



**Leicestershire & Leicester Waste  
Development Framework:  
Site Allocations DPD  
(Preferred Options)**

**Sustainability Appraisal (SA) / Strategic  
Environmental Assessment (SEA)**

**Sustainability Appraisal Report  
(Main Report)  
June 2006**

Prepared for Leicester City &  
Leicestershire County Councils by:

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## Foreword

Leicester City and Leicestershire County Councils are undertaking a review of the Local Waste Plan for Leicestershire, Leicester and Rutland (1995-2006) under the new system of Local Development Frameworks (LDFs) introduced through the new Planning and Compulsory Purchase Act passed in July 2004. The review will result in the Leicestershire and Leicester Waste Development Framework (LLWDF) for 2007-2021.

The LLWDF comprises two Development Plan Documents (DPDs):

- a Core Strategy & Development Control Policies Development Plan Document (CS&DC DPD).
- a Waste Site Allocations Development Plan Document (Sites DPD).

The Planning and Compulsory Purchase Act 2004 makes Sustainability Appraisal (SA) mandatory for Waste Development Frameworks. The European Directive 2001/42/EC sets out the requirement to undertake Strategic Environmental Assessment (SEA) of plans in the waste sector. To satisfy these requirements a Scoping Report for the SA/SEA was prepared and released for consultation on March-April 2005. An initial SA report was also prepared and released, for information purposes, alongside the Issues and Options consultation in June – August 2005. The conclusions of this report have fed into the CS&DC Policies Preferred Options document and this associated sustainability appraisal.

This consultation document is the Sustainability Appraisal Report, the next stage in the process. It is being published in support of the Public Participation for the LLWDF Site Allocations Preferred Options being consulted on between July and September 2006.

*Leicestershire County and Leicester City Councils would like to hear your views on this report. We have prepared a response form for the LLWDF Site Allocations Preferred Options document which incorporates a section for any comments specifically on this Sustainability Appraisal.*

**You are encouraged to respond by answering the following questions:**

1. Is any significant information missing or misrepresented?
2. Are judgements made in developing the SA framework correct?
3. Do you agree with the results of the assessment of effects and any mitigation and monitoring measures proposed? If not do you have any suggestions?

Consultation responses should be sent through to:

Planning Group,  
Environment and Heritage Services,  
County Hall,  
Glenfield, Leicester,  
LE3 8ZI

or email your response to [planningcontrol@leics.gov.uk](mailto:planningcontrol@leics.gov.uk)



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## Non-Technical Summary

### THE WASTE DEVELOPMENT FRAMEWORK AND THE SITE ALLOCATIONS DOCUMENT

Leicester City and Leicestershire County Council are undertaking a review of the Local Waste Plan for Leicestershire, Leicester and Rutland (1995-2006) under the new system of Local Development Frameworks (LDFs) introduced through the new Planning and Compulsory Purchase Act passed in July 2004. The review will result in the Leicestershire and Leicester Waste Development Framework (LLWDF) for 2007-2021. This is being done under the new system of Local Development Frameworks (LDFs) introduced through the new Planning and Compulsory Purchase Act passed in July 2004. The preparation of the documents to date has been carried out by Atkins Planning Consultants on behalf of, and in partnership with, Leicester City and Leicestershire County Councils (collectively referred to throughout this report as the Policy Team).

The LLWDF outlines the two Councils' vision for future sustainable waste development up to 2021 and will comprise two Development Plan Documents (DPDs): a Core Strategy and Development Control Policies (CS&DC) DPD and Waste Site Allocations (Sites) DPD.

The Site Allocations DPD to which this SA relates sets out the Preferred Sites for the waste development which the Policy Team has identified as suitable for development during the life of the LLWDF. The Sites document is directly informed by the CS&DC DPD which sets out the key elements of the waste planning framework, providing the vision, objectives, practical strategy and policies for waste development for Leicester City and the Leicestershire area for the period up to 2021.

### REASON FOR CARRYING OUT SUSTAINABILITY APPRAISAL

Under the new Regulations implementing the Planning and Compulsory Purchase Act 2004, a Sustainability Appraisal (SA) is required for all LDFs, including Waste Development Frameworks (WDFs). New Regulations implementing the European Union Strategic Environment Assessment (SEA) Directive also came into force in the UK in July 2004; these require that certain plans and programmes that are likely to have significant environmental effects once implemented undergo an environmental assessment.

This Sustainability Appraisal Report deals with the Site Allocations Document. It has been prepared to meet the requirements for Sustainability Appraisal arising from the Planning and Compulsory Act 2004 and the requirements for Strategic Environmental Assessment (SEA) arising from the SEA Directive.

### WHAT IS SUSTAINABILITY APPRAISAL?

The purpose of SA and SEA is to promote sustainable development through better integration of sustainability considerations in the preparation and adoption of plans. While SEA focuses predominantly on effects on the natural environment, SA is expanded beyond environmental sustainability concerns to include the social and economic dimensions of sustainability. Government guidance recommends that SA and SEA are carried out in a combined process; therefore, the term Sustainability Appraisal (SA) will henceforth be used to describe this combined process.

In brief, the SA process involves three main stages:

- 1) Identifying other relevant plans, programmes and sustainability objectives which inform and influence the development of the CS&DC Policies and

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hence the choice of site allocations, establishing an understanding of the social, environmental and economic condition of the Framework Area (the baseline), identifying key sustainability issues for the County, outlining SA objectives against which to later evaluate the proposed sites, and gathering consultation feedback on the SA's proposed breadth of coverage and level of detail;

- 2) Developing a series of policy options for specific LLWDF objectives and evaluating each option against the SA objectives outlined in stage 1;
- 3) Assessing (based on available information) the ways in which the proposed sites are likely to affect the SA objectives (in terms of the nature, scale and time frame of the effects), identifying measures to reduce or counteract any significant negative effects of the policies and developing a strategy for the monitoring of the significant effects on sustainability of the proposed sites in the Framework Area.

In the case of this Site Allocations document, it is important to note that it is not the role of the SA to determine which sites should be chosen as the basis for the preferred options. This is the role of those who have to decide which sites are appropriate. The SA should, however, help in identifying the most sustainable sites of those proposed which will meet the requirements for waste management provision set out in the WDF. While waste management sites, due to their nature and type of facilities required, generally cause negative effects on a variety of sustainability objectives, this must be set in the wider context of the urgent need to develop new waste management facilities in Leicester and Leicestershire. 'No Development' is not a viable option, given the waste arising from existing and proposed housing and employment development in the Framework Area and the issues arising from *not* providing for adequate waste treatment and disposal.

As the preparation of the Site Allocations Document progresses following the current Preferred Options consultation, it is possible that details of some preferred sites may be amended. If this happens, the amended proposals will be re-examined to assess any changes in their overall effects on sustainability. The aim is that any amendments will help overcome any identified negative effects on SA objectives and improve the effects of the DPD on sustainable development.

#### **SUSTAINABILITY BASELINE**

By 2016, population levels are expected to rise by 5.8% and a strong growth in household numbers of 14% is expected, particularly in the Central Leicestershire Policy Area. This is a higher level of household growth than any other part of the East Midlands. The spatial strategy is underpinned by the objective of concentrating housing and other growth in the existing urban areas. Household waste and commercial and industrial wastes are particularly affected by these trends.

The Framework Area has a strong agricultural base. However the principal industries in the FA are service industries, manufacturing, construction, food processing, pharmaceuticals and storage & distribution. Construction accounted for 5.5% of employment in Leicestershire in 2001, with transport and communications at 7.8%. The main centres of employment correspond broadly to the main population centres.

In 2003/04, approximately 4,849,000 tonnes of waste was produced in the Framework Area. This figure is expected to rise. The total amount of waste arising in Leicestershire requiring management is about 4,087,000 tonnes. Municipal (household and civic amenity) waste, which accounts for about 12% of this (lower) total figure, has been growing at an average yearly rate of about 2% based on the past five years. Approximately 60% of waste is currently landfilled, with over half of this being exported from the Framework Area. Lack of future capacity to manage predicted waste arisings has been identified as an issue.

Leicestershire's location in the heart of England means it is served by excellent road and rail transport links. At present all waste is transported by road. Air quality problems related to road transport have been identified as a problem. There are 15 Air Quality Management Areas (AQMAs) in Leicester & Leicestershire; pollution levels over the past few years have remained generally static or increased modestly.

The River Soar runs roughly south to north through the Framework Area to join the River Trent just north of Kegworth. There are four other main rivers: Mease, Sence, Wreake and Eye, and two canals: the Grand Union Canal Leicester Arm and the Ashby Canal. Parts of the River Soar are canalised to make it navigable. Flood plains are a constraint to development; the River Soar in particular has suffered frequent and extensive flooding since the late 18<sup>th</sup> century.

Around 80% of the land use in Leicestershire is agricultural, with the emphasis on mixed cereal and livestock farming. New legislation is proposed to extend waste management controls to non-natural agricultural waste. The majority of soil quality is classified as Grade Three with relatively small areas of particularly good or bad land.

Leicestershire is a relatively rural county with numerous areas of designated biodiversity importance, including the River Mease Special Area of Conservation. There are 19 Habitat Action Plans and 14 Species Action Plans in the Leicester, Leicestershire & Rutland Biodiversity Action Plan (BAP).

There are 18 landscape character areas covering Leicestershire, Leicester & Rutland, described in the Leicestershire, Leicester & Rutland Landscape & Woodland Strategy. A key issue identified is the gradual erosion of local distinctiveness through the intensification of agriculture, abandonment of traditional land management practices, changes in the rural way of life and pressure from new built developments, transportation and power generation schemes and mineral workings.

The county has only 3.8% woodland cover, making it one of the least wooded areas of England. Ongoing success in meeting National Forest targets mean woodland cover is increasing. Charnwood Forest is also a valuable landscape asset for Leicestershire, identified in Regional Planning Guidance as a priority area for protection and enhancement of natural and heritage landscape assets.

## **KEY SUSTAINABILITY ISSUES**

The analysis of the baseline information and current sustainability state of Leicestershire and Leicester highlighted the following major sustainability issues within the Framework Area. The identification of these issues has guided the subsequent development of the SA objectives, which directly address these issues and include indicators by which to monitor positive or negative change in these areas.

### Key Sustainability Issues

- **Air quality/emissions** – address air quality issues due to transport impacts
- **Biodiversity** – need to ensure development does not adversely affect Leicester and Leicestershire’s numerous areas of designated biodiversity importance and that wildlife corridors are preserved.
- **Economy** – with economic base changing to knowledge-based service industries seek to protect and enhance the employment and economic benefits of the waste management industry in the Framework Area
- **Household growth** – manage demand for raw materials, encourage reuse and recycling of building materials, support waste minimisation and recycling/reuse initiatives.
- **Landscape & Countryside** – protect landscape character and quality, and rural distinctiveness from erosion.
- **Lack of capacity & need for waste treatment** - reconcile the need for waste facilities and regional apportionment requirements with the environmental impacts of extraction and ensure appropriate after-uses of sites.
- **Public Nuisance** - minimise noise, traffic, dust, disruption to public rights of way and other disturbance to local residents.
- **Transport of waste** - minimise environmental disturbance and disruption to local communities as well air quality & climate change impacts, and encourage non-road alternatives.
- **Reliance on landfill** - facilitate other methods of waste management, treatment and disposal which pushes waste up the waste hierarchy
- **Flood risk** - ensure waste development does not increase flood risk.

### SUSTAINABILITY OBJECTIVES

Following the review of relevant plans and programmes influencing the development of the LLWDF, the baseline and the key sustainability issues identified for the Framework Area, the following SA objectives for the LLWDF were developed using an iterative process taking into account comments from previous consultations. Some of these have the potential for cumulative effects, as marked.

### Sustainability Appraisal Objectives

- 1) Conserve and enhance wildlife habitats and species, avoiding damage to or fragmentation of major features of importance for fauna and flora (cumulative effect)
- 2) To conserve and enhance the quality of the countryside, landscape and built environment (cumulative effect)
- 3) To protect places and buildings of archaeological, cultural and historic value
- 4) To protect the quality of ground and surface waters (cumulative effect)
- 5) To avoid contamination and safeguard soil quality and quantity (cumulative effect)
- 6) To limit emissions to air to levels that will not damage natural systems and affect human health (cumulative effect)
- 7) To minimise the contribution of waste development to adverse climate change (cumulative effect)
- 8) To minimise public nuisance from waste treatment and disposal (cumulative effect)
- 9) To maximise the benefits to human health and well-being
- 10) To ensure waste development does not irreversibly sterilise mineral reserves
- 11) To facilitate the management, recovery and correct disposal of wastes controlled by EC Directives

- 12) To encourage better use of developed land and to prevent irretrievable loss of the best and most versatile agricultural land (cumulative effect)
- 13) To minimise quantities of waste landfilled and to maximise re-use, recovery and recycling of waste
- 14) To reduce the need to travel, in particular to reduce the transportation of untreated waste by road, and thereby vehicle emissions, in line with the proximity principle.
- 15) To increase energy efficiency and the production of renewable energy
- 16) To promote stable employment and employment diversity in the Framework Area
- 17) To promote economic growth in the Framework Area
- 18) To ensure adequate access to waste facilities appropriate in scale and type to local needs.
- 19) To conserve geodiversity
- 20) To avoid or reduce flood risk as a result of waste development (cumulative effect)

#### **INITIAL COMPATIBILITY ASSESSMENT OF LLWDF OBJECTIVES WITH SUSTAINABILITY OBJECTIVES**

In preparation for the development of the CS&DC policies and the selection of sites, a set of draft objectives was developed initially for the LLWDF as a whole by the Policy Team, derived from an analysis of issues as described in this report, plus consideration of regional, national and international requirements. Each of these objectives was evaluated in terms of its compatibility with each of the SA objectives. The LLWDF objectives, being fairly broad, were generally judged to be broadly compatible with the SA objectives or neutral, with no obvious incompatibilities, although in many cases confirmation of compatibility depended on the confirmation of type of implementation proposals. Following discussions with the Policy Team and taking into account feedback obtained during the Issues and Options Consultation, a number of the LLWDF objectives were refined to give the following set of objectives to guide the development of policies.

#### **Final LLWDF Objectives**

- 1) To promote the implementation of waste minimisation initiatives.
- 2) To enable the delivery of sufficient waste management facilities in the framework area to meet the waste management capacity apportionment requirement identified by the Regional Waste Strategy to at least 2021.
- 3) To support the delivery of the Leicestershire Municipal Waste Management Strategy and Leicester's municipal waste management requirements.
- 4) To encourage waste management facilities which increase re-use, recycling, composting and value / energy recovery, including through the use of new waste management technologies where appropriate, in order to meet or exceed regional targets.
- 5) To promote use of waste as a resource including optimum use of recycled waste materials as aggregates.
- 6) To minimise final disposal as a means of managing waste arisings.
- 7) To provide for a distribution of waste management facilities in the FA at locations which optimise the use of previously-developed land and reduce the need to transport waste from origin to management destination.
- 8) To protect local communities, and the natural and built environment from unacceptable effects of waste management development.

- 9) To encourage opportunities for means of transporting waste other than by road.
- 10) To promote the delivery of measures for environmental, recreational, economic and community gain in mitigation or compensation for any adverse effects of waste related development where appropriate.

### ASSESSMENT OF STRATEGIC POLICY OPTIONS

With the LLWDF Objectives in place, the Policy Team then developed a range of strategic options to guide the development of specific policies in line with the objectives. These were assessed against the 20 SA objectives as part of the Issues & Options stage of the LLWDF process. The assessment revealed varying degrees of sustainability across the options. Although the Leicestershire and Leicester officers ultimately held responsibility for selecting the preferred option for each strategic issue, the SA assessment differentiated the various options and helped to identify the most sustainable option overall

### ASSESSMENT OF SIGNIFICANT EFFECTS OF PREFERRED OPTIONS

Following the Issues and Options consultation, associated consultation undertaken by Leicestershire and Leicester during 2005 and the selection of a preferred option for each strategic issue relating to waste development, a draft set of Preferred CS&DC Policies was developed by the Policy Team. These policies influence the selection of sites and the mitigation measures and planning conditions necessary for sites to be developed. For information purposes, the general topic areas of the CS&DC policies are listed below:

#### Draft CS&DC Preferred Policy Topics

*The Preferred Policies for Waste Management Provision*

Policy 1: Sustainable Waste Management Development

Policy 2: Waste Reduction

Policy 3: Ensuring Sustainable Provision

Policy 4: Allocated Sites and Areas for Waste Management Development

Policy 5: Waste Management Development Outside Allocated Sites

*The Preferred Policies for Securing Waste Re-use, Recycling and Recovery Facilities*

Policy 6: Re-Use and Recycling Facilities

Policy 7: Composting

Policy 8: Waste Transfer Stations and Recycling and Household Waste Sites (RHWS)

Policy 9: Anaerobic Digestion (AD), Mechanical-Biological Treatment (MBT) and Other Energy/Value Recovery Technologies

Policy 10: Incineration

*The Preferred Policies for Other Waste Management Development*

Policy 11: Non-inert Waste Landfill

Policy 12: Inert Waste Landfill

Policy 13: Other Forms of Waste Management

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Policy 14: Integrated Waste Management

*The Preferred Policies for Protecting the Environment*

Policy 15: Sites of International or National Importance

Policy 16: Sites of Regional and Local Importance

Policy 17: Archaeology

Policy 18: Green Wedges and the Countryside

Policy 19: Agricultural Land

Policy 20: Amenity

Policy 21: Design

Policy 22: Transportation of Waste

Policy 23: Traffic Management

Policy 24: Rights of Way

Policy 25: The Water Environment

Policy 26: Air Safeguarding

*The Preferred Policies for Controlling Waste Management Development*

- Policy 27: Information in Support of Planning Applications
- Policy 28: Landscaping and Woodland
- Policy 29: Reclamation and Aftercare
- Policy 30: After-Use
- Policy 31: Planning Conditions
- Policy 32: Planning Obligations

Thirty proposed site allocations for waste facilities have been assessed in this SA in order to inform the selection of preferred sites. In order to aid ease of understanding of the results, types of waste facility have been grouped; some sites fall into several groups. Groupings have been made for the following types of facilities:

- ◆ Predominantly recycling and reuse, including transfer stations;
- ◆ Predominantly composting;
- ◆ Landfill-only sites;
- ◆ Co-located landfill, recycling and energy to waste facilities.

It must be noted is not the role of the SA to determine which sites should be chosen as the basis for the preferred options. This is the role of those who have to decide which sites are appropriate. The SA should, however, help in identifying the most sustainable sites. The proposed sites are listed overleaf. Two proposed policies relating to the development of sites were also assessed:

**Policy 1: Waste Management Site Allocations**

The sites listed in Table 3.1 and identified in more detail in the following individual site statements have been allocated to facilitate new waste management capacity. On these sites planning permission will be granted for proposals for waste management development for the potential uses identified in Table 3.1, provided that:

- i. the application has full regard to the requirements, issues and constraints set out in the individual site statements;
- ii. the release of the site does not undermine the delivery of sustainable waste management provision; and
- iii. the proposed development accords with the requirements of other relevant policies contained in the waste development framework.

**Policy 2: Non-inert Landfill Site Allocations**

Sites allocated for the landfilling of non-inert waste will not be granted unless provision is also made for measures to encourage the provision of facilities which move waste management up the waste hierarchy of waste reduction, followed by re-use, recycling and composting of materials, and energy recovery or alternative value recovery technologies that reduce the amount of waste that needs to be disposed.

Site Ref	Site Location	Owner	District/ Borough	New Site or Extension	Operation Proposed	Waste Type
B1	Manor Farm, Aston Flamville	J&F Powner	Blaby	Extension	Composting	Municipal, C&I
B2	Enderby Hill Quarry	Leicester City	Blaby	New Site	Recycling	C&D
B3	Soars Lodge Farm, Foston	W.T. Clarke & Son	Blaby	Extension	Composting	Municipal, C&I Green Waste
B4	Coventry Road, Narborough	Glenfield Waste	Blaby	New Site	Recycling	C&I, Municipal, C&D
B5	Sapcote and Granitethorpe Quarries	JRM Industrial	Blaby	New Site	Landfill	Inerts/Non hazardous
B6	Thurlaston Sawmills	George Walker	Blaby	New Site	Recycling/Reuse	C&I, C&D (mainly wood & some concrete)
B7	Whetstone RHWS	B Garfoot	Blaby	Extension	Replacement RHWS, transfer station, recycling, composting and waste treatment	Municipal
C1	Mountsorrel Quarry (Site A)	Lafarge	Charnwood	New Site	Recovery/recycling; Transfer Station	C&I/Municipal
C2	Mountsorrel Quarry (Site B)	Lafarge	Charnwood	New Site/ Extension	Recycling	C&D
C3	Newhurst Quarry	Biffa	Charnwood	Two New Sites	Landfill; Treatment (MBT); Composting; Recycling (MRF); Biomass Energy Plant	Non-hazardous; C&I/Municipal/C&D
C4	Loughborough RHWS		Charnwood	Extension	Transfer Station; upgraded RHWS	Municipal
C5	Anstey Lane, Thurcaston	Maxi-Waste	Charnwood	New Site	Recycling/Reuse	Inerts/C&D/C&I/ Municipal
C6	Wanlip sand and Gravel, Syston	P. Winterton	Charnwood	New Site	Recycling/Reuse	C&D (mainly concrete and wood)
H1	Northfield Farm, Cotesbach	Mrs Hopkins	Harborough	New Site	Landfill, recycling, composting	Inerts, C&D, green waste
H2	Harborough Road, Kibworth		Harborough	New Site	Transfer Station; MRF; Composting; Incineration with energy recovery	C&I, Municipal, C&D,

Site Ref	Site Location	Owner	District/ Borough	New Site or Extension	Operation Proposed	Waste Type
H3	Shawell Quarry, Cotesbach	Lafarge	Harborough	Extension/ New Site	Landfill; Recycling (MRF)	Non-hazardous; C&I/Municipal
HB1	Leicester Road, Hinckley	E Taylor Recycling	Hinckley & Bosworth	Extension	Transfer Station; Recycling (MRF)	Inert/C&D/C&I/Municipal
HB2	Leicester Road, Hinckley	G Taylor	Hinckley & Bosworth	Extension	Transfer Station	Inert/C&D/C&I/Municipal
HB3	Thornton Lane, Markfield	Marriott Hardcastle	Hinckley & Bosworth	New Site	Landfill	Inerts
HB4	Nailstone Colliery	Viridor	Hinckley & Bosworth	New Site	Municipal Waste Treatment, Composting Recycling, Inert Landfill	Inert/C&D/C&I/Municipal
L1	Sunningdale Road, Leicester	Leicester City	Leicester City	New Site	Recycling	C&D/Non-hazardous
L2	Ulverscroft Road, Leicester	A E Burgess & Sons	Leicester City	New Site	Recycling/Reuse (MRF)	Inert/C&D
M1	Brooksby Quarry	Lafarge	Melton	New Site	Landfill; Recycling; Composting; Recycling (MRF)	Non-hazardous/C&D C&I/Municipal
NW1	Coalville RHWS		North West Leics.	Extension	Recycling; Transfer Station	Municipal
NW2	Little Wigston, Appleby Magna	R Wainwright	North West Leics.	New Site	Recycling/Reuse	C&D Waste
NW3	Hemington Quarry	Lafarge	North West Leics.	Extension	Recycling	C&D
NW4	Ibstock Brick, Leicester Rd, Ibstock	Ibstock Brick Ltd	North West Leics.	New Site	Landfill	C&I/Municipal
NW5	Lockington Quarry (Site A)	Lafarge	North West Leics.	Extension	Recycling	C&D
NW6	Lockington Quarry (Site B)	Lafarge	North West Leics.	Extension	Landfill	Inert

Site Ref	Site Location	Owner	District/ Borough	New Site or Extension	Operation Proposed	Waste Type
NW8	Swainspark	Tapton Properties	North West Leics.	New Site	Resource Recovery Park: Recycling recovery, composting	Inerts/C&D/C&I, municipal

The sites were assessed taking into consideration the site characteristics as well as the facilities proposed as suitable for those sites. Where a range of facilities is proposed to be co-located, the assessment was based on all elements coming forward. In carrying out the assessments, judgements were made on the basis of site data collated by Leicestershire County and Leicester City Councils' officers, based on their existing knowledge of sites and supplemented by information arising from ongoing consultation with stakeholders for individual sites as part of the LLWDF preparation process.

