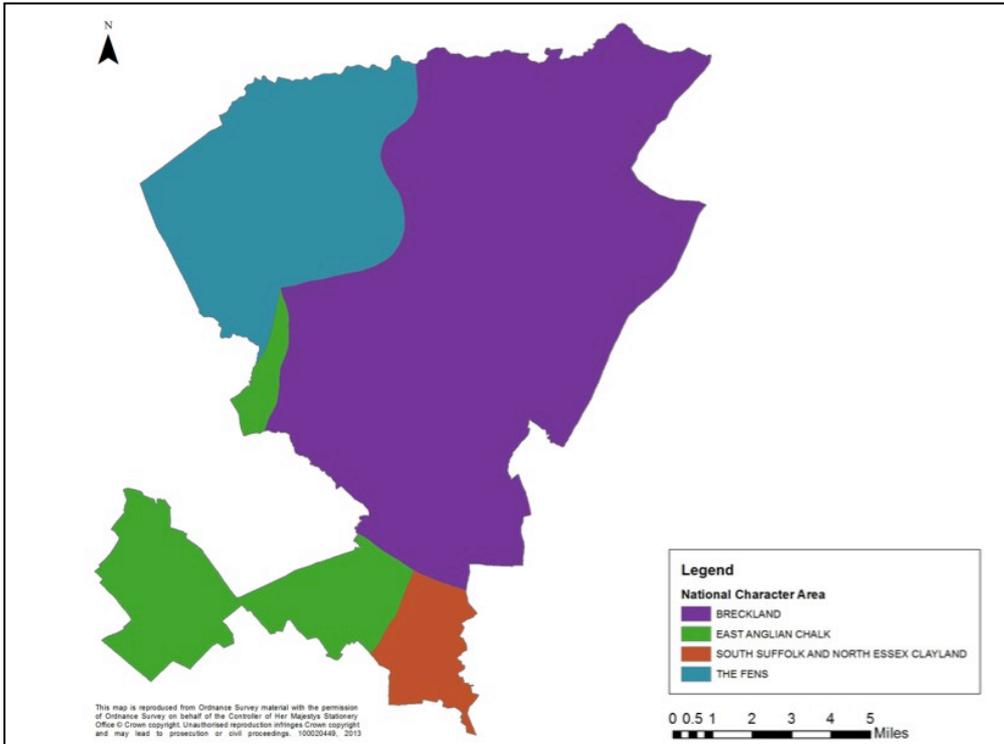


Figure 3.16: National character areas in the Forest Heath district

*The Brecks*⁵⁰

The Brecks are a unique landscape of heaths, conifer plantations and farmland on a chalk plateau. It has an ages-old identity, a very particular land use history and a richly distinctive wildlife, which sets it apart from all surrounding landscapes.

This area is among the warmest and driest parts of the United Kingdom, with a distinctly less maritime climate than other parts of England. This climate, combined with the free-draining soils, has greatly influenced the landscape character and led to the development of dry heath and grassland communities which until recently limited any large scale agriculture. However, 20th Century advances have enabled the dry, low-fertility soils to be farmed and the area is now a major producer of vegetables and cereals, with over two-thirds of the land under cultivation.

The landscape is largely open and gently undulating with a low-lying, dry plateau that rises to the north. The underlying geology of the area is chalk, however, local erosion and freeze and thaw processes has formed ridges and troughs, and over time the troughs have filled with sand, creating two differing soil types in close proximity to each other.

⁴⁸ Natural England (2012) National Character Area: The Brecks

⁴⁹ <http://www.naturalengland.org.uk/publications/nca/default.aspx> Date accessed: 9/12/13

⁵⁰ The Brecks Partnership (2013) The Norfolk & Suffolk Brecks Landscape Character Assessment

This variation in the soils has allowed a complex mosaic of acid and calcareous grassland to form together with heather-dominated heath in places, giving a characteristic patterned ground effect. The surviving remnants of dry heath and grassland support a great diversity of plants, invertebrates and breeding birds, which have also adapted to live in forestry and arable habitats.

There is a high concentration of important archaeological sites throughout the Brecks, resulting from a long continuity of human settlement. These include Neolithic flint mines, medieval churches, priories and rabbit warrens, 18th and 19th Century designed parklands and estate villages.

The main population centre is Thetford, with Brandon, Mildenhall and Swaffham the only other settlements of any size, and only Brandon and Mildenhall are within the Forest Heath district boundary. The settlement pattern is sparse, with villages focused around a church or village green, scattered along the river valleys. Elsewhere in the landscape, farm buildings have a considerable impact, together with a few large military air bases. Otherwise the landscape remains fairly empty of obvious human influence.

*The Fens*⁵¹

The Fens consist of a large-scale, flat, open landscape with extensive vistas to level horizons and huge skies. The Fens include a portion of the northwest of the district, to the north of Mildenhall and west of Lakenheath. A network of rivers, drains and ditches provide a strong influence throughout the area, with embanked rivers and roddons creating local enclosure and elevation. There are some modestly elevated 'islands' within the fens that provide isolated higher ground, and the majority of the grassland, tree cover and hedgerows are associated with these areas.

Jurassic clays are overlain by rich, fertile calcareous and silty soils over the coastal and central fens and by dark, friable fen peat further inland: it is this latter type that is predominant in the Fens area of Forest Heath district. The soils are important for agriculture, which is hugely significant for the rural economy in the Fens. There are over 4,000 farms in the Fens, and enough wheat is grown here annually to produce a quarter of a million loaves of bread. Some 40 per cent of England's bulbs and flowers are also produced in the Fens.

However, the fertile peat soils have been historically drained and managed to support national food production at the expense of other ecosystem services. Drained peat is more vulnerable to loss, particularly where the deposits are deep and the water table is kept artificially low. Peat wastage through shrinkage, oxidation and wind erosion is a long-term issue affecting the ecosystem services of the Fens.

The Settled Fens in the northwest of Suffolk exhibit an ancient medieval and irregular field pattern. They are typically smaller-scale fens with scattered farmsteads and dispersed ribbon settlements along the main arterial routes. Built forms exhibit strong influence ranging from historic cathedrals and churches, like Ely and Boston to large agricultural and industrial structures. Domestic architecture displays combination of elegant Georgian brick houses and bland 20th century bungalows.

There is a long history of human occupation here, although early prehistoric sites are mostly deeply buried beneath the fen sediments or occur on the low slopes of the higher fen 'islands'. Scheduled Ancient Monuments of prehistoric to post-medieval date are located across the fens and many undesignated sites and monuments are known, again mainly from the fen edges and islands. Ancient remains of settlements are increasingly being discovered as the peat dries out across the fenland area, or as a

⁵¹ Natural England (2013) National Character Area: The Fens

result of development, and numerous artifact scatters of prehistoric to Roman sites are annually ploughed up where the peat is thinnest on the gravel island edges and emerging crests.

*East Anglian Chalk*⁵²

The East Anglian Chalk NCA is an eastwards extension of the Chiltern Hills, though is notably different in that it has a more subdued topography as a result of glacial erosion. It surrounds the town of Newmarket, stretching northwards between Isleham and Mildenhall, and eastwards until just beyond Moulton.

Due to the underlying chalk the soils are predominately nutrient-poor and shallow on the escarpments, with better soils at the base of the slopes. In the Newmarket area, this has resulted in areas of patterned ground with mosaics of different vegetation types as described above under the Brecks NCA summary.

The smooth rolling chalkland hills offer a broad-scale landscape of large, very late enclosure fields with low thorn hedges and few trees. Roads are often lined with shelter belts of beech, with pine belts taking over towards the east of the NCA. The landscape is visually continuous, historically very open, uninterrupted and flowing, with occasional long views over the lower land to north and west. Around Newmarket, the rectilinear landscape is more subdivided giving a more closely geometric feel. This has arisen as a result of the fences and shelter belts of the stud farms which have been created, both to shelter the occupants and to protect them from external movement that might startle them. Roads in this area are therefore frequently tree-lined.

*The South Suffolk & North Essex Claylands*⁵³

The South Suffolk & North Essex Claylands NCA is made up of an undulating landscape, incised by small river valleys flowing east towards the North Sea. It covers the south-eastern tip of Forest Heath, roughly east of Moulton and south of the A14.

Ancient woodland is strongly represented in the area, though mainly in small parcels, and when combined with the higher than average density of hedges, this gives a well-wooded feel to the landscape. It is largely an area of 'ancient countryside' where the field boundaries are predominantly substantial hedges of medieval or earlier date with hedgerow trees persisting in many areas. Fields are frequently irregular in shape, and within the Forest Heath district there is substantial evidence of 18th and 19th century parliamentary enclosure of former common arable fields. The area is well-drained as a result of the undulating landscape and is predominantly arable with some pasture found on the valley floors. The dominant crop is cereals, accounting for 54% of the total farmed area.

The existing pattern of towns and villages was laid down by the time of the Domesday survey of 1086, when the area was already densely settled. This pattern intensified with the development of the medieval woollen trade, which was mainly home-based, backed up by a collection of interdependent trade's people within the towns and major villages with markets.

Local Landscape Character and Typology⁵⁴

⁵² Natural England (undated) NCA 86 South Suffolk & North Essex Claylands: Key Facts & Data

⁵³ Natural England (undated) NCA 87 East Anglian Chalk: Key Facts & Data

⁵⁴ http://www.suffolklandscape.org.uk/landscape_map.aspx Date Accessed: 9/12/13

Suffolk County Council undertook a more detailed landscape assessment, to describe the character and qualities that make up each of the different landscape areas of the county. This landscape typology was updated in 2011.

There are 31 different landscape character areas in the county, 15 of which are present in Forest Heath (Figure 3.17). These are:

- 7: Estate sandlands;
- 9: Planned fenlands;
- 11: Plateau estate farmlands;
- 13: Rolling estate chalklands;
- 16: Rolling estate sandlands;
- 21: Settled chalklands;
- 22: Settled fenlands;
- 23: Undulating ancient farmlands;
- 24: Undulating estate farmlands; and
- 25: Urban.
- 26: Valley meadowlands
- 27: Valley meadows & fens
- 28: Wooded chalk slopes
- 29: Wooded fens
- 31: Wooded valley meadowlands & fens

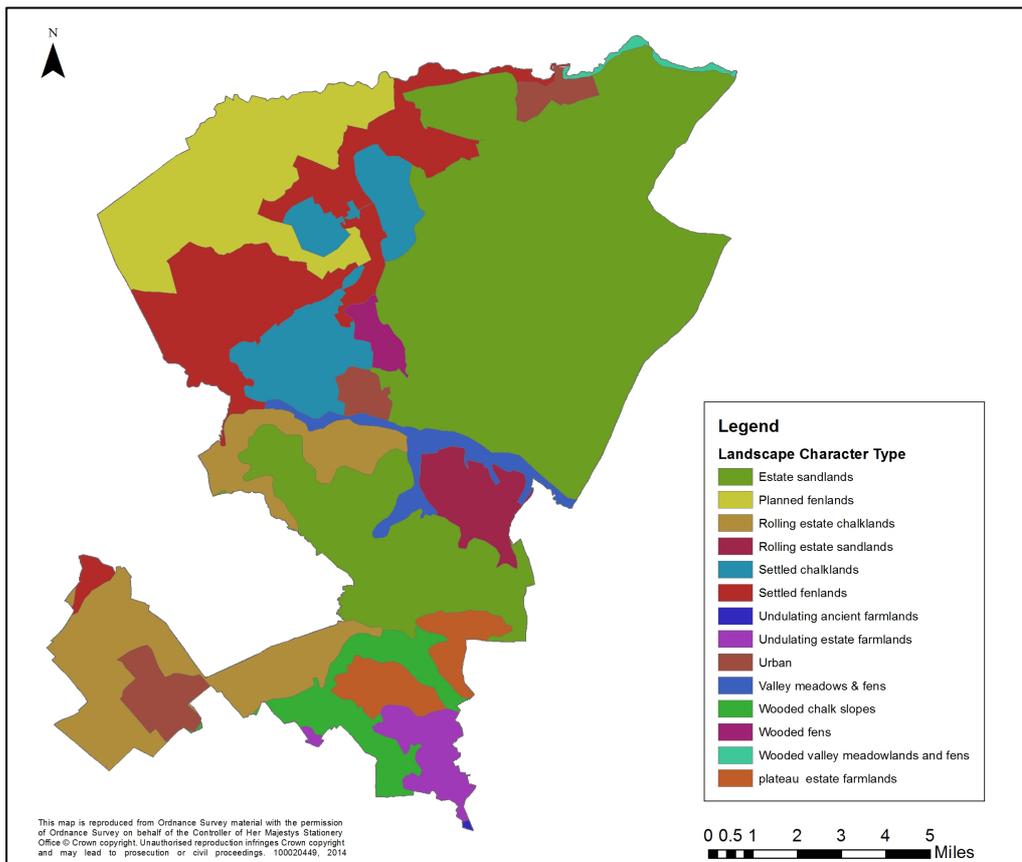


Figure 3.17 Landscape character area types in Forest Heath district

A substantial portion of the district is classified as Estate Sandlands, the key characteristics of which are:

- Flat or very gently rolling plateaux of free-draining sandy soils, overlying drift deposits of either glacial or fluvial origin;
- Chalky in parts of the Brecks, but uniformly acid and sandy in the south-east;
- Absence of watercourses;
- Extensive areas of heathland or acid grassland;
- Strongly geometric structure of fields enclosed in the 18th & 19th centuries;
- Large continuous blocks of commercial forestry;
- Characteristic 'pine lines' especially, but not solely, in the Brecks;
- Widespread planting of tree belts and rectilinear plantations;
- Generally a landscape without ancient woodland, but there are some isolated and very significant exceptions;
- High incidence of relatively late, estate type, brick buildings; and
- North-west slate roofs with white or yellow bricks. Flint is also widely used as a walling material.

3.7 Material Assets

Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
Planning Practice Guidance	Delivery of affordable housing need in context of total housing delivery	LP will need to ensure total affordable need can be delivered
Forest Heath Strategic Housing Market Assessment	Provide an objective assessment of housing need according to market conditions	Required to provide for objectively assessed housing need.
Cambridge Sub-Region Housing Statement 2012	<p>Deliver new homes to support economic success</p> <p>Enable better health and well-being through housing, affordable housing and housing-related support</p> <p>Create mixed, balanced, sustainable and cohesive communities</p> <p>Extend housing choice and meet housing need</p> <p>Prevent and tackle homelessness</p>	Housing development to deliver aims of Housing Statement
Suffolk Minerals Core Strategy (September 2008)	Policy 2: Preference will be given to aggregate sites in Suffolk located in the broad belt that follows the A14 stretching from east of Ipswich to the western extremity of the county	Location of aggregate sites to be in line with Minerals Core Strategy.

Water infrastructure

The potable water network has been characterised in the Water Cycle Study (WCS) Level 2⁵⁵. Water treatment works and reservoirs in the south and west of the district feed the settlements in the centre. This is supplemented by a network of smaller abstractions. The network towards the north east of the District operates broadly independently, and is reliant on a series of local abstractions (see below – extract from WCS).

⁵⁵ Hyder, 2013, Forest Heath District Water Cycle Study Stage 2: Full Strategy.

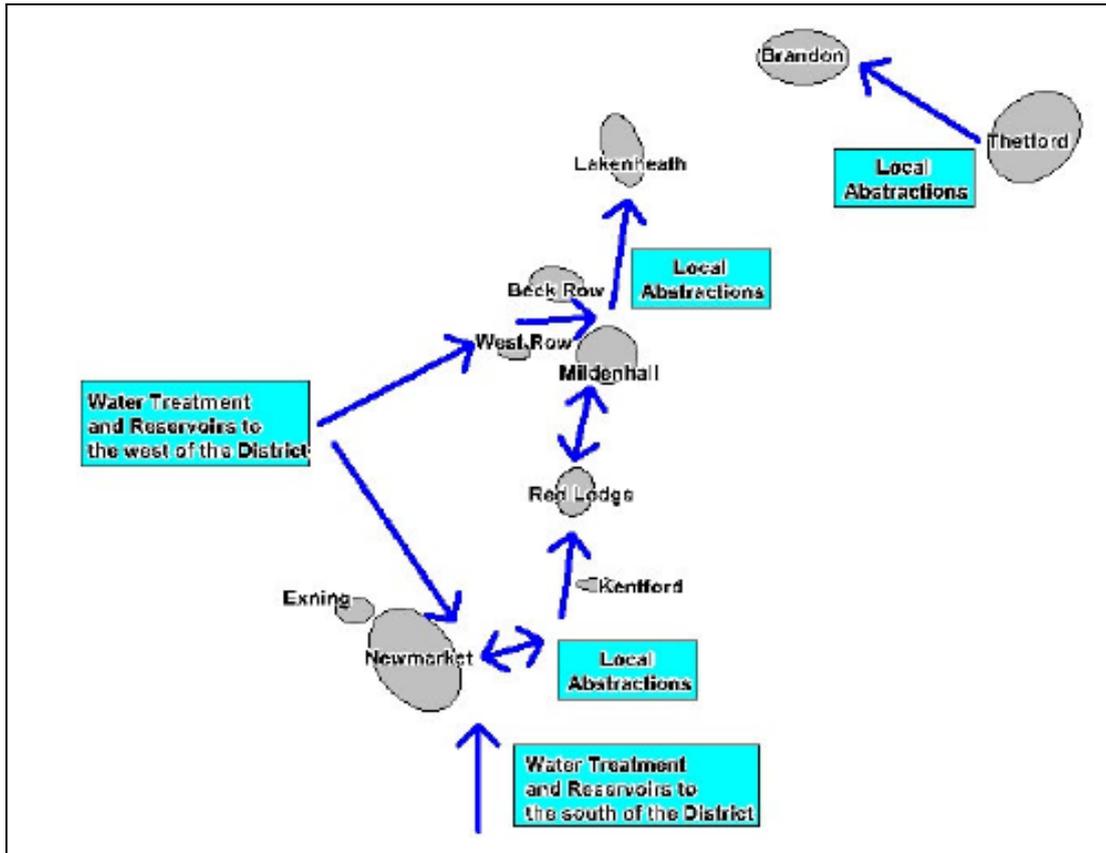


Figure 3.18. Potable water network in Forest Heath (from Water Cycle Study Level 1)

Waste water treatment has been identified under the Water Cycle Study Level 2⁵⁶ as being insufficient to completely remove phosphate from surface water supplies, and this is a key regional issue. Certain Waste Water Treatment Works (WwTW) are currently priorities for upgrades for phosphorous removal due to their impact on conservation sites.

