Warwickshire County Council

Sustainability Appraisal of Warwickshire's Waste Development Framework - Waste Core Strategy

Sustainability Appraisal Final Report

March 2012

Contents Page

List of Appendices

List of Figures

List of Tables

Preamble

Warwickshire County Council is currently developing a Waste Development Framework in response to the new system of Local Development Frameworks introduced through the Planning and Compulsory Purchase Act 2004. This Act makes Sustainability Appraisal a requirement for Waste Development Frameworks. In addition, the requirements under the Strategic Environmental Assessment Directive as they apply to the waste sector are required for the Sustainability Appraisal. A Scoping Report was produced to satisfy the requirements of Sustainability Appraisal / Strategic Environmental Assessment during December 2005 for the Waste Core Strategy and this was subsequently circulated for comment by statutory and non-statutory stakeholders.

Following this stage an initial Sustainability Appraisal of the Core Strategy was conducted and released alongside the Issues and Options consultation during February 2006. The Sustainability Appraisal of Issues and Options contributed to the formulation of the Preferred Options for the Waste Development Framework Core Strategy in 2007.

Work was halted on the Waste Core Strategy in 2007 due to uncertainty as to how the county's Municipal Waste Management Strategy would progress and what implications it would have for the Waste Core Strategy.

Work restarted again in 2010 with a Revised Spatial Options consult on the Revised Spatial Options in March 2010. These new options were put forward to give more of a spatial dimension to the plan which had previously not been evident. As part of this process the Options were assessed against a new Sustainability Appraisal. This resulted in the choice of a Preferred Option. Since consultation of the Preferred Option we consulted in an updated Sustainability Appraisal Scoping Report in January 2012 to reflect the changing baseline conditions since 2007 and to ensure that the SA was as up to date as the Core Strategy itself. The results of the consultation have moulded the latest document which is now the subject of a new consultation.

Warwickshire County Council value stakeholder feedback and encourage you to share your observations on this Sustainability Appraisal Report. It has been produced to support stakeholder engagement in respect of the Preferred Options for the Waste Development Framework.

Warwickshire County Council wish to encourage feedback on this report through the means outlined below.

By post	**Telephone, fax, e-mail and other services**
Waste Core Strategy Planning Policy Team, Planning and Development Group, Sustainable Communities, Communities, Warwickshire County Council, P O Box 43 Shire Hall Warwick CV34 4SX	Telephone: 01926 412391 or 412907 For telephone recording, transcription and translation services – please contact the numbers / email above.

Non Technical Summary

Warwickshire County Council is currently developing a Waste Development Framework in response to the new system of Local Development Frameworks introduced through the Planning and Compulsory Purchase Act 2004. This Act makes Sustainability Appraisal[1] a requirement for Local Development Frameworks including the Waste Development Framework. It is a requirement that Sustainability Appraisal incorporates the provisions of the Strategic Environmental Assessment Directive[2] as they apply to waste. Ove Arup and Partners Ltd (Arup) was originally appointed by Warwickshire County Council to assist in the delivery of the Sustainability Appraisal incorporating Strategic Environmental Assessment for the Waste Core Strategy. Arup produced the initial Sustainability Appraisal Report in 2007. This report uses the same methodology used by Arup to assess the Revised Spatial Options process which began in 2010. These new options were put forward to give more of a spatial dimension to the plan which had previously not been evident. The Sustainability Appraisal Report was updated to reflect this, as well as the changes over the previous 5 years, in Plans, Policies and Programmes and new baseline evidence.

Sustainability Appraisal is a staged process, with the former Office of the Deputy Prime Minister (ODPM) Guidance providing a breakdown of the key activities which are undertaken at each stage of the development of the plan (in this case the Waste Development Framework). The following main stages have been undertaken to date (unless otherwise stated):

- Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope;
- Stage B: Developing and refining options and assessing effects;
- Stage C: Preparing the Sustainability Appraisal Report (this report fulfils the requirements of Stage C);
- Stage D: Consultation on the Preferred Options of the Waste Development Framework and the Sustainability Appraisal Report (this stage has yet to be completed);
- Stage E: Monitoring the significant effects of implementing the Waste Development Framework (this stage has yet to be completed).