A simplified approach has been taken in order to establish the degree of sustainability of various sites. This approach assumes that all SA objectives are equally important and thus option(s) with more negative effects are noted as being less sustainable.

Effects, which can only be assessed at a very general level at this stage, are also determined by the way development will be implemented and the way development will be influenced by any other LLWDF DPDs and other District-level LDFs. It is worth noting that waste management sites, due to their nature and type of facilities required, generally cause negative effects on a variety of sustainability objectives.

The summary tables overleaf show where, based on the available information, the assessment has identified significant (both positive and negative) likely sustainability effects of the policies in the short, medium and long term. Assessments marked ++, +, -- or --- are those judged to have significant effects; those with one + or – are judged to have non-significant effects. ? indicates that an effect is uncertain.

Summary of Assessments of predominantly Recycling and Reuse Sites, including transfer stations																			
	B2. Entorby Hill Quarry	B4. Coventry Road, Netherborough	B6. Thurston Sawmill	B7. Whelstone RHWS	C1. Mountsorrel Quarry A	C2. Mountsorrel Quarry B	C4. Loughborough RHWS	C5. Anstey Lane, Thurston	C6. Wanlip Sand and Gravel, Syston	H2. Herborough Road, Kibworth	HB1-E Taylor Recycling, Leicester Road, Hinckley	HB2-G Taylor, Leicester Road, Hinckley	L1. Sunningdale Road, Leicester	L2. Ulverscroft Road, Leicester	NW1. Coalville RHWS	NW2. Little Wigston, Appleby Meana	NW3. Hemington Quarry	NW7. Swainsparr Road, Quarry A	NW5. Lockington Quarry A
SA01-Biodiversity	-	-	0	0	-	0	0	0	-	-	++	-	-	-	0	-	0	0	-
SA02-Countywide Landscapes	-	-	-	-	-	0	-	-	-	-	-	-	0	0	0	-	0	-	0
SA03-Cultural Heritage	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
SA04-Water Quality	-	-	-	-	-	-	-	-	-	-	+	+	-	-	-	-	-	-	-
SA05-Soil	-	-	0	-	-	-	-	0	-	-	-	0	-	-	-	-	-	-	0
SA06-Air Quality	-	-	-	-	-	-	-	-	-	-	-	-	-	+/	-	-	-	+/	-
SA07-Greenhouse Gases	-	-	-	-	-	-	-	-	-	-	+	+	-	+/	-	-	-	+/	-
SA08-Public Nuisance	---	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SA09-Human Health	-	-	-	-	-	-	-	0	-	-	0	0	0	-	0	0	-	0	0
SA10-Mineral Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SA11-Contaminated Wastes	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SA12-Developer/ Agricultural Land	+	+	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
SA13-Waste Minimization	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
SA14-Reduced Need to Treat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SA15-Energy	0	0	0	0	0	0	0	0	0	0/++	0	0	0	0	0	0	0	0	0
SA16-Employment	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SA17-Economic Growth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SA18-Access to Waste Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SA19-Good/ Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SA20-Flood Risk	0	-	0	-	0	0	0	-	-	-	-	0	0	-	0	0	-	0	-

Summary of Assessments of Composting sites			Summary of Assessments of Landfill-only Sites			Summary of Assessment of Combined Landfill, Recycling, Recovery and Waste to Energy Sites						
B1. Manor Farm, Aston Flamville	B3. Soars Lodge Farm, Foston	H2. Harborough Road, Kibworth	B5. Sappcote and Grantlethorpe Quarries	HB3. Thornton Lane, Markfield	NW4. Ibstock Brick	NW6. Lockington Quarry B	C3. Newhurst Quarry, Shepshed*	H1. Northfield Farm, Cotesbach	H2. Harborough Road, Kibworth**	H3. Shawell Quarry	HB4. Nallstone Colliery#	M1. Brooksbury Quarry
SA01-Biodiversity	-	-	--	-	0	--	-	--	-	--	--	-
SA02-Countryside/Landscape	-	--	--	--	+/-	+	--	--	--	-	-/-	-
SA03-Cultural Heritage	0	-	0	0	0	-	0	0	-	0	0	-
SA04-Water Quality	-	--	--	--	--	--	--	--	--	--	--	--
SA05-Soil	--	--	--	--	--	--	--	--	--	--	--	--
SA06-Air Quality	-	-	-	-	-	-	-	-	-	-	-	-
SA07-Greenhouse Gases	-	-	-	-	-	-	-	-	-	-	-	-
SA08-Public Nuisance	0	-	--	--	--	-	--	--	--	--	--	--
SA09-Human Health	0	0	-	0	-	0	-	0	-	-	-	-
SA10-Mineral Reserves	0	0	0	0	0	0	0	0	0	0	0	0
SA11-Controlled Wastes	+	+	+	+	+	+	+	+	+	+	+	+
SA12-Developed/Agricultural Land	-	-	0	--	+	0	--	-	-	+	++	+
SA13-Waste Minimisation	++	++	0	0	0	0	0	++	++	++	++	++
SA14-Reduce Need to Travel	-	-	-	-	-	-	-	-	-	-	+	+
SA15-Energy	0	0	0	0	0	0	0/+	0	0/+	0	0/+	0
SA16-Employment	+	+	+	+	+	+	+	+	+	+	+	+
SA17-Economic Growth	0	0	0	0	0	0	0	0	0	0	0	0
SA18-Access to Waste Facilities	0	0	0	0	0	0	0	0	0	0	0	0
SA19-Goodiversity	0	0	--	0	0	0	--	0	0	0	0	0
SA20-Flood Risk	0	0	0	-	0	--	0	0	--	--	0	--

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### **Sites for recycling and reuse facilities, including transfer stations**

For the recycling and reuse facilities, a range of potential significant positive and negative effects have been identified; overall, provision of new facilities gave varying negative or neutral effects on environmental objectives. All sites were seen to have significant positive effects on minimising quantities of waste landfilled and maximising reuse recovery and recycling of waste (SA13).

The results of the assessment indicate that sites NW1 (Coalville RHWS), NW7 (Swainspark), B6 (Thurlaston Sawmill) and L1 (Sunningdale Rd) are the more sustainable of the 19 sites being proposed for predominantly recycling/reuse/transfer facilities; these all have more positive effects than negative. Sites H2 (Harborough Rd Kibworth) and HB1 (E Taylor, Leicester Rd) are judged to be the least sustainable, followed by B4 (Coventry Rd Narborough), C6 (Wanlip Sand & Gravel) and HB2 (G Taylor, Leicester Rd). All other sites are judged to be, in general, equally sustainable.

### **Composting sites**

For the composting proposals, both sites B1 (Manor Farm) and B3 (Soars Lodge Farm) have been assessed as having similar overall effects. For these sites significant negative effects have been identified against safeguarding soil quality/quantity (SA 5).

Significant positive effects are likely for all three sites on minimising quantities of waste landfilled and maximising reuse recovery and recycling of waste (SA13) due to the contribution composting can make towards meeting waste minimisation targets.

The results of the assessments indicate that Site H2 (Harborough Road Kibworth), H2 is the less sustainable of the three sites; this is a far larger site and the proposals include a range of facilities other than composting. The proposals as a whole have the potential for significant negative effects against four SA objectives, including countryside/landscape character (SA2), water quality (SA4), soil quality and quantity (SA5), and flood risk (SA20).

### **Landfill-only sites**

The four site proposals consisting of only landfilling operations were judged to have significant negative effects on between three and six SA objectives. All have the potential for significant negative effects on water quality (SA4), soil quality and quantity (SA5), and public nuisance (SA8). No sites scored significantly positively on any criteria.

The results of the assessments show that site B5 (Sapcote & Granitethorpe Quarries) and HB3 (Thornton Lane, Markfield) are the least sustainable of the four sites proposed, with significant negative effects on six and five SA objectives respectively. However the other two sites, NW4 (Ibstock Brick) and NW6 (Lockington Quarry B), do not score well against most environmental sustainability objectives.

### **Sites for co-located landfilling, recycling and energy-from-waste facilities**

The proposed site allocations for landfilling, recycling and energy from waste facilities score significant negative and positive effects across a range of SA objectives; overall, provision of new facilities gave varying negative or neutral effects on environmental objectives. Sites were assessed on the assumption that all proposals would come forward; the exception was for sites incorporating waste to energy facilities, where the positive effect on increasing

energy-efficiency and the production of renewable energy (SA 15) was assessed to be dependant on this element coming forward. All sites scored at least one significant positive effect through their recycling/reuse proposals and the contribution towards meeting waste minimisation/recycling targets (SA 13). However, all sites were predicted to have more significant negative than significant positive effects.

The results of the assessments indicate that of the 6 sites being proposed for co-location of landfill, recycling and energy to waste facilities Site C3 (Newhurst Quarry) scores the best in sustainability; while it has significant negative effects on four SA objectives, it is also predicted to have significant positive effects on two/three SA objectives. Sites H1 (Northfield Farm Cotesbach), H2 (Harborough Rd, Kibworth), and HB4 (Nailstone Colliery), are broadly similar in overall sustainability terms. Sites H3 (Shawell Quarry, Cotesbach) and M1 (Brooksby Quarry) are judged to be the least sustainable with significant negative effects on five and four SA objectives respectively, and significant positive effects on only one SA objective.

### Supporting policies

The two site allocations policies (Policies 1 and 2) contribute strongly to the overall achievement of sustainable waste development by reinforcing Core Strategy & Development Control policies and by ensuring that landfill options, while permissible as a final disposal option, are considered only in conjunction with other facilities to reuse, recycle and recover waste in line with the waste hierarchy. Both are predicted to have significant effects on SA Objectives 11 (to facilitate the management, recovery and correct disposal of wastes controlled by EC Directives) and 13 (to minimise quantities of waste landfilled and to maximise reuse, recovery and recycling of waste). Policy 1 also has non-significant positive effects on the environmental objectives addressed by the Core Strategy & Development Control Policies DPD.

### Overall Significance

Overall, some or all of the proposed sites are likely to have significant negative effects on the following objectives:

- ◆ SA 01 – Conserve and enhance wildlife habitats and species, avoiding damage to or fragmentation of major features of importance for fauna and flora
- ◆ SA 02 - To conserve and enhance the quality of the countryside and landscape
- ◆ SA 04 - To protect the quality of ground and surface waters
- ◆ SA 05 - To avoid soil contamination and safeguard soil quality and quantity
- ◆ SA 06 - To limit emissions to air to levels that will not damage natural systems and affect human health
- ◆ SA 08 - To minimise public nuisance from waste treatment and disposal
- ◆ SA 12 - To encourage better use of developed land and to prevent irretrievable loss of the best and most versatile agricultural land
- ◆ SA 19 - To conserve geodiversity
- ◆ SA 20 - To avoid or reduce flood risk as a result of waste development

Some or all of the proposed sites are likely to have significant positive effects on:

- ◆ SA 12 - To encourage better use of developed land and to prevent irretrievable loss of the best and most versatile agricultural land
- ◆ SA 13 - To minimise quantities of waste landfilled and to maximise re-use, recovery and recycling of waste
- ◆ SA 14 - To reduce the need to travel, in particular to reduce the transportation of untreated waste by road, and thereby vehicle emissions, in line with the proximity principle
- ◆ SA 15 - To increase energy efficiency and the production of renewable energy (if energy-from-waste proposals are implemented at sites)

The two supporting policies are likely to have significant positive effects on

- ◆ SA 11 – To facilitate the management, recovery and correct disposal of wastes controlled by EC Directives.
- ◆ SA 13 - To minimise quantities of waste landfilled and to maximise re-use, recovery and recycling of waste

#### MITIGATION MEASURES

Many of the sustainability effects of developing the proposed sites depend on site and proposal-specific details. Measures envisaged to prevent, reduce or offset any significant adverse effects (so called mitigation measures) have been proposed on a policy basis. However, most potential negative effects require outlining of mitigation measures during project-level Environmental Impact Assessment (EIA). A list of proposed general measures to mitigate negative impacts (and enhance positive impacts) is set out below:

- ◆ Project level Environmental Impact Assessments, where applicable;
- ◆ The effective implementation of relevant Policies within the CS&DC DPD;
- ◆ Measures to ensure best-practice construction and operation procedures as well as sympathetic design.
- ◆ Incorporation of suggested mitigation measures as part of site planning requirements.

#### MONITORING OF SIGNIFICANT EFFECTS

The SA guidance recommends SA monitoring to be incorporated into Local Authority's existing monitoring arrangements. In accordance with Regulation 48 of the Town and Country Planning Regulations, the Councils are required to prepare an Annual Monitoring Report (AMR) to assess the implementation of the Waste Development Framework and the extent to which objectives are being achieved; as well as to identify any changes if a policy is not working or if the targets are not met. It is recommended that the Councils seek to integrate the monitoring of the significant sustainability effects of Site Allocations in these wider monitoring arrangements.

#### CONCLUSIONS

Based on the information available, a range of significant positive and negative effects have been predicted for all proposed sites. These effects, as is to be expected for the type of development, are largely negative. Any new development is likely to have negative effects on, particularly, the natural environment. However the construction of new waste facilities

must be seen within the strategic context as a means of addressing the environmental and other sustainability issues of dealing with waste produced in Leicester and Leicestershire.

Some negative effects can be minimised to a satisfactory degree through the identified, and possibly other, mitigation measures as described above and in the detailed site assessments. However, the assessment has highlighted that some proposed sites have the potential for significant negative sustainability effects, which would be difficult to avoid. The extent of the significance of effects and subsequent mitigation will need to be assessed in greater detail as individual sites come forward which are subject to EIA.

The sustainability appraisal has been taken into consideration in the selection of preferred sites for consultation and the Policy Team have incorporated the recommendations outlined in this Sustainability Appraisal Report, where possible, into the site planning requirements for each preferred site. A full explanation of the reasons for site choices is given in Section 4 of the Site Allocations Preferred Options document.

## Glossary

Abbreviation	Definition
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
cSAC	Candidate Special Area of Conservation
CS&DC	Core Strategy and Development Control Policies
DPD	Development Plan Document
ELV	End Of Life Vehicles
FA	Framework Area
HGV	Heavy Goods Vehicles
ISAR	Interim Sustainability Appraisal Report
LCC	Leicestershire County Council
LDF	Local Development Framework
LLWDF	Leicester & Leicestershire Waste Development Framework
LMDF	Leicestershire Minerals Development Framework
LTP	Local Transport Plan
MPG	Minerals Planning Guidance
NO <sub>2</sub> ; NO <sub>x</sub>	Nitrogen dioxide; oxides of nitrogen
ODPM	Office of the Deputy Prime Minister
PM <sub>10</sub>	Fine particles
PPG	Planning Policy Guidance
PPP	Plans, policies and programmes
PPS	Planning Policy Statement
RSS	Regional Spatial Strategy
SA	Sustainability Appraisal
SAR	Sustainability Appraisal Report
SEA	Strategic Environmental Assessment
SINC	Site of Importance for Nature Conservation
SPA	Special Protection Area
SPD	Supplementary Planning Document
SSA	Site-Specific Allocations
SSSI	Site of Special Scientific Interest
WEEE	Waste Electrical And Electronic Equipment



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# 1. INTRODUCTION

## WASTE DEVELOPMENT FRAMEWORK CORE STRATEGY & DEVELOPMENT CONTROL POLICIES AND SITE ALLOCATIONS

- 1.1 Leicester City and Leicestershire County Council are undertaking a review of the Local Waste Plan for Leicestershire, Leicester and Rutland (1995-2006) under the new system of Local Development Frameworks (LDFs) introduced through the new Planning and Compulsory Purchase Act passed in July 2004. The review will result in the Waste Development Framework for Leicester and Leicestershire (LLWDF) which will roll the Plan forward to 2021. The LLWDF outlines the Councils' vision for future sustainable waste development up to 2021 and comprises two Development Plan Documents (DPDs): a Core Strategy & Development Control Policies and Development Plan Document (CS&DC DPD) and a Waste Site-Specific Allocations Development Plan Document (SSA DPD).
- 1.2 The **Core Strategy** and **Development Control Policies** DPD sets out the key principles to guide the form of waste management development in the framework area, and the criteria against which planning applications for waste management development will be considered. It includes a spatial vision, spatial strategy, strategic objectives, core policies, and a monitoring framework.
- 1.3 The **Site Allocations** DPD identifies sites and land suitable for waste development within the framework area.
- 1.4 Atkins was appointed by Leicester City and Leicestershire County Council in October 2004 to undertake Sustainability Appraisal (SA) work incorporating Strategic Environmental Assessment (SEA) of the LLWDF. This sustainability appraisal report describes the results of the appraisal on the social, environmental and economic effects of the LLWDF Site Allocations DPD.

## REQUIREMENT FOR STRATEGIC ENVIRONMENTAL ASSESSMENT

- 1.5 The EU Directive 2001/42/EC on assessment of effects of certain plans and programmes on the environment (the Strategic Environmental Assessment (SEA) Directive) came into force in the UK on 20 July 2004 through the Environmental Assessment of Plans and Programmes Regulations 2004.
- 1.6 The objective of the Directive is:  
*'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoptions of plans...with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans...which are likely to have significant effects on the environment'*. (Article 1, 2001/42/EC)
- 1.7 It is clear from this definition that, given the scope of the LLWDF and its likely significant effects on the environment, a Strategic Environmental Assessment is required of its component DPDs.
- 1.8 The SEA Directive and the SEA Regulations state that the SEA must consider the following topic areas:
  - Biodiversity

- Population
- Human health
- Flora and fauna
- Soil
- Water
- Air
- Climatic factors
- Material assets
- Cultural heritage, including archaeological and architectural heritage
- Landscape
- And the interrelationship between these factors

1.9 The SEA Directive creates the following specific requirements on consultation:

- ◆ Authorities, which, because of their environmental responsibilities, are likely to be concerned by the effects of implementing the plan or programme, must be consulted on the scope and level of detail of the information to be included in the Environmental Report. The authorities designated as consultation bodies under the 2004 Regulations are:
  - English Nature
  - English Heritage
  - Environment Agency
  - Countryside Agency
- ◆ The public and the consultation bodies must be consulted on the draft plan or programme and on the Environmental Report.

#### **REQUIREMENT FOR SUSTAINABILITY APPRAISAL**

1.10 Under new Regulations<sup>1</sup>, implementing the provisions of the Planning and Compulsory Purchase Act 2004, a Sustainability Appraisal (SA) is required for all LDFs, including WDFs. The purpose of SA is to promote sustainable development through better integration of sustainability considerations in the preparation and adoption of plans. The Regulations stipulate that SA of LDFs should meet the requirements of the EU Directive 2001/42/EC on assessment of effects of certain plans and programmes on the environment (the 'SEA Directive').

1.11 Sustainability Appraisal is described in Paragraph 8 of 'The Planning System: General Principles':

*'Sustainability appraisal is intended to assess the impact of plan policies from an environmental, economic and social perspective. It is first and foremost a systematic process. It is intended to test the performance of a plan against the objectives of sustainable development and thereby provide the basis for its improvement. Guidance to be published on sustainability appraisal will show how the requirements of the Strategic Environmental Assessment (SEA) Directive can be incorporated into the process.'*

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<sup>1</sup> The Town and Country Planning (Local Development) (England) Regulations 2004. The Regulations came into force on 28 September 2004.

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- 1.12 Sustainability appraisal thus helps Local Planning Authorities to fulfil the objective of contributing to the achievement of sustainable development in preparing their plans.
- 1.13 There are many definitions of sustainable development, however, the most commonly used and widely accepted is that coined by the World Commission of Environment and Development in 1987 as:
- ‘Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.’*
- 1.14 The UK Government launched its new strategy for sustainable development ‘Securing the Future: Delivering a Sustainable Development Framework’ on 7 March 2005. The new strategy sets five guiding principles which will form the basis for sustainable policy in the UK:
- 1) **Living within environmental limits** – respecting the limits of the planet’s environment, resources and biodiversity to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations;
  - 2) **Ensuring a Strong, Healthy and Just Society** – meeting the needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity for all;
  - 3) **Achieving a Sustainable Economy** – building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them; and efficient resource use incentivised;
  - 4) **Promoting Good Governance** – actively promoting effective, participative systems of governance in all levels of society – engaging people’s creativity, energy and diversity;
  - 5) **Using Sound Science Responsibly** – ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty as well as public attitudes and values.
- 1.15 The new strategy then sets out four agreed priorities for immediate action, shared across the UK:
- Sustainable consumption and production;
  - Climate change and energy;
  - Natural resource protection and environmental enhancement;
  - Sustainable communities.
- 1.16 The aim of the SA is to ensure that the Development Framework and its constituent documents being developed, in this case the LLWDF CS&DC DPD, is sustainable and that through the process of undertaking the SA the overall sustainability of the Development Framework is improved.
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## SA PROCESS

- 1.17 The requirements to carry out SA and SEA are distinct, but ODPM guidance<sup>2</sup> states that it is possible to satisfy both through a single appraisal process and provides methodologies for doing so. Therefore for ease of reference this report will refer to both processes as a Sustainability Appraisal (SA) despite the differences in the two processes.
- 1.18 According to the same guidance the main stages in the SA process are as follows:
- ◆ Stage A – Setting the context and objectives, establishing the baseline and deciding on scope;
  - ◆ Stage B – Developing and refining options and assessing effects;
  - ◆ Stage C – Preparing the Sustainability Report;
  - ◆ Stage D – Consultation on the preferred options of the DPD and the SA Report;
  - ◆ Stage E – Monitoring the significant effects of implementing the DPD.
- 1.19 The interrelationship between these main stages and between the tasks in each stage is illustrated in Figure 2.1 in Chapter 2.
- 1.20 The 2005 ODPM guidance also requires the preparation of the following reports:
- ◆ Scoping Report (summarising Stage A work) which should be used for consultation on the scope of the SA;
  - ◆ Sustainability Appraisal Report (documenting Stages A to C work) which should be used in the public consultation on the Preferred Options.
- 1.21 The final guidance produced in November 2005 removed the previous requirement for producing an Initial Sustainability Appraisal Report. However, in order to allow the SA process to inform consultees during the development of broad LLWDF options, and to add transparency to the process, the Leicestershire SA process has included the preparation of an Interim Sustainability Appraisal Report which was published alongside the LLWDF Issues and Options consultation in June-August 2005.