A priority site for this has been Brandon WwTW. A scheme at Mildenhall WwTW to remove phosphorous and improve water quality in the River Lark was judged to be too expensive.⁵⁷

The foul sewerage network for the district has also been characterised (in the Water Cycle Study⁵⁸). Storm events can increase risk of foul sewer overflows, where foul sewers and stormwater drains are combined. New development connections have the potential to exacerbate this risk. This is mitigated through planning liaison with Anglian Water to ensure that new development is served by appropriate sewerage and water supply infrastructure. Upgrades to the network would be agreed with the developer at the planning stage.

Only one sewer model exists for the District, for Newmarket, and there is a great deal of uncertainty regarding connections and capacities. It is anticipated that certain proposed development in and around Newmarket would require upgrades to the foul

⁵⁶ *Ibid.*

⁵⁷ *Ibid.*

⁵⁸ *Ibid.*

sewer network and pumping stations, although a large number of development sites would have no discernable impact.

The WCS has been reviewed by Anglian Water, given that a number of years have elapsed since its publication.

This identified that the overall confidence in the WCS was 'amber' on a red/amber/green assessment. This reflects the natural evolution and progression of policy, practice and data over the intervening period. The WCS should be updated before it is used to inform decision-making.

Mineral resources

Minerals policy in Forest Heath is dealt with by Suffolk County Council. The key document is the Minerals Core Strategy DPD (2008).

Forest Heath falls within the area of Suffolk which this designates as the main location of minerals extraction.

There are three allocated sites within Forest Heath for mineral (sand and gravel) extraction (M8, 9, and 10), and one safeguarding site (P1). Two of these are proposed extensions to Worlington Quarry at Red Lodge. The third is at Cavenham, and is also an extension to an existing quarry.

Waste infrastructure

This is described in section 3.11 waste, below.

Energy infrastructure

There are no power stations or other significant energy generation infrastructure in the District.

Social infrastructure

Hospitals: West Suffolk NHS Foundation Trust only has one hospital in Forest Heath District. This is Newmarket Hospital, which has a limited range of departments and no accident and emergency unit

The nearest accident and emergency unit serving the district is at the larger West Suffolk Hospital in Bury St Edmunds.⁵⁹

It is likely that there is other medical provision at the RAF Lakenheath and RAF Mildenhall bases.

Schools: There are a number of primary schools distributed through the District serving local villages and other dispersed rural communities. There is a concentration of secondary education within the primary settlements of Newmarket and Mildenhall.⁶⁰

Leisure Provision of leisure facilities in Forest Heath is managed by Anglia Community Leisure on behalf of FHDC. These comprise:

- Newmarket Leisure Centre and swimming pool;
- Mildenhall Swimming Pool;
- Brandon Leisure Centre;

⁵⁹ <http://www.nhs.uk/Services/Trusts/HospitalsAndClinics/DefaultView.aspx?id=938>

⁶⁰ <http://www.suffolk.gov.uk/education-and-careers/schools-and-support-in-education/schools-in-suffolk/> accessed 16th December 2013

- The Dome Leisure Centre, Mildenhall (owned by Suffolk County Council, managed by FHDC, operated by ACL);
- George Lambton Playing Field, Newmarket;
- Mildenhall Community Centre; and
- Studlands Park Community Centre.

A review of leisure provision within the district was undertaken in 2009.⁶¹ A summary of the findings is presented below (Forest Heath District Council, 2009, p.6).

Summary of Suggested Local Standards of Provision

Sports Facility	Proposed standard per 1,000 pop	Proposed facility per no. population	Current provision per 1,000 pop	Current shortfall per 1,000 pop	Quantity required (shortfall) by 2021
Sports halls with community access	40m ² (.07 of a 4 badminton court hall)	1 sports hall per 15,000	35m ² (.06) (3.75 halls included)	5m² (.01) (.54 halls)	5 halls (1 hall)
Swimming pools with community access	11.5m ² (.05 of a 25m x 4 lane pool)	1 equiv. per 20,500	9.5m ² (3 sites/pools included)	2m² (total 0.6 pools)	4 equiv. pools (1.1 pools)
Fitness Gyms all provision	4 stations (16m ²)	1 station per 325	3.1 stations (197 total)	0.9 stations (58)	298 stations (101)
Synthetic turf pitches all provision	240m ² (0.04 of a full size pitch)	1 per 25,000	116m ² (0.02 of a full size pitch), or 1.24 full size equiv. in total	124m² (total 1.3 pitches)	3 pitches (1.76)
Indoor Bowls	0.05 rink	1 x 6 rink centre equiv. per 50,000	1 x rink per 8,000	None	1.5 x 6 rink centre equiv.(1 rink)

⁶¹ Forest Heath District Council, 2009, Built Sports Facilities Study

Economic and employment infrastructure

There are a number of industrial estates within Forest Heath District. The principal ones (5.0 ha or greater) are:⁶²

- Studlands Park Industrial Estate (Newmarket) = 16.6 ha (7.7% of total District supply);
- Newmarket Business Park = 5.0 ha (NBP) (2.02 ha remain to be developed);
- Minton Enterprise Park (Newmarket): 5.1 ha;
- Willie Snaith Road (Newmarket): 9.2 ha;
- Laureate Paddocks Industrial Estate (Newmarket): 6.0 ha;
- Mildenhall Industrial Estate: 44.44 ha;
- Brandon Industrial Estate: 22.8 ha;
- Omar Homes Site (Brandon): 5.5 ha;
- Plantation Farm, Station Road (Lakenheath): 8.35 ha; and
- Kennet Park (Kennett): 6.34 ha.

3.8 Population

Demographics

The population of Forest Heath is approximately 60,735 (based on figures from 2012)⁶³. Over the long-term the district's population has grown, increasing by 7.5% over the last 10 years, and is estimated to grow to 78,300 by 2035⁶⁴.

The profile of the district is younger than the county and regional averages, with almost two thirds being of working age (i.e. 15-64) (Figure 3.19).

⁶² Forest Heath District Council, 2006, Employment Land Review: Background Technical Document to Accompany the Core Strategy Preferred Options

⁶³ <http://www.suffolkobservatory.info> Date accessed: 11/12/13

⁶⁴ <http://www.suffolkobservatory.info> Date accessed: 11/12/13

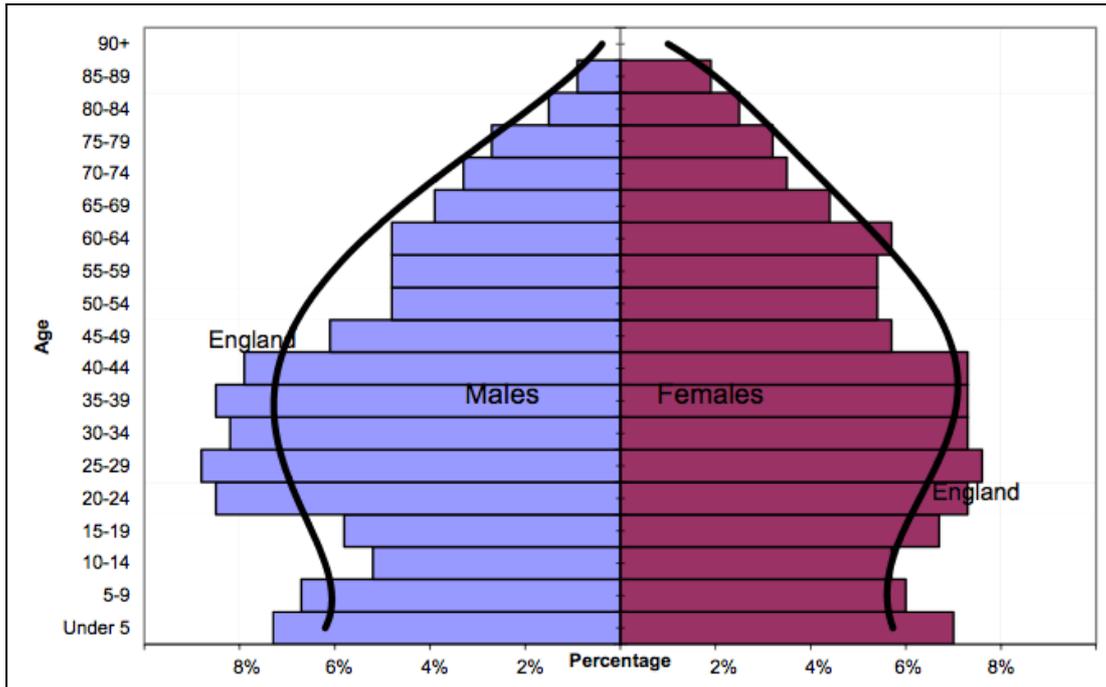


Figure 3.19 Age pyramid by gender for Forest Heath (bars: lines show national data) (based on ONS mid-2008 estimates)⁶⁵

The district tends to attract young adults in their twenties and thirties, with a lower proportion in their forties, and these migrants to the area, once assimilated, will age along with the existing population and contribute to subsequent births. This net migration of people of working age helps to maintain the low median age of the district⁶⁶ (see Figure 3.20).

⁶⁵ Suffolk County Council (2010) Forest Heath District Profile

⁶⁶ http://www.forest-heath.gov.uk/info/100004/council_and_democracy/526/about_the_district

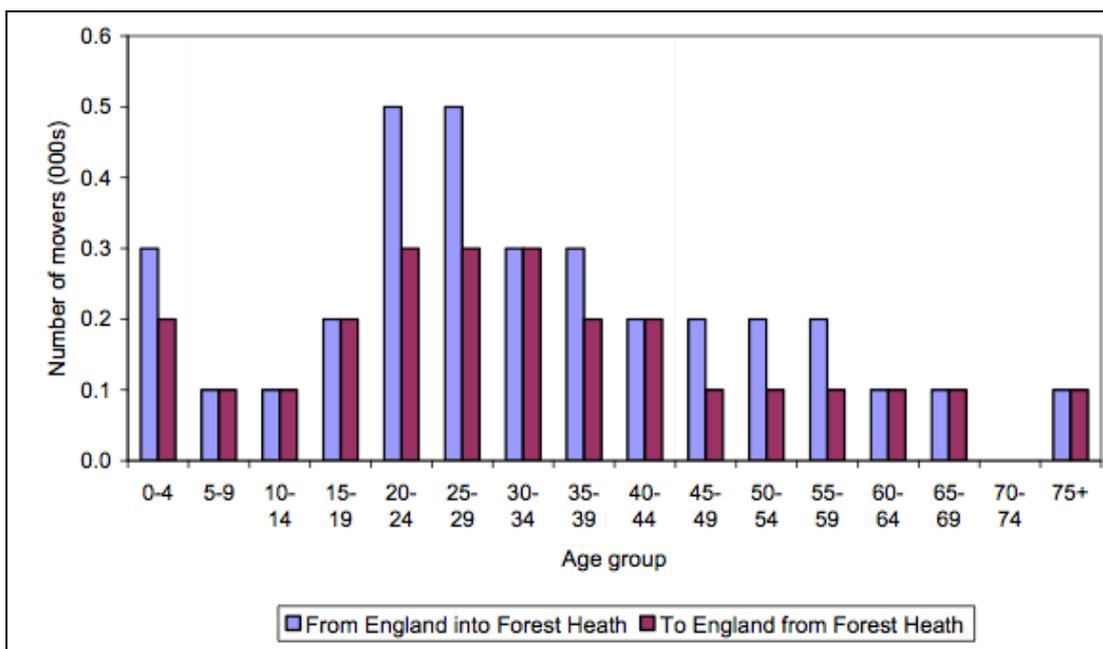


Figure 3.20 Age structure of moves to/from Forest Heath⁶⁷

Forest Heath district is also more diverse than the rest of the county or country, with 13.2% of the population being non-white in June 2009, compared to a national average of 12.5%; and over 15% of the population of the district being non-UK nationals compared to an average of 4.2% across the whole county.

This diversity and young age profile of the population is largely due to the United States Air Force bases in Mildenhall and Lakenheath, as well as the number of migrant workers in the district's horse racing and agricultural industries.

Education

In comparison to the East of England and Suffolk, Forest Heath has a lower percentage of children achieving level 4+ in both English and Maths at Key Stage 2⁶⁸.

23% of Forest Heath's Year 13 school leavers move to non-NVQ2 employment, compared to just 14.5% for Suffolk as a whole. The percentage of Year 13 leavers that are Not in Employment, Education or Training (NEET) is also substantially higher in Forest Heath than in Suffolk as a whole, with 7% compared to 4.6% respectively⁶⁹. Newmarket and Mildenhall in particular have notable concentrations of young people (aged between 16 and 18) that are NEET (Figure 3.21).

The general trend is for a fall in the NEET percentages across the region, although it should be pointed out that this is a relatively short term trend, covering just January 2011 to November 2012⁷⁰.

⁶⁷ Suffolk County Council (undated) The State of West Suffolk

⁶⁸ <http://www.suffolkobservatory.info> Date accessed: 11/12/13

⁶⁹ <http://www.suffolkobservatory.info> Date accessed: 11/12/13

⁷⁰ Suffolk County Council (undated) The State of West Suffolk

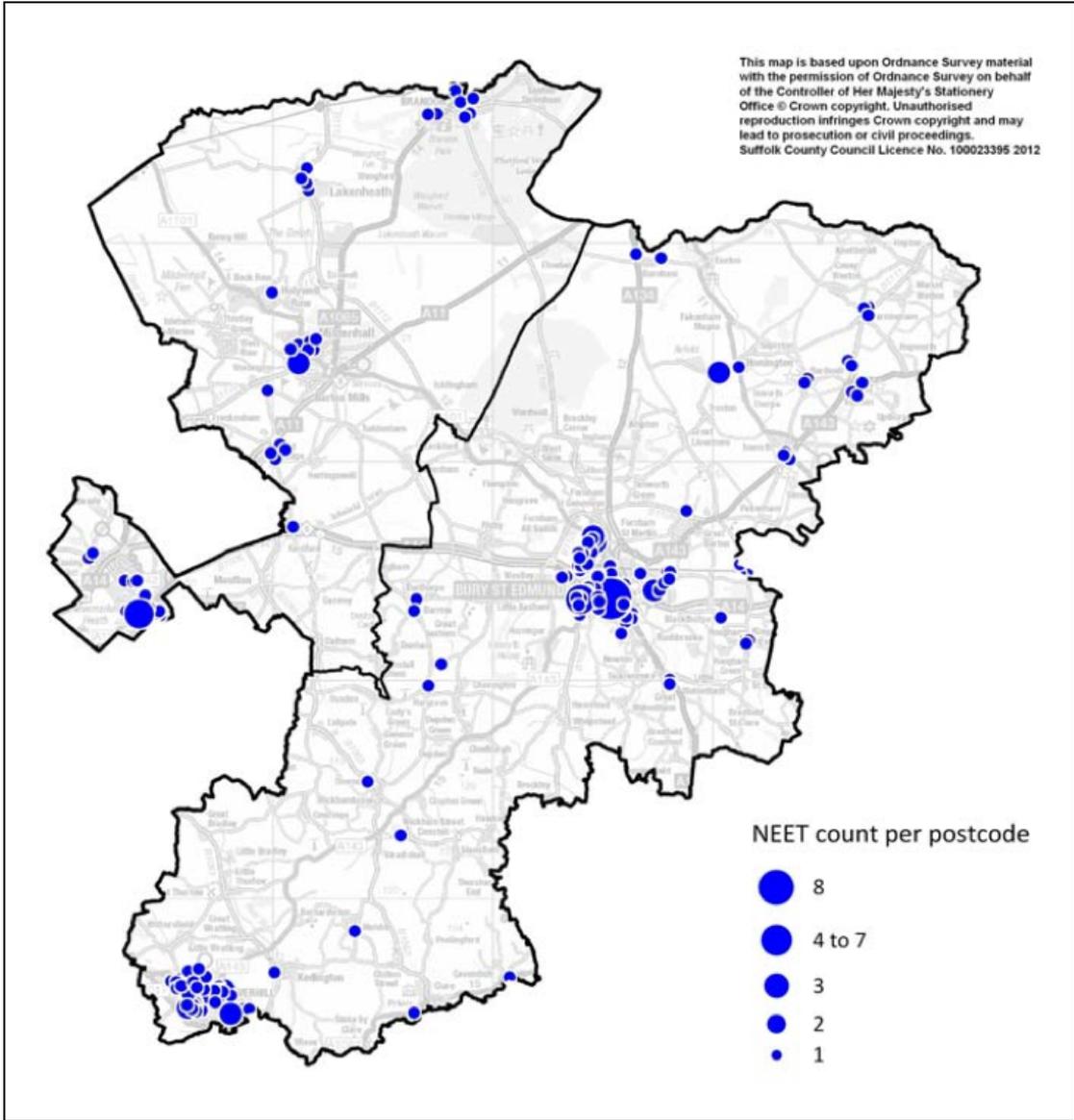


Figure 3.21 The count of 16-18 years olds NEET by postcode across West Suffolk ⁷¹

⁷¹ Suffolk County Council (undated) The State of West Suffolk

Forest Heath district has considerably lower working age skill levels than Suffolk as a whole (Figure 3.22), and has even lower skill levels than the region and England as a whole. However, there are a greater proportion of people with other qualifications in the district. This may be attributable to the presence of the American military base in this locality ⁷².