The first stage in delivering the first Sustainability Appraisal was the production of a Sustainability Appraisal Scoping Report, in order to satisfy the requirements of Sustainability Appraisal / Strategic Environmental Assessment. The Scoping Report was circulated for comment by statutory and non-statutory stakeholders. The Scoping Report set out the Sustainability Appraisal Framework, a series of objectives and indicators against which the developing Waste Core Strategy was assessed. The initial Scoping Report was circulated for comment by statutory and non-statutory stakeholders in December 2005. These comments were considered and a revised Scoping Report was circulated in April 2006.

An initial Sustainability Appraisal was conducted and released alongside the Core Strategy Issues and Options (essentially a plan formulation stage) consultation during February 2006. The Sustainability Appraisal of Issues and Options contributed to the formulation of Preferred Options for the Waste Core Strategy.

Following a period of inactivity due to uncertainty as to how the county's Municipal Waste Management Strategy would progress, the county decided to redraft the Core Strategy and consult on the Revised Spatial Options in March 2010. These new options were put forward

[1] Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents: ODPM: November 2005
[2] European Directive 2001/42/EC (SEA Directive) enacted through The Environmental Assessment of Plans and Programmes Regulations 2004 (SI 2004/1633)

to give more of a spatial dimension to the plan which had previously not been evident. As part of this process the Options were assessed against a new Sustainability Appraisal. This resulted in the choice of a Preferred Option. Since consultation of the Preferred Option we consulted on an updated Sustainability Appraisal Scoping Report in January 2012 to reflect the changing baseline conditions since 2007 and to ensure that the SA was as up to date as the Core Strategy itself. The results of the consultation have moulded the latest document which is now the subject of a new consultation.

This report presents the findings of Stage C of the Sustainability Appraisal process, in accordance with the provisions of the Strategic Environmental Assessment Directive and the latest Planning Advisory Service Guidance on Sustainability Appraisal through its Plan Making Manual. This document is the consultation Sustainability Appraisal Report produced to support stakeholder engagement in the developing Waste Core Strategy.

Purpose and Scope of the Sustainability Appraisal

Warwickshire County Council has challenging recycling, composting and recovery and landfill diversion targets targets for waste management within the County and one of the key delivery mechanisms for achieving this is through the Waste Development Framework. This Waste Core Strategy is one of the Development Plan Documents (DPDs) for which a Sustainability Appraisal must be undertaken. It is intended that the Sustainability Appraisal (incorporating the provisions of the Strategic Environmental Assessment Directive) promotes sustainable development through enhancing the application of sustainability principles during the preparation and final adoption of plans. Sustainability Appraisal embraces not only the environmental consequences of the Waste Core Strategy (through due reference to the provisions of Strategic Environmental Assessment) but also social and economic considerations of sustainability. For the purposes of this report, where the phrase Sustainability Appraisal is used, it should be concluded that this incorporates the provisions of Strategic Environmental Assessment.

This report, which comprises Stage C of the Sustainability Appraisal process, has been prepared to present information to stakeholders on the manner in which sustainability has been a feature of the decision making process for the Waste Core Strategy. The Stage C report is a key output of Sustainability Appraisal for which public consultation is required. In conducting the Sustainability Appraisal, Warwickshire County Council has been cognisant of the need for Sustainability Appraisal to be an iterative process, integral to the production of the Waste Core Strategy.

The Sustainability Appraisal has sought to systematically 'test' the performance of the Waste Core Strategy and its individual objectives and policies against sustainable development criteria. This has been achieved through developing Sustainability Appraisal objectives, informed by an appreciation of the baseline conditions encountered within Warwickshire, and identified during the Sustainability Appraisal Stage A which was outlined in the Scoping Report.

In conducting Stage A, sustainability challenges were identified for the Waste Core Strategy to assist in developing plan-led solutions. In addition, baseline conditions, related international, national, regional and local policy, identified challenges within the region and aspirations which can be supported through the delivery of the Waste Core Strategy were identified during Stage A such that Sustainability Appraisal objectives could be developed.

Baseline Conditions within Warwickshire

Characterising the baseline conditions within Warwickshire is a fundamental aspect of the Sustainability Appraisal process: it is critical to informing the development of the Sustainability Appraisal Framework. The baseline information has recently been updated in February 2012 following the initial baseline work produced by Arup in 2006 which formed

the basis of the Sustainability Appraisal produced by Arup in 2007. Because the original baseline information is now out of date, it is important that the Sustainability is re-assessed against the new baseline and most recent plans policies and programmes.