## SA AND CONSULTATION

- 1.22 The requirements for consultation during a Sustainability Appraisal are as follows:
- ◆ Authorities which, because of their environmental responsibilities, are likely to be concerned by the effects of implementing the plan or programme, must be consulted on the scope and level of detail of the information to be included in the Environmental Report. The 2004 SEA Regulations indicate four Consultation Bodies as follows: Countryside Agency, English Heritage, English Nature and Environment Agency. The SA guidance goes further by suggesting consultation, in addition to the four Consultation Bodies, of representatives of other interests including economic interests and local business, social interests and community service providers, transport planners and providers and NGOs.
  - ◆ The public and the statutory Consultation Bodies must be consulted on the issues and options, the SA of issues and options, the draft plan and the Sustainability Appraisal Report.

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<sup>2</sup> Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks: Guidance for Regional Planning Bodies and Local Planning Authorities, ODPM, November 2005

- 1.23 The consultation timetable for the preparation of the LLWDF Site Allocations DPD and its Sustainability Appraisal is set out in Table 1.1.

**Table 1-1: Consultation Timetable for the Site Allocations DPD and Sustainability Appraisal**

<b>Consultation</b>	<b>Date</b>
Sustainability Appraisal Scoping Report	March-April 2005
Interim Sustainability Appraisal Report for information only, accompanying consultation on Issues & Options for LLWDF as a whole.	June-August 2005
Site Allocations Preferred Options/ Sustainability Appraisal Report	Summer 2006

- 1.24 The following reports (covering SA Stages A and B) have been prepared by Atkins Ltd for Leicestershire County Council and published as part of this sustainability appraisal process:

- ◆ Scoping Report for LLWDF prepared in March 2004;
- ◆ Interim SA Report prepared in June 2005;
- ◆ Final Sustainability Appraisal Report (this document) prepared in April 2006.

#### **PURPOSE OF THE SUSTAINABILITY APPRAISAL REPORT**

- 1.25 The requirement to prepare a Sustainability Appraisal Report (SAR) arises directly from Article 5.1 of the SEA Directive which states that:

*'An Environmental Report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.'*

- 1.26 In a sustainability appraisal the SAR replaces the Environmental Report as required under the SEA Directive.
- 1.27 This SAR reports on the work undertaken during the initial stages of the SA process and takes the process further by reporting on the social, environmental and economic effects of the allocated sites thus helping in the identification of the most sustainable sites for location of waste management activities.

## 2. SUSTAINABILITY APPRAISAL METHODOLOGY

### MEETING THE REQUIREMENTS OF THE SEA DIRECTIVE

- 2.1 As mentioned in Chapter 1 there is a fundamental difference between the SA and SEA methodologies. SEA is primarily focused on environmental effects and the methodology addresses a number of topic areas namely Biodiversity, Population, Human Health, Flora and Fauna, Soil, Water, Air, Climatic Factors, Material Assets, Cultural Heritage and Landscape and the interrelationship between these topics. SA, however, widens the scope of the appraisal to include social and economic topics as well as environmental as it is intended to assess the impact of a plan from an environmental, social and economic perspective.
- 2.2 This Sustainability Appraisal has been undertaken to meet the requirements of the SEA Directive for environmental assessment of plans. Table 2.1 sets out the way the specific SEA requirements have been met in this report.

**Table 2-1: Schedule of SEA Requirements**

Requirements of the Directive	Where Covered in Report
<b>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 information to be given is:</b>	
a) An outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes	Chapter 1
b) The relevant aspects of the current state of the environment and the likely evolution without implementation of the plan or programme	Chapter 3, Appendix C
c) The environmental characteristics of areas likely to be significantly affected	Chapter 3, Appendix C
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directive 79/409/EEC and 92/43/EEC	Chapter 3, Appendix C
e) The environmental protection objectives established at international, community or national level which are relevant to the programme and the way those objectives and any environmental considerations have been taken into account during its preparation	Chapters 3 and 4
f) The likely significant effects on the environment, including: short, medium and long term; permanent and temporary; positive and negative; secondary, cumulative and synergistic effects 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.	Chapter 3, Appendix D
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.	Chapter6, Appendix D
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	Chapter 5
i) A description of measures envisaged concerning monitoring (in accordance with regulation 17)	Chapter 7
j) A non-technical summary of the information provided under the above headings	Non-technical summary

<b>Consultation with:</b>	
Authorities with environmental responsibility when deciding on the scope and level of detail of the information to be included in the environment report	Chapters 1 and 2, Appendices A and B
Authorities with environmental responsibility and the public to be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan and accompanying environmental report before its adoption	Consultation on this SA Report
Other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country	Not applicable
<b>Taking the environmental report and the results of the consultations into account in decision making</b>	
<b>Provision of information on the decision:</b> When the plan or programme is adopted the public and any countries consulted must be informed and the following made available: <ul style="list-style-type: none"> <li>• The plan or programme as adopted</li> <li>• A statement summarising how environmental considerations have been integrated into the plan or programme in accordance with the requirements of the legislation</li> <li>• The measures decided concerning monitoring</li> </ul>	To be addressed at a later date
<b>Monitoring</b> of the environmental effects of the plan or programmes implementation must be undertaken	To be addressed at a later date

## APPRAISAL PROCESS

- 2.3 The sustainability appraisal started as the preparation of the WDF began and it has progressed in an iterative fashion, with ongoing communication and consultation between Atkins Ltd, Leicester City and Leicestershire County Council. The Statutory SEA Consultees were also involved in this process. It is considered that this methodology of Planning Authorities and Statutory SEA Consultees jointly working through the process facilitates proper consideration of sustainability issues beyond administrative (and subject) boundaries. It also represents an efficient and effective use of resources. A further benefit is to provide mutual verification of the process.
- 2.4 To date the following outputs have been prepared:
- ◆ A Scoping Report for the draft LLWDF (hereafter the ‘Scoping Report’) was produced by Atkins Ltd in March 2005 preliminary to the preparation of the LLWDF, setting out the results of SA Stage A work. The Scoping Report was subject to consultation in March and April of 2005.
  - ◆ The LLWDF Interim Sustainability Appraisal Report (ISAR) was not subject to formal consultation but was published to inform the consultation exercise on Issues and Options which was completed on August 1<sup>st</sup> 2005.

## APPRAISAL METHODOLOGY

- 2.5 The Government has produced guidance on the Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents (ODPM November 2005) which contains guidance and quality assurance checklists on the preparation of Sustainability Appraisal Reports. The preparation of this document follows this

guidance closely. During earlier stages of the SA the interim guidance<sup>3/4</sup> was followed; references have been updated in this SAR.

- 2.6 The methodology adopted involved the completion of the SA stages A to C and associated tasks as outlined in Figure 2.1 overleaf.

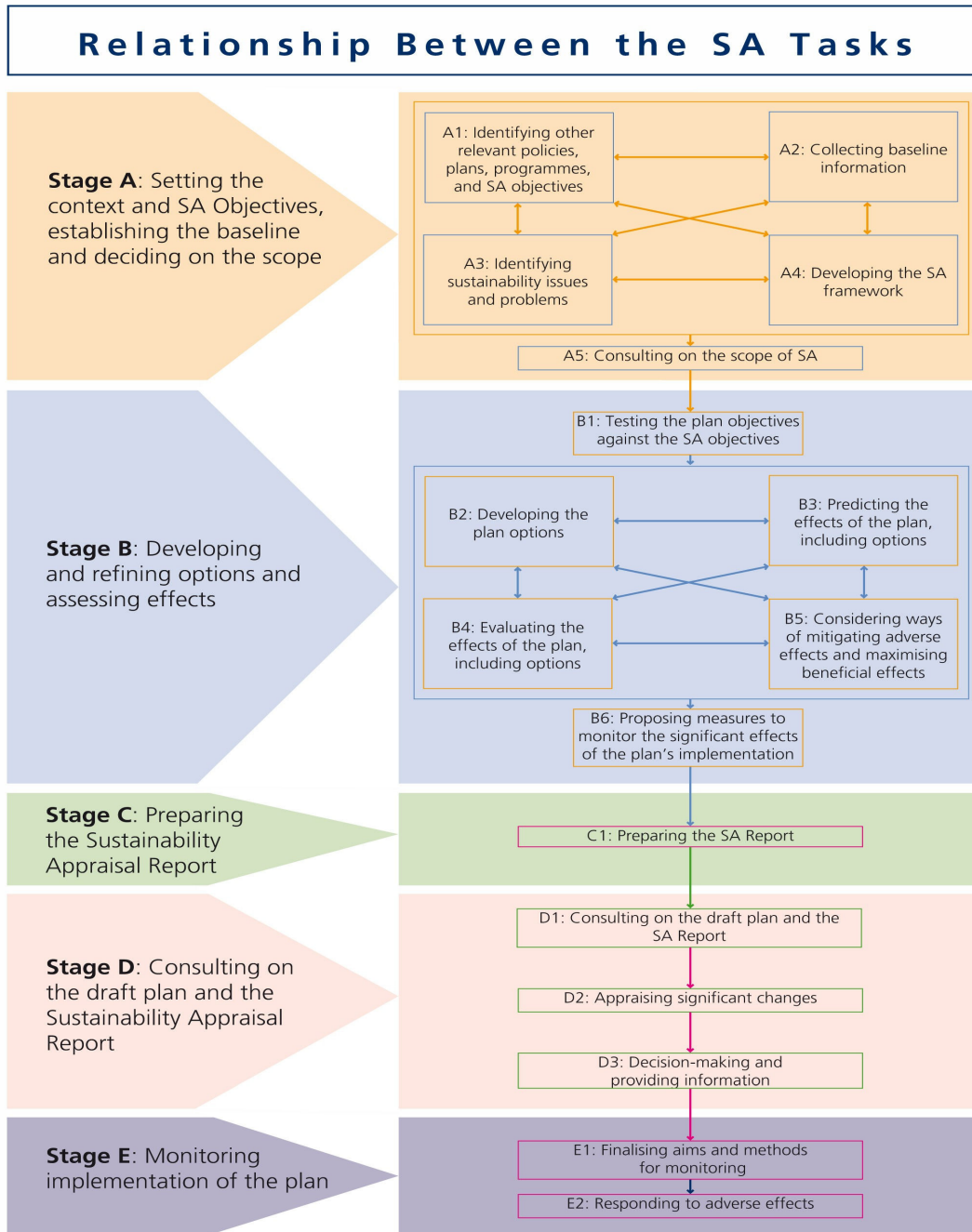
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<sup>3</sup> Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks: Guidance for Regional Planning Bodies and Local Planning Authorities. Consultation Paper. ODPM, September 2004.

<sup>4</sup> Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks: Guidance for Regional Planning Bodies and Local Planning Authorities. Interim Advice Note on Frequently Asked Questions, ODPM, April 2005

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Figure 2.1: Relationship between SA Stages and Tasks



**Source:** Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks: Guidance for Regional Planning Bodies and Local Planning Authorities, ODPM, November 2005. P 38

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## **STAGE A: SETTING THE CONTEXT AND OBJECTIVES, ESTABLISHING BASELINE AND DECIDING ON SCOPE**

### **A1: Other Relevant Policies, Plans, Programmes and Sustainability objectives**

- 2.7 Plans and programmes relevant to the LLWDF were identified through a systematic desk-based search supplemented by informal consultation. These were reviewed and a set of key sustainability themes and issues drawn out. The results of this exercise are given in a table listing the key issues against the relevant plans and programmes.

### **A2: Collecting Baseline Information**

- 2.8 To accurately predict how potential plan policies will affect the environment, it is first important to understand the current state of the environment and of social and economic factors and then examine the likely evolution of such factors without the implementation of the plan.
- 2.9 Baseline information provides the basis for predicting and monitoring environmental effects and helps to identify sustainability problems and alternative ways of dealing with them. Baseline data tables have been prepared where data have been split by the key topics to be considered under the SEA Directive. These tables record:
- ◆ general indicators of relevance to the plan;
  - ◆ quantified latest available data;
  - ◆ comparators (regional or national level data against which the Framework Area's status can be compared);
  - ◆ targets for the indicators where they exist;
  - ◆ trends for the indicators; and
  - ◆ issues, problems and constraints which arise.
- 2.10 Data were collated from a wide range of existing sources. For each indicator, quantified baseline data was collected which was readily accessible and in a format applicable to the issues to be assessed by the SA/SEA and at a relevant geographical level. The main sources used were official websites, Leicester City & Leicestershire County Council reports and data, regional-level reports, Census 2001 and draft Area Profiles
- 2.11 No new data collection was undertaken. Where significant gaps exist, these are identified and recommendations for filling the gaps will be included in the proposals for monitoring the implementation of the plan. Data availability is a key problem. It varies between indicators and at different tiers of government; for example, statistics at national level do not always have a comparator, or are not necessarily relevant at the local level.
- 2.12 Not all detail is readily presentable or sufficiently detailed in table format. Some detail is available in map form and held on GIS within the Council, and this is identified.

### **A3: Identifying Sustainability Issues and Problems**

- 2.13 Key sustainability issues within Leicester and Leicestershire were identified through consideration of existing objectives for the area, ongoing consultation with officers and organisations and examination of the collected baseline data. The key issues

identified covered the most relevant topics and were considered at a SA Scoping Workshop meeting in February 2005<sup>5</sup>, after which they were set out in a table.

2.14 It was generally agreed that using the categories of social, environmental and economic to group issues, as often done, is not necessarily the best method for SA. The main reason is that some issues affect all three categories and few issues affect just one category. Examples of this include:

- ◆ Traffic congestion is clearly an economic, social and environmental problem for the whole of the Framework Area; and
- ◆ Habitat loss has clear environmental costs, but also has an impact on the social benefits of living in Leicester and Leicestershire and the attractiveness of the Framework Area to commerce.

#### **A4: Developing the Sustainability Appraisal Framework**

2.15 A set of draft objectives and indicators, against which the policies and proposals in the DPD can be assessed, was drawn up. They were identified by reviewing relevant policy documents at the European, national, regional, county and district level, those put forward in the SEA Guidance, the review of the baseline data and key sustainability issues and those suggested at the Scoping Workshop. The draft objectives have been refined through subsequent internal officer steering group meetings, workshops and through the consultation on the Scoping Report.

2.16 For each objective, one or more indicators have been set that provide for the status of the objective to be tested against targets, now or in the future, and that are appropriate to the County. They have been adapted from those in the SEA Guidance, Strategic Council Documents and the Draft Community Plan, through officer discussion and consultation on the Scoping Report. A table has been prepared setting out the SA Framework and identifying how relevant SEA Directive topic(s) have been covered.

#### **A5: Consulting on the Scope of the Sustainability Appraisal**

2.17 The consultation on the Scoping Report took place between 25 March and 6 May 2005. The four main statutory bodies: English Nature, English Heritage, the Countryside Agency and the Environment Agency were formally consulted in accordance with the SEA Directive. In addition the neighbouring authorities, Leicester and Leicestershire officers and relevant organisations were consulted.

2.18 The statutory and non-statutory bodies and organisations that have been consulted to date on the Scoping Report, Revised Scoping Report and the Initial Sustainability Appraisal Report are presented in Appendix A. Appendix B summarises the main consultee comments on the Scoping Report and indicates how these comments have been addressed in the preparation of this SA report.

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<sup>5</sup> SA Scoping Workshop, County Hall 17<sup>th</sup> Feb 2005. Invitations were extended to planning authorities within and neighbouring the City and County, statutory consultees, pressure groups. Attendance included representatives from various divisions of Leicester City and Leicester County Councils, representative from Environment Agency.

- 2.19 Of the four SEA statutory consultation bodies consulted only the Countryside Agency did not provide a response. English Nature's response was supportive of the emphasis put on biodiversity and geodiversity and requested that preserving geodiversity should be included as a WDF SA objective. The Environment Agency highlighted the need to assess flood risk; avoiding or reducing flood risk was subsequently added to the list of SA objectives.

## **STAGE B: DEVELOPING AND REFINING OPTIONS**

### **B1: Testing the DPD Objectives Against the Sustainability Appraisal Framework**

- 2.20 An initial compatibility assessment of the original LLWDF objectives against the SA Objectives was undertaken as part of the iterative process to assess the sustainability of the objectives. The results were presented in table format.

### **B2: Developing the DPD Options**

- 2.21 Strategic policy options were developed by the Policy Team (Atkins Planning consultants in liaison with Leicester City, Leicestershire County Council) in consultation with the SA team. These options have been assessed, in broad terms, against the SA framework in order to determine their performance in sustainability terms, with reference to the social, environmental and economic factors. These broad options covered both LLWDF DPDs: the CS&DC DPD and the SSA DPD. The options appraisal for the CS&DC DPD is described in the SAR for the CS&DC DPD.
- 2.22 For the SSA DPD, an initial set of sites were assessed in detail by the methodology as described in sections B3, B4, B5, and B6 of this report. The less sustainable Site Allocations were then identified and recommended for exclusion in the SSA Preferred Options Document.

### **B3: Predicting the Effects of the DPD**

- 2.23 The methodology that has been adopted for this assessment is generally broad-brush and qualitative which is generally accepted as good practice by the SA guidance.
- 2.24 The prediction of effects involved the identification of the potential changes to the future baseline conditions (which was considered to not deviate substantially from existing baseline conditions, see section on Predicted Future Trends) which were believed to arise from the specific preferred policy.
- 2.25 The prediction of effects was undertaken for each proposed site against the SA Framework. Judgements were informed by site data collated by Leicester City and Leicestershire County Council officers, based on existing knowledge of sites and supplemented by ongoing consultation with stakeholders for individual sites as part of the LLWDF preparation process.
- 2.26 The predicted effects were described in terms of their nature and magnitude using the following parameters:
- ◆ Geographical scale;
  - ◆ Probability of the effect occurring;
  - ◆ Timing of effect – short, medium, long term;
  - ◆ Duration of effect – temporary or permanent;
  - ◆ Nature of effect – positive, negative or neutral; and

- ◆ Secondary, cumulative and/or synergistic effects.

**B4: Evaluating the Effects of the DPD**

- 2.27 The next stage of the assessment involved the evaluation of the significant effects. The evaluation involved forming a judgement on whether or not the predicted effects will be significant. The technique that has primarily been used to assess the significance of effects in this assessment is a qualitative assessment based on expert judgement. Other techniques included consultation with stakeholders involved in the SA process, geographical information systems and reference to key legislation, primarily the Strategic Environmental Assessment of Plans and Programmes Regulations 2004 and Environmental Impact Assessment Regulations 1999.
- 2.28 As with the prediction of the effects, the criteria of assessing the significance of a specific effect used in this assessment, as outlined in Annex II of the SEA Directive, has been based on the following parameters to determine the significance:
- ◆ Scale;
  - ◆ Permanence;
  - ◆ Nature and sensitivity; and
  - ◆ Cumulative effects.
- 2.29 In the current practice of sustainability appraisals, the broad-brush qualitative prediction and evaluation of effects is based on a qualitative seven point scale in easily understood terms. In general, this assessment has adopted the scale set in Table 2.2 to assess the significance of effects of the proposed sites.

**Table 2-2: Criteria for Assessing Significance of Effects**

Assessment Scale	Significance of Effect/Appraisal Category
+++	Strongly positive
++	Moderately positive
+	Slightly positive
0	Neutral or no obvious effect
-	Slightly negative
--	Moderately negative
---	Strongly negative
+/-	Combination of positive and negative or neutral effects
?	Effect unclear/cannot be accurately assessed at this stage

- 2.30 Moderately and strongly positive and negative effects have been considered of significance whereas neutral and slightly positive and negative effects have been considered non-significant.

**B5: Considering Ways of Mitigating Adverse Effects and Maximising Beneficial Effects**

- 2.31 Where appropriate mitigation measures have been identified during the evaluation process to reduce the scale/importance of significant negative effects.

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## **B6: Proposing Measures to Monitor the Significant Effects of Implementing the DPD**

- 2.32 SA monitoring involves measuring indicators which will enable the establishment of a causal link between the implementation of the plan and the likely significant effect (positive or negative) being monitored. The aim is to ensure that any adverse effects which arise during implementation, whether or not they were foreseen, can be identified and that action can be taken by Leicester and Leicestershire to deal with them.
- 2.33 It should be noted that the CS & DC DPD includes a monitoring framework which identifies the targets to be met for achieving the LLWDF and its objectives. The aim is to ensure that any proposals for monitoring outlined in the SAR will complement, where appropriate, the monitoring proposals outlined in the CS & DC DPD.

### **ASSESSING CUMULATIVE EFFECTS AS PART OF SUSTAINABILITY APPRAISAL**

- 2.34 Annex I of the SEA Directive requires that the assessment of effects include secondary, cumulative and synergistic effects.
- 2.35 **Secondary or indirect effects** are effects that are not a direct result of the plan, but occur away from the original effect or as a result of the complex pathway (e.g. a development that changes a water table and thus affects the ecology of a nearby wetland). These effects are not cumulative and have been identified and assessed primarily through the examination of the relationship between various objectives during the Assessment of Effects.
- 2.36 **Cumulative effects** on the other hand arise where several proposals each have insignificant effects but in-combination have a significant effect due to spatial crowding or temporal overlap between plans, proposals and actions and repeated removal or addition of resources due to proposals and actions. Cumulative effects can be:
- ◆ **Additive** – the simple sum of all the effects;
  - ◆ **Neutralising** – where effects counteract each other to reduce the overall effect; or
  - ◆ **Synergistic** – when the effect of two or more effects acting together is greater than the simple sum of the effects when acting alone. For instance, a wildlife habitat can become progressively fragmented with limited effects on a particular species until the last fragmentation makes the areas too small to support the species at all.
- 2.37 Cumulative effects assessment is a systematic procedure for identifying and evaluating the significance of effects from multiple activities. The analysis of the causes, pathways and consequences of these effects is an essential part of the process.
- 2.38 Cumulative (including additive, neutralising and synergistic) effects have been considered throughout the entire SA process, as described below:
- ◆ As part of the review of relevant strategies, plans and programmes and the derivation of draft SA objectives key receptors have been identified which may be subject to cumulative effects.
  - ◆ In the process of collecting baseline information cumulative effects have been considered by identifying key receptors (e.g. specific wildlife habitats) and

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information on how these have changed with time, and how they are likely to change without the implementation of the LLWDF. Targets have been identified (where possible), that identify how close to capacity the key receptor is, which is a key determining factor in assessing the likelihood of cumulative and synergistic effects occurring, and their degree of significance.