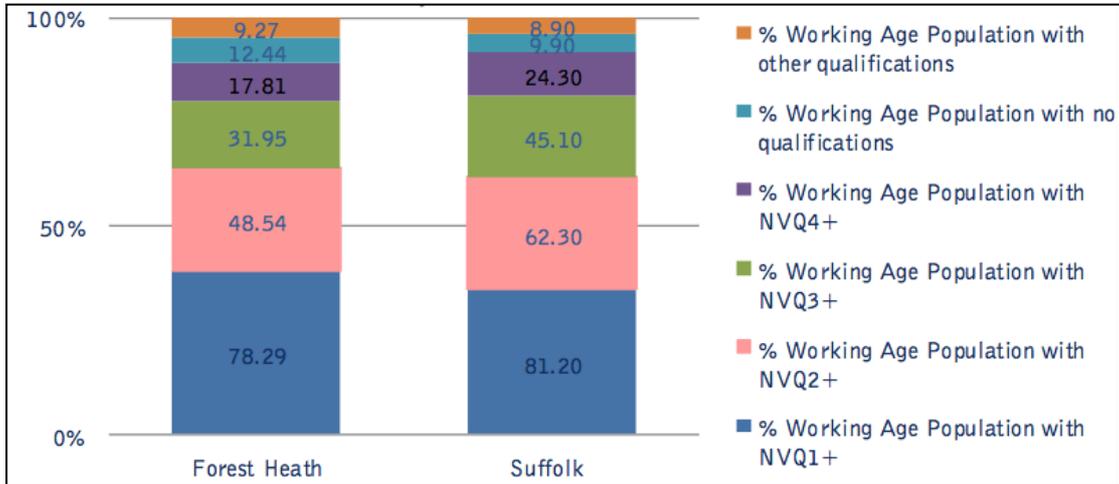


Figure 3.22 Comparison of qualifications of the working populations in Forest Heath and Suffolk ⁷³

Economics & Employment

The employment rate for Forest Heath is slightly lower than for Suffolk or the East of England, but higher than that for England as a whole. The unemployment rate has fluctuated over the last few years more than for Suffolk or England as a whole (Figure 3.23) ⁷⁴.

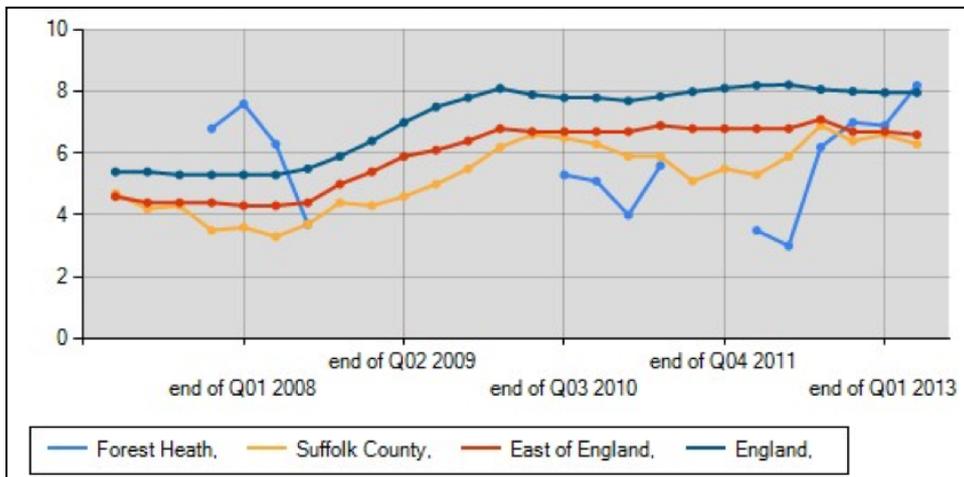


Figure 3.23 The unemployment rate for working age people (i.e. aged 15-64) ⁷⁵

⁷² Suffolk County Council (2010) Forest Heath District Profile

⁷³ Choose Suffolk (undated) Forest Heath Economic Profile 2010-11

⁷⁴ Suffolk Observatory Economy & Employment Theme Overview <http://www.suffolkobservatory.info> Date accessed: 11/12/13

⁷⁵ Suffolk Observatory Economy & Employment Theme Overview <http://www.suffolkobservatory.info> Date accessed: 11/12/13

The percentage of the Forest Heath working population employed in the banking, finance and insurance; transport and communications; distribution, hotels and restaurants; and construction industries is lower than in Suffolk or England as a whole. Forest Heath has a higher percentage of employees working in the manufacturing; public administration, education and health; and other service industries ⁷⁶ (Figure 3.24).

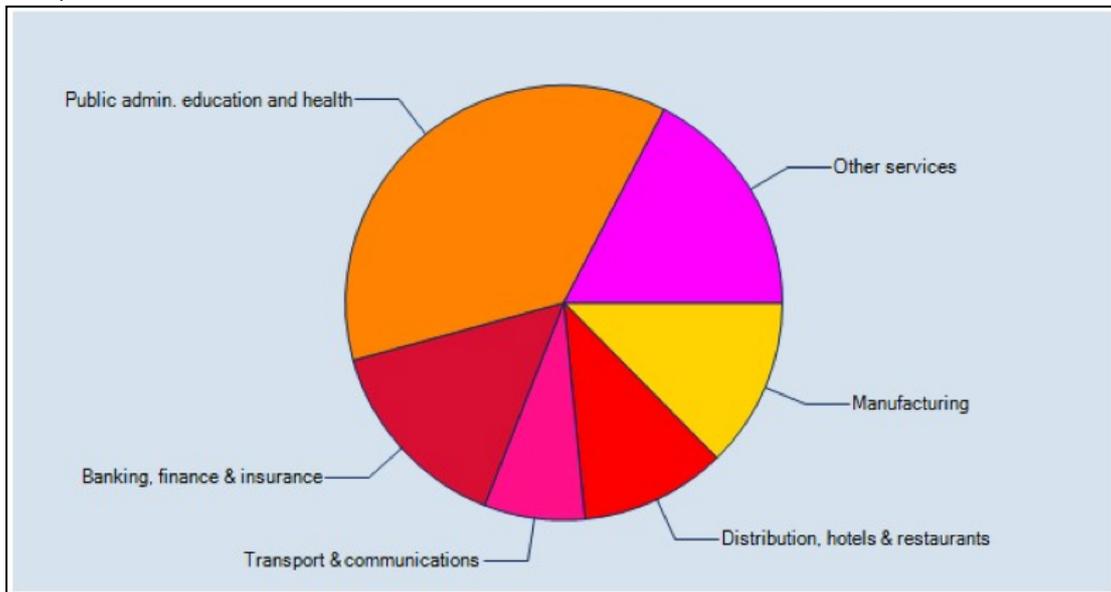


Figure 3.24 Employment in Forest Heath by industry (based on figures from 2013) ⁷⁷

Suffolk as a whole has 46% of businesses in the manual sector and 36% and 17% in the service, and professional/scientific sectors respectively. In comparison, Forest Heath has a greater proportion in the manual (47%) and service (41%) sectors and less in the professional/scientific sector (13%) ⁷⁸.

The median annual earnings of people who work in Forest Heath is lower than those in Suffolk as a whole, the East of England or England as a whole; and this has been the case for all of the years for which there is data since 2006 ⁷⁹.

The majority of jobs in Suffolk are centered in and around the three major towns of Ipswich, Bury St Edmunds and Lowestoft, none of which are in Forest Heath. Employers in rural areas tend to be smaller and therefore can be more vulnerable to recession. The limited availability of broadband and speed of internet connections can also restrict growth in the rural economy, as those businesses in rural areas are less able to spread their customer base further than their immediate area through the use of online service or e-commerce, and are less able to compete with those businesses in more urban areas ⁸⁰.

The business formation rate, a measure of entrepreneurship, is very similar in Forest Heath to Suffolk as a whole. However, based on the new businesses that registered in 2004, the survival rates of new businesses in Forest Heath is below the county average

⁷⁶ <http://www.suffolkobservatory.info> Date accessed: 11/12/13

⁷⁷ <http://www.suffolkobservatory.info> Date accessed: 11/12/13

⁷⁸ Suffolk County Council (2011) The State of Suffolk: Economy & Employment

⁷⁹ <http://www.suffolkobservatory.info> Date accessed: 11/12/13

⁸⁰ Suffolk County Council (2011) The State of Suffolk: Economy & Employment

for each year of the first 5 years of trading ⁸¹.

Housing

Forest Heath contains an estimated 28,510 dwellings (based on 2011 figures), which is the lowest of all of the 7 Suffolk districts and boroughs ⁸². The average size of a household in Forest Heath is the same as in Suffolk as a whole, at 2.3 people, but marginally lower than for the East of England or England as a whole, at 2.4 people ⁸³.

The (now revoked) East of England Regional Spatial Strategy required Forest Heath District Council to build 6,400 new homes between 2001 and 2021. This equates to 320 homes pa, but this target has changed as a result of the actual rate of delivery ⁸⁴.

Following revocation of this strategy, the Strategic Housing Market Assessment (SHMA) for the Cambridge sub-region was ‘expanded into providing an objective assessment of need for all homes, as well as for affordable homes.’⁸⁵ The SHMA Technical Report and joint Memorandum of Co-operation form the basis for housing delivery in the plan period across all of the participating Authorities within the sub-region, (Cambridge City, East Cambridgeshire, Fenland, Huntingdonshire, South Cambridgeshire, Forest Heath, St Edmundsbury & Peterborough). The Technical Report indicates a need for 7,000 dwellings in Forest Heath the period 2011 to 2031, which equates to 350 per annum.

Figure 3.25 below shows how the actual completions (AMR) have varied over the years, but have generally accorded with the annual requirement for the last eight years.

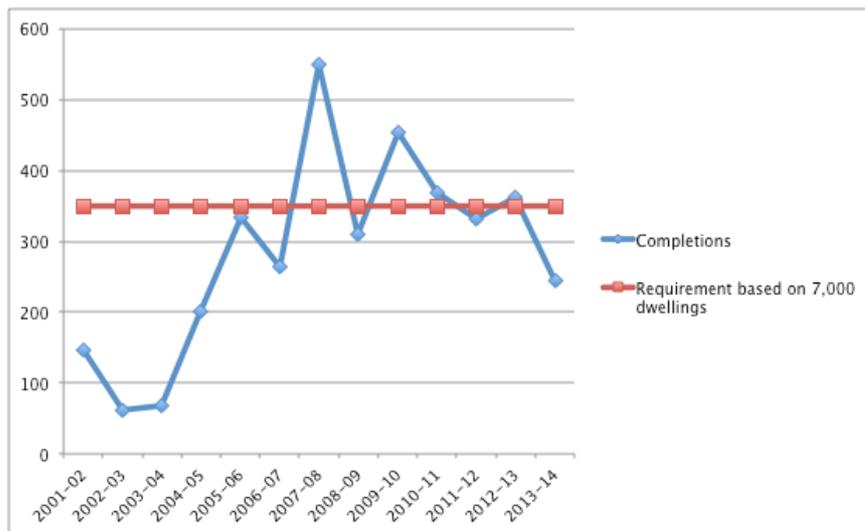


Figure 3.25 Housing completions in Forest Heath based on figures from the Annual Monitoring Report (AMR) ⁸⁶ and 5-year supply reports ⁸⁷

⁸¹ Choose Suffolk (undated) Forest Heath Economic Profile 2010-11

⁸² Suffolk County Council (undated) The State of West Suffolk

⁸³ 2011 Census Data <http://www.suffolkobservatory.info> Date accessed: 11/12/13

⁸⁴ Analytics Cambridge (2012) Forest Heath: Recent trends in the economy, population and housing

⁸⁵ <http://www.cambridgeshireinsight.org.uk/housing/shma>
Date accessed: 1/5/14

⁸⁶ Analytics Cambridge (2012) Forest Heath: Recent trends in the economy, population and housing

⁸⁷ West Suffolk Councils, Five year supply reports, accessed at http://www.westsuffolk.gov.uk/planning/Planning_Policies/supportinginformation.cfm Date accessed: 24/02/15

Table 3.3 shows the distribution of tenures within Forest Heath, Suffolk, the East of England and England as a whole. Forest Heath does not have any Local Authority dwellings due to the Large Scale Voluntary Transfer (LSVT) in 2004. While Forest Heath has a smaller proportion of social housing compared to England as a whole, (Local Authority plus Housing Association dwellings), it is comparable with the proportions for Suffolk and the East of England⁸⁸.

Table 3.3 The distribution of housing stock by tenure ⁸⁹

	Owned outright	Owned with a mortgage or loan	Shared ownership	Social Housing	Private Rented	Living rent free
Forest Heath	27.2	28.6	1.4	14.7	24.4	3.6
Suffolk County	35.7	31.5	0.7	14.8	15.6	1.6
East of England	32.9	34.7	0.7	15.7	14.7	1.3
England	30.6	32.8	0.8	17.7	16.8	1.3

Forest Heath has a lower than average proportion of owner occupied properties and a higher proportion of private tenanted properties compared to other districts in the area. The main reason for this is the presence of military bases in Forest Heath and the tendency of military personnel to rent properties rather than buy them ⁹⁰.

The US proposals announced in January 2015 to withdraw from Mildenhall and increase activities at Lakenheath are likely to cause significant changes in housing need and demand.

⁸⁸ Suffolk County Council (undated) The State of West Suffolk

⁸⁹ 2011 Census Data <http://www.suffolkobservatory.info> Date accessed: 13/12/13

⁹⁰ 2011 Census Data <http://www.suffolkobservatory.info> Date accessed: 13/12/13

Council tax bandings are based on property values in 1991, so does not give a reliable view of the current value of properties. However, a breakdown of the housing stock by council tax bands does give a good indication of the types and sizes of properties in the area. In Forest Heath (based on 2012 data) there is a greater proportion of smaller properties than in Suffolk or the East of England, but lower than in England as a whole; and fewer larger houses than any of the larger geographical regions (Figure 3.26) ⁹¹.

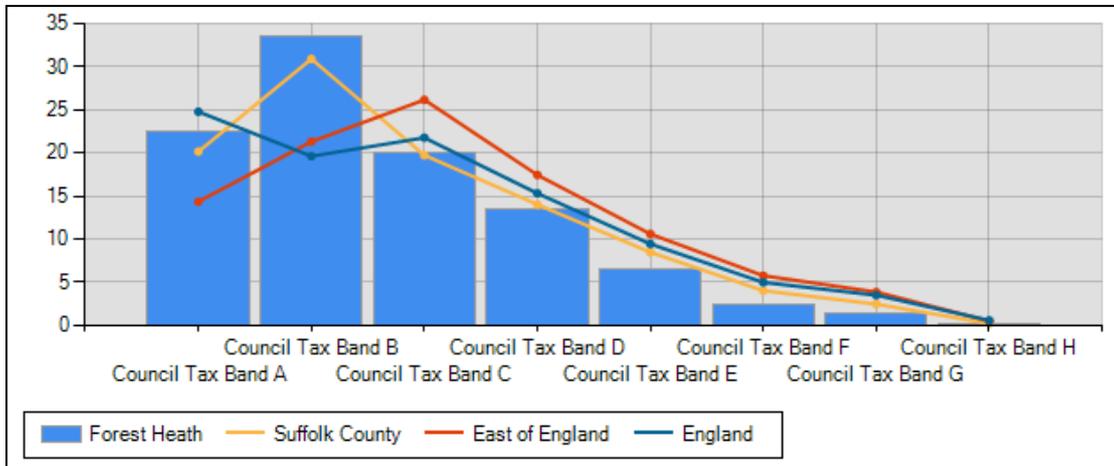


Figure 3.26 Housing stock in Forest Heath separated by council tax band (based on figures from 2012) ⁹²

Forest Heath has lower average house prices than the East of England and England as a whole, and has done consistently since 2001 (2012 data). The estimated mean house price in Forest Heath was £167,500 in 2011, compared to £231,000 across the East of England ⁹³. This trend for lower house prices continues when considering the lower quartile house prices, with the average prices in Forest Heath being consistently lower than Suffolk and the East of England.