Population

Warwickshire has a population of around 536,000[3] and covers an area of 1,975Km with just under a quarter of a million households. To the north of the county, Rugby and Nuneaton and Bedworth are traditional industrial towns, where established industries include (or included) coal mining, textiles, cement production and engineering. In the centre and south of Warwickshire, lie the more prosperous towns of Royal Leamington Spa, Warwick, Kenilworth and Stratford-upon-Avon. The relative population of each Borough and District are shown below in table 1.1

Table 1.1: Population sizes (mid 2009 estimates)

Districts	Population
North Warwickshire	61,900
Nuneaton and Bedworth	122,000
Rugby	93,300
Stratford-upon-Avon	118,900
Warwick	139,000
Warwickshire	535,100

To the north of the county, Rugby and Nuneaton and Bedworth are traditional industrial towns, where established industries include (or included) coal mining, textiles, cement production and engineering. In the centre and south of Warwickshire, lie the more prosperous towns of Royal Leamington Spa, Warwick, Kenilworth and Stratford-upon-Avon.

The South of the County is largely rural and sparsely populated. The largest towns in Warwickshire at 2008 were Nuneaton (pop 79,750) Rugby (pop 63,950) Leamington Spa (47,500) Bedworth (pop (36,150) Warwick (pop 29,250) and Stratford-on-Avon (26,150).

Demographic Change

The population of Warwickshire is projected to reach a total of 634,900 by 2033 which is an increase of 101,700 people or 19.1% on the 2008 ONS mid-year estimate. This is a higher increase over the 25 year period than the projected regional and national population growth rates of 14% and 18% respectively.

Warwickshire's population has been growing for the past four decades and is now home to 78,000 (17%) more people than at the start of the 1970s. Growth has been rapid in recent years. A key factor behind this trend, is the continued in-migration from the urban areas of Coventry and Birmingham.

Within Warwickshire, the South of the County is expected to experience the highest rates of

[3] Census 2010

population growth. Growth will continue to be most rapid in Warwick District with an overall increase of 24.7% between 2008 and 2033, bringing the total population in the District to 172,400.

Across Warwickshire as a whole, the highest rates of projected population growth are in the groups aged 65 and over. The rate of growth increases with age, with the oldest age group (those aged 85 and over) predicted to almost treble in size (from 12,000 to 35,000) by 2033. This trend is reflected across all of the Districts and Boroughs.

Waste Production and Management

Warwickshire has a long tradition of mineral extraction and restoration by landfilling. As a consequence there is a long history of landfilling of residual municipal waste in the county to achieve these goals. However with the introduction of the Landfill Directive and landfill diversion targets, this has reduced significantly over the years whereby currently less than 50% of the residual waste is landfilled.

Almost all of the county's waste arises from the four main waste streams. These are Municipal waste which comprised 279,966 tonnes of waste in 2010, Commercial and Industrial Waste which is estimated to produce approximately 550,000-600,000 tonnes of waste per annum, Construction and Demolition waste comprising 585,000 tonnes per annum based on recent surveys and finally Hazardous waste 38309 tonnes based on figures from the Hazardous Waste Interrogator.

For the financial year 2009/10, Warwickshire landfilled 44.2% of its municipal waste, recycled 48.1% and diverted 7.7% for energy recovery. With enhanced recycling provision via the District collection arrangements it is likely that the levels of recycling will be further enhanced resulting in even less municipal waste going to landfill.

Warwickshire Waste Partnership have set a target to recycle 60% by 2015/16, and 67% of waste by 2027/28. The cost of waste disposal (per tonne) is continuing to rise; landfill tax is now £56 per tonne and will increase by £8 per tonne per year until at least 2014/15. This is placing increasing pressure on the need to reduce the amount of waste sent for disposal. Total waste in Warwickshire fell by 1% between 2009/10 and 2010/11, and the amount of residual waste sent to landfill reduced by 10% with more waste being sent for energy recovery. Warwickshire Waste Partnership will look to write a new high level waste policy document in light of the Government's Review of Waste Policy.

The amount of waste produced per head of population is continuing to fall. This could be attributed to the economic climate as people are becoming more mindful about what they are discarding, linked with a national and local initiatives such as the 'Love Food, Hate Waste' campaign.

Currently, waste management facilities receiving Warwickshire's waste are spread across the five Boroughs and Districts of Warwickshire and extend into neighbouring counties of Staffordshire, Leicestershire, Worcestershire and the West Midlands. The range of waste management facilities employed in managing the waste streams in Warwickshire represent a combination of disposal to non-inert landfill; transfer, bulking and recycling, production of energy from waste and composting.