- ◆ Through the analysis of environmental issues and problems, receptors have been identified that are particularly sensitive, in decline or near to their threshold (where such information is available).
- ◆ The development of objectives, indicators and targets has been influenced by cumulative effects identified through the process above and SA objectives that consider cumulative effects have been identified.
- ◆ Testing the consistency between the Site Allocations DPD and SA objectives has highlighted the potential for cumulative effects against specific LLWDF objectives.
- ◆ Cumulative effects of the proposed sites have been predicted and assessed through the identification of key receptors and SA objectives that consider cumulative effects assessment. It is recognised that there is uncertainty in predicting effects and determining significance and this can arise through a number of factors, including: variations in natural systems and their interactions; and a lack of information, knowledge or scientific agreement regarding cause-effect relationships.

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### 3. DEVELOPMENT OF THE SUSTAINABILITY APPRAISAL FRAMEWORK

#### INTRODUCTION

- 3.1 The development of a sustainability appraisal framework is a key component in completing the SA by synthesising objectives relevant to the SA, the baseline information and sustainability issues into a systematic and easily understood tool that allows the prediction and assessment of effects arising from the Core Strategy and Development Control Policies.

#### OTHER PLANS AND PROGRAMMES

- 3.2 The SEA Directive states that the Environmental Report should provide information on:
- ‘the plan’s ‘relationship with other relevant plans and programmes’ and ‘the environmental protection objectives, established at international, [European] Community or national level, which are relevant to the plan...and the way those objectives and any environmental considerations have been taken into account during its preparation’.*
- (Annex 1 (a), (e))
- 3.3 Relevant international, national, regional and local plans and programmes that might influence the plan have been identified and are outlined in Table 3.1.

**Table 3-1: Relevant Plans, Programmes and Strategies**

<b>International Plans and Programmes</b>
Animal By-Products Regulations (EC 1774/2002)
Batteries Directive
EU 6 <sup>th</sup> Environmental Action Plan, September 2002
EU Air Quality & Management Directive (96/62/EC)
EU Biodiversity Action Plan, February 1998
EU Conservation of wild birds Directive 79/409/EEC
EU Directive on Incineration of Waste (2000/76/EC)
EU End of Life Vehicles Directive (2000/53/EC)
EU Habitats Directive (92/43/EEC)
EU Hazardous Waste Directive 91/689/EEC (Amended by Directive 94/31/EC)
EU Integrated Pollution and Prevention and Control (IPPC) Directive (96/61/EC)
EU Landfill Directive (1999/31/EC)
EU Packaging and Packaging Waste Directive (94/62/EC)
EU Restriction of Hazardous Substances (ROHS) Directive (2002/95/EC)
EU Sustainable Development Strategy, May 2001
EU Waste Electrical and Electronic Equipment (WEEE) Directive (2002/96/EC)
EU Waste Framework Directive (75/442/EEC as amended)
EU Water Framework Directive (2002/49/EC)
European Landscape Convention
Ozone Depleting Substances Regulations (1 <sup>st</sup> Jan 2002)
Proposed Biowaste Directive

<b>National Plans and Programmes</b>
Circular 05/05: Planning Obligations, ODPM
Circular 1/2003: Aerodrome Safeguarding, ODPM
Countryside & Rights of Way Act 2000
Draft MPS 1: Planning & Minerals (consultation paper 2004)
Draft PPS25: Development and Flood Risk (2005)
Draft PPS3: Housing (2005)
Environment Act 1995
Environmental Protection Act 1990
Forthcoming Agricultural Waste Regulations
Geodiversity and the minerals industry – Conserving our geological heritage English Nature, SAMSA, QPA, 2003
Heritage Counts Website ( <a href="http://www.heritagecounts.org.uk">www.heritagecounts.org.uk</a> ), maintained by English Heritage
Household Waste Recycling Bill 2002
ICAO Annex 14 Vol. 1 – provision of Bird Strike Hazard Reduction
Landfill Tax Regulations 1996
MPG 1: Minerals Planning Guidance 1: General Considerations & the Development Plan System (1996)
MPG6: Guidelines for Aggregate provision in England (1994)
MPG7: Reclamation of Mineral Workings (1996)
National and Regional Guidelines for Aggregates Provision in England 2001- 2016

<b>National Plans and Programmes</b>
National Forest Biodiversity Action Plan
National Forest Strategy 2004-2014
National Waste Strategy 2000 (England and Wales)
Planning for the Supply of Natural Building and Roofing Stone in England and Wales, Symonds Group, ODPM, March 2004.
Policy and Practice for the Protection of Flood Plains, Environment Agency, 1997
PPG2: Green Belts (1994)
PPG3: Housing (2000)
PPG4: Industrial, Commercial Development and Small Firms (1992)
PPG13: Transport 2001
PPG15: Planning and the Historic Environment (1994)
PPG16: Archaeology and Planning (2002)
PPG17: Planning for Open Space, Sport and Recreation (2002)
PPG24: Planning and Noise (1994)
PPG25: Development and Flood Risk (2001)
PPS 10: Planning for Sustainable Waste Management (2005)
PPS1: Delivering Sustainable Development (2005)
PPS7: Sustainable Development in Rural Areas 2004
PPS9: Biodiversity and Geological Conservation (2005)
PPS11 Regional Spatial Strategies (2004)
PPS12: Local Development Frameworks (2004)
PPS22: Renewable Energy 2004
PPS23: Planning and Pollution Control, (2004)
Proposed Changes to Waste Management Decision Making Principles in Waste Strategy 2000
Road Traffic Reduction (National Targets) Act, 1998
SEA and Biodiversity: Guidance for Practitioners, RSPB, June 2004
The Conservation (Natural Habitats Etc) Regulations 1994
The End-of-Life Vehicles Regulations 2003
The Future of Transport White Paper, DETR, July 2004
The Historic Environment – a Force for our Future, DCMS 2001
The Landfill (England and Wales) (Amendment) Regulations 2004
The Landfill (England and Wales) Regulations 2002
The Planning and Compensation Act 1991
The Planning and Compulsory Purchase Act 2004
The Planning Response to Climate Change, ODPM, September 2004
The Town and Country Planning Act 1990 (as amended)
The Waste and Emissions Trading Act 2003
The Waste Incineration (England and Wales) Regulations 2002
UK Air Quality Strategy, 2000
UK Sustainable Development Strategy 2005
UK Sustainable Development Strategy, 1999
Waste Minimisation Act 1998
Waste Not Want Not - A Strategy for tackling the Waste Problem (Nov 2002)
Wildlife & Countryside Act (1981) (as amended)

<b>Regional Plans and Programmes</b>
Countryside Character Volume 4: East Midlands, Countryside Agency
East Midlands Biodiversity Strategy
East Midlands Regional Economic Strategy
East Midlands Regional Energy Strategy
East Midlands Regional Environment Strategy
East Midlands Regional Waste Strategy
East Midlands Regional Assembly Strategic River Corridors Vision Statement 2003
Regional Freight Strategy
RSS 8: East Midlands Regional Spatial Strategy 2005
Space4trees Regional Forestry Framework, East Midlands
The State of the Countryside Report (East Midlands) 2004
'Think Farming and Food', East Midlands Rural Affairs Forum, July 2003
Viewpoints on the East Midlands Environment, 1999
Viewpoints on the Historic Environment of the East Midlands, 2002
Water Resources for the Future: A Strategy for the East Midlands (March 2001)

<b>Local Plans and Strategies</b>
Blaby Local Plan
Central Leicestershire LTP
Charnwood Local Plan
Core Strategy Issues and Options Report, May 2005
Core Strategy Scoping Report, March 2005
Draft Leicester Local Area Agreement
Harborough District Local Plan
Hinckley & Bosworth Local Plan
Leicester Air Quality Action Plan
Leicester Community Plan
Leicester Environmental Statement
Leicester Local Plan 2006-16
Leicester, Leicestershire & Rutland Structure Plan March 2005
Leicestershire Biodiversity Action Plan
Leicestershire Community Strategy
Leicestershire Economic Partnership (LSEP) Action Plan 2004-7
Leicestershire LTP
Leicestershire Minerals Local Plan Review 1995
Leicestershire Municipal Waste Management Strategy 2002-2020
Leicestershire Municipal Waste Management Strategy 2006 – Draft Core Strategy and Action Plan for Consultation
Leicestershire Waste Management Partnership Business Plan Nov 2004-March 2006
Leicestershire, Leicester & Rutland Landscape & Woodland Strategy
Leicestershire, Leicester & Rutland Waste Local Plan
Local Geodiversity Action Plan for Leicester & Rutland, English Nature
LSEP Leicester & Leicestershire Economic Regeneration Programme 2003-12
Melton Local Plan

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North West Leicestershire Local Plan
Oadby & Wigston Local Plan

- 3.4 The key objectives, and issues raised for the LLWDF, were identified from these plans as an initial step in the development of the SA objectives. These are summarised in Table 3.2.

**Table 3-2: Derivation of SA Objectives from Plans, Programmes & Strategies**

Key Issues relevant to LLWDF	Derived from
Promoting a healthier life and environment	Environment Agency, PPG10, PPS23, RSS8, Leicestershire LTP, Central Leicestershire LTP, Directive 75/442/EEC Waste, Directive 96/62/EC Air Quality, ELV Directive, WEEE Directive, Packaging & Packaging Waste, UK Air Quality Strategy, Local Air Quality plans, Directive 94/31/EC Hazardous Waste, Local Plans, Leicestershire Community Strategy East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005; EMRA Strategic River Corridors Vision
Safeguarding & enhancing the natural environment	Directive 75/442/EEC Waste, Directive 79/409/EEC Conservation of wild birds, Directive 96/62/EC Air Quality, EU Biodiversity Action Plan for Conservation of Natural Resources, PPG2, PPS7, PPS23, PPS10, PPS9, RSS8, Leicestershire BAP, Rutland LP, Leicester, Leicestershire and Rutland SP, Leicestershire LTP, Leicester, Leicestershire and Rutland Landscape and Woodland Strategy, Blaby LP, Oadby & Wigston LP, Melton LP, Harborough LP, Charnwood LP, Hinckley & Bosworth LP, Leicester LP, Environment Agency, Leicestershire Community Strategy, East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005, Putting Wildlife Back on the Map: the East Midlands Biodiversity Statement: Consultative Draft (Oct 2004); EMRA Strategic River Corridors Vision
Promotion of improvements to air quality	UK Sustainable Development Strategy, Directive 75/442/EEC Waste, Directive 96/62/EC Air Quality, PPS 10, PPS23, RSS8 Leicestershire LP, Leicester Air Quality Action Plan, Environment Agency, PPS22 East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Protection of quality of inland waters	Directive 75/442/EEC Waste, Directive 2000/60/EC Water, Environment Agency, PPS22 East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005; EMRA Strategic River Corridors Vision
Protection of soil quality	Environment Agency, Directive 75/442/EEC Waste, PPS22, Landfill Directive East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Reducing the impact of noise on residents of and visitors to the area	Directive 2002/49/EC Noise, Environment Agency, Leicester LP
Minimising quantities of waste produced	Environment Agency, National Waste Strategy, Leicester, Leicestershire and Rutland Waste Local Plan, Leicester LP, Directive 75/442/EEC Waste, Directive 1999/31/EC Landfill, Directive 91/689/EC Hazardous Waste, PPS10, RSS8, Regional Economic Strategy, Waste Strategy 2000 England & Wales, Regional Waste Strategy
Minimising quantities of waste landfilled	Environment Agency, National Waste Strategy, Leicester, Leicestershire and Rutland Waste Local Plan, Leicester LP, Directive 75/442/EEC Waste, Directive 1999/31/EC Landfill, Directive 91/689/EC Hazardous Waste, PPS10, RSS8, Regional Economic Strategy, Waste Strategy 2000 England and Wales, E. Midlands Regional Waste Strategy, East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Contribute to the reduction in greenhouse gases	Waste Strategy 2000 England and Wales, RSS8, PPS23, East Midlands Energy Strategy,
Maximise value recovered from waste	Draft PPS22, Waste Strategy 2000 England and Wales, E Midlands Regional Waste Strategy
Reducing flood risk	Directive 2000/60/EC Water, RSS8, Environment Agency, PPG25 East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005; EMRA Strategic River Corridors Vision

Key issues relevant to LLWDF	Derived from
Ensuring countryside managed sustainably	UK Sustainable Development Strategy, PPS1, PPG2, PPS10, PPS7, RSS8, Leicester, Leicestershire and Rutland Woodland Strategy, Blaby LP, Charnwood LP, North West Leicestershire LP, East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Protection of best and most versatile agricultural land	PPS7, PPS10, Leicester, Leicestershire and Rutland SP
Protection of mineral resources from sterilisation	Leicester, Leicestershire and Rutland Structure Plan, Leicestershire Minerals Local Plan, MPG1, MPG6, MPG7
Promoting economic growth and employment	PPS1, PPG4, PPS10, PPS7, RSS8, Regional Economic Strategy, Leicester, Leicestershire and Rutland SP, Leicestershire LTP, Central Leicestershire LTP, Harborough LP, NW Leicestershire LP, Hinckley & Bosworth LP, Melton LP, LSEP Strategy and action plan
Management, recovery and correct disposal of hazardous waste	Directive 91/689/EC Hazardous Waste, Directive 75/442/EEC Waste, PPS23, Draft E Mids Regional Waste Strategy
Promotion of sustainable transport	PPG13, RSS8, RSS8, Leicester, Leicestershire and Rutland SP, Regional Transport Strategy, Leicestershire LTP, Central Leicestershire LTP, Local Plans, Community Strategy, East Midlands Regional Energy Strategy
Quantity of woodland cover in County	NW Leicestershire LP, Hinckley & Bosworth LP, Charnwood LP, Leicester, Leicestershire and Rutland Landscape and Woodland Strategy, National Forest Biodiversity Action Plan, National Forest Strategy
Address social exclusion	RSS8, Regional Economic Strategy, Local plans, Leicestershire Community Strategy East Midlands Integrated Regional Strategy – Our Sustainable Development Framework
Accessibility to services and provision of everyday needs	Leicestershire LTP, Central Leicestershire LTP, Melton LTP, Local Plans, Community Strategy, LSEP Strategy and Action plans East Midlands Integrated Regional Strategy – Our Sustainable Development Framework Geodiversity and the minerals industry – Conserving our geological heritage
Reuse of development land	PPS1, Local Plans, Leicestershire, Leicester & Rutland Structure Plan, RSS 8, MPG7
Protecting the historic environment	English Heritage, East Midlands Regional Environment Strategy, Local Plans, East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005, PPG15.
Sustainable communities	UK Sustainable Development Strategy 2005, 1999, UK Sustainable Development Strategy 2005, PPS1, Leicestershire Community Strategy, East Midlands Integrated Regional Strategy – Our Sustainable Development Framework
Promoting a healthier life and environment	Environment Agency, PPG10, PPS23, RSS8, Leicestershire LTP, Central Leicestershire LTP, Directive 75/442/EEC Waste, Directive 96/62/EC Air Quality, ELV Directive, WEEE Directive, Packaging & Packaging Waste, UK Air Quality Strategy, Local Air Quality plans, Directive 94/31/EC Hazardous Waste, Local Plans, Leicestershire Community Strategy East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Safeguarding & enhancing the natural environment	Directive 75/442/EEC Waste, Directive 79/409/EEC Conservation of wild birds, Directive 96/62/EC Air Quality, EU Biodiversity Action Plan for Conservation of Natural Resources, PPG2, PPS7, PPS23, PPS10, PPS9, RSS8, Leicestershire BAP, Rutland LP, Leicester, Leicestershire and Rutland SP, Leicestershire LTP, Leicester, Leicestershire and Rutland Landscape and Woodland Strategy, Blaby LP, Oadby & Wigston LP, Melton LP, Harborough LP, Charnwood LP, Hinckley & Bosworth LP, Leicester LP, Environment Agency, Leicestershire Community Strategy, East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005, Putting Wildlife Back on the Map: the East Midlands Biodiversity Statement: Consultative Draft (Oct 2004)

Key issues relevant to LLWDF	Derived from
Promotion of improvements to air quality	UK Sustainable Development Strategy, Directive 75/442/EEC Waste, Directive 96/62/EC Air Quality, PPS 10, PPS23, RSS8 Leicestershire LP, Leicester Air Quality Action Plan, Environment Agency, PPS22 East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Protection of quality of inland waters	Directive 75/442/EEC Waste, Directive 2000/60/EC Water, Environment Agency, PPS22 East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Protection of soil quality	Environment Agency, Directive 75/442/EEC Waste, PPS22, Landfill Directive East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Reducing the impact of noise on residents of and visitors to the area	Directive 2002/49/EC Noise, Environment Agency, Leicester LP
Minimising quantities of waste produced	Environment Agency, National Waste Strategy, Leicester, Leicestershire and Rutland Waste Local Plan, Leicester LP, Directive 75/442/EEC Waste, Directive 1999/31/EC Landfill, Directive 91/689/EC Hazardous Waste, PPS10, RSS8, Regional Economic Strategy, Waste Strategy 2000 England & Wales, Regional Waste Strategy
Minimising quantities of waste landfilled	Environment Agency, National Waste Strategy, Leicester, Leicestershire and Rutland Waste Local Plan, Leicester LP, Directive 75/442/EEC Waste, Directive 1999/31/EC Landfill, Directive 91/689/EC Hazardous Waste, PPS10, RSS8, Regional Economic Strategy, Waste Strategy 2000 England and Wales. E. Midlands Regional Waste Strategy, East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Contribute to the reduction in greenhouse gases	Waste Strategy 2000 England and Wales, RSS8, PPS23, East Midlands Energy Strategy.
Maximise value recovered from waste	Draft PPS22, Waste Strategy 2000 England and Wales, E Midlands Regional Waste Strategy
Reducing flood risk	Directive 2000/60/EC Water, RSS8, Environment Agency, PPG25 East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Ensuring countryside managed sustainably	UK Sustainable Development Strategy, PPS1, PPG2, PPS10, PPS7, RSS8, Leicester, Leicestershire and Rutland Woodland Strategy, Blaby LP, Charnwood LP, North West Leicestershire LP East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005
Protection of best and most versatile agricultural land	PPS7, PPS10, Leicester, Leicestershire and Rutland SP
Protection of mineral resources from sterilisation	Leicester, Leicestershire and Rutland Structure Plan, Leicestershire Minerals Local Plan, MPG1, MPG6, MPG7
Promoting economic growth and employment	PPS1, PPG4, PPS10, PPS7, RSS8, Regional Economic Strategy, Leicester, Leicestershire and Rutland SP, Leicestershire LTP, Central Leicestershire LTP, Harborough LP, NW Leicestershire LP, Hinckley & Bosworth LP, Melton LP, LSEP Strategy and action plan
Management, recovery and correct disposal of hazardous waste	Directive 91/689/EC Hazardous Waste, Directive 75/442/EEC Waste, PPS23, Draft E Mids Regional Waste Strategy
Promotion of sustainable transport	PPG13, RSS8, RSS8, Leicester, Leicestershire and Rutland SP, Regional Transport Strategy, Leicestershire LTP, Central Leicestershire LTP, Local Plans, Community Strategy, East Midlands Regional Energy Strategy
Quantity of woodland cover in County	NW Leicestershire LP, Hinckley & Bosworth LP, Charnwood LP, Leicester, Leicestershire and Rutland Landscape and Woodland Strategy, National Forest Biodiversity Action Plan, National Forest Strategy

Key issues relevant to LLWDF	Derived from
Address social exclusion	<p style="text-align: center;"><b>RSS8 , Re</b></p> gional Economic Strategy, Local plans, Leicestershire Community Strategy East Midlands Integrated Regional Strategy – Our Sustainable Development Framework
Accessibility to services and provision of everyday needs	Leicestershire LTP, Central Leicestershire LTP, Melton LTP, Local Plans, Community Strategy, LSEP Strategy and Action plans East Midlands Integrated Regional Strategy – Our Sustainable Development Framework Geodiversity and the minerals industry – Conserving our geological heritage
Reuse of development land	PPS1, Local Plans, Leicestershire, Leicester & Rutland Structure Plan, RSS 8, MPG7
Protecting the historic environment	English Heritage, East Midlands Regional Environment Strategy, Local Plans, East Midlands Integrated Regional Strategy – Our Sustainable Development Framework, 2005 ,PPG15,
Sustainable communities	UK Sustainable Development Strategy 2005, 1999, UK Sustainable Development Strategy 2005, PPS1, Leicestershire Community Strategy, East Midlands Integrated Regional Strategy – Our Sustainable Development Framework,

## BASELINE INFORMATION

- 3.5 The SEA Directive states that the Environmental Report should provide information on
- ◆ “relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan” and the “environmental characteristics of the areas likely to be significantly affected” (Annex I (b) (c))
  - ◆ “any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC” (Annex I (c)).
- 3.6 The Framework Area (FA) is made up of Leicestershire County and Leicester City. Leicestershire and Leicester are located at the heart of England and sit within three of the five sub-areas which make up the East Midlands region. These are the Eastern, Southern (the most southerly parts of Leicestershire) and Three Cities Sub-areas. The other two sub-areas are the Northern and Peak Sub-Areas. The County is bordered by the Counties of Nottinghamshire, Lincolnshire, Rutland, Northamptonshire, Warwickshire and Staffordshire. It is comprised of 7 Districts: Melton, Harborough, Oadby & Wigston, Blaby, Hinckley & Bosworth, North-West Leicestershire and Charnwood. Leicester City lies roughly in the centre of the County.

## Waste Management in the Framework Area

- 3.7 In 2003/04, approximately 4,849,000 tonnes of waste was produced in the Framework Area. This figure is expected to rise. The quantities of the principal waste streams arising in 2003/04 are listed in Table 2.1.