It is normal for up to 3% of dwellings to be vacant. The figure for vacant dwellings in Forest Heath is 3.6%, and the figures for long term vacant dwellings (those that have been vacant for more than a year) are 1.4% for Forest Heath which is slightly higher than for Suffolk, the East of England, or England as a whole ⁹⁴.

Forest Heath has a relatively low number of second homes, 0.6% of the total housing stock ⁹⁵.

⁹¹ <http://www.suffolkobservatory.info> Date accessed: 5/12/13

⁹² <http://www.suffolkobservatory.info> Date accessed: 5/12/13

⁹³ Analytics Cambridge (2012) Forest Heath: Recent trends in the economy, population and housing

⁹⁴ Suffolk County Council (undated) The State of West Suffolk

⁹⁵ Suffolk County Council (undated) The State of West Suffolk

Affordable housing

The ratio of lower quartile house prices to lower quartile income is a measure of housing. The Department of Communities and Local Government have defined an acceptable affordable house price to income ratio to be 3.5⁹⁶. Forest Heath's house price to income ratio has risen from 3.96 to 7.79 over the period 1997 to 2012 (Figure 3.27). This increase has followed the general trend in Suffolk, the East of England and England as a whole, but is worse than any of them⁹⁷.

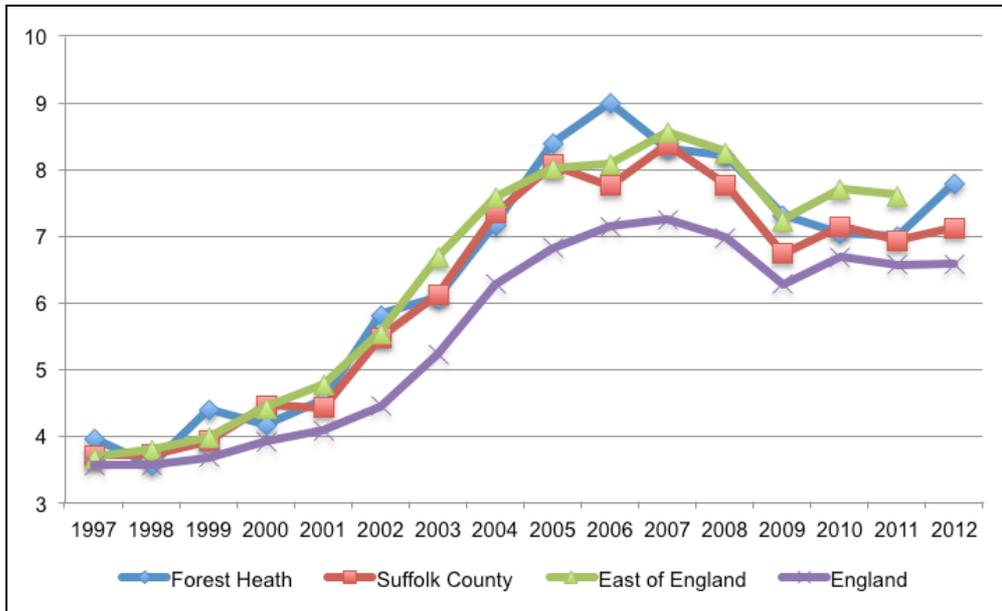


Figure 3.27 Ratio of lower quartile incomes to lower quartile house prices⁹⁸

⁹⁶ Cambridgeshire County Council (2012) Forest Heath Profile

⁹⁷ Analytics Cambridge (2012) Forest Heath: Recent trends in the economy, population and housing

⁹⁸ 2011 Census Data <http://www.suffolkobservatory.info> Date accessed: 13/12/13

Forest Heath District Council built an average of 239 affordable houses pa over a 3-year period (2006-2009), which placed them 15th out of all districts in England.⁹⁹ However, since 2009/10 the number of affordable homes being completed in Forest Heath has been falling, possibly due to the economic recession (Figure 3.28)¹⁰⁰.

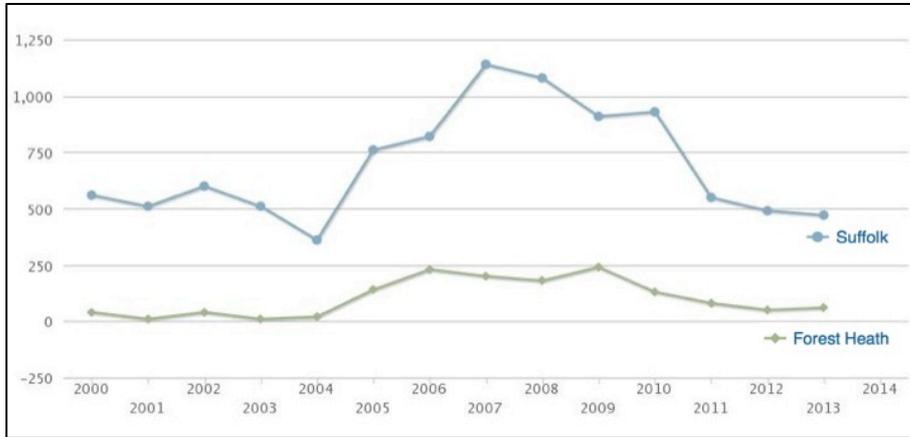


Figure 3.28 Comparison of the number of affordable homes built in Forest Heath and Suffolk¹⁰¹

There is an on-going demand for affordable housing in the district, and the number of households that are on the housing needs register has increased since 2001 to 2010, with a peak in 2006 and 2007, with 1,325 households on the register in 2010¹⁰².

Crime & Community Safety

The overall level of crime in Forest Heath is relatively low, with a crime rate per 1000 people of 68 in 2010/11, compared to the national average of 76. This figure has also decreased by 16% since 2007/8, and is also decreasing across Suffolk as a whole.

According to Suffolk Constabulary’s telephone survey in 2010/11, people in Forest Heath had the highest levels of concern in Suffolk regarding the issues of drug taking and dealing, rubbish and litter, and people being rowdy/drunken in public places¹⁰³. However, this concern is relative, as the national British Crime Survey found that people in Suffolk have the lowest level of concern about antisocial behavior (ASB)¹⁰⁴, and Forest Heath was the district that had the least recorded ASB offences in Suffolk. ASB is defined as any aggressive, intimidating or destructive activity that damages or destroys another person’s quality of life¹⁰⁵.

On current trends, recorded crime will continue to decline in both Forest Heath and Suffolk¹⁰⁶.

⁹⁹ Suffolk County Council (2011) The State of Suffolk: Housing

¹⁰⁰ http://england.shelter.org.uk/professional_resources/housing_databank Date accessed 12/12/14

¹⁰¹ *ibid.*

¹⁰² Analytics Cambridge (2012) Forest Heath: Recent trends in the economy, population and housing

¹⁰³ Suffolk County Council (2011) The State of Suffolk: Community Safety

¹⁰⁴ Suffolk Police Authority (2011) Keeping Suffolk Safe: Suffolk Police Authority Performance Report 2010/11

¹⁰⁵ Suffolk County Council (2011) The State of Suffolk: Community Safety

¹⁰⁶ Suffolk County Council (2011) The State of Suffolk: Community Safety

3.9 Soil

Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
Safeguarding our Soils: A Strategy for England DEFRA 2009	Improve the quality of England's soils and safeguard their ability to provide essential services for future generations.	Not to degrade soil (especially Best and Most Versatile Land [BMV]). Protect and manage soil as a resource

Soil type

According to the Landis Soilscales online portal¹⁰⁷, the majority of the southern part of the district consists of “freely draining slight acid but base-rich soils”, interspersed with “shallow lime-rich soils over chalk or limestone” and pockets of “freely draining lime-rich loamy soils”. The central part of the district is predominantly “freely draining slightly acid soils” with the northeast corner comprising “loamy and sand soils with naturally high groundwater and a peaty surface”.

The other principle source of data on soil types at a strategic scale is Soil Survey of England and Wales (1984). This shows there to be 6 broad categories of soil within the district:

Table 3.4. Soil types present within Forest Heath District, from Soil Survey of England and Wales (1984)

Soil type ref	Soil type	Characteristics	Area of district
571	Typical argylic brown earths	Well drained	Newmarket area
551	Typical brown sands	Well drained	Central area of district south of Mildenhall
521	Typical brown calcerous sands	Well drained	Small area NE of Mildenhall
343	Brown redzinas	Well drained	Eriswell/Lakenheath
861	Typical humic-sandy gley soils	Prone to wind erosion, well drained where water table is artificially lowered	Mildenhall Fen
1024	Earthy eutro-amorphous peat soils	Waterlogged where undrained	Adjacent to (floodplains of) River Lark

Agricultural potential

The quality of the soil for agriculture and its potential for agricultural productivity is indicated by the Agricultural Land Classification (ALC). Data based on a strategic scale application of the MAFF 1988 Agricultural Land Classification of England and Wales study for the District is displayed overleaf.

¹⁰⁷ Landis.org.uk/soilscales

It can be seen that the best agricultural land (Grades 1 and 2) is on the floodplain in the north-west of the district, with large swathes of Grades 4 and 5 in the central area. The Grade 2 and 3 in the south and west of the district provides good (potential) agricultural productivity.

It can be seen from the pie chart that much of the land in the district is grade 4 or 5, or non-agricultural.

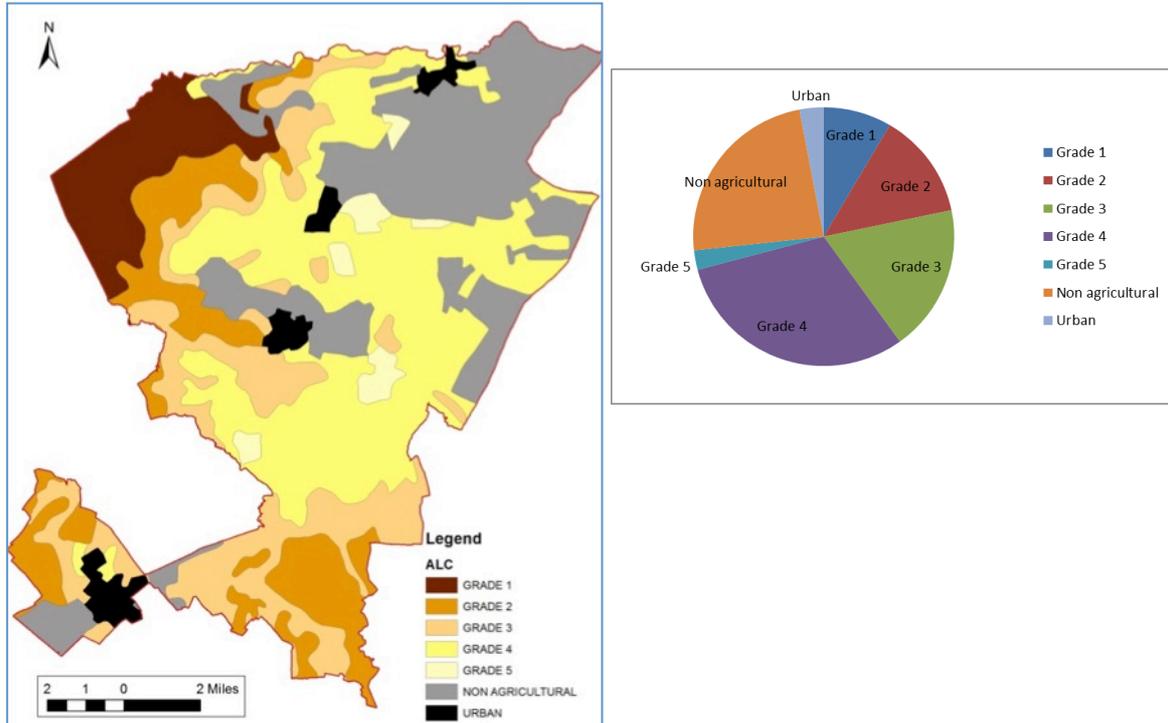


Figure 3.29. Agricultural Land Quality in Forest Heath: distribution and proportions, based on MAFF 1988 methodology This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100020449, 2014

Contaminated Land

According to the 2013 West Suffolk Contaminated Land Strategy¹⁰⁸, the area has little in the way of known contaminated land issues. Data regarding specific locations of identified contaminated land under the Environmental Protection Act (EPA) 1990 will be referred to on the Council's public register as part of the process to secure remediation. To date (April 2015), no land has been determined as contaminated. In its strategy the council has outlined an approach for dealing with any occurrences of contaminated land.

¹⁰⁸ West Suffolk, 2013, Contaminated Land Strategy, <http://www.westsuffolk.gov.uk/environment/upload/WS-contaminated-land-strategy.pdf>

3.10 Transport

Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
Planning Practice Guidance	Reduce emissions Reduce congestion Reduce the need to travel	Local Plan to facilitate a reduction in the need to travel or is compatible with low or no emission modes of travel

Transport infrastructure

There are no motorways within the district; the nearest is the M11 from west of Cambridge to London. The main roads through the district are the A11 and A14 providing good connections between Newmarket and Mildenhall. Brandon is connected (to Mildenhall) by the A1065. The Western Suffolk Employment Land Review recommended that improvements be made to this infrastructure.¹⁰⁹

Congestion in the District is generally low, with more significant build-ups recorded in Newmarket¹¹⁰, as well as Brandon, Mildenhall, Lakenhall and the A14 junction at Higham.

The only train stations in the District are Newmarket and Lakenheath (weekends only). Brandon station is on the district boundary. Kennet, Thetford, Ely and Bury St Edmunds are just outside. Newmarket to London is approximately 80 minutes by train, changing at Cambridge.

Cycle routes pass through the District only at Newmarket. The National Cycle Route (NCR) 51 (long distance cycle route linking Oxford to Ipswich), grazes the southern extent of the District, but does not link to the centre or northern extent, or settlements such as Mildenhall¹¹¹. The Jockey's Trail is a 28-mile circular route around Newmarket¹¹², but is largely outside of Forest Heath District.

Newmarket is currently linked by bus services to Red Lodge and Mildenhall by service 16 – every hour in the day. Other local services include Lakenheath to Beck Row (for RAF Mildenhall) and Red Lodge (number 956). Other local centres such as Bury St Edmunds, Cambridge, and Ipswich have bus connections to the district.¹¹³ Mildenhall also has a coach station with National Express connections to Stanstead Airport and other local centres.

Car ownership

Car ownership in Forest Heath is above the average for Suffolk, the East of England and England and Wales. In 2011, 15.8% of households had no car, compared to 25.8% nationally. 45.5% had one car (42.2% nationally), 30.4% had two cars (24.7% nationally), 6.1% had three cars (5.5% nationally) and 2.2% had four or more cars

¹⁰⁹ Taken from Forest Heath Core Strategy, Examination in Public Topic 2 Employment (p.6).

¹¹⁰ 2012 State of Suffolk Report, Figure 4.

¹¹¹

<http://www.suffolk.gov.uk/assets/suffolk.gov.uk/Environment%20and%20Transport/Roads%20and%20Pavements/2008%2001%2003%20Get%20Cycling%20Suffolk.pdf>

¹¹² <http://visitely.eastcambs.gov.uk/sites/default/files/Jockey%20Trail%20EET.pdf>

¹¹³ Information from Suffolkonboard.com, December 2013

(1.9% nationally)¹¹⁴.

Over the period 2001 to 2011 car ownership in Forest Heath has increased slightly by 1.3%, with the greatest increases being in those households that have access to 3 or more cars.

Journeys to work

According to the 2011 census, 55% of people in Forest Heath drive to work (either as the driver, or passenger in a car or van), compared to the average for England of 40%, and Suffolk of 47%. The proportions of those who travel to work on foot or by bicycle are relatively similar across Forest Heath, Suffolk and England as a whole, but only 1.9% in Forest Heath use public transport to get to work (compared to 3.6% in Suffolk and 11% in England ¹¹⁵).

3.11 Waste

Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
Joint Municipal Waste Management Strategy	Encourage waste reduction Increase recycling, composting	Local plan policies to encourage waste reduction and non-landfill waste disposal options

Waste Policy

The Forest Heath District Council Core Strategy (adopted in 2010) states:

Spatial Objective ENV 6:

To reduce the amount of waste going to landfill and to ensure higher levels of waste recycling and recovery of value from waste.

The Suffolk Waste Partnership (SWP) (a strategic partnership of the county, district and borough councils) has prepared the Joint Municipal Waste Management Strategy (JMWMS) 2003-2020 (as updated in 2013). Its vision is:

'The Strategy seeks to minimise levels of waste generated and to manage waste in ways that are environmentally, economically and socially sustainable.

In delivering the Strategy, the Local Authorities will embrace the principles outlined in the National Waste Strategy and aim to recycle or compost at least 60% of municipal waste.'

Landfill/historic landfill sites

There is one household waste facility in Forest Heath. This is located at Brandon Road, Mildenhall. There is also a recycling centre in Newmarket operated by the Open Door charity. There are nearby household waste facilities in Bury St Edmunds, and Thetford.

There are 3 existing landfill facilities identified from the Environment Agency's 'What's in My Back Yard' interactive mapping (as of December 2013), in Forest Heath District.