Transport Infrastructure

Warwickshire is served by a number of major transport facilities due in part to its location adjacent to the West Midlands conurbation. Several motorways and key trunk routes pass through the County, and a comprehensive network of secondary routes serves local destinations.

The level of traffic on Warwickshire's roads continued to increase between 1993 and 2008. There was an increase of 25% in the number of vehicles travelling within and through the county, between these dates. However, between 2008 and 2010, there was a slight fall in traffic not only within Warwickshire but also in the West Midlands and England.

Data used to calculate the average annual daily traffic flows in the main towns in Warwickshire is collected at automatic monitoring sites located around the outskirts of the towns. Numbers of vehicles in all of the towns except Kenilworth fell between 2007 and 2010. This may be linked to the recession, unemployment and high fuel prices.

Natural and Built Heritage Resources

There are many sites designated for nature conservation purposes within the County. There is one site designated as of European importance for nature conservation - the Ensor's Pool Special Area of Conservation (SAC) in Nuneaton. There are approximately 62 nationally designated Sites of Special Scientific Interest (SSSIs) and 253 locally designated Local Wildlife Sites (LWSs). 20 of the SSSIs are designated for reasons of geological interest. Furthermore, there are approximately 90 Local Geological Sites (LGSs, formerly Regionally Important Geological Sites) within the County. There are no National Nature Reserves, although there are 22 Local Nature Reserves.
Together with neighbouring Solihull and Coventry, Warwickshire's biodiversity is encompassed by a local Biodiversity Action Plan which in turn includes specific plans aimed at conservation of 27 specific species and 24 specific habitats considered to be of specific conservation value to the region.

The main issue in respect of habitats is their fragmentation, where although a particular site may be protected by a statutory designation, if it becomes isolated from other parts of the same habitat it becomes isolated and the natural corridors which link them are lost. This can hinder species moving around the countryside and eventually can lead to a decline in species. By GIS habitat mapping it is possible to identify areas at risk of decline and areas of future opportunity so that habitats can be better linked. One way of targeting such critical areas is where planning applications in the vicinity are able to provide off site habitat improvements, where it may be more advantageous to do this that on the particular site. This is called biodiversity offsetting which is a new initiative and which can be used in conjunction to inform and plan for the District and Borough Green Infrastructure studies as part of their Local Development Frameworks.

The Stratford-upon-Avon District of Warwickshire is home to the Cotswolds Area of Outstanding Natural Beauty. This is a national designation, indicating a landscape of the highest status. The Cotswolds is the third largest protected landscape in the UK. It is given unity by its underlying limestone geology and the character of the area is reflected in the stone used in the locality.[4]

Regionally Important Geological and Geomorphological Sites (RIGS), designated by locally developed criteria, are currently the most important places for geology geomorphology outside statutorily protected land such as Sites of Special Scientific Interest (SSSI). A result of the Pleistocene sand and gravel extraction in the county is that important geological and archaeological finds resulting from the excavations, have provided evidence for major climate changes and human habitation during Warwickshire's Ice Age past.

Water Resources

Warwickshire takes in two of the major water catchments of the Midlands region. The Avon Catchment takes water from the south and east of the Midlands into the River Severn and

[4] Cotswolds AONB Management Plan

Bristol Channel via the Avon and its tributaries (e.g. the Sowe, Leam, Dene, Stour, Alne and Arrow), while the Tame Catchment takes water from the north-west of the County (as well as much of the West Midlands) into the Trent, Humber and North Sea via River Leam the Tame and its tributaries (e.g. the Blythe, Cole and Anker). In addition to these two major catchment areas, an element of the Thames Catchment also lies within the extreme southern tip of Warwickshire. The Waste Core Strategy must comply with the Water Framework Directive. It's main objectives are to protect and enhance the water environment and ensure the sustainable use of water resources for economic and social development. Catchment Abstraction Management Strategies (CAMS) set out how water resources of a catchment are managed and contribute to implementing the WFD.

Warwickshire is captured substantially within two Catchment Abstraction Management Strategies. The northern local authorities of Warwickshire lie within the geographic scope of the Tame, Anker and Mease CAMS, which also takes in the Rivers Bourne, Blythe and Cole. To the south, the Warwickshire Avon CAMS represents most of the County, particularly Rugby, Warwick and Stratford upon Avon Districts. In addition, the strategy reaches to other transboundary areas of the Avon catchment including the urban centre of upstream Coventry and downstream rural counties of Worcestershire and Gloucestershire. CAMS contribute to the WFD by:

- providing a water resource assessment of rivers, lakes, reservoirs, estuaries and groundwater referred to as water bodies under the WFD;
- identifying water bodies that fail flow conditions expected to support good ecological status;
- preventing deterioration of water body status due to new abstractions;
- providing results which inform River Basin Management Plans (RBMPs).