**Table 3-3: Quantities of Waste Arising by Type 2003/04**

Waste type	Total Quantity (tonnes)
Household	351,661
Civic Amenity	125,612
Commercial and Industrial	1,069,187
Construction and Demolition	2,502,480
Clinical Non- Special	1936
Clinical hazardous	367
Hazardous	28,344
Agricultural	769,139
<b>Total</b>	<b>4,848,726</b>

Source:

Household & Civic Amenity waste - County and City Councils  
 Commercial and Industrial, Construction and Demolition & Agricultural waste – Draft Regional Waste Strategy estimates adjusted by 5% to remove the figure for Rutland  
 Clinical & Hazardous waste – Environment Agency

- 3.8 Agricultural waste, although a significant quantity, is not currently subject to control and is largely dealt with on farm. New legislation is proposed to extend waste management controls to non-natural agricultural waste. Nevertheless, it is anticipated that the amount of non-natural agricultural waste then requiring management as controlled waste (i.e. in facilities provided for by the LLWDF) will only be about 1% or 7,700 tonnes. Using this figure, the total amount of waste arising in Leicestershire requiring management would be about 4,087,000 tonnes.
- 3.9 Municipal (household and civic amenity) waste, which accounts for about 12% of this (lower) total figure, has been growing at an average yearly rate of about 2% based on the past five years.
- 3.10 Whilst there are accurate figures for the quantities of municipal waste from the Waste Collection Authorities year on year, the data for commercial and industrial waste and construction and demolition waste is not so consistently available. Furthermore it is suspected that the figure(s) given in the Draft Regional Waste Strategy for commercial and industrial Waste may have been miscalculated and could be more in the region of 150,000 tonnes higher for the Framework Area. This matter will be clarified in due course. However, on the basis of the tables in the figure above commercial and industrial waste is estimated as accounting for about 26% and construction and demolition waste for about 61% of the total amount of waste requiring management in the Framework Area.
- 3.11 Rates of recycling in 2003-04 were in the order of:
- 18% for municipal waste,
  - 30% for commercial and industrial; and
  - 49% for construction and demolition waste.
- 3.12 The remainder of the waste for 2003-04 was both landfilled in the Framework Area and exported to landfill sites in the neighbouring counties of Warwickshire, Northamptonshire and Lincolnshire as follows:

**Table 3-4: Proportion of Waste Landfilled by Type 03/04**

Waste type	% to Landfills in Framework Area	% to Landfills in neighbouring counties
Municipal	35%	47%
Commercial and Industrial	27%	43%
Construction and Demolition	34%	17%
<b>Total</b>	<b>22%</b>	<b>38%</b>

Source: Environment Agency data

- 3.13 There are a number of existing facilities within the Framework Area for managing waste:
- Materials recovery facilities (MRFs) at Whetstone and Melton

- A mechanical biological treatment (MBT) facility at Bursom
  - Seven composting sites
  - An anaerobic digestion facility at Wanlip
  - Around 40 transfer stations throughout the framework area
  - 32 construction and demolition recycling sites
  - Around 40 scrap metal sites
  - 16 Recycling and Household Waste Centres
  - An incinerator in Melton
  - Landfills for non-hazardous waste at Bradgate, Cotesbach and Narborough
  - Principal landfills for inert waste at Lockington, Hemington, Syston and Husbands Bosworth and a variety of other smaller inert landfill sites
- 3.14 All Waste Collection Authorities operate special collection initiatives and facilities exist at all recycling and household waste recycling centres for the collection of waste electrical and electronic equipment, fridges and freezers, although these are exported to specialist operators outside the Framework Area. There are no tyre recycling facilities in the Framework Area although Cotesbach landfill has a temporary permit which allowed the acceptance of tyres until mid 2005.

#### **Transportation Pressures**

- 3.15 Leicestershire and Leicester's location in the heart of England means they are served by excellent transport links. The M1 is the principal arterial route linking the Framework Area with the rest of the country. The other major roads are the M69 connecting to Coventry, the A42 and the A46. Principal roads are the A511, A444 and A447, A6, A42, A46, A47 and M69.
- 3.16 The A and B roads in the Framework Area have predominately witnessed around 3% to 7% growth in traffic in the period 2003-04.
- 3.17 Main line rail connections link Leicester to Birmingham, Nottingham, Derby and London. Beyond the Framework Area, long distance and international rail freight terminals are located in Birmingham and Daventry, both easily accessible via the motorway network.
- 3.18 Several navigable waterways exist within the Framework Area such as the Ashby Canal, the River Soar and the Grand Union Canal branching to Market Harborough and Welford. Scope for transporting freight on waterways may be limited, however, due to their other uses, such as leisure, which conflict with freight movement.
- 3.19 The Ivanhoe rail line used as a freight line through the former Leicestershire and south Derbyshire coalfield area passes close to the Albion landfill site, which is expected to open in 2005.
- 3.20 There are no intermodal freight terminals in the Framework Area.
- 3.21 A summary table of the baseline data is shown in Table 3.3. Baseline data is set out in Appendix D.

**Table 3-5: Baseline Summary**

SEA Topic	Description
<p>Population &amp; Human health</p>	<p>The Framework Area has a strong agricultural base and the following centres of population, Leicester City (283,500), Loughborough (55,000), Hinckley (37,200) and Coalville (33,000). There are 32 other settlements with a population of over 5,000. The more affluent areas of the county are located towards the south-east in the Harborough District.</p> <p>The total population of the Framework Area at mid-2002, was 899,000. From 1991 to 2001 the population of the county grew by 6% (37,000) compared with a 0.5% decrease in Leicester City over the same period and an England and Wales average of 2.5%. Harborough District has the largest projected household growth to 2016 and Oadby &amp; Wigston District has the smallest with a fall in overall population forecast to 2016.</p> <p>By 2016, population levels are expected to rise by 5.8% and a strong growth in household numbers of 14% is expected, particularly in the Central Leicestershire Policy Area. Household waste and commercial and industrial wastes are particularly affected by these trends.</p> <p>Leicestershire is forecast to have a higher level of household growth than any other part of the East Midlands. Growth is forecast to be around the main settlements of Loughborough, Coalville, Hinckley, and Market Harborough. Particular growth is expected in Central Leicester and through the Leicester regeneration programme, though forecasts are uncertain as housing completions in Leicester have been below Structure Plan allocation targets. While there is a growth in the number of households, household sizes are generally decreasing which will place pressure on the availability of land for building.</p>
<p>Material assets</p>	<p>Within Leicester, 13 of the 28 wards and 47% of the population rank within the most deprived 10% in England. None of the wards outside Leicester rank within the most deprived 10%.</p> <p>Household earnings in Leicestershire are comparable to those for the region, though lower than the national average.</p> <p>In terms of spatial development a key priority is regeneration of the North Derbyshire/North Nottinghamshire coalfield, together with urban areas exhibiting very high and concentrated levels of deprivation; peripheral and isolated rural and coastal areas; and those market towns whose hinterlands display high levels of deprivation.</p> <p>The spatial strategy is underpinned by the objective of concentrating housing and other growth in the existing urban areas, and Regional Spatial Strategy (RSS) places emphasis on sustaining and enhancing the role of existing city, town, district and local centres.</p> <p>Regional Housing provision for 2001 - 2021 should be made at an annual average rate of 3,150 (RSS), out of a total for the East Midlands of 13,700</p> <p>No targets have been set for employment land – RSS advises that net changes in office, industrial and retail floor space should meet local needs.</p>

<p>Biodiversity, fauna and flora</p>	<p>In 2003, designated sites in Leicestershire comprised the River Mease Special Area of Conservation, 91 SSSIs (including Rutland) covering an area of 4750ha, 9 local nature reserves and numerous SINCs (ENABLE, 2004). Leicester City has one SSSI and 34 SINCs. Biodiversity Challenge: an Action Plan for Leicestershire, Leicester &amp; Rutland identifies 4 areas of being of particular importance in terms of biodiversity, containing high levels of SSSIs and semi-natural habitat in general. These are Charnwood Forest, Leighfield Forest, and the limestone area of north-east Leicestershire and Rutland. The Vale of Catmose includes Rutland Water across the Framework Area (FA) border, a wetland of international importance designated as a Special Protection Area.</p> <p>There are 19 Habitat Action Plans and 14 Species Action Plans in the Leicester, Leicestershire &amp; Rutland Biodiversity Action Plan (BAP) 1998, though targets are not quantified. These are:</p> <table border="0" data-bbox="628 887 1222 1473"> <thead> <tr> <th style="text-align: left;"><b>Priority Habitats</b></th> <th style="text-align: left;"><b>Priority Species</b></th> </tr> </thead> <tbody> <tr><td>Heath-grassland</td><td>Otter</td></tr> <tr><td>Hedgerows</td><td>Dormouse</td></tr> <tr><td>Mature Trees</td><td>Water vole</td></tr> <tr><td>Calcareous grassland</td><td>Bats</td></tr> <tr><td>Neutral grassland</td><td>Barn owl</td></tr> <tr><td>Field margins</td><td>Redstart</td></tr> <tr><td>Floodplain wetland</td><td>Nightingale</td></tr> <tr><td>Reedbeds</td><td>Sand martin</td></tr> <tr><td>Mesotrophic lakes</td><td>Black hairstreak</td></tr> <tr><td>Fast-flowing streams</td><td>White-clawed crayfish</td></tr> <tr><td>Sphagnum ponds</td><td>Black poplar</td></tr> <tr><td>Springs and flushes</td><td>Violet helleborine</td></tr> <tr><td>Field ponds</td><td>Wood vetch</td></tr> <tr><td>Rocks and built structures</td><td>Purple small-reed</td></tr> <tr><td>Wet woodland</td><td></td></tr> <tr><td>Sessile oakwood</td><td></td></tr> <tr><td>Roadside verges</td><td></td></tr> <tr><td>Lowland wood pasture and parkland</td><td></td></tr> </tbody> </table> <p>A separate BAP has been produced for the National Forest Area.</p> <p>66.67% of SSSI sites in the FA meet PSA targets, a situation which is better than England as a whole. In Leicester City, there has been an overall decline in the quality and quantity of SINCS, representing a move away from the target set in the Leicester Environmental Strategy.</p>	<b>Priority Habitats</b>	<b>Priority Species</b>	Heath-grassland	Otter	Hedgerows	Dormouse	Mature Trees	Water vole	Calcareous grassland	Bats	Neutral grassland	Barn owl	Field margins	Redstart	Floodplain wetland	Nightingale	Reedbeds	Sand martin	Mesotrophic lakes	Black hairstreak	Fast-flowing streams	White-clawed crayfish	Sphagnum ponds	Black poplar	Springs and flushes	Violet helleborine	Field ponds	Wood vetch	Rocks and built structures	Purple small-reed	Wet woodland		Sessile oakwood		Roadside verges		Lowland wood pasture and parkland	
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<p>Soil</p>	<p>Of the East Midland region's land area, 47% is grade 1, 2 and 3a – the best and most versatile classes of agricultural land (East Midlands Regional Assembly 2002). In England as a whole, only 39% belongs to these grades. This valuable resource is under pressure, however. In the 20 years to 2002, political, economic and animal health factors have led to an 8.4% loss in grassland and an accompanying increase in arable intensive farming (East Midlands Regional Assembly 2002). There is no Environmentally Sensitive Area (ESA) in Leicestershire). Around 80% of the land use in the Framework Area is agricultural, with the emphasis on mixed cereal and livestock farming. The majority of soil quality is</p>																																						

	<p>classified as Grade Three with relatively small areas of particularly good or bad land.</p>
Water	<p>The River Soar runs roughly south to north through the Framework Area to join the River Trent just north of Kegworth. There are four other main rivers: Mease, Sence, Wreake and Eye, and two canals: the Grand Union Canal Leicester Arm and the Ashby Canal. Parts of the River Soar are canalised to make it navigable.</p> <p>The main catchment area in the FA is that of the River Soar and its tributaries (River Sence, River Wreake and Rothley Brook). The catchment area covers 1380km<sup>2</sup> and there are 398 licensed abstractions within the catchment, of which 124 are surface and 274 are groundwater. Downstream the River Soar receives wastewater discharges from treatment works – the main pollution source.</p> <p>In 2003 94.2% of rivers were classified as good or fair chemical quality. 87.1 % were classified as good or fair biological quality, while 96.1% were classified as poor phosphate quality. 48.8% were nitrate poor or bad.</p> <p>Recent investments by water companies have seen major improvements to wastewater effluent and therefore river quality. However a focus on biological and chemical river quality has ignored water quality issues related to nutrient inputs, mainly due to agricultural runoff. In 2002 the entire county was designated a Nitrate Vulnerable Zone (NVZ) (55% of England is so designated).</p> <p>Flood plains are a constraint. The Environment Agency gives 15700 properties in Flood Zone 3 (&gt;1% chance of river flooding pa) in 2004. Development pressures on floodplains increase risk of downstream floods and damage to property – the River Soar in particular has suffered frequent and extensive flooding since the late 18<sup>th</sup> century. In 2002/3 an improved flood alleviation system near Melton Mowbray was completed.</p> <p>Groundwater quality in the FA is generally good and the aquifers are generally of low vulnerability to pollution; there are very few aquifers capable of supporting large-scale abstraction.</p>
Air	<p>Air quality issues in the FA are predominantly related to road traffic. There are 15 Air Quality Management Areas (AQMAs) in the study area, all concerned with NO<sub>2</sub> from traffic; it is likely that several areas will not meet targets by 2005. AQMAs, include a large portion of the City centre and radial roads. Air quality monitoring over the past few years has indicated that pollution levels have remained generally static or increased modestly.</p> <p>There is a possibility that short term standards for fine particle (PM10) concentrations may be exceeded around Croft Quarry in Blaby DC. However, PM10 pollution is not identified as a significant problem elsewhere in the County.</p>
Climatic factors	<p>Recent Government predictions include an increase in rainfall, and consequently the incidence of flooding and subsidence and hotter, drier summers in Leicestershire.</p>

	<p>No data has been identified on CO2 emissions or energy consumption/conservation. The FA's production of renewable energy is unlikely to meet Government targets.</p>
<p>Cultural heritage</p>	<p>The cultural heritage resource within the FA comprises the following statutory designated sites:</p> <ul style="list-style-type: none"> <li>• 212 Scheduled Ancient Monuments</li> <li>• 244 historic townscapes or villages designated as conservation areas</li> <li>• 16 parks or gardens identified on the English Heritage Register of Historic Parks and Gardens.</li> <li>• 1 battlefield included on the English Battlefields Register</li> <li>• 4337 buildings listed for their special architectural or historical interest.</li> </ul> <p>Many features of cultural heritage significance are not registered and therefore do not attract the same level as attention as those listed. However, there is strong voluntary and community support for cultural heritage in the FA.</p>
<p>Landscape &amp; Public amenity</p>	<p>The Framework Area has a landscape of considerable variety and complexity. This is created by the varied physical and human influences that have acted on the land over time and by the underlying variations in the land itself.</p> <p>There is no Green Belt but there are twelve Green Wedges around Leicester and five throughout other parts of the county.</p> <p>There are 18 landscape character areas covering Leicestershire, Leicester &amp; Rutland, described in the Leicestershire, Leicester &amp; Rutland Landscape &amp; Woodland Strategy</p> <p>The Strategic Overview of Leicestershire's Environment (ENABLE, 2004) identifies a key issue as the gradual erosion of local distinctiveness through the intensification of agriculture, abandonment of traditional land management practices, changes in the rural way of life and pressure from new built developments, transportation and power generation schemes and mineral workings. Large developments such as East Midlands Airport are a key source of primary and secondary development pressure, contributing to loss of tranquillity and landscape character.</p> <p>The county has only 3.8% woodland cover,<sup>6</sup> making it one of the least wooded areas of England. The National Forest area has a target of one third woodland cover – targets towards this are being consistently met and woodland cover is increasing. Charnwood Forest is also a valuable landscape asset for the FA, identified in Regional Planning Guidance as a priority area for protection and enhancement of natural and heritage landscape assets. One of the aims of the National Forest was to address the need for open space and recreation – while 71% of Leicestershire residents find it easy to access public open space, the limited space for outdoor pursuits in the country has placed visitor pressure on areas such as Charnwood Forest, with consequent</p>

<sup>6</sup> Forestry Commission National Inventory of Woodland & Trees, 2002. In ENABLE (2004) Strategic Overview of Leicestershire's Environment.

	negative landscape implications (ENABLE).
Economic Development	<p>The Framework Area has a strong agricultural base. However the principal industries in the FA are service industries, manufacturing, construction, food processing, pharmaceuticals and storage &amp; distribution. Construction accounted for 5.5% of employment in Leicestershire in 2001, with transport and communications at 7.8%. The main centres of employment correspond broadly to the main population centres.</p> <p>Regarding social class and occupational structure, there is a noteworthy difference between Leicester and the rest of the County, with the County recording a greater proportion of the workforce in higher skilled occupations (particularly management and professional occupations).</p> <p>While the oil and gas extraction sector is predicted to grow in value 2002-2012, (though shrink in terms of employment), other mining and minerals sectors are predicted to shrink in terms of both value and employment. Mining is predicted to see a significant drop in employment to 2012, from 1.2% of total employment to 0.8%.</p> <p>The key themes of the East Midlands Development Agency regional economic strategy 2003-10 are that manufacturing industries will be allowed to decline in importance, while there will be a focus on encouraging new high-tech industries and the service sector. Overall, manufacturing is forecast to continue to contract significantly over the next decade (shedding some 15,000 jobs, 2002-2012), though the economy will remain heavily dependent on this sector.</p> <p>Key growth areas which may influence waste are the planned expansion of East Midlands Airport, the regeneration of Corby and the large predicted growth in population of Northamptonshire which may increase demand for construction minerals in the south of the county.</p>

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### KEY SUSTAINABILITY ISSUES

- 3.22 The SEA Directive says that the Environmental Report should provide information on:  
*“any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EE”*  
(Annex I (c))
- 3.23 The analysis of the baseline information, supplemented by the study of relevant policies plans and programmes (as set out in Table 3.1) and the results of the scoping workshop, led to the identification of a number of sustainability issues within the Framework Area (FA) which must be addressed by the LLWDF. These issues are summarised in Table 3.6 as follows:

**Table 3-6: Key Sustainability Issues in Leicestershire & Leicester relevant to LLWDF**

Key Issue	Implication for LLWDF	Source
High forecast growth in household numbers, particularly within Central Leicestershire Policy Area (CPLA)	While growth should be taken into account in targets, the pattern of settlement is relevant to the WDF. The proximity principle indicates that the Plan should encourage provision of additional facilities close to source. There is the possibility for coordination with District LDFs to establish development controls for waste-efficient housing and employment development.	Leicestershire Structure Plan Adopted 7 <sup>th</sup> March 2005
Change in predominant industry away from textiles, minerals and manufacturing towards knowledge-based service industries.	Type of waste arisings and source locations may change	LSEP Economic Baseline Study, Regional economic Strategy
The Framework Area (FA) is one of the least wooded areas in Britain	Opportunity for WDF to address potential for woodland planting for post-operational reinstatement of landfill or other sites, particularly within National Forest Area. WDF could deter development that would adversely affect woodland areas.	ENABLE, National Forest strategy, Leicestershire, Leicester & Rutland Landscape and Woodland strategy
The FA's limited space for outdoor pursuits is putting pressure on Charnwood Forest	Opportunity for WDF to address recreational potential for post-operational reinstatement of landfill or other sites. WDF could deter development that would adversely affect recreation and amenity areas.	ENABLE
100% of waste is currently transported by road. Previous Waste Local Plan policies to encourage alternative transport strategies have not been successful.	Scope for WDF to incorporate stronger incentives to facilitate alternative transport modes, particularly the use of rail. This could be a key influence on location and deliverability of facilities	Atkins review of public and industry sources
NO <sub>2</sub> Air quality targets are unlikely to be met in several areas	This issue is linked to transport. While not directly relevant to WDF, the WDF could ensure that locations of sites do not encourage traffic growth in sensitive areas.	
Renewable energy sources are undersupplied in the FA and targets are unlikely to be met.	Opportunity for WDF to encourage Energy From Waste (EfW) developments, if this will contribute to targets. However, possible conflict exists due to general perception of incinerators as 'bad neighbours' which may limit number of sites where such facilities could be located.	ENABLE

Key Issue	Implication for LLWDF	Source
<p>There are few official landscape designations in the FA, and the landscape characterisation lacks detail or specific targets. This means landscape risks being overlooked in land use planning and development control. There has been gradual erosion in landscape quality and traditional character.</p> <p>Targets for development on previously developed land are likely to be met.</p>	<p>WDF policies could ensure that landscape protection is given adequate consideration, going further than simple exclusion of development in designated sensitive areas.</p>	<p>Leicestershire, Leicester &amp; Rutland Landscape &amp; Woodland strategy, ENABLE 2004.</p>
<p>Targets for development on previously developed land are likely to be met.</p>	<p>WDF could enhance this by encouraging waste development on PDL. There is also the need to provide for remediation/disposal of contaminated soils which may be affected by changes in hazardous waste regulations.</p>	<p>Leicestershire, Leicester &amp; Rutland Structure plan; local plans.</p>
<p>The FA has numerous areas of designated biodiversity importance, with the River Mease designated as internationally significant. There are three areas designated as Strategic Biodiversity Enhancement Zones.</p>	<p>WDF should take account of the hierarchy of nature conservation designations when selecting sites. The implications for strategic biodiversity enhancement zones should be considered.</p>	
<p>Railways, waterways and motorway verges form wildlife corridors across the FA.</p>	<p>WDF should ensure no severance of corridors, and could consider opportunities to improve corridors and 'stepping stone' areas in site selection stage.</p>	
<p>80% of land in Leicestershire County is agricultural and 25% of waste in the East Midlands is of agricultural source. This is not currently controlled; however new legislation is likely to reclassify some agricultural wastes as 'controlled' wastes from 2005.</p>	<p>Opportunity for WDF to encourage development of additional, suitably located, facilities to cope with predicted increase in controlled waste from agricultural sources, having regard for proximity principle</p>	<p>RWS (policy RWS8)</p>
<p>Half of Districts did not meet 2003/4 BVPI targets for kerbside collection, and there is a risk that 2005/6 targets may not be met.</p>	<p>If targets are not met this will affect the predicted arisings and waste streams during the WDF period and therefore required capacity. Need for monitoring of waste strategies to link with WDF.</p>	<p>Atkins review of public and industry sources</p>
<p>Few facilities in the FA for bulking up and exporting dry recyclables</p>	<p>WDF should make appropriate allowances for such facilities.</p>	<p>Atkins review of public and industry sources</p>
<p>Landfill capacity is expiring. By the end of 2006 Narborough and Bradgate sites will be closed. The remaining site will be Cotesbach and, potentially, Albion.</p>	<p>WDF should ensure sufficient alternative capacity, while taking account of need to divert increasing amounts of waste away from landfill.</p>	<p>Atkins review of public and industry sources</p>
<p>The FA is a net exporter of most types of waste. The Charnwood facility identified in the existing plan as the solution to this problem has not been delivered.</p>	<p>WDF should aim to ensure self-sufficiency in waste disposal</p>	<p>Atkins review of public and industry sources</p>

Key Issue	Implication for LLWDF	Source
<p>Insufficient facilities, particularly in the FA, for recycling/recovery/other treatment of waste exist to meet EU Landfill Directives 2010 targets. In the FA there is an insufficiency of R/R facilities to meet current needs. In Leicester City, the current facility has capacity for a 30000 tonne increase in intake (equivalent to 27%).</p>	<p>Key input into WDF which must create the planning context allowing delivery of the required capacity, in the right locations. Opportunity to encourage provision of additional MBT or thermal treatment facilities</p>	<p>Atkins review of public and industry sources</p>
<p>Planning restrictions may be restricting the ability to cater for recycling and other targets - the sensitivity of and number of constraints on waste development restricts potential development of new waste processing and disposal facilities.</p>	<p>Consideration must be given to ways of balancing the need for new facilities, the need to take account of the proximity principle and the need to respect landscape, biodiversity and other constraints. Conflict exists between, for example, Structure Plan policies on Green Wedges and Regional Waste policy stating that need for waste development may override landscape designations. There is a need for WDF coordination with land-use planning to avoid conflict at development control stage, as well as with waste management strategies and action plans.</p>	<p>East Midlands Regional Waste Strategy</p>
<p>Perception of waste as a problem not a resource</p>	<p>WDF could encourage development of recycling/reuse facilities. Link with Management Strategy objectives of raising awareness and finding markets for recycled products</p>	<p>Scoping workshop</p>

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### PREDICTED FUTURE TRENDS

- 3.24 During the lifetime of the LLWDF (2006 to 2021), it is predicted that there will be a number of changes within the FA and within Great Britain which could affect the plan, notably the projected population increase which represents a 5.8% increase in population and the strong predicted growth in household numbers (14% between 2001-2016), particularly in the Central Leicestershire Policy Area. The LLRSP confirms that between 1996 and 2016 provision will be made for 60,650 dwellings within the Plan Area (excluding Rutland), of which about 31,500 shall be located in the Central Leicestershire Policy Area. Large developments such as East Midlands Airport are also a key source of primary and secondary development pressure.
- 3.25 Housing and infrastructure development will place considerable demand on construction materials and mineral resources and will lead to associated generation of household and construction waste.
- 3.26 With regard to road building, at the time of writing this report the Government launched a 10-year £1.5bn Regional Strategic Transport Network Plan (RSTN TP). The Transport Plan identifies a £529.4m programme of Strategic Road Improvements (SRIs) that would see enhanced access to regional gateways (international ports and airports) and cross border links from the network.
- 3.27 In addition, the FA is undergoing a change in its economic structure, with a decline in traditional industries such as textiles and mineral extraction, but a growth in knowledge-based industries. The FA has a strong agricultural base; forthcoming legislation on disposal of agricultural waste and changes in farming methods is likely to affect the waste arisings.
- 3.28 The FA relies heavily on landfill for its waste disposal requirements at present and is a net exporter of all types of waste. The two principal landfill sites are forecast to close in the near future and the FA does not have the capacity to deal with the predicted growth in arisings or to ensure waste is treated in a manner according to national and regional policy and the various waste-related European Directives. Without the WDF, Leicestershire County and Leicester City will not be able to dispose of its waste adequately.
- 3.29 Both the natural and built environments are subject to pressures, particularly from development and congestion linked to increased levels of traffic. The expansion of East Midlands Airport with associated industrial development pressures could have a significant effect on the Framework Area together with pressure of household growth.