¹¹⁴ 2011 Census Data <http://www.suffolkobservatory.info> Date accessed: 20/12/13

¹¹⁵ 2011 Census Data <http://www.ons.gov.uk/ons/index.html> Date accessed: 20/12/13

These are located at postcodes:

- CB8 7PZ (Kentford) – A4: Household, Commercial & Industrial Waste Landfill
- CB8 7QD (Kennett) – A6: Landfill taking other wastes
- IP28 8LQ (Redlodge Warren) – A6: Landfill taking other wastes.

Additionally, there are 25 historic landfill sites predominantly located in the south of the District. Of these, 11 are identified as being pre the 1974 Control of Pollution Act (COPA) and are likely to have been used for a range of different waste types. The COPA marked a major step-change in UK waste law, and the implications are that the pre-1974 'dilute and disperse' landfill sites may be associated with potential groundwater pollution of local aquifers, and possible landfill gas issues.

These historic sites are shown on the map below:

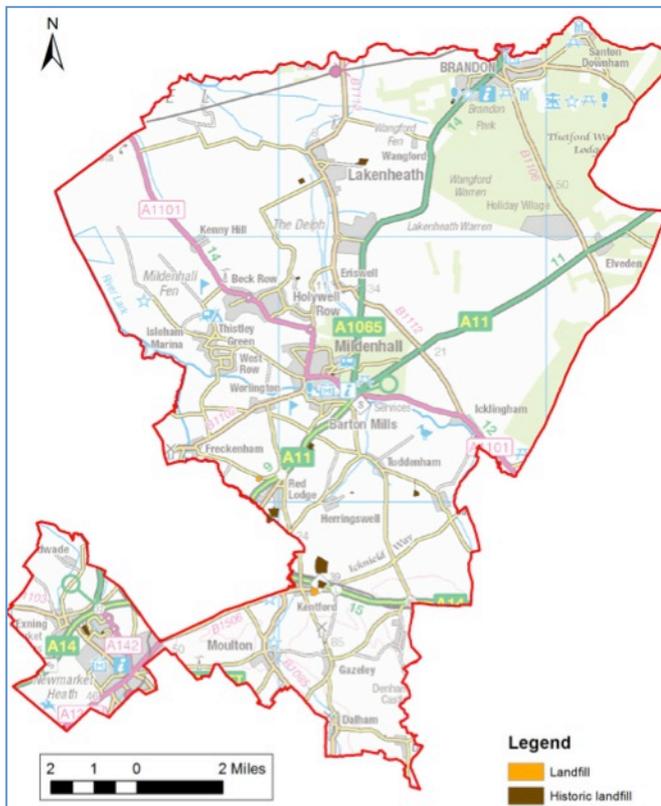


Figure 3.30. Landfill and Historic Landfill Sites in Forest Heath This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100020449, 2014

No new landfill capacity was approved during the latest period for which information is available (April 2011-March 2012)¹¹⁶.

Recycling – household and commercial – progress against targets

The annual amount of Suffolk's household waste that is re-used, recycled or composted has increased from 26.2% in 2003 to 52.4% in 2012. In Forest Heath, for the financial year 2012-13, 47% of household waste was sent for recycling reuse and

¹¹⁶ Suffolk County Council (2013) Waste Policies Monitoring Report 2012

composting. This has remained at a stable level for the past four years.¹¹⁷ These are achieved through a combination of kerbside collections and Household Waste Recycling Centres (HWRCs), as well as waste minimisation education campaigns and initiatives such as distribution of home composters.¹¹⁸

This is typical for districts across England¹¹⁹ as shown on the figure below.

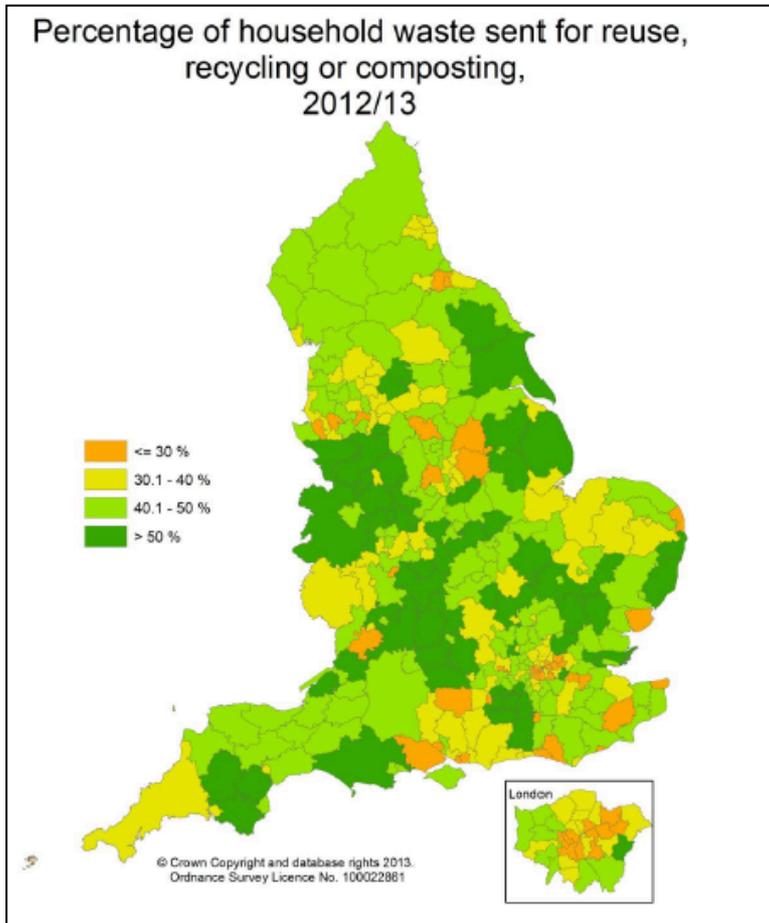


Figure 3.31. Percentage of waste for reuse, recycling, composting in England, 2012/13, from Defra, 2013, *Statistics on waste managed by local authorities in England in 2012/13*, accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/255610/Statistics_Notice1.pdf, 5th December 2013

According to the 2012/3 Local Authority waste statistics¹²⁰, only 10% of non-household waste in Forest Heath was sent to recycling. However, as in many districts, less than 10% of the total waste collected by the Local Authority was non-domestic .

¹¹⁷ Suffolk Waste Partnership, 2013, Joint Municipal Waste Management Strategy

¹¹⁸ *Ibid.*

¹¹⁹ Defra, 2013, Statistics on waste managed by local authorities in England https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/255610/Statistics_Notice1.pdf

¹²⁰ Defra, 2013, *Statistics on waste managed by local authorities in England in 2012/13*, accessed at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/255610/Statistics_Notice1.pdf, 5th December 2013

3.12 Water

Strategy/ Plan/ Programme	Policy Aims	Implications for Local Plan
Water Environment (Water Framework Directive) (England and Wales) 2003	Transposition of Water Framework Directive into English Law Providing protection for all inland and coastal water bodies	Must not compromise water quality and ecological health of water bodies
Floods and Water Management Act (2010)	Appropriate management of flood risk	Policies to contribute to appropriate flood and water management objectives, and not exacerbate water resource constraints
Water for People and the Environment: Water Resources strategy regional action plan for Anglian Region (2009)	Water environment to be restored, protected and improved so that habitats and species can better adapt to climate change	
Great Ouse Catchment Flood Management Plan (CFMP), summary report, 2011	CFMP: Sub area 1 (the east of the district): Areas of low to moderate flood risk where we are generally managing existing flood risk effectively. Sub area 5 (inc Newmarket): flood risk is expected to increase. Further investigation needed. Sub area 10 (the Fens): short term continuation of flood management, long term, look to reduce consequences of flooding.	Avoid exacerbating flood risk or increasing the numbers of people in the District at flood risk. Availability of water for abstraction is limited in the region
Cam and Ely Ouse Catchment Licensing Strategy, 2013	Ensure abstraction is controlled and appropriate	
Suffolk Local Flood Risk Management Strategy, December 2012	Main principles of flood management to be: <ul style="list-style-type: none"> • Community focus and partnership working. • A catchment and coastal cell based approach. Sustainability. • Proportionate, risk-based approaches. • Multiple benefits. • Beneficiaries should be allowed and encouraged to invest in local risk management. 	Local plan to ensure development does not exacerbate flood risk, result in 'un-safe' development and that it encourages realisation of multiple benefits.

Surface water catchments

The main surface water bodies in the district are:

- the River Lark, a navigable watercourse which passes east-west through Mildenhall. Its source is near Bury St Edmunds and it joins the Great Ouse between Ely and Littleport¹²¹.
- a number of drains in the north-west of the district (Mildenhall Fen) which feed the Little Ouse. Hydrologically, this area is administered by the Mildenhall, Lakenheath and Burnt Fen Internal Drainage Boards. The Little Ouse flows west to join the Great Ouse near Littleport.

Flood – rivers, sea, reservoir, surface water

Regarding flooding from rivers, some 6,670 Ha of the district lies within Flood Zone 3 (at risk of flooding once in 100 years or more often), with 7,314 Ha in Flood Zone 2, (at risk of flooding once in 1000 years or more often)¹²². This amounts to over 17% and over 19% of the surface area of the district respectively.



Figure 3.32 Flood Zone 3 within Forest Heath This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100020449, 2014

Areas within Flood Zones 3 and 2 are concentrated within the sparsely populated area east of Lakenheath (floodplain of the Little Ouse), and a more densely populated area within and to the south and east of Mildenhall (See Figure 3.32) (floodplain of the River Lark).

Newmarket is identified within the Strategic Flood Risk Assessment (SFRA) Level 2¹²³ as having 2,800 properties at risk from surface water flooding, placing it 119th in the

¹²¹ <http://www.cawa.co.uk/lark.html>

¹²² Based on EA Floodzones, dated August 2013

¹²³ Hyder, 2012, Forest Heath Strategic Flood Risk Assessment, Level 2

country for this risk (with the top 77 receiving funding for measures). Beyond this, there are a further approximately 800 properties identified as being at risk from surface water flooding in towns in the district.

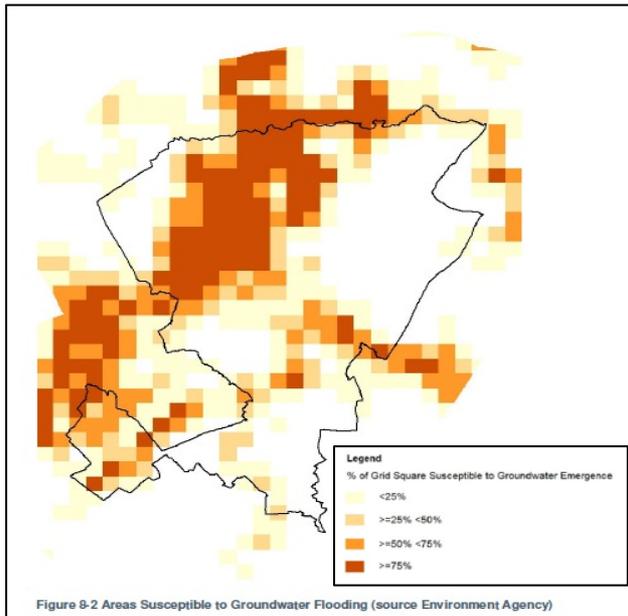


Figure 3.33 Groundwater flood risk in Forest Heath

The SFRA Level 2 also identifies much of the district as having a risk of groundwater flooding (see strategic scale map, Figure 3.33 taken from the SFRA level 2, above).

Surface Water Quality

The Water Cycle Study Level 2¹²⁴ identifies the Twelve Foot Drain (see Figure 3.33) as achieving Good Ecological Potential (GEP) and “the majority” of the other water courses within the district achieving Moderate Ecological Potential. The barriers to achieving GEP are identified in the Water Cycle Study Level 2 as:

- Excessive phosphate concentrations;
- Low fish and invertebrate population levels;
- Low river flows / poor flow dynamics;
- Failure to adequately mitigate the impacts of modification (which is preventing the majority of the ‘Heavily Modified Water Bodies’ in the District achieving GEP).

These issues predominantly result from discharges from Waste Water Treatment Works, and agricultural runoff.

¹²⁴ Hyder 2012 Forest Heath Water Cycle Study Level 2

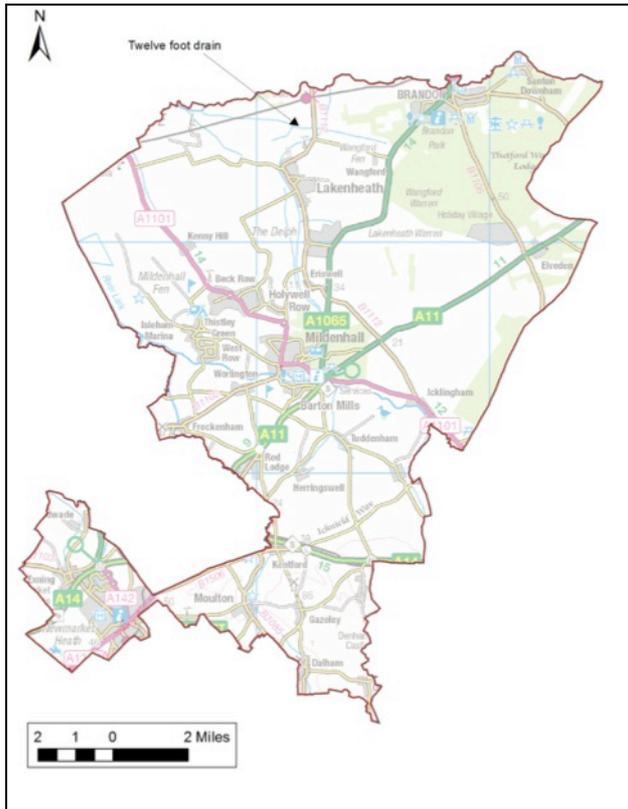


Figure 3.34 Location of Twelve Foot Drain

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Groundwater Resources

The District is almost entirely underlain by a Principal Bedrock Aquifer, which is mostly considered to be of 'High' or 'Intermediate' vulnerability.

The bedrock underlying the district comprises two types:

- The north-west of the district is underlain by the Grey Chalk subgroup – clayey chalk.
- The south-east of the district is underlain by the White Chalk subgroup – chalk with flint. The boundary between the two runs approximately parallel to, but north-west of the A11.¹²⁵

These chalk aquifers are important on a sub-regional scale, also exploited by authorities in Cambridgeshire and Norfolk as well as Suffolk.

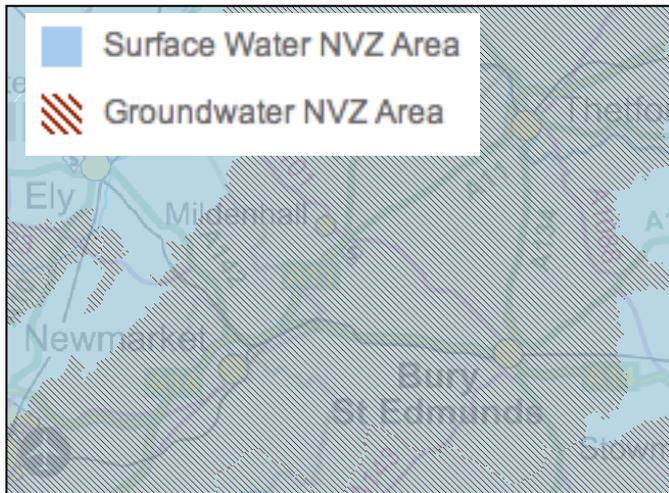
Groundwater Quality

The entire District lies within a Nitrate Vulnerable Zone for either surface water or groundwater (see figure below). Much of the east of the district is designated as a Source Protection Zone¹²⁶ (see figure below), indicating the vulnerability of this drinking water aquifer to contamination. Additionally this area is a Drinking Water Protected

¹²⁵ British Geological Survey, 2008, Bedrock Geology UK South

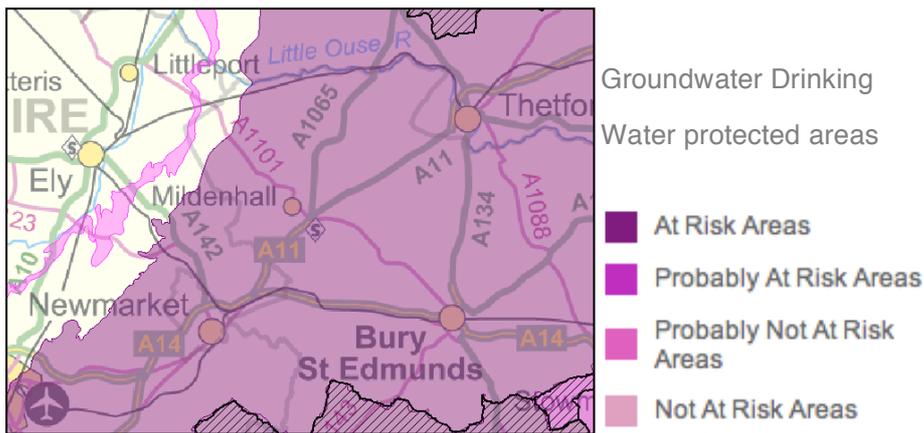
¹²⁶ Environment Agency, What's in My Backyard, 2013

Area¹²⁷, indicating that extra treatment may be required before the water can be used in public drinking water supply (see figure below).