### CUMULATIVE EFFECTS

- 3.30 The SEA Directive requires consideration of cumulative effects. Cumulative effects can occur from the following situations:
- ◆ Combined effects of a plan with effects of another plan, affecting the same receptor. For example, proposals from land use and transport plans could affect a nature reserve;
  - ◆ Interaction of effects from proposals within a plan affecting the same receptor. For example, proposals to build roads, commercial premises and waste facilities in a particular area within a short period of time could result in cumulative noise, dust and visual effects on the residents nearby, or cumulative loss of space.

3.31 As part of the scoping process, likely cumulative effects of the LLWDF have been identified from the analysis of plans and programmes and the environmental baseline. This analysis has identified a preliminary set of likely cumulative effects, their receptors and likely causes, as shown in Table 3.5. This initial assessment of likely cumulative effects is further examined in the more detailed assessments of Stage B of the SA process.

**Table 3-7: Likely Cumulative Effects and their Causes**

Cumulative Effect	Affected Receptor	Causes
Habitat loss and fragmentation	Wildlife habitats Species	Use of land for new infrastructure, including waste infrastructure, commercial uses & housing
Climate change	Worldwide	Increase in CO <sub>2</sub> emissions through increased motorised transport usage
Increase in ambient noise levels	Humans Species	Increase in traffic flows, increased congestion, preference for waste management development close to source of waste.
Increase in air pollution	Humans Wildlife habitats Species	Increase in traffic flows, increased congestion, new infrastructure, including waste infrastructure
Increase in flood risk	Humans Wildlife habitats Species	Use of land for new transport infrastructure, commercial/waste uses and housing and associated increase in impermeable surfaces.

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## SA FRAMEWORK

- 3.32 A SA Framework has been developed using an iterative analytical process, based initially on the review of relevant plans and programmes, the baseline information, the analysis of key sustainability issues and subsequently incorporating consultees' comments from the Scoping Report consultation (See Appendix B). Specifically, the objective related to conserving geodiversity (Objective 19) has been added to take account of comments from English Heritage and the objective relating to flood risk (Objective 20) has been added to take account of the comments from the Environment Agency.
- 3.33 A set of SA objectives has been developed with indicators suggested for each objective. When known, national, regional and local targets have also been included. The SA objectives have been worded so that they reflect one single desired direction of change for the theme concerned and do not, as far as possible, overlap with other objectives. They include both externally imposed social, environmental and economic objectives and others devised specifically in relation to the context of the Waste Development Framework being prepared and they are distinct from the Waste Development Framework objectives. The SA objectives have also been worded to take account of local circumstances and concerns feeding from the analysis on sustainability issues.
- 3.34 Existing indicators have been used as often as possible. In some cases, specific new indicators are proposed which will require monitoring by relevant bodies should significant effects relating to the SA objectives concerned be identified as part of the assessment of effects during SA Stage B. These proposed indicators aim to capture the change likely to arise from the LLWDF implementation and will play a role in the assessment itself. The set of indicators has been refined as the SA progressed. Developing a good balance of appropriate and reliable indicators across the set of SA objectives is critical in the development of an effective but also practical monitoring programme. It must be noted however that not all indicators will be applicable to all policies or situations.

Table 3-8: SA Framework of Objectives, Indicators and Targets

Objective number	Key Objective relevant to LLWDF	Suggested Indicators	Targets identified	SEA Topic <sup>7</sup>
1.	Conserve and enhance wildlife habitats and species, avoiding damage to or fragmentation of major features of importance for fauna and flora (cumulative effect)	<ul style="list-style-type: none"> <li>Number and type of designated nature sites affected by waste development</li> <li>Trends in BAP habitats and species affected by waste developments</li> <li>Data on condition of designated and non-designated sites potentially affected by waste developments</li> <li>Data on prosecutions or complaints involving waste facilities and protected habitats/species</li> </ul>	<ul style="list-style-type: none"> <li>Leicestershire, Leicester &amp; Rutland and National Forest BAP targets (though these are not quantified to a large extent)</li> <li>English Nature PSA target to have 95% of the SSSI area in favourable or recovering condition by 2010</li> <li>No specific waste-related targets identified.</li> </ul>	BD, FF
2.	To conserve and enhance the quality of the countryside, landscape and built environment (cumulative effect)	<ul style="list-style-type: none"> <li>Data on changes in landscape character areas and impact of waste development</li> <li>Amount of woodland affected or created by waste development</li> </ul>	<ul style="list-style-type: none"> <li>National Forest target of 1/3 woodland cover.</li> <li>No quantifiable targets identified. However, broad objectives of National Forest and Landscape &amp; Woodland Strategy exist.</li> </ul>	LS, MA
3.	To protect places and buildings of archaeological, cultural and historic value	<ul style="list-style-type: none"> <li>Data on designated and non-designated cultural heritage features affected by waste development</li> </ul>	<ul style="list-style-type: none"> <li>No targets identified.</li> </ul>	CH
4.	To protect the quality of ground and surface waters (cumulative effect)	<ul style="list-style-type: none"> <li>Number of watercourses associated with waste facilities which meet Environment Agency water quality standards.</li> <li>Number and location of waste facilities within groundwater protection zones</li> <li>Abstraction and discharge data associated with waste treatment</li> <li>Number of water contamination reports occurring in the waste sector.</li> </ul>	<ul style="list-style-type: none"> <li>No targets identified</li> </ul>	WT

<sup>7</sup> WT=Water; SL=Soil; BD=Biodiversity; FF=Flora & Fauna; AQ=Air Quality; CC=Climatic Factors; CH=Cultural Heritage; LS=Landscape; PP=Population; HH=Human Health; MA=Material Assets

Objective number	Key Objective relevant to LLWDF	Suggested Indicators	Targets identified	SEA Topic <sup>7</sup>
5.	To avoid contamination and safeguard soil quality and quantity (cumulative effect)	<ul style="list-style-type: none"> <li>Number of soil contamination reports occurring in the waste sector.</li> <li>Data on soil quality and contaminated land</li> </ul>	<ul style="list-style-type: none"> <li>No targets identified</li> </ul>	SL
6.	To limit emissions to air to levels that will not damage natural systems and affect human health (cumulative effect)	<ul style="list-style-type: none"> <li>Data on emissions from waste facilities</li> <li>Number of air pollution reports occurring in the waste sector</li> <li>Data on traffic movements associated with waste transportation</li> </ul>	<ul style="list-style-type: none"> <li>National Air Quality Targets as defined in AQ Regulations.</li> <li>No waste-related targets identified</li> <li>Lorry Routing and weight restrictions in place.</li> </ul>	AQ
7.	To minimise the contribution of waste development to adverse climate change. (cumulative effect)	<ul style="list-style-type: none"> <li>Production of greenhouse gases associated with waste facilities (Gassim models)</li> <li>Calculations of emissions arising from waste transportation</li> </ul>	<ul style="list-style-type: none"> <li>Kyoto Protocol obligation to cut greenhouse gas emissions to 12.5% below 1990 levels by between 2008 and 2012.</li> <li>Government target of a 20% cut by 2010.</li> <li>No waste-related targets identified</li> </ul>	CC
8.	To minimise public nuisance from waste treatment and disposal.	<ul style="list-style-type: none"> <li>Extent of noise, odour, dust or vermin problems from waste sites</li> <li>Fly tipping data</li> </ul>	<ul style="list-style-type: none"> <li>No targets identified</li> </ul>	PP, HH
9.	To maximise the benefits to human health and well-being	<ul style="list-style-type: none"> <li>Number and extent of environmental educational or public involvement programmes in operation</li> <li>How many restored waste sites available for public sport and recreation</li> </ul>	<ul style="list-style-type: none"> <li>No targets identified</li> </ul>	PP, HH
10.	To ensure waste development does not irreversibly sterilise mineral reserves	<ul style="list-style-type: none"> <li>Areatype of mineral land permanently sterilised by waste sites</li> </ul>	<ul style="list-style-type: none"> <li>No targets identified</li> </ul>	MA, SL
11.	To facilitate the management, recovery and correct disposal of wastes controlled by EC Directives	<ul style="list-style-type: none"> <li>Hazardous waste arisings</li> <li>Data on ELV waste, WEEE items</li> <li>Amount of these waste types exported out of county</li> <li>Destination of these waste types.</li> </ul>	<ul style="list-style-type: none"> <li>No targets identified</li> </ul>	HH
12.	To encourage better use of developed land and to prevent irretrievable loss of the best and most versatile agricultural land (cumulative effect)	<ul style="list-style-type: none"> <li>% of waste disposal facilities planned and delivered on previously used land</li> <li>% area of grades 1, 2 or 3 agricultural land occupied by waste facilities</li> <li>Area taken by waste management facilities returned to non-waste-related use?</li> </ul>	<ul style="list-style-type: none"> <li>No target identified.</li> </ul>	MA, SL

Objective number	Key Objective relevant to LLWDF	Suggested Indicators	Targets identified	SEA Topic <sup>7</sup>
13.	To minimise quantities of waste landfilled and to maximise re-use, recovery and recycling of waste	<ul style="list-style-type: none"> <li>▪ % household waste landfilled</li> <li>▪ % industrial and commercial waste landfilled</li> <li>▪ Measurements of other waste disposal methods and tonnages.</li> <li>▪ % of total and of each waste recycled</li> <li>▪ % of waste arisings from which value is recovered</li> <li>▪ % of material recovered from kerbside collections schemes and sold</li> <li>▪ tonnages of materials recovered through bring schemes.</li> </ul>	<p>National Waste Strategy targets of:</p> <ul style="list-style-type: none"> <li>▪ By 2005, reduce amount of industrial/commercial waste landfilled to 85% of 1998 levels and to recycle/compost at least 25% of household waste.</li> <li>▪ By 2010 to recycle/compost at least 30% of household waste</li> <li>▪ By 2015 to recycle/compost at least 33% of household waste</li> </ul>	
14.	To reduce the need to travel, in particular to reduce the transportation of untreated waste by road, and thereby vehicle emissions, in line with the proximity principle.	<ul style="list-style-type: none"> <li>▪ Number of waste km (by mode)</li> <li>▪ Amount of waste carried by road vehicle</li> <li>▪ Amount of waste carried by rail and other modes</li> <li>▪ Amount of each waste stream exported out of county.</li> <li>▪ Data on destination of waste exported from Leicestershire</li> <li>▪ Improve efficiency of HGV routes</li> </ul>	<ul style="list-style-type: none"> <li>▪ No waste-related targets identified</li> </ul>	AQ
15.	To increase energy efficiency and the production of renewable energy	<ul style="list-style-type: none"> <li>▪ Number of landfill sites equipped with gas recovery facilities</li> <li>▪ Contribution of waste to renewable energy targets via energy from waste</li> </ul>	<ul style="list-style-type: none"> <li>▪ RPG target of increase in energy from waste from 7Mw in 2003 to 55MW in 2010</li> <li>▪ East Midlands Draft Sustainable Energy Strategy target of 11.2MW Biomass, Landfill Gas 18MW and anaerobic digestion 3.2MW</li> <li>▪ National target to reduce CO<sub>2</sub> emissions by 30% 1996-2011</li> <li>▪ No target identified</li> </ul>	CC
16.	To promote stable employment and employment diversity in the Framework Area	<ul style="list-style-type: none"> <li>▪ Data on employment in Leicester and Leicestershire and waste industry</li> </ul>	<ul style="list-style-type: none"> <li>▪ No target identified</li> </ul>	MA, PP
17.	To promote economic growth in the Framework Area	<ul style="list-style-type: none"> <li>▪ Data on economic value of waste industry within the Framework Area and the national economy</li> <li>▪ data on value recovered from waste</li> </ul>	<ul style="list-style-type: none"> <li>▪ No target identified</li> </ul>	MA

Objective number	Key Objective relevant to LLWDF	Suggested Indicators	Targets identified	SEA Topic <sup>7</sup>
<b>18.</b>	To ensure adequate access to waste facilities appropriate in scale and type to local needs.	<ul style="list-style-type: none"> <li>▪ Number of civic amenity sites per household</li> <li>▪ Tonnage of waste going into each CA site</li> <li>▪ Ratio of arisings to disposals of I&amp;C wastes</li> <li>▪ % of different waste streams processed outside the FA</li> <li>▪ Distance of users from recycling point</li> <li>▪ Distance of users from waste transfer station</li> <li>▪ % new developments including provision for composting and green waste</li> <li>▪ % new developments including provision for recycling</li> <li>▪ % new developments for which a waste audit has been provided</li> </ul>	<ul style="list-style-type: none"> <li>▪ No targets identified at present</li> </ul>	PP, HH, MA
<b>19.</b>	To conserve geodiversity	<ul style="list-style-type: none"> <li>▪ GIS of geological information including topography, geology, availability and locations of local rock, mineral and fossil specimens; borehole sites and core; quarry sites, geological photographs, geophysics</li> <li>▪ Data on RIGS and geological SSSIs</li> <li>▪ Audit of all geological and landscape features and sites</li> <li>▪ Minerals sites identified for restoration or other work</li> </ul>	<ul style="list-style-type: none"> <li>▪ Application for Geopark status for the Chamwood Forest and surrounding areas.</li> <li>▪ 12 sites identified for restoration and other work</li> </ul>	CH, LS
<b>20.</b>	To avoid or reduce flood risk as a result of waste development (cumulative effect)	<ul style="list-style-type: none"> <li>▪ Number of operational or allocated sites within floodplain</li> <li>▪ Number of planning permissions with sustainable drainage installed.</li> <li>▪ Number of properties flooded per annum</li> </ul>	<ul style="list-style-type: none"> <li>▪ No targets identified</li> </ul>	WT

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## 4. DEVELOPMENT OF LLWDF OBJECTIVES

### INTRODUCTION

- 4.1 A number of spatial objectives have been identified and developed for the LLWDF as a whole from the review of relevant plans and strategies that have a strategic policy influence on the LLWDF, the profile of the Framework Area (FA) and taking into consideration the key issues outlined above. According to the Guidance<sup>8</sup> it is important that the objectives of the LLWDF are in accordance with sustainability objectives. Therefore, these objectives have been developed and refined through an iterative process. A compatibility assessment of the LLWDF first set of objectives with the SA objectives was undertaken. This initial assessment helped in refining the objectives as well as identifying the options.

### INITIAL SET OF OBJECTIVES FOR THE LLWDF

- 4.2 A set of 10 draft objectives was developed initially for the LLWDF as a whole by the LLWDF Policy Team, derived from an analysis of issues as described in this report, plus consideration of regional, national and international requirements. These were as follows:
1. To promote the implementation of waste minimisation initiatives
  2. To enable the delivery of sufficient waste management facilities to accommodate forecast waste arising in Leicestershire to at least 2016.
  3. To encourage waste management facilities which increase re-use, recycling and value/energy recovery, including new waste management technologies where appropriate, in order to meet national and/or regional targets.
  4. To encourage optimum use of recycled waste materials as a resource.
  5. To minimise final disposal as a means of managing waste arisings.
  6. To provide for a distribution of waste management facilities in the Framework area that minimises the need to transport waste from origin to treatment destination.
  7. To protect local amenity from unacceptable effects of waste management development, including transportation.
  8. To minimise the adverse effects of waste management development on the natural and built environment.

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<sup>8</sup> Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks, Consultation Paper, ODPM, September 2004

9. To encourage opportunities for means of transporting waste other than by road.
10. To promote the delivery of measures for environmental, recreational, economic and community gain as part of waste related development where possible.

#### **INITIAL COMPATIBILITY ASSESSMENT OF LLWDF OBJECTIVES AND SA OBJECTIVES**

- 4.3 An initial compatibility assessment of the original LLWDF objectives against the SA objectives was undertaken as part of the iterative process to assess the sustainability of the LLWDF objectives. This was carried out at the scoping stage. Table 4.1 shows the initial appraisal of the initial set of LLWDF objectives in the form of a compatibility assessment matrix. Each LLWDF objective was assessed against each SA objective.
- 4.4 The LLWDF objectives, being fairly broad, were assessed as broadly compatible with the SA Objectives or neutral, with no obvious incompatibilities, although in many cases confirmation of compatibility depended on the confirmation of the type of implementation proposals.

##### SA Objectives

- ◆ SA 01 – Conserve and enhance wildlife habitats and species, avoiding damage to or fragmentation of major features of importance for fauna and flora
- ◆ SA 02 – To conserve and enhance the quality of the countryside and landscape
- ◆ SA 03 – To protect places and buildings of archaeological, cultural and historic value
- ◆ SA 04 – To protect the quality of ground and surface waters
- ◆ SA 05 – To avoid soil contamination and safeguard soil quality and quantity
- ◆ SA 06 – To limit emissions to air to levels that will not damage natural systems and affect human health
- ◆ SA 07 – To minimise the contribution of waste development to adverse climate change through reduced greenhouse gas emissions.
- ◆ SA 08 – To minimise public nuisance from waste treatment and disposal.
- ◆ SA 09 – To maximise the benefits to human health and well-being
- ◆ SA 10 – To ensure waste development does not irreversibly sterilise mineral reserves
- ◆ SA 11 – To facilitate the management, recovery and correct disposal of wastes controlled by EC Directives
- ◆ SA 12 – To encourage better use of developed land and to prevent irretrievable loss of the best and most versatile agricultural land
- ◆ SA 13 – To minimise quantities of waste landfilled and to maximise re-use, recovery and recycling of waste
- ◆ SA 14 – To reduce the need to travel, in particular to reduce the transportation of untreated waste by road, and thereby vehicle emissions, in line with the proximity principle.
- ◆ SA 15 – To increase energy efficiency and the production of renewable energy
- ◆ SA 16 – To promote stable employment and employment diversity in the Framework Area
- ◆ SA 17 – To promote sustainable economic growth in the Framework Area

- ◆ SA 18 – To ensure adequate access to waste facilities appropriate in scale and type to local needs.
- ◆ SA 19 – To conserve geodiversity
- ◆ SA 20 – To avoid or reduce flood risk as a result of waste development

Table 4-1: Initial Compatibility Assessment of LLWDF and SA/SEA Objectives

	SA1	SA2	SA3	SA4	SA5	SA6	SA7	SA8	SA9	SA10	SA11	SA12	SA13	SA14	SA15	SA16	SA17	SA18
LLWDF 1	?	?	?	?	?	✓	✓	✓	✓		✓	?	✓	✓	✓	?	?	?
LLWDF 2	?	?	?	?	?	?	?	?	?	?	✓	?	?	✓	?	✓	✓	✓
LLWDF 3	?	?	?	✓	?	✓	✓	?	✓	?	✓	?	✓	?	?	✓	✓	✓
LLWDF 4	?	✓	?	?	✓		✓	✓	✓	✓	✓	?	✓	✓	✓	?	?	
LLWDF 5	?	?	?	?	✓	✓	?	?	✓	✓	✓	?	✓	?	?	✓	✓	?
LLWDF 6	✓		?	?	?	✓	✓	?	✓	?	✓	?	✓	✓	✓	✓	?	✓
LLWDF 7	✓	✓	✓	✓	?	✓	✓	✓	✓	?	?	✓	?	✓	?	?	?	✓
LLWDF 8	✓	✓	✓	✓	✓	✓	✓	?	✓	✓	?	✓	?	✓	?	?	?	?
LLWDF 9	?	?	?	?	?	✓	✓	✓	✓		?	?	?	✓	?	?	?	✓
LLWDF 10	✓	✓	✓	?	?	?	?	✓	✓	?	?	?	?	?	?	✓	✓	✓

Key: ✓ Compatible    ✗ Incompatible    □ No link    ? Uncertain or unknown

## SECOND SET OF OBJECTIVES

- 4.5 Following the initial compatibility assessment of the LLWDF objectives and the SA objectives, taking into account feedback obtained during the Issues and Options Consultation and following discussions with Leicestershire & Leicester Officers, a number of the objectives were refined by Atkins Planning Consultants.
- 4.6 The main aim was to combine similar objectives, to reduce duplication and to ensure a concise set of objectives relevant to the LLWDF. The following objectives were refined from the first set of objectives, with the principal changes as follows:
- ◆ Objectives 7&8 were combined.
  - ◆ The need to optimise use of previously developed land was incorporated into Objective 6.
  - ◆ An objective was added to link the LLWDF to the delivery of the Leicestershire Municipal Waste Management Strategy and Leicester's municipal waste management requirements.
  - ◆ The framework period was extended to 2021 to take account of RSS.
- 4.7 The final set of LLWDF Objectives is outlined in Table 4.2 below.