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Figure 3.35 Nitrate Vulnerable Zones



© Environment Agency copyright and database rights 2013.

Figure 3.36 Groundwater Drinking Water Protected Areas

¹²⁷ *Ibid.*

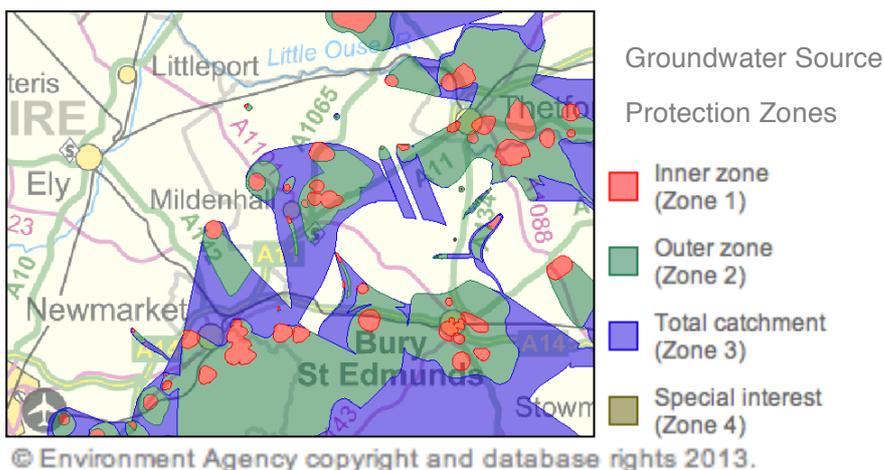


Figure 3.37 Groundwater Source Protection Zones

Water as a resource – water stress in Eastern England

The district receives low rainfall by national standards, with just over half the UK average falling in an average year (Newmarket (Brooms Barn) 631.8mm/year, UK 1154mm/year 1981-2010 average)¹²⁸.

Anglian Water are the water and sewerage operator for Forest Heath District, and their resources have been rated by the Environment Agency as having a stress level of “Serious”, the highest level¹²⁹.

Anglian Water produces a Water Resource Management Plan every five years. This ensures that water is used sustainably across the region, to support population growth and economic development as well as climate change. The plan identifies potential new water sources and opportunities for efficiency and the latest iteration is in effect from April 2015.

The 2014 Anglian Water Drought Management Plan (Appendix 1) identifies Forest Heath as being within Water Resource Zone for Chevely, Ely, Newmarket, Sudbury and West Suffolk. Forest Heath District is within the Ely, Newmarket and West Suffolk Sub-Zones.¹³⁰

The document also notes that:

Environmental concerns exist over the impact of abstractions at a small number of conservation sites, mostly on the edge of the Chalk outcrop and on the impact of abstractions on the River Lark and Chippenham Fen in the Ely and Newmarket RZs. These are being investigated as part of the AMP5 NEP programme.

Many of the chalk groundwater sources contain significant nitrate levels and are subject to treatment or blending arrangements.

These zones includes five drought vulnerable groundwater sources.

(p.31)

¹²⁸ Met Office 1981-2010 averages table, accessed December 2013, metoffice.gov.uk

¹²⁹ Environment Agency, 2013, Water Stressed Areas – Final Classification

¹³⁰ Anglian Water (2014) Drought Plan Appendix 1 <http://www.anglianwater.co.uk/environment/our-commitment/our-plans/drought-plan.aspx>

Catchment Abstraction Management Plan

Forest Heath District is covered by the Cam and Ely Ouse Catchment Abstraction Management Plan (see below):

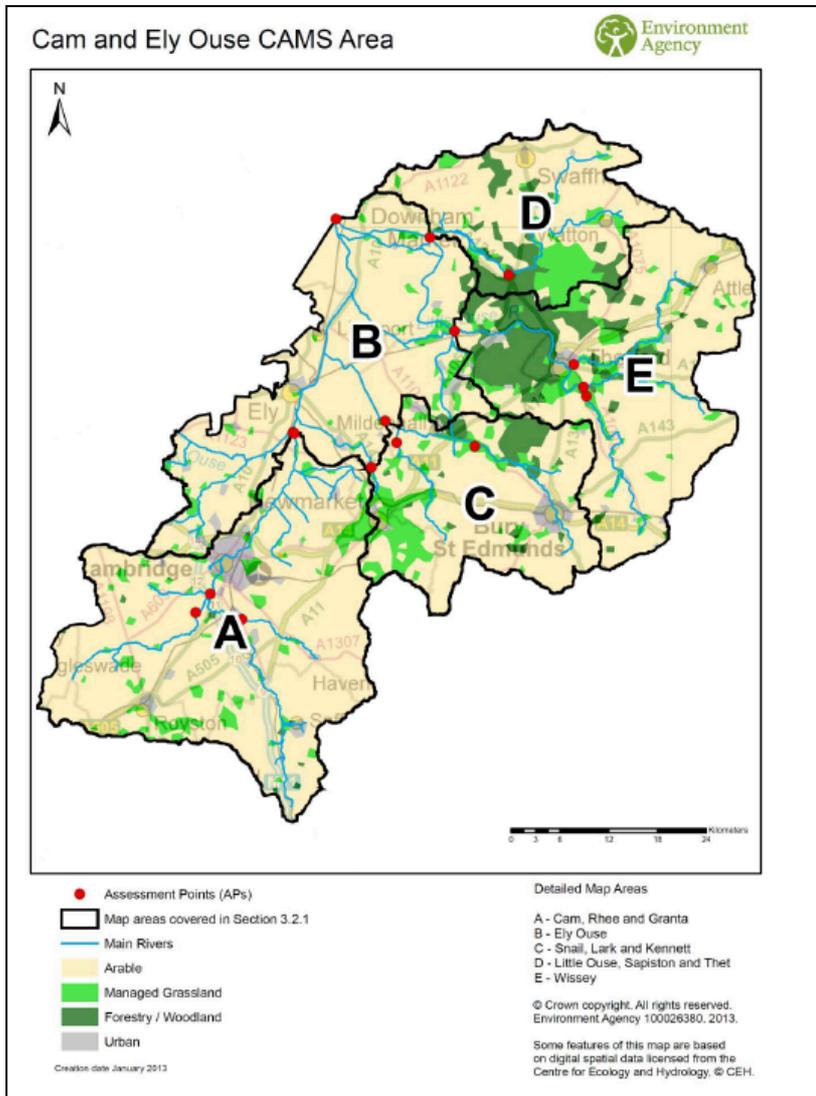


Figure 3.37 Cam and Ely Ouse CAMS Area

The District includes Area C, the Snail, Lark and Kennett sub-area. This sub-area is rated as “not having water available for licensing” during periods of moderate flows and below (Q50 – the flow which is exceeded 50% of the time), and “restricted water available for licensing” at high flows (Q30 – the flow exceeded 30% of the time).¹³¹

The Environment Agency Abstraction Strategy also reports that groundwater is not available for abstraction in most of the Assessment area, although a small proportion of Forest Heath District does have groundwater availability. The resource reliability assessment classifies the north of Forest Heath District as having a consumptive

¹³¹ Environment Agency, 2013, Cam and Ely Ouse Abstraction Licensing Strategy http://a0768b4a8a31e106d8b0-50dc802554eb38a24458b98ff72d550b.r19.cf3.rackcdn.com/LIT7706_89dabb.pdf

resource available at least 30% of the time (implied less than 50%), with the south of the district classified as having a consumptive resource available less than 30% of the time.

4. Sustainability Issues and Likely Evolution without the Plan

4.1 Sustainability Issues

The assessments of the potential for identified potential sustainability issues to cause detriment to the wellbeing, economic or environmental sustainability of Forest Heath have been based on issues identified in the 2010 Scoping Report. The Johns Associates/Levett-Therivel project team reviewed these against the latest available data and for relevance to the Local Plan and removed those judged not relevant, or where data no longer provided evidence of a problem. The team also reviewed the updated baseline to identify any further issues not evidenced in 2010.

The rankings of low, medium and high potential to cause detriment are judgements based on the available evidence. Where there is no current evidence of a pressing, conspicuously bad or worsening, problem we have tended to give lower scores, to help ensure that the most clearly urgent and important ones stand out. This does not mean that the others do not matter or do not need to be closely monitored or safeguarded by policy. These issues have been considered only where they depart from broader scale patterns (e.g. national), either because the issue is not evident at a larger scale or because the issue is more extreme within Forest Heath.

Table 4.1 Sustainability Issues derived from Updated Baseline (2014)

Key to categorisation of potential sustainability issues

Symbol	Meaning
●	Low potential to cause detriment to the wellbeing, economic or environmental sustainability of Forest Heath
●	Medium potential to cause detriment to the wellbeing, economic or environmental sustainability of Forest Heath
●	High potential to cause detriment to the wellbeing, economic or environmental sustainability of Forest Heath

Table 4.2: Summary of Revised Sustainability Issues – categorisation of potential issues

Social Issues			Environmental Issues			Economic Issues		
S.1	Housing	●	En.1	Noise	●	Ec.1	Unemployment	●
S.2	Crime	●	En.2	Pollution of air	●	Ec.2	Income distribution	●
S.3	Education	●	En.3	Pollution of water	●			
S.4	Health	●	En.4	Pollution of land	●			
S.5	Demographic Change	●	En.5	Flooding	●			
S.6	Sports and leisure	●	En.6	Water resources	●			
S.7	Social deprivation	●	En.7	Climate Change Resilience	●			
S.8	Child poverty	●	En.8	Renewable Energy	●			
			En.9	Biodiversity	●			
			En.10	Accessible Natural Greenspace	●			
			En.11	Character of Built Environment	●			
			En.12	Landscape Character	●			
			En.13	Transport	●			
			En.14	Waste	●			
			En.15	Historic Environment	●			

Table 4.3 Sustainability Issues identified from Revised Baseline

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Social Issues			
S.1	Housing	The ratio of lower quartile house prices to lower quartile incomes is more than twice that deemed to be affordable by government (3.5 times), and is higher than the ratios for Suffolk and England as a whole. There is a risk of exacerbating economic and social disparities as house price rises disadvantage those who have been unable to buy. Further housing provision is needed to ensure the population is housed affordably and appropriately.	
S.2	Crime	Forest Heath is a relatively safe place to live, with an overall level of crime lower than the national average and a decreasing trend in crime levels. However, compared to Suffolk as a whole, Forest Heath has the highest levels of concern regarding types of anti-social behaviour. There is an issue related to residents' perception of crime, however, the current trend is for ongoing decrease in actual crime levels.	
S.3	Education	The percentage of Year 13 school leavers that are Not in Employment, Education or Training (NEET) is substantially higher in Forest Heath (7%) than Suffolk as a whole (4.6%), with concentrations of NEET young people in Newmarket and Mildenhall, and working age skill levels in Forest Heath (12% with no qualifications [highest proportion in Suffolk]) are lower than those in Suffolk (10% with no qualifications), the region and England. Some of these apparent skills deficiencies may be due to different categorisations of the qualifications of American military personnel. Low education skill levels could contribute to unemployment, suppression of wages and other social issues such as deprivation.	

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Social Issues			
S.4	Health	<p>The baseline indicates a strong health performance across a number of indicators. However, there are a number of health statistics in which Forest Heath performs badly in comparison with England and the region.</p> <ul style="list-style-type: none"> • More adult smokers: 24.5% vs 21.2% England • More obese children: 21.1% vs 18.7% England • Higher incidence of malignant melanoma: 15% vs 13.1% England <p>The District also performed badly compared to the national average in terms of health care resourcing, preventative health care resourcing, and access to social care. This may be in part due to the resources for US service personnel not being accounted for.</p> <p>Although FH currently performs well on some health indicators, investment is needed in areas of weakness in order to avoid establishing new negative trends in health levels, especially when considered against the ongoing demographic trends, which could be causal factors.</p>	
S.5	Demographic change	<p>The population has grown over the last 10 years, and is estimated to continue growing. There is a net migration of people of working age to the district, resulting in a consistently low median age for the district.</p> <p>This has led to a high (2009) fertility rate: 74.8/1000 women against England and East of England (both 63.7/1000 women). This is possibly related to the large US forces presence.</p> <p>This continued growth in the population, particularly in the working age population creates pressures on the provision of services such as schools, health care and housing.</p>	
S.6	Sports and leisure	<p>The district has a shortfall in synthetic sports pitch provision requiring three to be constructed by 2021, along with 5 sports halls, a swimming pool and gym facilities.</p> <p>Lack of sports and leisure facilities may exacerbate prevalence of health and social issues.</p>	

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Social Issues			
S.7	Social deprivation	<p>Although Forest Heath displays lower overall deprivation levels than the national average, the trend over the period 2004 – 2010 is that the district is becoming relatively more deprived. Forest Heath has become more deprived relative to the rest of Suffolk (from 6th most deprived to 2nd most deprived 2004-2010) and the UK (rise of 54 places in the ranking of deprivation, 2004-2010).</p> <p>Within the district the areas with the greatest and least deprivation found very close to each other, with both extremes being found in both Newmarket and Mildenhall. This suggests a divided society within these towns.</p> <p>Trends towards deprivation and disparity may lead to exacerbation of health, social and economic issues.</p>	
S.8	Child poverty	<p>A substantially higher proportion of the children experiencing child poverty in the district (72%) are in lone parent families compared to the national average (66%).</p> <p>This implies that a particular social issue exists in the district that needs to be investigated further and addressed.</p>	

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Environmental Issues			
En.1	Noise	<p>The 1994 noise monitoring data shows that 17% of the District suffers from aircraft noise of 70 dB(A) or above emanating from the two large military airbases in the District. However, this data is now 20 years out-of-date and the proportion of the district subject to these noise levels (particularly given improved technology in terms of aircraft design, possible efforts to reduce flying at night, changes to activities at the base) is currently unknown.</p> <p>Assuming that a significant proportion of the district is still subject to these aircraft noise levels, chronic exposure to noise pollution can have a significant detrimental impact on the health and wellbeing of sensitive receptors. Allocation of any new development within areas covered by these noise contours may result in an increased number of people subject to health impacts as a result of noise pollution.</p> <p>Please note this is based on 1994 data.</p>	
En.2	Pollution of air	<p>Air Quality: There is one Air Quality Management Area (AQMA). This is in the centre of Newmarket, and has been an AQMA since 2009 due to elevated levels of nitrogen dioxide NO₂, primarily arising from traffic emissions. This is being tackled within an action plan but is nonetheless an existing issue. Progress on this is undocumented.</p> <p>Elevated levels of, and / or long-term exposure to, NO₂, can lead to and exacerbate respiratory conditions.</p>	
En.3	Pollution of water	<p>Ground water quality: a large proportion of the catchment has been designated by the Environment Agency as a Groundwater Source Protection Zone. This is where land is close to groundwater sources used for drinking water. These coincide with large areas designated as high or medium vulnerability aquifers.</p> <p>This is predominantly related to agricultural land management and as such has a low likelihood of impact from Planning outcomes.</p> <p>Surface water quality: The Water Cycle Study Level 2 identifies phosphate concentrations in surface water bodies as an issue preventing achievement of target status under the Water Framework Directive. These result from discharges from Waste Water Treatment Works (WWTW) and agricultural runoff.</p> <p>New development will result in increased pressure on WWTW, which may result in increased phosphate concentration of surface water bodies with resulting reduction in environmental quality and biodiversity.</p>	
En.4	Pollution of land	<p>Land: FHDC has not formally declared any land as contaminated under Part 2A of the Environmental Protection Act 1990 (Harm to people or controlled waters). FHDC have marked land parcels for inspection as potentially contaminated under statutory obligations. The extent of contaminated land in the District is therefore currently unknown.</p> <p>Contaminated land can lead to direct human health impacts as well as pollution of ground and surface water bodies.</p>	

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Environmental Issues			
En.5	Flooding	<p>Pluvial flooding [surface water flooding – directly from water running off the land surface, as opposed to a river overtopping its banks]: in Newmarket, 2,800 properties are identified at risk of pluvial flooding (in the SFRA level 2, 2012, based on 2008 modelling). Since then however, the Environment Agency have published revised surface water flood risk maps (December 2013) – as such the assessment of risk does not use current information.</p> <p>The extent of surface water flood risk is therefore only partially quantified. Localised risk in Newmarket should not be exacerbated through future development.</p> <p>Fluvial flooding [river-originated flooding]: The Great Ouse Catchment Flood Management Plan (CFMP) identifies 59 properties at risk (from 1% flood) in Newmarket under current conditions, and 122 allowing for climate change. The largest area of flood risk is the sparsely populated north-west of the district. There is also a flood risk to Mildenhall and Brandon.</p> <p>A relatively low proportion of properties in the district are currently at risk of flooding, although in the north west of the district particularly, a large land area is at risk.</p> <p>Climate change impacts are likely to increase flooding and storm frequency, resulting in increasing problems with flooding and associated social and economic problems.</p> <p>Flood Zones 2 and 3 within and adjacent to Newmarket, Brandon and Mildenhall, significantly constrain new development, which could result in worsening of negative trends identified in terms of house prices and stock; and employment. Conversely, new developments constructed within these Flood Zones (i.e. that have passed the Exception Test) are, despite flood resistance and resilience measures, likely to increase the number of properties that are regularly flooded with corresponding increases in social and economic problems.</p>	
En.6	Water resources	<p>Water resources is a big problem for the East of England. Much of the region experiences periods when supplies are insufficient for domestic and industrial uses and to sustain biodiversity.</p> <p>Development of the built environment should seek not to place further pressure on the use of water resources, and where possible should seek to reduce it.</p>	
En.7	Climate change resilience	<p>Climate change impacts in the District could include flooding, water scarcity, changes in agricultural practices and viability, impacts on soil, air quality impacts, direct and indirect public health impacts.</p> <p>The District has a high level of vulnerability to Climate Change compared to the EU and UK. Climate Change impacts are a key consideration, but no coherent strategy currently exists.</p>	