**Table 4-2: Final Set of LLWDF Objectives**

<b>LLWDF Objectives</b>	
1.	To promote the implementation of waste minimisation initiatives.
2.	To enable the delivery of sufficient waste management facilities in the framework area to meet the waste management capacity apportionment requirement identified by the Regional Waste Strategy to at least 2021.
3.	To support the delivery of the Leicestershire Municipal Waste Management Strategy and Leicester's municipal waste management requirements.
4.	To encourage waste management facilities which increase re-use, recycling, composting and value / energy recovery, including through the use of new waste management technologies where appropriate, in order to meet or exceed regional targets.
5.	To promote use of waste as a resource including optimum use of recycled waste materials as aggregates.
6.	To minimise final disposal as a means of managing waste arisings.
7.	To provide for a distribution of waste management facilities in the FA at locations which optimise the use of previously-developed land and reduce the need to transport waste from origin to management destination.
8.	To protect local communities, and the natural and built environment from unacceptable effects of waste management development.
9.	To encourage opportunities for means of transporting waste other than by road.
10.	To promote the delivery of measures for environmental, recreational, economic and community gain in mitigation or compensation for any adverse effects of waste related development where appropriate.

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## 5. ASSESSMENT OF POLICIES AND SITES

### INTRODUCTION

- 5.1 The SEA Directive states that in the Environmental Report, *'the likely significant effects on the environment of implementing the plan or programme....and reasonable alternatives....are [to be] identified, described and evaluated'* (Article 5.1). The Environmental Report should include 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 [and] its stage in the decision-making process'* (Article 5.2).
- 5.2 In addition, the SEA Directive requires the Environmental Report to outline measures to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme (Annex I (g)).
- 5.3 Existing SA guidance recognises that the most familiar form of SA prediction and evaluation is generally broad-brush and qualitative. It is recognised that quantitative predictions are not always practicable and broad-based and qualitative predictions can be equally valid and appropriate. Examples of the prediction and evaluation techniques for assessing significance of effects are expert judgement, dialogue with stakeholders and public participation, geographical information systems, reference to legislation and regulations and environmental capacity.
- 5.4 This section outlines the allocated waste development sites that have been assessed as part of Stage B, the assessment rationale that has been used for the assessment of significant effects and provides a discussion of the cumulative advantages and disadvantages of the sites considered.

### WASTE SITE POLICIES AND ALLOCATIONS ASSESSED

- 5.5 Table 5.1 presents the 30 proposed site allocations which have been assessed in this SAR. These sites have been identified by Leicester City and LCC in conjunction with, and incorporating advice from, the SA Team. They relate specifically to the implementation of LLWDF objectives 2, 3, 4 and 7.

**Table 5-1: Proposed Site Allocations**

Site Ref	Site Location	Owner	District/ Borough	New Site or Extension	Operation Proposed	Waste Type
B1	Manor Farm, Aston Flamville	J&F Powner	Blaby	Extension	Composting	Municipal, C&I
B2	Enderby Hill Quarry	Leicester City	Blaby	New Site	Recycling	C&D
B3	Soars Lodge Farm, Foston	W.T. Clarke & Son	Blaby	Extension	Composting	Municipal, C&I Green Waste
B4	Coventry Road, Narborough	Glenfield Waste	Blaby	New Site	Recycling	C&I, Municipal, C&D
B5	Sapcote and Granitethorpe Quarries	JRM Industrial	Blaby	New Site	Landfill	Inerts/Non hazardous
B6	Thurlaston Sawmills	George Walker	Blaby	New Site	Recycling/Reuse	C&I, C&D (mainly wood & some concrete)
B7	Whetstone RHWS	B GARfoot	Blaby	Extension	Replacement RHWS, transfer station, recycling, composting and waste treatment	Municipal
C1	Mountsorrel Quarry (Site A)	Lafarge	Charnwood	New Site	Recovery/recycling; Transfer Station	C&I/Municipal
C2	Mountsorrel Quarry (Site B)	Lafarge	Charnwood	New Site/ Extension	Recycling	C&D
C3	Newhurst Quarry	Biffa	Charnwood	Two New Sites	Landfill; Treatment (MBT); Composting; Recycling (MRF); Biomass Energy Plant	Non-hazardous; C&I/Municipal/C&D
C4	Loughborough RHWS		Charnwood	Extension	Transfer Station; upgraded RHWS	Municipal
C5	Anstey Lane, Thurcaston	Maxi-Waste	Charnwood	New Site	Recycling/Reuse	Inerts/C&D/C&I/Municipal
C6	Wanlip sand and Gravel, Syston	P. Winterton	Charnwood	New Site	Recycling/Reuse	C&D (mainly concrete and wood)
H1	Northfield Farm, Cotesbach	Mrs Hopkins	Harborough	New Site	Landfill, recycling, composting	Inerts, C&D, green waste

Site Ref	Site Location	Owner	District/ Borough	New Site or Extension	Operation Proposed	Waste Type
H2	Harborough Road, Kibworth		Harborough	New Site	Transfer Station; MRF; Composting; Incineration with energy recovery	C&I, Municipal, C&D,
H3	Shawell Quarry, Cotesbach	Lafarge	Harborough	Extension/ New Site	Landfill; Recycling (MRF)	Non-hazardous; C&I/Municipal
HB1	Leicester Road, Hinckley	E Taylor Recycling	Hinckley & Bosworth	Extension	Transfer Station; Recycling (MRF)	Inert/C&D/C&I/ Municipal
HB2	Leicester Road, Hinckley	G Taylor	Hinckley & Bosworth	Extension	Transfer Station	Inert/C&D/C&I/ Municipal
HB3	Thornton Lane, Markfield	Marriott Hardcastle	Hinckley & Bosworth	New Site	Landfill	Inerts
HB4	Nailstone Colliery	Viridor	Hinckley & Bosworth	New Site	Municipal Waste Treatment, Composting Recycling, Inert Landfill	Inert/C&D/C&I/ Municipal
L1	Sunningdale Road, Leicester	Leicester City	Leicester City	New Site	Recycling	C&D/Non-hazardous
L2	Ulverscroft Road, Leicester	A EBurgess & Sons	Leicester City	New Site	Recycling/Reuse (MRF)	Inert/C&D
M1	Brooksby Quarry	Lafarge	Melton	New Site	Landfill; Recycling; Composting; Recycling (MRF)	Non-hazardous/C&D C&I/Municipal
NW1	Coalville RHWS		North West Leics.	Extension	Recycling; Transfer Station	Municipal
NW2	Little Wigston, Appleby Magna	R Wainwright	North West Leics.	New Site	Recycling/Reuse	C&D Waste
NW3	Hemington Quarry	Lafarge	North West Leics.	Extension	Recycling	C&D
NW4	Ibstock Brick, Leicester Rd, Ibstock	Ibstock Brick Ltd	North West Leics.	New Site	Landfill	C&I/Municipal
NW5	Lockington Quarry (Site A)	Lafarge	North West Leics.	Extension	Recycling	C&D
NW6	Lockington Quarry (Site B)	Lafarge	North West Leics.	Extension	Landfill	Inert

Site Ref	Site Location	Owner	District/ Borough	New Site or Extension	Operation Proposed	Waste Type
NW8	Swainspark	Tapton Properties	North West Leics.	New Site	Resource Recovery Park: Recycling recovery, composting	Inerts/C&D/C&I, municipal

- 5.6 Two policies are also included in this document governing the development of these sites; these have also been assessed. Table 5.2 shows the two proposed policies:

**Table 5-2: Site Allocations policies assessed**

**Policy 1: Waste Management Site Allocations**

The sites listed in Table 3.1 and identified in more detail in the following individual site statements have been allocated to facilitate new waste management capacity. On these sites planning permission will be granted for proposals for waste management development for the potential uses identified in Table 3.1, provided that:

- iv. the application has full regard to the requirements, issues and constraints set out in the individual site statements;
- v. the release of the site does not undermine the delivery of sustainable waste management provision; and
- vi. the proposed development accords with the requirements of other relevant policies contained in the waste development framework.

**Policy 2: Non-inert Landfill Site Allocations**

Sites allocated for the landfilling of non-inert waste will not be granted unless provision is also made for measures to encourage the provision of facilities which move waste management up the waste hierarchy of waste reduction, followed by re-use, recycling and composting of materials, and energy recovery or alternative value recovery technologies that reduce the amount of waste that needs to be disposed.

**ASSESSMENT METHODOLOGY AND RATIONALE**

- 5.7 As already discussed in Section 2 on methodology, the assessment undertaken relies heavily on professional judgement which has necessarily an element of subjectivity. Effects, which can only be assessed at a very general level at this stage, are determined by the way development will be implemented and the way development will be influenced by other LLWDF DPDs and other District LDFs.
- 5.8 The assessment was undertaken taking into account the considerations outlined in Table 5.3 overleaf. Judgements were informed by site information collated by Leicestershire County and Leicester City Council officers based on their existing knowledge of sites and supplemented by ongoing consultation with stakeholders for individual sites.
- 5.9 It is important to note that it is not the role of the SA to determine which sites should be chosen as the basis for the preferred options. This is the role of those who have to decide which sites are appropriate. The SA should, however, help in identifying the most sustainable sites of those proposed in order to meet the requirements for waste management provision set out in the WDF. It is also worth noting that while waste management sites, due to their nature and type of facilities required, generally cause negative effects on a variety of sustainability objectives, this must be set in the wider context of the urgent need to develop new waste management facilities in Leicester and Leicestershire. 'No Development' is not a viable option, given the waste arising from existing and proposed housing and employment development in the Framework Area and the sustainability issues arising from not providing for adequate waste treatment and disposal.

- 5.10 A simplified approach has been taken in order to establish the degree of sustainability of various sites. This approach assumes that all SA objectives are equally important and thus option(s) with more negative effects are noted as being less sustainable.
- 5.11 The sites have been assessed taking into consideration the site characteristics as well as the facilities proposed as suitable for those sites, assessing site proposals against the range of SA criteria and looking at the level of impact of the different proposed options on each objective based on the rationale set out in Table 5.3. Full details of the assessments can be found in Appendix D. Where a range of facilities is proposed to be co-located, the assessment has been based on all elements coming forward. The precise scale and type of effect will always be dependent on the final proposals for facilities on any site; detailed assessment would normally be carried out, where appropriate, at a proposal-specific Environmental Impact Assessment (EIA) level.
- 5.12 Note: For the current assessment, sites have not been formally assessed against SA18 (*To ensure adequate access to waste facilities appropriate in scale and type to local needs.*) due to lack of detailed information on spatial distribution of need. Work is ongoing in this area and will further inform the site selection process. However, by providing for waste management within the Framework Area boundaries, all potential sites could be seen to have a neutral or slight positive effect on this criterion.

**Table 5-3: Assessment Rationale**

Assessment Rationale		
01	<i>To conserve and enhance wildlife habitats and species, avoiding damage to or fragmentation of major features of importance for fauna and flora</i>	The degree to which site allocations could result in major, minor, neutral effects on designated sites of international, national, and local importance were considered as well as major, minor, neutral effects on undesignated sites and important flora and fauna. The extent of net gain in wildlife interest through creation of habitats was considered to have a positive effect.
02	<i>To conserve and enhance the quality of the countryside and landscape</i>	Consideration of whether site allocations would have an positive or negative effects, either directly or indirectly, on maintaining and enhancing the quality of the countryside and open space, and to meet objectives of landscape character areas. Site allocations which sought to protect these areas in the short and medium terms were assessed as having a positive effect.
03	<i>To protect places and buildings of archaeological, cultural and historic value</i>	Consideration was given to how site allocations would have direct positive or negative effects on designated and non-designated cultural heritage and archaeological features, for example conservation areas, listed buildings, or areas of archaeological potential.
04	<i>To protect the quality of ground and surface waters</i>	The extent to which site allocations will have positive or negative effects on maintaining and improving the quality of surface and ground waters. Consideration was given to aspects such as the quantity and quality of surface water run-off and treatment, and the need for mitigation measures.
05	<i>To avoid soil contamination and safeguard soil quality and quantity</i>	The degree to which site allocations would prevent and reduce soil contamination and safeguard soil quality, in particular agricultural land, was considered. Potential new sources of contamination of were judged as a negative effect.
06	<i>To limit emissions to air to levels that will not damage natural systems and affect human health</i>	Consideration was given to whether site allocations would result in reductions or increases in pollutant emissions. Predicted changes in road traffic numbers and the effect on the concentrations of certain traffic derived pollutants (NO <sub>2</sub> and PM <sub>10</sub> ) were considered. There is a correlation between improvements in air quality, health improvements and the use of more sustainable modes of transport.
07	<i>To minimise the contribution of waste</i>	Consideration was given to whether site allocations would result in development or transport arrangements leading to reductions or increases in carbon dioxide or

<b>Assessment Rationale</b>		
	<i>development to adverse climate change through reduced greenhouse gas emissions.</i>	methane emissions. There was also consideration of whether contributions to climate change will be reduced through encouraging the use of renewable energy resources or promoting efficient energy usage.
08	<i>To minimise public nuisance from waste treatment and disposal.</i>	Consideration was given to whether site allocations would decrease or increase local nuisance from noise, dust or traffic related to waste development. Secondary effects were considered through site allocations that encouraged reduced traffic levels which could lead to a reduction in traffic nuisance locally and County-wide. The effect of green spaces, areas of countryside and habitats acting as buffers for areas of higher nuisance-creating activity, and related areas of relative tranquillity, was also considered.
09	<i>To maximise the benefits to human health and well-being</i>	Consideration was given to whether site allocations would have a direct effect on health, for example, through improved air quality which is likely to lead to a lower level of respiratory disease or potential new sources of contamination introducing additional risks to health. Site allocations that promoted developing/enhancing green spaces through restoration were also considered to be relevant by increasing recreational opportunities that may have a secondary effect on improving health.
10	<i>To minimise the irreversible sterilisation of mineral reserves</i>	Consideration was given to the extent to which site allocations would prevent the sterilisation of workable mineral resources, or facilitate extraction in advance of new development. The proximity of development adjacent to mineral reserves and the potential delays to /constraints on this new development were also considered.
11	<i>To facilitate the management, recovery and correct disposal of wastes controlled by EC Directives</i>	Consideration was given as to whether site allocations would facilitate development allowing the disposal, management and recovery of controlled waste.
12	<i>To encourage better use of developed land and to prevent irretrievable loss of the best and most versatile agricultural land</i>	Consideration was given to the level of protection offered to agricultural land of grades 1, 2 or 3a, including through avoidance or mitigation measures. Consideration was given to whether site allocations would encourage the development of previously developed land and buildings.
13	<i>To minimise quantities of waste landfilled and to maximise re-use, recovery and recycling of waste</i>	Consideration was given to the extent to which site allocations would reduce the amount of waste going to landfill and increase the availability of alternative options to recycle, re-use and recover generated waste materials.
14	<i>To reduce the need to travel, in particular to reduce the transportation of untreated waste by road, and thereby vehicle emissions, in line with the proximity principle</i>	Consideration was given to site allocations that both directly and indirectly encourage a reduction in the use of road transport and provide for any other means to encourage a change to more sustainable modes of transport. Siting of developments was considered an important factor enabling appropriate use of the current transport infrastructure.
15	<i>To increase energy efficiency and the production of renewable energy</i>	Consideration was given to the extent to which site allocations encourage energy-efficiency or encourage the use of waste for sustainable energy generation.
16	<i>To promote stable employment and employment diversity in the Framework Area</i>	The extent to which site allocations encourage new commercial development and employment opportunities. The diversification of local labour markets and the extent to which the development and retention of a diverse workforce is supported by site allocations were also considered.
17	<i>To promote sustainable economic growth in the Framework Area</i>	The extent to which site allocations encourage new commercial development and employment opportunities in the LLWDF Area, benefit existing business operations and contribute to the long-term viability of existing employment sites, and contribute to a positive change in the LLWDF Area's unemployment rate were of key consideration. Consideration was taken of indirect economic effects of waste development such as associated development or the sustainability of other local businesses dependant on employees in the waste industry for trade. The 'opportunity cost' of waste vs other development was also taken into consideration.

Assessment Rationale		
18	<i>To ensure adequate access to waste facilities appropriate in scale and type to local needs.</i>	Consideration should be given to new and existing developments which incorporate waste collection facilities. Local need should be assessed via the amount of facilities per household, distance of householders from the waste facility.
19	<i>To conserve geodiversity</i>	Consideration was given to the effect of site allocations on maintaining the existing diversity of geological features and types of formation. Site allocations that allow for the protection of existing or newly designated Regionally Important Sites/SSSIs are viewed as positive.
20	<i>To avoid or reduce flood risk as a result of waste development</i>	Consideration was given to whether site allocations prevent the location of proposed development on floodplains or require mitigation measures and thus seek to have direct or indirect effects on reducing the risk of flooding.

## ASSESSMENT RESULTS

### SUMMARY OF ASSESSMENT FINDINGS

5.13 This section summarises the assessment of the proposed sites against the SA objectives which are listed below:

- ◆ SA 01 – Conserve and enhance wildlife habitats and species, avoiding damage to or fragmentation of major features of importance for fauna and flora
- ◆ SA 02 – To conserve and enhance the quality of the countryside and landscape
- ◆ SA 03 – To protect places and buildings of archaeological, cultural and historic value
- ◆ SA 04 – To protect the quality of ground and surface waters
- ◆ SA 05 – To avoid soil contamination and safeguard soil quality and quantity
- ◆ SA 06 – To limit emissions to air to levels that will not damage natural systems and affect human health
- ◆ SA 07 – To minimise the contribution of waste development to adverse climate change through reduced greenhouse gas emissions.
- ◆ SA 08 – To minimise public nuisance from waste treatment and disposal.
- ◆ SA 09 – To maximise the benefits to human health and well-being
- ◆ SA 10 – To ensure waste development does not irreversibly sterilise mineral reserves
- ◆ SA 11 – To facilitate the management, recovery and correct disposal of wastes controlled by EC Directives
- ◆ SA 12 – To encourage better use of developed land and to prevent irretrievable loss of the best and most versatile agricultural land
- ◆ SA 13 – To minimise quantities of waste landfilled and to maximise re-use, recovery and recycling of waste
- ◆ SA 14 – To reduce the need to travel, in particular to reduce the transportation of untreated waste by road, and thereby vehicle emissions, in line with the proximity principle.
- ◆ SA 15 – To increase energy efficiency and the production of renewable energy
- ◆ SA 16 – To promote stable employment and employment diversity in the Framework Area
- ◆ SA 17 – To promote sustainable economic growth in the Framework Area

- ◆ SA 18 – To ensure adequate access to waste facilities appropriate in scale and type to local needs.
- ◆ SA 19 – To conserve geodiversity
- ◆ SA 20 – To avoid or reduce flood risk as a result of waste development

5.14 Details of the assessments for each site and the two policies are provided in Appendix D. A summary of the assessment findings is presented in Tables 5.4 to 5.8. In order to aid ease of understanding of the results, types of waste facility have been grouped and the results summarised; some sites fall into several groups. Groupings have been made for the following types of facilities:

- ◆ Predominantly recycling and reuse, including transfer stations;
- ◆ Predominantly composting;
- ◆ Landfill-only sites;
- ◆ Co-located landfill, recycling and energy to waste facilities.

5.15 The scoring of the site proposals against the SA objectives is as follows:

Assessment Scale	Significance of Effect
+++	Strongly positive
++	Moderately positive
+	Slightly positive (non-significant)
0	Neutral or no obvious effect
-	Slightly negative (non-significant)
--	Moderately negative
---	Strongly negative
+/-	Combination of positive and negative or neutral effects
?	Effect unclear/cannot be accurately assessed at this stage

**Table 5-4: Summary Results for Recycling and Reuse Facilities**

	B2. Enderby Hill Quarry	B4. Coventry Naborough	B6. Thurston Sawmill	B7. Whiststone RHWs	C1. Mountsorrel Quarry A	C2. Mountsorrel Quarry B	C4. Loughborough RHWs	C5. Anstey, Leno, Thurcaston	C6. Wanlip Sand and Gravel, Syston	H2. Harborough Road, Abworth	HB1. E Taylor Recycling, Leicester Road, Hinckley	HB2. G Taylor, Leicester Road, Hinckley	L1. Sunningdale Road, Leicester	L2. Uverscroft Road, Leicester	NW1. Coaville RHWs	NW2. Little Wigston, Appleby, Marnham	NW3. Hemington Quarry	NW7. Swainspark NW6, Lockington Quarry A
SAM1 Site Diversity	-	-	0	0	-	0	0	0	-	-	++	-	-	-	0	-	0	0
SAM2 Contaminated Landscape	-	-	-	-	-	0	-	-	-	-	++	-	0	0	0	-	0	-
SAP1 Cultural Heritage	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
SAM4 Water Quality	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAM5 Soil	-	-	0	-	-	-	-	0	-	-	-	0	-	-	-	-	-	0
SAM6 Air Quality	-	-	-	-	-	-	-	-	-	-	-	-	+/	+/	-	-	-	+/
SAM7 Greenhouse Gases	-	-	-	-	-	-	-	-	-	-	+	+	-	+/	-	-	-	+/
S108 Public Nuisance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAM9 Human Health	-	-	-	-	-	-	-	0	-	-	0	0	0	0	0	0	0	0
SAM10 Mineral Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAM11 Controlled Waste	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SAM12 Development Agricultural Land	+	+	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
SAM13 Waste Minimisation	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
SAM14 Reduce Need to Travel	-	-	-	+/	-	-	-	-	-	-	-	-	-	-/++	-	-	-	-/++
SAM15 Energy	0	0	0	0	0	0	0	0	0	0/++	0	0	0	0	0	0	0	0
SAM16 Employment	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SAM17 Economic Growth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAM18 Access to Waste Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAM19 Geo-diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAM20 Flood Risk	0	-	0	-	0	0	0	-	-	-	-	0	0	-	0	0	-	0

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- 5.16 For the recycling and reuse facilities, a range of potential significant positive and negative effects have been identified. The site with the least number of significant negative effects identified (no significant negatives) is site NW1 (Coalville RHWS).
- 5.17 Site B6 (Thurlaston Sawmill), L1 (Sunningdale Road), and NW2 (Little Wigston) have significant negative effects on one SA objective. Sites B2 (Enderby Hill Quarry), B7 (Whetstone RHWS), C1(Mountsorrel Quarry A), C2 (Mountsorrel Quarry B), C4 (Loughborough RHWS), HB2 (G Taylor, Leicester Rd), NW5 (Lockington Quarry A) and NW7 (Swainspark) have significant effects on two SA objectives, though the Enderby Hill Quarry (B2) has the potential for particularly strong negative effects on public nuisance due to the relative distance to residential properties.
- 5.18 Sites B4, C5, C6, NW3 have significant negative effects on three SA Objectives. Sites H2 (Harborough Rd Kibworth), HB1 (E Taylor Leicester Rd) and L2 (Ulverscroft Rd) have potential significant negative effects on four SA objectives. Of these, E Taylor (HB1) has potential for severe negative effects on biodiversity and landscape due to its size and location in open countryside in a Green Wedge, adjacent to a local nature reserve and SSSI.
- 5.19 Conversely, whilst site L2 (Ulverscroft Rd) has four identified negative effects, it also has a high number of significant positive effects (three), with further potential positive effects on air quality and greenhouse gas emission objectives, due to the potential of the site to receive waste from rail. Site NW7 (Swainspark) also has potential for rail use, and has the same three identified potential positive effects.
- 5.20 Sites B6, B7, C1, C2, C4, C5, L1, NW1 and NW3 all have potential significant positive effects on two SA Objectives, all related to SA objective 12 (use of developed land/preventing loss of agricultural land) and SA objective 13 (waste minimisation). All other sites, with the exception of Site HB2 (which shows no significant positive effects), have significant positive effects on Waste Minimisation. Site H2 also shows significant positive effects if the energy from waste element comes forward.
- 5.21 The results of the assessment indicate that sites NW1, NW7, L1 and B6 are the more sustainable of the 19 sites being proposed for predominantly recycling/reuse/transfer facilities; these have more positive effects than negative. Sites H2 and HB1 are judged to be the least sustainable, followed by B4, C6 and HB2. All other sites are judged to be, in general, equally sustainable.