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Environmental Issues			
En.8	Renewable energy	<p>While some renewable energy generation capacity has been approved for development, it is yet to be constructed, and the number of approved sites is low compared to surrounding areas. This will need to rapidly increase in subsequent years for the target to be met.</p> <p>Low levels of renewable energy generation mean that ultimately the district will be producing greater than average greenhouse gas (GHG) emissions and will be contributing to national vulnerability to energy supply and cost variability. The renewable energy targets set for Forest Heath District are unlikely to be met.</p>	

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Environmental Issues			
En.9	Biodiversity	<p>The district supports a number of biodiversity action plan habitats, including flood plain grazing marsh, arable field margins, lowland heath and reedbeds. The district also supports a number of nationally important populations of birds, and contains over 72% of the rare species that have been identified for special protection in Suffolk.</p> <p>It is recognised that the overall trend for the UK is on-going loss of biodiversity, however, the extent to which this applies to Forest Heath District is not known. Although inappropriately located development can result in loss of biodiversity, much of this overall biodiversity loss at a national level is arising from more widespread countryside management practices rather than through the planning system (e.g. agricultural intensification and changes in agricultural management; changes in woodland and forestry management; invasive species and disease).</p> <p>New development may result in loss of biodiversity, resulting in net loss of habitats or species populations at a local level.</p> <p>Nationally, nearly 60% of agricultural land is now in Entry Level Stewardship (ELS). Although the current programme finished in 2013, the next programme starts in 2015. Such agri-environment schemes encourage farmers and land managers to deliver effective environmental management on their land, with the view to benefiting biodiversity.</p> <p>However, the planning system has limited or no influence over such agri-environment schemes or how it can regulate agricultural management.</p> <p>Nearly 50% of the District is protected under some sort of nature conservation designation (i.e. including locally-designated sites as well as nationally and internationally designated statutory sites), which is substantially more than other districts in Suffolk. These sites are concentrated in the east and northeast, although there are designated sites throughout the district. Increases in recreational activity on these designated sites resulting from increases in population within their vicinity will negatively impact the designated features of these sites.</p> <p>A substantial majority of Forest Heath's SSSIs are in either 'Favourable' condition, meaning being managed effectively and sustainably to conserve the features for which it is designated, or 'Unfavourable Recovering' condition¹³² meaning that the necessary management mechanisms to achieve their conservation are in place but the targets set are not yet all being met.</p> <p>Therefore there is not an issue in Forest Heath in terms of continuing loss of habitat from, or decline in condition of, designated sites (i.e. including locally-designated sites). There is however an issue with increasing recreational pressure within the vicinity of European designated sites, which should be avoided.</p> <p>One of the key issues for Forest Heath is that designated sites in proximity to market towns and key service centres significantly constrain new development, which could result in worsening of negative trends identified in terms of house prices and stock; and employment.</p>	

¹³² Environment Agency The state of our environment: biodiversity.

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Environmental Issues			
En.10	Accessible Natural Green-space	Forest Heath has the highest proportion of households in Suffolk that meet all of the targets for having access to natural greenspace. However, there are concentrations of households that do not meet these accessible natural greenspace targets in the northwest and south of the district, including Newmarket. Available data does not show whether accessibility to natural greenspace is decreasing or increasing. Access to natural greenspace has been shown to benefit peoples' physical and mental health. It will therefore be important to ensure that new housing development allows for such access to natural areas	
En.11	Erosion of quality and distinctiveness in the built environment	There is no evidence of an erosion of the quality or distinctiveness of the built environment. Nevertheless there is a risk of damaging such assets as a result of inappropriately designed development. Therefore any future developments must pay regard to existing cultural, historic and landscape value of existing settlements, and ensure sympathetic design and location. Although there is no evidence of an on-going negative trend, future risks from inappropriately designed and located development could include erosion of quality and distinctiveness of the built environment. Impacts on the townscape could also have a knock-on impact on the tourism industry, particularly that associated with Newmarket.	
En.12	Erosion of landscape character	The issue of concern is change to landscape character and quality. Much of the landscape in the district is noted for its openness, sparse pattern of settlement, and extensive vistas, notably in the Fens and the Brecks National Character Areas. The quantum of development is intrinsically likely to threaten landscape: very careful siting and high quality layout and design will be needed to avoid unacceptable damage	
En.13	Transport	Poor public transport provision increases the risk of people becoming isolated in terms of their access to community facilities and job opportunities; potentially leading to a greater disparity in prosperity between the rural and urban populations. A greater number of people in the District drive to work, compared to the county and national averages, and substantially fewer people in the District use public transport to get to work compared to in Suffolk as a whole or in England. Such a dependency on private cars acts as a constraint to development in terms of traffic congestion in the district as well as making it harder to meet targets for climate change and reducing air pollution.	
En.14	Waste	The national target is to recycle or compost 40% of household waste by 2010, 45% by 2015 and 50% by 2020; and to reduce landfill for industrial and commercial waste to 45% of the 2000 level by 2020. This is supported by the Landfill Directive. Forest Heath remains ahead of the target for household waste. Efforts should continue to ensure waste management practices focus on the higher end of the waste management hierarchy with a particular focus on commercial waste. (i.e. prevention> minimisation> reuse> recycling> energy recovery> disposal).	

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Environmental Issues			
En.15	Historic Environment	There are a number of heritage assets on the 'At Risk' register, including Newmarket and Mildenhall Conservation Areas, although the condition of each is very bad, they are improving. Proposals for future development present an opportunity to improve the setting and condition of heritage assets, but this requires careful design to avoid worsening the condition.	

Ref	Issue	Johns Associates' revised and recommended description of the issue and implications for the sustainability of Forest Heath based on a review of the updated baseline	Potential for sustainability issue to cause detriment to FH District based on current trends and data
Economic Issues			
Ec.1	Unemployment	At the beginning of 2013 the unemployment rate in Forest Heath was higher than for Suffolk, the East of England and England as a whole, despite having been lower in 2006. However, these fluctuations mean that it is unclear whether this is a long-term trend. The higher than average unemployment rate could result in negative impacts to the economy of the district, including lower output and incomes, reduced consumption and reduced tax revenue. This could result in increased negative social impacts such as deprivation, erosion of skills and education, and stress and mental health conditions.	
Ec.2	Income distribution	The proportion of people in Forest Heath who work in the professional/scientific sector is lower than in Suffolk as a whole, whereas the proportion of those employed in the manual or service sectors is higher than the county average. The median annual earnings of people who work in Forest Heath is lower than those in Suffolk as a whole, the East of England or England as a whole. This has been the case for all of the years for which there is data since 2006. There are strong links here with issue S.3 – education – whereby poorer levels of education leave people ill equipped for more highly paid, highly skilled occupations. This can lead to a vicious circle of deprivation and a shrinking of the local economy with wages not sufficient to drive establishment of consumer led businesses. A higher than average proportion of employment in the lower-paid manual and service sectors is one of the indicators of social deprivation, particularly in terms of income deprivation, and deprivation in terms of education, skills and training. The lower incomes of those who work in Forest Heath is an issue as it can lead to increased social deprivation.	

4.2 Likely Evolution without the Plan

Chapter 3 already describes trends in environmental, social and economic issues in Forest Heath in the absence of detailed policies for the distribution and phasing of housing allocation across the District (though with policy for overall quantum of housing in force, along with the rest of the Core Strategy DPD adopted in 2010).

Table 4.4 shows more specifically how the continued absence of such policies is likely to affect the continued evolution of the district, and therefore by implication what difference revised housing allocation policies could make.

Table 4.4 How Sustainability Issues Could Evolve without detailed housing policies

Issue Ref	Key Sustainability Issue	Likely evolution without detailed housing policies
S.1	HOUSING More housing is needed to ensure the population is housed affordably and appropriately	Exacerbation of economic and social problems resulting from inappropriate or unaffordable housing
S.2	CRIME Residents' perception of crime	Unlikely to be significantly affected by housing allocation policies
S.3	EDUCATION & TRAINING The percentage of Year 13 school leavers that are Not in Employment, Education or Training (NEET) is substantially higher in Forest Heath than Suffolk as a whole.	If housing distribution is not informed by access to jobs, education and training, residents could have diminished opportunities.
S.4	HEALTH Although FH currently performs well on some health indicators, investment is needed in areas of weakness in order to avoid establishing new negative trends in health levels, especially when considered against the ongoing demographic trends, which could be causal factors.	Development likely to be ad-hoc and not link strategically to sustainable transport and recreation provision
S.5	DEMOGRAPHIC CHANGE Continued growth in population, particularly in the working age population creates pressures on the provision of services such as schools and health care.	Without housing allocation policies development to cater for this population growth will be ad-hoc and could be in less sustainable locations
S.6	SPORTS AND LEISURE Lack of sports and leisure facilities may exacerbate prevalence of health and social issues.	Development likely to be ad-hoc and not link strategically to recreation provision
S.7	DEPRIVATION The trend over the period 2004 – 2010 is that the district is becoming relatively more deprived.	Development likely to be ad-hoc and not incorporate measures (including strategic distribution and phasing) to reverse deprivation trends
En.1	NOISE 17% of the District suffers from aircraft noise of 70 dB(A) or above	Development likely to be ad hoc and could increase the percentage of the population exposed to aircraft noise
En.2	AIR QUALITY There is one AQMA in the centre of Newmarket, due to elevated levels of nitrogen dioxide NO ₂ , primarily arising from traffic emissions.	Development could fail to fully assess the impact on traffic and emissions, and either directly or indirectly exacerbate the issue

Issue Ref	Key Sustainability Issue	Likely evolution without detailed housing policies
En.3a	GROUNDWATER QUALITY A large proportion of the catchment has been designated by the Environment Agency as a Groundwater Source Protection Zone	Development could fail to fully assess the impact on groundwater and either directly or indirectly exacerbate the issue
En.3b	SURFACE WATER QUALITY New development will result in increased pressure on WWTW, which may result in increased phosphate concentration of surface water bodies	Development could fail to fully assess the impact on infrastructure capacity and either directly or indirectly exacerbate the issue
En.4	LAND QUALITY The extent of contaminated land in the District is therefore currently unknown.	Development may be ad hoc and result in contamination of environment or missed opportunities for remediation
En.5	FLOOD RISK Widespread flood risk within the District.	Policy CS4 directs development away from flood risk areas
En.6	WATER RESOURCES Much of the region experiences periods when water supplies are insufficient for domestic and industrial uses and to sustain biodiversity.	Development likely not to pay full regard to water resource constraints
En.7	CLIMATE CHANGE RESILIENCE The District has a high level of vulnerability to Climate Change compared to the EU and UK	CS4 mandates adaptation to climate change
En.8	RENEWABLE ENERGY The renewable energy targets set for Forest Heath District are unlikely to be met.	Development not to leave suitable sites or infrastructure for renewable generation
En.9	NATURE CONSERVATION Nearly 50% of the district is protected under some sort of nature conservation designation	Core Strategy Policy CS2 will ensure protection of designated sites – major constraint on development. However, housing allocation can impact this trend through siting development in areas of less sensitive biodiversity. In the absence of housing allocation policies, housing development is ad-hoc and impacts may therefore be greater.
En.10	ACCESS TO GREENSPACE Concentrations of households that do not meet Accessible Natural Greenspace targets	Housing allocation can impact this trend through siting development in areas which have good access to green spaces. In the absence of housing allocation policies, housing development is ad-hoc and has no necessity to pay regard to strategic access to green spaces.
En.11	CHARACTER OF BUILT ENVIRONMENT Erosion of character of built environment	Protected under policy CS5, however housing allocation policies can impact this trend through siting housing carefully with regards proximity to areas of particular or designated character. In the absence of CS7, housing development is ad-hoc and protection of character is weakened
En.12	LANDSCAPE CHARACTER Erosion of landscape character	Protected in part by Core Strategy CS3, but without housing allocation policies FHDC is open to challenges regarding applications for development in inappropriate locations
En.13	TRANSPORT Dependency on private cars causes issues in terms of traffic congestion in the district as well as making it harder to meet targets for climate change and reducing air pollution.	Housing allocation policies can impact this trend through siting development in areas where alternatives to private car use are available. In the absence of CS7, housing development is ad-hoc and has no necessity to pay regard to strategic proximity to sustainable transport aspirations

Issue Ref	Key Sustainability Issue	Likely evolution without detailed housing policies
En.14	WASTE MANAGMENT Progress against waste management targets	CS7 can impact this trend through siting housing where residents will have suitable waste management facilities and available. In the absence of CS7, housing development is ad-hoc and has no necessity to pay regard to strategic proximity to waste facilities
En.15	HISTORIC ENVIRONMENT A number of heritage assets on the 'at risk' register	Protected to some extent by Core Strategy CS3, but without housing allocation policies FHDC is open to challenges regarding applications for development in inappropriate locations and opportunities for improvement not promoted.
Ec.1	UNEMPLOYMENT At the beginning of 2013 the unemployment rate in Forest Heath was higher than for Suffolk, the East of England and England as a whole.	CS7 can impact this trend through siting housing in proximity to suitable employment centres. In the absence of CS7, housing development is ad-hoc and has no necessity to pay regard to strategic proximity to employment locations
Ec.2	DEPRIVATION The lower incomes of those who work in Forest Heath is an issue as it can lead to increased social deprivation.	Trends of deprivation may continue: CS7 can specify developments that can arrest and reverse these trends will have no need to contribute to regeneration.

It can be seen, therefore that without housing allocation policies, trends in the District will continue towards exacerbation of the issues identified. The housing allocation policies will give the Council a strong mandate and tool to direct development to the most sustainable distribution.

5. Method for Generation of Alternatives

The generation of 'reasonable alternatives' is a key aspect of the SA/SEA process, and has been the root of a number of legal challenges to the soundness of Local Plans. The method for the generation of alternatives needs to be demonstrably sound to ensure that the suite of alternatives encompasses a reasonable range of scenarios and possibilities.

Proposed method

The proposed method for the generation of alternatives will include:

- Generation of alternatives for the overall scale of growth (total housing numbers);
- Alternative settlement strategies, based on a range of criteria (possibly including capacity based on environmental constraints, historical trends, employment and economic need);
- Alternative site specific distributions

Each of the alternatives generated will be assessed against the SA/SEA criteria, and a most sustainable option identified. This may not be the finally selected preferred option.

6. Sustainability Appraisal Framework

The proposed SA Objectives and appraisal criteria are presented below in Table 5.1:

Sustainability Issue		Proposed Sustainability Objective: <i>Does the policy ...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Social			
Objective Reference O.S.1 – Housing			
S.1	<p>The ratio of lower quartile house prices to lower quartile incomes is more than twice that deemed to be affordable by government (3.5 times), and is higher than the ratios for Suffolk and England as a whole.</p> <p>There is a risk of exacerbating economic and social disparities as house price rises disadvantage those who have been unable to buy. Further housing provision is needed to ensure the population is housed affordably and appropriately</p>	Meet the housing needs of the whole community	<ul style="list-style-type: none"> • Increase access to good quality housing • Increase supply of affordable housing • Encourage sustainable regeneration and the re-use of empty homes
Objective Reference O.S.2 – Crime			
S.2	There is an issue related to residents' perception of crime, however, the current trend is for on-going decrease in actual crime levels.	Minimise crime and antisocial behaviour, and fear of them	<ul style="list-style-type: none"> • Promote places that are, and feel, safe and secure • Reduce the potential for crime or anti-social behaviour.

Sustainability Issue		Proposed Sustainability Objective: <i>Does the policy ...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Social			
Objective Reference O.S.3 – Education			
S.3	<p>The percentage of Year 13 school leavers that are Not in Employment, Education or Training (NEET) is substantially higher in Forest Heath than Suffolk as a whole.</p> <p>Low education skill levels could contribute to unemployment, suppression of wages and other social issues such as deprivation.</p>	Increase local education, training and employment opportunities especially for young people	<ul style="list-style-type: none"> • Provide training and learning opportunities
Objective Reference O.S.4 – Health			
S.4	<p>Although FH currently performs well on some health indicators, investment is needed in areas of weakness in order to avoid establishing new negative trends in health levels, especially when considered against the ongoing demographic trends, which could be causal factors.</p>	Improve the health of the people of Forest Heath	<ul style="list-style-type: none"> • Encourage provision of healthcare services appropriate to local needs • Encourage healthy lifestyles

Sustainability Issue		Proposed Sustainability Objective: <i>Does the policy ...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Social			
Objective Reference O.S.5 – Demographic Change			
S.5	Continued growth in population, particularly in the working age population creates pressures on the provision of services such as schools and health care.	<i>This issue is dealt with by objectives on Education, Healthcare, and Sports and Leisure</i>	N/A
Objective Reference O.S.6 – Sports and Leisure			
S.6	The district has a shortfall in synthetic sports pitch provision requiring three to be constructed by 2021, along with 5 sports halls, a swimming pool and gym facilities). Lack of sports and leisure facilities may exacerbate prevalence of health and social issues.	Facilitate sports and leisure opportunities for all	<ul style="list-style-type: none"> • Increase access to sport and physical recreation facilities • Encourage a wide range of sporting and non-sporting physical recreation opportunities
Objective Reference O.S.7 – Social Deprivation			
S.7	Although Forest Heath displays lower overall deprivation levels than the national average, the trend over the period 2004 – 2010 is that the district is becoming relatively more deprived.	<i>Combined with Objective O.S.8 Poverty</i>	N/A

Sustainability Issue		Proposed Sustainability Objective: <i>Does the policy ...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Social			
Objective Reference O.S.8 – Poverty			
S.8	A substantially higher proportion of the children experiencing child poverty in the district (72%) are in lone parent families compared to the national average (66%).	Reduce social deprivation and poverty and in particular child poverty	<ul style="list-style-type: none"> • Encourage community cohesion to foster support networks • Encourage opportunities for education, training and skills for people in poverty

Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.1 Noise			
En.1	1994 noise monitoring data shows that 17% of the District suffers from aircraft noise of 70 dB(A) or above. Chronic exposure to noise pollution can have a significant detrimental impact on the health and wellbeing of sensitive receptors.	Minimise exposure to noise pollution	<ul style="list-style-type: none"> • Direct residential development towards those locations not affected by chronic noise pollution • Protect residents from noise • Locate and design infrastructure to minimise noise generation and exposure

Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.2 – Pollution of Air			
En.2	Air Quality: There is one AQMA in the centre of Newmarket, due to elevated levels of nitrogen dioxide NO ₂ , primarily arising from traffic emissions. Elevated levels of, and / or long-term exposure to, NO ₂ , can lead to and exacerbate respiratory conditions.	Improve air quality in the district especially in the Newmarket AQMA	<ul style="list-style-type: none"> • Directly or indirectly negatively impact air quality in the centre of Newmarket • Improve air quality in the district
Objective Reference O.En.3 – Pollution of Water			
En.3	<p>A large proportion of the catchment has been designated by the Environment Agency as a Groundwater Source Protection Zone. This is where land is close to groundwater sources used for drinking water. These coincide with large areas designated as high or medium vulnerability aquifers.</p> <p>The Water Cycle Study Level 2 identifies phosphate concentrations in surface water bodies as an issue preventing achievement of target status under the Water Framework Directive. These result from discharges from Waste Water Treatment Works (WWTW) and agricultural runoff.</p> <p>New development will result in increased pressure on WWTW, which may result in increased phosphate concentration of surface water bodies with resulting reduction in environmental quality and biodiversity.</p>	Maintain good water quality	<ul style="list-style-type: none"> • Maintain and improve water quality • Maintain and improve barriers between pollution sources and water receptors

Sustainability Issue Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.4 – Pollution of Land			
En.4	<p>FHDC has not formally declared any land as contaminated under Part 2A of the Environmental Protection Act 1990 (Harm to people or controlled waters). FHDC have marked land parcels for inspection as potentially contaminated under statutory obligations. The extent of contaminated land in the District is therefore currently unknown.</p> <p>Contaminated land can lead to direct human health impacts as well as pollution of ground and surface water bodies.</p>	Reduce land contamination and avoid adverse impacts on human health or the environment	<ul style="list-style-type: none"> • Avoid development in contaminated areas • Remediate contaminated land

Sustainability Issue Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.5 – Flooding			
En.5	<p>Pluvial: In Newmarket, 2,800 properties are identified at risk of Pluvial flooding (in the SFRA level 2, 2012, based on 2008 modelling). Localised risk should not be exacerbated through future development.</p> <p>Fluvial [river-originated flooding]: The Great Ouse Catchment Flood Management Plan (CFMP) identifies 59 properties at risk (from 1% flood) in Newmarket under current conditions, and 122 allowing for Climate Change. The largest area of flood risk is the sparsely populated north-west of the district. There is also a flood risk to Mildenhall and Brandon.</p> <p>Climate Change impacts are likely to increase flooding and storm frequency, resulting in increasing problems with flooding and associated social and economic problems.</p> <p>Flood Zones 2 and 3 within and adjacent to Newmarket, Brandon and Mildenhall, significantly constrain new development.</p>	Reduce flood risk to people, property and infrastructure	<ul style="list-style-type: none"> • Avoid placing development in inappropriate locations • Increase the use SuDS • Encourage development design that reduces flood risk

Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.6 – Water Resources			
En.6	<p>Water resources is a key strategic issue for the East of England. Much of the region experiences periods when supplies are insufficient for domestic and industrial uses and to sustain biodiversity.</p> <p>Development of the built environment should seek not to place further pressure on the use of water resources, and where possible should seek to reduce it.</p>	Reduce and minimise pressures on water resources	<ul style="list-style-type: none"> • Direct development to where access is available to appropriate volumes of water without compromising the needs of others or the environment • Increase use of water efficiency technology to reduce demand
Objective Reference O.En.7 – Climate Change Resilience			
En.7	<p>Climate Change impacts are likely to increase flooding and storm frequency, resulting in increasing problems with flooding and associated social and economic problems.</p> <p>The District has a high level of vulnerability to Climate Change compared to the EU and UK. Climate Change impacts are a key consideration, but no coherent strategy currently exists.</p>	Make Forest Heath resilient to forecast impacts of climate change	<ul style="list-style-type: none"> • Incorporate resilience to climate change into the built environment • Encourage economic activities and patterns of life likely to be more resilient to climate change

Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.8 – Renewable Energy			
En.8	Low levels of renewable energy generation mean that ultimately the district will be producing greater than average greenhouse gas (GHG) emissions and will be contributing to national vulnerability to energy supply and cost variability. The renewable energy targets set for Forest Heath District are unlikely to be met.	Increase the proportion of energy generated from renewable sources	<ul style="list-style-type: none"> • Encourage infrastructure that is suitable for alternative energy generation • Encourage installation of renewable energy capacity • Encourage energy efficiency and measures to reduce energy consumption

Sustainability Issue Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.9 – Biodiversity			
En.9	<p>Nearly 50% of the district is protected under some sort of nature conservation designation (i.e. including locally-designated sites as well as statutory sites), which is substantially more than other districts in Suffolk.</p> <p>A key issue for Forest Heath is that designated sites in proximity to market towns and key service centres significantly constrain new development, which could result in worsening of negative trends identified in terms of house prices and stock; and employment.</p> <p>The district supports a number of nationally important populations of birds, and contains over 72% of the rare species that have been identified for special protection in Suffolk.</p> <p>New development may result in loss of biodiversity, resulting in net loss of habitats or species populations at a local level.</p>	Protect and enhance the District’s biodiversity, particularly where protected at international, national, regional or local level.	<ul style="list-style-type: none"> • Deliver development designed to provide space for biodiversity • Direct development away from particularly sensitive locations • Avoid loss of biodiversity in relation to designated sites, and minimise loss of biodiversity elsewhere, and offset unavoidable losses like for like

Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.10 – Accessible Natural Greenspace			
En.10	Forest Heath has the highest proportion of households in Suffolk that meet all of the targets for having access to natural greenspace. However, there are concentrations of households that do not meet these accessible natural greenspace targets	Maximise residents' access to natural areas.	<ul style="list-style-type: none"> • Increase access to natural greenspaces • Deliver development that maintains and improves access to greenspace
Objective Reference O.En.11 – Erosion of Character of Built Environment			
En.11	<p>There is no evidence of an erosion of the quality or distinctiveness of the built environment. Nevertheless there is a risk of damaging such assets as a result of inappropriately designed development. Therefore any future developments must pay regard to existing cultural, historic and landscape value of existing settlements, and ensure sympathetic design and location.</p> <p>Although there is no evidence of an ongoing negative trend, future risks from inappropriately designed and located development could include erosion of quality and distinctiveness of the built environment. Impacts on the townscape could also have a knock-on impact on the tourism industry, particularly that associated with Newmarket.</p>	Maintain and enhance the quality of the built environment	<ul style="list-style-type: none"> • Encourage development that is architecturally complementary to existing townscapes and incorporates sustainable design principals • Encourage vibrant town centres that include retail as well as other uses • Encourage development that maintains tourism opportunities and improves the tourist offering

Sustainability Issue Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.12 – Erosion of Landscape Character			
En.12	<p>Much of the landscape in the district is noted for its openness, sparse pattern of settlement, and extensive vistas, notably in the Fens and the Brecks National Character Areas.</p> <p>There is the potential for negative change to the character and openness of the District's special landscapes due to inappropriately located or designed development.</p>	Maintain and enhance the landscape character of the District	<ul style="list-style-type: none"> • Locate and design development to avoid compromising the landscape character of the District • Locate and design development to enhance previously degraded landscapes

Sustainability Issue Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.13 – Transport			
En.13	<p>Poor public transport provision increases the risk of people becoming isolated in terms of their access to community facilities and job opportunities; potentially leading to a greater disparity in prosperity between the rural and urban populations.</p> <p>A greater number of people in the District drive to work, compared to the county and national averages, and substantially fewer people in the District use public transport to get to work compared to in Suffolk as a whole or in England.</p> <p>Such a dependency on private cars causes issues in terms of traffic congestion in the district as well as making it harder to meet targets for climate change and reducing air pollution</p>	Reduce car use and car dependency	<ul style="list-style-type: none"> • Encourage development in locations where sustainable transport is most viable • Encourage development design that encourages alternatives to private car use • Encourage walking and cycling

Sustainability Issue	Reference	Proposed Sustainability Objective: <i>Does the policy...?</i>	Sustainability Appraisal Criteria: <i>Does the policy...?</i>
Environmental			
Objective Reference O.En.14 – Waste			
En.14	Forest Heath remains ahead of the target for household waste. Efforts should continue to ensure waste management practices focus on the higher end of the waste management hierarchy with a particular focus on commercial waste.	Reduce waste and manage waste sustainably	<ul style="list-style-type: none"> • Reduce the creation of waste • Deliver sustainable waste management
Objective Reference O.En.15 – Historic Environment			
En.15	There are a number of heritage assets on the 'At Risk' register, including Newmarket and Mildenhall Conservation Areas, although the condition of each is very bad, they are improving. Proposals for future development present an opportunity to improve the setting and condition of heritage assets, but this requires careful design to avoid worsening the condition.	Conserve and enhance the historic environment, heritage assets and their settings	<ul style="list-style-type: none"> • Conserve and/or enhance heritage assets and the historic environment • Improve the quality of the historic environment • Respect, maintain and strengthen local character and distinctiveness

Sustainability Issue	Reference	Proposed Sustainability Objective: <i>The policy should...</i>	Associated example prompts: <i>Does the policy...?</i>
Economic			
Objective Reference O.Ec.1 - Unemployment			
Ec.1	<p>At the beginning of 2013 the unemployment rate in Forest Heath was higher than for Suffolk, the East of England and England as a whole.</p> <p>The higher than average unemployment rate could result in negative impacts to the economy of the district, including lower output and incomes, reduced consumption and reduced tax revenue. This could result in increased negative social impacts such as deprivation, erosion of skills and education, and stress and mental health conditions.</p>	Reduce the levels of unemployment within the District	<ul style="list-style-type: none"> • Deliver development that increases employment opportunities • Deliver diverse economic opportunities in the District • Provide jobs suitable for all residents, especially the less qualified
Objective Reference O.Ec.2 – Income distribution			
Ec.2	<p>Trends towards deprivation and disparity may lead to exacerbation of health, social and economic issues.</p> <p>The lower incomes of those who work in Forest Heath is an issue as it can lead to increased social deprivation.</p>	<i>Covered by O.Ec.1 so far as the Local Plan can influence it</i>	N/A



7. Consultation on this Document

This document is presented for consultation by Statutory Consultees.

Particular issues for consideration are:

- **Scope** and completeness of plans, policies and programmes considered;
- **Scope** and completeness of environmental baseline;
- **Scope** and completeness of sustainability issues considered; and
- **Scope** and appropriateness of sustainability objectives.

The consultation period ran from 5th March to 10th April 2015.

Number	Consultee	Action Suggested by Consultee	JA/L-T Response
1	Anglian Water	Sustainability East may be able to provide information and advice to Forest Heath (Ref Climate Change and Water) Incorporate ref to Water Resource Plan, April 2015 Section 3.7 - incorporate WCS gap analysis P.43 incorporate reference to AW planning service as mechanism to ensure developers are aware of required upgrades "We would recommend policy is included to ensure necessary infrastructure is in place to serve development" P.68 drought plan 2008 superceded by drought plan 2014	Signpost added to Climate East Report P.69 - ref to WRMP added Note added to draw attention to possible requirement to update Reference to AW planning advice service as mitigation for issues caused by new development. This should be a recommendation for a policy in the Plan, not something the Scoping Report can address Reference updated
2	Kings Lynn and West Norfolk Borough	None Transport section: emphasise contribution of cycling in shaping proposals and policies Proposal of cycle link: Burwell to Exning to Newmarket Cambs County + ECDC - request for partnership working on Transport Strategy	n/a The consultee is directed to p.100, Appraisal criterion En.13 - policies will be assessed against "Does the policy encourage walking and cycling". Beyond the scope of this document to make that recommendation
3	East Cambridgeshire DC	Mention European Directives on Water, Waste and Nitrates in relation to water management Acknowledge sub regional water resource demands of Cambs and Norfolk on Chalk aquifers Add the following documents to Section 2: European Landscape Convention Heritage England Good Practice Documents Conservation Area appraisals and management plans Suffolk Heritage Strategy	No ammendment required to report Reference added to UK transposition of Water FD. Waste not included as no obvious relevance to water section. Nitrates directive relates to agricultural land use - not impacted by this plan, therefore not included (reference already made to NVZ for context) Text added to this effect to 3.12 as relates more to water resources than water infrastructure. Updated in part as follows Only Conservation Area <i>Appraisals</i> available, not mangment plans, therefore not a plan, policy or programme Good Practice Guide not a Plan, Policy or Programme, but relate to the <i>implementation</i> of these Suffolk Heritage Strategy - already referenced European Landscape Convention - added in Section 3.6 - Landscape All plans considered. A great number not relevant (direct spatial irrelevance [e.g. London] or relating to designations not impacted by the plan) - List amended with relevent plan(s).
4	Historic England	Insert plans policies and programmes from list in EH guidance Update baseline: historic parks and gardens numbers of heritage assets at risk register Local plan to identify non-designated heritage assets and items of local interest Heritage as explicit sustainability issue/item in SA Framework, to include archeology and landscapes as well as built environment Method for generating alternatives - should include a more complete assessment of potential impact on heritage assets at an early stage	Updated in line with comments Beyond the scope of this document - but reference to non-designated assets added Overall model objective incorporated. More detailed objectives in the criteria, though without over-emphasising this compared to other topics. It would be inconsistent, and unbalanced, to now go into more detail about just this one aspect.

5	Natural England	3.2 - more detail on sites impacted by recreational pressure	Text in section 3.2 to provide more clarity on potential impacts of development on designated sites . The detail provided for the ecology baseline is commensurate and in parity with other SA topics, however, further detail on the main component sites potentially impacted by development and the mechanism of impact should be set out within the HRA report.
6	Norfolk County Council	Table 4.3 - detail on condition of sites Lack of sustainable travel options as additional constraint to develop in table 4.3	Adjusted in En.13 - Transport
7	RSPB	None Sustainability objective En9 - change "minimise" to "avoid" Include direct reference to recreational pressure on Stone Curlew to 1500m made more explicit as per woodlark and nightjar Additions to plans and policies Re-wordings on p.20 Re-wordings on p.21	n/a Amended Amended Ameded, except Earth Heritage Suffolk - not a plan, policy or programme All ammendments made as specified All ammendments made as specified All ammendments as specfied apart from reference for CCVI - unable to obtain more up to date UK specific map
8	Suffolk County Council	Re-wordings on p.22 Re-wordings on p.23 Omission of Energy Efficiency as an environmental issue P77. Final sentence re energy efficiency Impact of road noise	Completed as specified Should be included only if there is some problem or opportunity which is exceptional or specific to this district. (Eg it would be in Glasgow because they have a big problem of cold-related illnesses due to the combination of poverty, climate and lots of exceptionally hard-to-heat housing.) It's there as an appraisal criterion anyway. Sentence removed Should not be included unless there is something that makes it a specific or exceptional problem for this district (which <i>aircraft</i> related noise is, for example)
9	West Suffolk Environmental Health	Fuel Poverty - incorporate revised Fuel Poverty assessment Contradiction of "no significant energy generation infrastructure" with identification of 5MW solar farm Amend air quality section to reflect nuances of data Amend contaminated land section to reflect public availability of contaminated land information	Text ammended Disagree - 5MW is a relatively modest scale of generation. Further solar farms, unless very large are also not significant. Text updated to reflect discounted exceedence. Running mean text not amended as clearly stated as running mean Text amended