**Table 5-5: Summary Results for Composting Facilities**

Summary of Assessments of Composting sites				
	B1. Manor Farm, Aston Flamville	B3. Soars Lodge Farm, Foston	H2. Harborough Road, Kibworth	
S A O b j e c t i v e s	SA01-Biodiversity	-	-	-
	SA02-Countryside/ Landscape	-	-	--
	SA03-Cultural Heritage	0	0	-
	SA04-Water Quality	-	-	--
	SA05-Soil	--	--	--
	SA06-Air Quality	-	-	-
	SA07-Greenhouse Gases	-	-	-
	SA08-Public Nuisance	0	0	-
	SA09-Human Health	0	0	-
	SA10-Mineral Reserves	0	0	0
	SA11-Controlled Wastes	+	+	+
	SA12-Developed/ Agricultural Land	-	-	-
	SA13-Waste Minimisation	++	++	++
	SA14-Reduce Need to Travel	-	-	-
	SA15-Energy	0	0	0/++
	SA16-Employment	+	+	+
	SA17-Economic Growth	0	0	0
	SA18-Access to Waste Facilities	0	0	0
	SA19-Geodiversity	0	0	0
	SA20-Flood Risk	0	0	--

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- 5.22 For the composting proposals, both sites B1 (Manor Farm) and B3 (Soars Lodge Farm) have been assessed as having similar overall effects. For these sites significant negative effects have been identified against SA objectives 5, through the greenfield nature of the proposals and the likely permanent losses of agricultural land. Significant positive effects are likely on waste minimisation due to the role composting will make towards meeting waste minimisation targets.
- 5.23 Site H2 (Harborough Road) is a far larger site (4.5 ha vs 2.5 and 0.36ha for B1 and B3 respectively) and the proposals include a range of facilities other than composting. The proposals as a whole have the potential for significant negative effects against four SA objectives, including countryside/landscape character, water quality, soil quality and quantity, and flood risk. Similarly to the proposals for sites B1 and B3, siteH2 has the potential for significant positive effects on waste minimisation due to the nature of proposals.
- 5.24 The results of the assessments indicate that site H2 is the least sustainable of the three sites being proposed for the location of composting facilities; this is due to its size and the range of processes proposed, which must be taken into consideration in relation to the need for facilities across the Framework Area.

**Table 5-6: Summary Results for Landfill Sites**

Summary of Assessments of Landfill-only Sites					
	B5. Sapcote and Granitethorpe Quarries	HB3. Thornton Lane, Markfield	NW4. Ibstock Brick	NW6. Lockington Quarry B	
S A O b j e c t i v e s	SA01-Biodiversity	---	-	0	--
	SA02-Countryside/ Landscape	--	--	+/-	+
	SA03-Cultural Heritage	0	0	0	-
	SA04-Water Quality	--	--	--	--
	SA05-Soil	--	--	--	--
	SA06-Air Quality	-	-	-	-
	SA07-Greenhouse Gases	-	-	-	-
	SA08-Public Nuisance	--	--	---	-
	SA09-Human Health	-	0	-	0
	SA10-Mineral Reserves	0	0	0	0
	SA11-Controlled Wastes	+	+	+	+
	SA12-Developed/ Agricultural Land	0	--	+	0
	SA13-Waste Minimisation	0	0	0	0
	SA14-Reduce Need to Travel	-	-	-	-
	SA15-Energy	0	0	0	0
	SA16-Employment	+	+	+	+
	SA17-Economic Growth	0	0	0	0
	SA18-Access to Waste Facilities	0	0	0	0
	SA19-Geodiversity	--	0	0	0
	SA20-Flood Risk	0	-	0	--

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- 5.25 For the site proposals consisting of only landfilling operations, site B5 (Sapcote and Granitethorpe Quarries) showed six potentially significant negative effects, including a severe negative effect on biodiversity. Site HB3 (Thornton Lane, Markfield) scored significant negative effects against five SA objectives. Site NW6 (Lockington Quarry B) has the potential for significant negative effects against four SA objectives. Site NW4 (Ibstock Brick) has the potential for significant negative effects against three SA objectives, including a severe negative effect on public nuisance.
- 5.26 All four sites have the potential for significant negative effects on water quality, soil quality and quantity, and public nuisance. Site B5 has strongly negative effects against the biodiversity SA objective, due to the loss of Granitethorpe Quarry, which is of district level ecological significance. Both Sapcote and Granitethorpe Quarries are designated as Regionally Important Geological Sites (RIGS), and score negatively against the SA objective to conserve geodiversity (SA19). Site HB3 will result in the loss of agricultural land and site NW4 will have potentially severe significant negative effects on public nuisance due to the proximity of houses to the site.
- 5.27 No sites scored significantly positive on any criteria, though all would contribute to stable employment (SA16) and NW4 and NW7 offer potential for reinstating landscape in the long term following mineral working. It is worth noting that there may be some transport benefits associated with the co-location of aggregates processing and landfilling operations at Lockington Quarry sites A&B
- 5.28 The results of the assessments show that site B5 and HB3 are the least sustainable of the four sites proposed, however the other two sites do not score well against most environmental sustainability objectives.

**Table 5-7: Summary Results for Landfill, Recycling & Energy to Waste Facilities**

Summary of Assessment of Combined Landfill, Recycling, Recovery and Waste to Energy Sites							
	C3. Newhurst Quarry, Shepshed*	H1. Northfield Farm, Cotesbach	H2. Harborough Road, Kibworth**	H3. Shawell Quarry	HB4. Nailstone Colliery#	M1. Brooksby Quarry	
S A O b j e c t i v e s	SA01-Biodiversity	-	--	-	--	--	-
	SA02-Countryside/ Landscape	-	--	--	-	-/--	-
	SA03-Cultural Heritage	0	0	-	0	0	-
	SA04-Water Quality	--	--	--	--	--	--
	SA05-Soil	--	-	--	--	--	--
	SA06-Air Quality	-	-	-	-	-	-
	SA07-Greenhouse Gases	-	-	-	-	-	-
	SA08-Public Nuisance	--	-	-	--	--	--
	SA09-Human Health	-	0	-	-	-	-
	SA10-Mineral Reserves	0	0	0	0	0	0
	SA11-Controlled Wastes	+	+	+	+	+	+
	SA12-Developed/ Agricultural Land	++	-	-	+	++	+
	SA13-Waste Minimisation	++	++	++	++	++	++
	SA14-Reduce Need to Travel	+	-	-	-	+	+
	SA15-Energy	0/++	0	0/++	0	0/++	0
	SA16-Employment	+	+	+	+	+	+
	SA17-Economic Growth	0	0	0	0	0	0
	SA18-Access to Waste Facilities	0	0	0	0	0	0
	SA19-Geodiversity	--	0	0	0	0	0
	SA20-Flood Risk	0	0	--	--	0	--

\* Includes proposals for a biomass waste to energy plant.

\*\* Incineration with energy recovery of municipal and commercial & industrial waste

# Plans for the site include municipal waste treatment (including potential incineration with energy recovery) as part of a range of proposals for the site.

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- 5.29 The proposed site allocations for landfilling, recycling and energy from waste facilities score significant negative and positive effects across a range of SA objectives. Sites were assessed on the assumption that all proposals would come forward; the exception was for sites incorporating waste to energy facilities, where the positive effect on SA objective 15 was assessed to be dependent on this element coming forward.
- 5.30 Site H3 (Shawell Quarry) and HB4 (Nailstone Colliery) have the potential for significant negative effects on five SA objectives. Site C3 (Newhurst Quarry), H2 (Harborough Rd, Kibworth) and M1 (Brooksby Quarry) scored significant negative effects on four SA criteria, all including landscape and water quality, whilst site H1 (Northfield Farm) scored significant negative effects against 3 SA objectives. C3 was the only site to score negatively against SA objective 19 (geodiversity), as the site is currently designated as a SSSI of national importance for its geological interest.
- 5.31 Site C3 (Newhurst Quarry) and HB4 (Nailstone Colliery) showed significant positive effects against two SA objectives. In addition, sites C3, H2 and HB4 potentially score significantly well against SA objective 15 through the biomass and waste to energy proposals; this is dependent on the waste to energy proposals coming forward.
- 5.32 All sites showed positive effects on SA13 through their recycling/reuse proposals and the contribution towards meeting waste minimisation/recycling targets.
- 5.33 The results of the assessments indicate that of the sites being proposed for co-location of landfill, recycling and energy to waste facilities Site C3 (Newhurst Quarry) scores the best in sustainability; while it has four negatives it also scores two (or three, if waste to energy is included) positives. Sites H1, H2 and HB4, are broadly similar in overall sustainability terms. Site H3 (Shawell) and M1 (Brooksby Quarry) are judged to be the least sustainable.

**Table 5-8: Summary Results for Site Allocations Supporting Policies**

Summary of Assessment of Site Allocations Supporting Policies		
	Policy 1	Policy 2
SA01-Biodiversity	+	0
SA02-Countryside/ Landscape	+	0
SA03-Cultural Heritage	+	0
SA04-Water Quality	+	0
SA05-Soil	+	0
SA06-Air Quality	+	0
SA07-Greenhouse Gases	+	0
S08-Public Nuisance	+	0
SA09-Human Health	+	0
SA10-Mineral Reserves	0	0
SA11-Controlled Wastes	++	++
SA12-Developed/ Agricultural Land	+	0
SA13-Waste Minimisation	++	++
SA14-Reduce Need to Travel	+	0
SA15-Energy	+	0
SA16-Employment	0	0
SA17-Economic Growth	0	0
SA18-Access to Waste Facilities	0	0
SA19-Geodiversity	0	0
SA20-Flood Risk	+	0

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- 5.34 The two site allocations policies (Policies 1 and 2) contribute strongly to the overall achievement of sustainable waste development by reinforcing Core Strategy & Development Control policies and by ensuring that landfill options, while permissible as a final disposal option, are considered only in conjunction with other facilities to reuse, recycle and recover waste in line with the waste hierarchy. Both are predicted to have significant effects on SA Objectives 11 (to facilitate the management, recovery and correct disposal of wastes controlled by EC Directives) and 13 (to minimise quantities of waste landfilled and to maximise reuse, recovery and recycling of waste). Policy 1 has non-significant positive effects on the environmental objectives addressed by the Core Strategy & Development Control Policies DPD.

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## 6. MITIGATION

- 6.1 The term 'mitigation' encompasses any approach, which is aimed at preventing, reducing or offsetting significant adverse sustainability effects that have been identified. In practice, a range of measures applying one or more of these approaches is likely to be considered in mitigating any significant adverse effects predicted as a result of implementing the LLWDF. In addition, it is also important to consider measures aimed at enhancing positive effects. All such measures are generally referred to as mitigation measures.
- 6.2 However, the emphasis should, in the first instance, be on proactive *avoidance* of adverse effects. Only once all alternative options or approaches to avoiding an effect have been examined should mitigation then examine ways of reducing the scale/importance of the effect.
- 6.3 Mitigation can take a wide range of forms, including:
- ◆ Changes to the LLWDF options, including bringing forward new options to address specific elements that cause adverse effects, or adding or deleting options;
  - ◆ Refining options in order to improve the likelihood of positive effects and to minimise adverse effects;
  - ◆ Technical measures (such as setting guidelines) to be applied during the implementation stage;
  - ◆ Identifying issues to be addressed in project environmental impact assessments for certain projects or classes of projects;
  - ◆ Proposals for changing other plans and programmes; and
  - ◆ Contingency arrangements for dealing with possible adverse effects.
- 6.4 Mitigation measures for each site allocation have been identified in the individual assessments in Appendix D. The following general measures are proposed in order to mitigate the adverse sustainability effects identified in the assessment:
- ◆ Biodiversity
    - ◆ Avoidance of designated sites, where at all practical;
    - ◆ Habitat and species surveys, where required;
    - ◆ Habitat creation and enhancement/species translocation, where practicable;
    - ◆ Ensuring that the invertebrate interests of sites are not unduly impaired;
  - ◆ Countryside quality/landscape character
    - ◆ Site screening and landscape bunding, along with sympathetic design of any additional structures;
  - ◆ Cultural heritage
    - ◆ Archaeological surveys may be required to determine the nature and significance of any archaeological remains. Adequate provision can then be made for the preservation, excavation or recording of any interest.
  - ◆ Surface and groundwater quality
    - ◆ Site specific protection measures to ensure that ground and surface waters are not at risk from contamination;
    - ◆ Directing drainage from sites into sealed systems and treatment prior to disposal;
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- ◆ Sustainable urban drainage systems, where appropriate;
  - ◆ Soil quality/quantity
    - ◆ Minimising land take of site proposals;
    - ◆ For sites proposed on previous landfill sites, ensuring that drainage from the site does not infiltrate the former landfill beneath and increase leachate rates;
    - ◆ Ensuring sites in areas of risk do not discharge to the underlying strata;
  - ◆ Air quality
    - ◆ Site proposals should be accompanied with details on traffic movements in terms of their numbers and routing, associated emissions and their effect on air quality;
  - ◆ Greenhouse gas emissions
    - ◆ Possible utilisation of transport vehicles powered by bio fuels or solar power;
    - ◆ Generation of renewable energy on-site;
    - ◆ Gas migration systems for landfilling activities, where appropriate;
  - ◆ Public nuisance
    - ◆ Noise attenuation measures and screening including landscape bunding;
    - ◆ Dust and odour control measures;
    - ◆ Appropriate choices of plant and equipment to minimise adverse noise effects;
  - ◆ Human Health
    - ◆ Site specific protection measures to ensure that ground and surface waters are not at risk from contamination;
  - ◆ Reducing the need to travel
    - ◆ Controls of numbers of Heavy Goods Vehicles may need to be considered;
  - ◆ Energy
    - ◆ Further utilisation of methane generation for electricity generation;
  - ◆ Geodiversity
    - ◆ The preservation of the geological interest of sites;
  - ◆ Flood Risk
    - ◆ Flood Risk Assessments;
    - ◆ No development should take place in the flood plain without the provision of appropriate mitigation/compensation;
    - ◆ There should be no increase in surface water runoff from sites;
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## 7. MONITORING

- 7.1 The SEA Directive states that *'member states shall monitor the significant environmental effects of the implementation of plans and programmes.....in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action'* (Article 10.1). In addition, the Environmental Report should provide information on a *'description of the measures envisaged concerning monitoring'* (Annex I (i)) (Stage E).
- 7.2 SA monitoring will cover significant social and economic effects as well as significant environmental effects and it involves measuring indicators which will enable the establishment of a causal link between the implementation of the plan and the likely significant effect (positive or negative) being monitored. In line with the SEA Directive, these significant positive and negative effects should be monitored with the implementation of the LLWDF.
- 7.3 Significant overall positive and negative effects have been found against the following SA objectives for the policies and sites proposed (see Tables 5.4 to 5.8):
- ◆ SA 01 – Conserve and enhance wildlife habitats and species, avoiding damage to or fragmentation of major features of importance for fauna and flora
  - ◆ SA 02 - To conserve and enhance the quality of the countryside and landscape
  - ◆ SA 04 - To protect the quality of ground and surface waters
  - ◆ SA 05 - To avoid soil contamination and safeguard soil quality and quantity
  - ◆ SA 06 - To limit emissions to air to levels that will not damage natural systems and affect human health
  - ◆ SA 08 - To minimise public nuisance from waste treatment and disposal
  - ◆ SA 11 – To facilitate the management, recovery and correct disposal of wastes controlled by EC Directives.
  - ◆ SA 12 - To encourage better use of developed land and to prevent irretrievable loss of the best and most versatile agricultural land
  - ◆ SA 13 - To minimise quantities of waste landfilled and to maximise re-use, recovery and recycling of waste
  - ◆ SA 14 - To reduce the need to travel, in particular to reduce the transportation of untreated waste by road, and thereby vehicle emissions, in line with the proximity principle
  - ◆ SA 15 - To increase energy efficiency and the production of renewable energy
  - ◆ SA 19 - To conserve geodiversity
  - ◆ SA 20 - To avoid or reduce flood risk as a result of waste development
- 7.4 However, a more general document – the Core Strategy and Development Control Policies DPD – is also being prepared as part of the LLWDF and the results above indicate that effects which have not been identified as significant for the Core Strategy and Development Control Policies DPD have been assessed as significant in the assessment of the site proposals. The SA of the Core Strategy and Development Control Policies DPD identified overall significant negative effects on SA1 and significant positive effects on SA 11, 13, 14 and 15. Consideration to inclusion of monitoring for SA objectives 02, 04, 05, 06, 08, 12, 19 and 20 will need to be given in the final monitoring programme.
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- 7.5 In addition, it is likely that it will be necessary to review which effects require monitoring following consultation on this SA report as other effects may be deemed significant by consultees. This means that a realistic monitoring programme can only be prepared at a later stage.
- 7.6 Leicestershire County Council will need to consider the SA indicators to identify those that can be effectively used to monitor the sustainability effects of the LLWDF. This will need to be done in dialogue with statutory environmental consultees and other bodies as in many cases the monitoring information will be provided by outside bodies.

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## 8. CONCLUSIONS

- 8.1 The Leicestershire and Leicester Waste Development Framework: Site Allocations DPD has been the subject of sustainability appraisal/strategic environmental assessment and significant sustainability effects have been identified.
- 8.2 Thirty proposed sites have been assessed, and, based on the information available, have been shown to have significant negative effects on biodiversity, countryside/landscape, water quality, soil quality/quantity, public nuisance, developed/agricultural land, geodiversity and flood risk.
- 8.3 All sites scored positively for the SA objective for minimising quantities of waste to be landfilled and to maximise re-use, recovery and recycling of waste, with the exception of the landfill only site proposals.
- 8.4 Most negative effects can be minimised to a satisfactory degree through the identified and possibly other mitigation measures as described in the detailed assessments shown in Appendix D. However, the assessment has highlighted that some proposed sites have the potential for significant negative sustainability effects, which would be difficult to avoid. Tellingly, the proposals with the least significant negative effects are those associated with composting, recycling and reuse facilities; proposals for, particularly, landfill, scored greater numbers of significant negative effects.
- 8.5 The following sites have been identified as being less sustainable:
- Recycling and Reuse Facilities**  
H2 (Harborough Rd, Kibworth) and HB1 (E Taylor, Leicester Rd)
- Composting Facilities**  
Site H2 (Harborough Rd, Kibworth)
- Landfill Sites**  
All four proposed sites – B5 (Sapcote and Granitethorpe Quarries), HB3 (Thornton Lane, Markfield), NW4 (Ibstock Brick) and NW6 (Lockington Quarry B)
- Landfill, Recycling and Energy to Waste Facilities**  
M1 (Brooksby Quarry), H2 (Harborough Rd, Kibworth) and HB4 (Nailstone Colliery)
- 8.6 Policies 1 and 2 contribute strongly to the overall achievement of sustainable waste development by reinforcing Core Strategy & Development Control policies and by ensuring that landfill options, while permissible as a final disposal option, are considered only in conjunction with other facilities to reuse, recycle and recover waste in line with the waste hierarchy.
- 8.7 The assessment has informed the selection of preferred sites and the preferred sites DPD has incorporated mitigation measures suggested into the 'Site Planning Requirements' for each preferred site. In the selection of sites, other factors than the SA have been taken into consideration; a full justification of the reasons for site selection or rejection is set out in Section 4 of the LLWDF Site Allocations Preferred Options Document. Table 8.1 lists the sites given in the DPD as the final preferred sites for consultation:

**Table 8-1: List of Preferred Site Options**

Site No.	SA Site Ref	Site	MSW/C&I Waste Recycling	C&D Waste Recycling	Composting	Energy/Value Recovery/Treatment	Waste Transfer	Integrated Waste Management	Inert Landfill	Non-inert Landfill
1	B7	Whetstone RHWS	■		■	■	■	■		
2	C4	Loughborough RHWS	■				■			
3	NW8	Swainspark	■	■	■			■		
4	B4	Coventry Road, Narborough	■							
5	B1	Manor Farm, Aston Flamville			■					
6	B6	Thurlaston Sawmills	■	■						
7	C1	Mountsorrel Quarry (Site A)	■				■			
8	C2	Mountsorrel Quarry (Site B)		■						
9	L2	Ulverscroft Road, Leicester		■						
10	L1	Sunningdale Road, Leicester		■						
11	NW3	Hemington Quarry		■						
12	NW2	Little Wigston		■						
13	NW5	Lockington Quarry (Site A)		■						
14	NW6	Lockington Quarry (Site B)							■	
15	C3	Newhurst Quarry	■	■	■	■		■	■	■
16	M1	Brooksby Quarry	■	■	■			■	■	■
17	H3	Shawell Quarry	■	■				■	■	■
18	HB4	Nailstone Colliery	■	■	■	■		■	■	■
Not Selected	B3	Soars Lodge Farm, Foston								
Not Selected	B2	Enderby Hill Quarry								
Not Selected	B5	Sapcote&Granitethorpe Quarries								
Not Selected	C5	Anstey Lane, Thurcaston								
Not Selected	C6	Wanlip sand and Gravel								
Not Selected	H1	Northfield Farm, Cotesbach								
Not Selected	H2	Harborough Road, Kibworth								
Not Selected	HB1	E Taylor Leicester Road,								
Not Selected	HB2	G Taylor Leicester Road								
Not Selected	HB3	Thornton Lane, Markfield								
Not Selected	NW1	Coalville RHWS								
Not Selected	NW4	Ibstock Brick, Leicester Rd								