Key Sustainability Issues for Warwickshire

The detailed review of baseline conditions within Warwickshire and its current performance in sustainability terms has allowed an identification of the particular sustainability issues that may be influenced by the Waste Core Strategy. Sustainability objectives have been developed partly in response to these sustainability challenges and opportunities, and in conjunction, indicators have been developed through which the beneficial and potentially adverse impacts of the Waste Core Strategy can be monitored. The key sustainability issues as identified by Warwickshire County Council are outlined below.

Key Sustainability Issues for Warwickshire
• Role of the county in the Sub-Region and wider area – the County has a role to play that sustainable waste management is delivered around the county, whilst working alongside districts and boroughs.
• Waste and Recycling – provide strategy and policy which enables an appropriate mix of waste management options and diverts waste away from disposal in accordance with the principles of the waste hierarchy;
• Travel and Movement – support more sustainable transportation of waste through effective planning of waste management facilities;
• Perception and Image – enhancing Warwickshire's positive image and capitalise on the historic and natural resources
• Population Growth - there is a need for appropriate waste facilities to support an

Key Sustainability Issues for Warwickshire
increase in population within Warwickshire. • Inequality and Deprivation – effective planning of waste management facilities will enhance access to employment opportunities in areas of relative deprivation • Health – recognising that in delivering waste management facilities, there is a need to protect human health; • Crime – ensuring that facilities can be delivered in a secure manner which reduce opportunities for criminal behaviour; • Access to Services - ensuring that waste management services are accessible to all and that there is a good geographical spread of municipal facilities and waste collections. • Housing Provision – ensuring that where new housing is proposed that it is served by the necessary waste infrastructure and facilities. • Historic Environment – ensuring that the historic environment is protected against inappropriate development; • Economic Activity – stimulating innovation in the economy through novel waste management techniques and processes; • Economic Structure – providing opportunities to all tiers of the economy to become involved in managing the delivery of sustainable waste management practices; • Entrepreneurship and Innovation – allow opportunities in the waste sector to be pursued and the conditions where new technologies can be developed and used to thri optimum. • Education and Skills – allow for stakeholder / community engagement programmes enhancing an understanding of the need for effective waste management; • Unemployment and Worklessness – encourage employment through the development of the waste facilities and infrastructure • Community Engagement – enable local communities full and proper participation in all waste planning consultation processes. • Climate Change and Flood Risk – recognising that resource consumption / utilisation and management of waste have consequences for flooding. There is a need for waste management practices to not increase flood risk; • Protection of Natural Resources (Air, Water and Soil) – to protect natural resources through the locational and development management principles of the Waste Core Strategy and seek to reduce dependency on natural resources through recovery and recycling activities as well as supporting sustainable waste management techniques. • Energy Production and Usage – ensuring waste is moving the waste hierarchy will ensure that scarce resources are re-used and recycled rather than sent to landfill. Energy from waste can also generate power whilst at the same time disposing of waste. • Water Resources – to ensure that waste management practices do not compromise water quality and supply; • Historic Environment and Landscape – protection of the historic and cultural environment from waste development and infrastructure is important for the local area

Key Sustainability Issues for Warwickshire
and to ensure it does not impact on tourism in the county. • Biodiversity – seek to protect the significant biodiversity assets within the region and engage with stakeholders in waste management planning;

Developing Sustainability Objectives

Following the review of baseline conditions, relevant plans and programmes and key sustainability issues for Warwickshire County Council, Sustainability Appraisal objectives were developed. Originally, 16 Sustainability Appraisal objectives were adopted during Stage A. Following consultations of the SA the objectives were re-assessed and whilst very similar, there are now 17 SA objectives which are set out below:

Sustainability Appraisal Objectives for the Waste Core Strategy
1. Conserve and enhance biodiversity; 2. Protect and improve water quality and resources; 3. Avoid, reduce and manage flood risk; 4. To safeguard environmental quality in order to minimise potential impacts on community health; 5. To conserve and enhance the character and quality of the County's natural landscape and built environment 6. Preserve and enhance sites, features and areas of historic, archaeological or architectural importance and their settings; 7. Protect soil resources; 8. To preserve and protect geological features and promote geological conservation; 9. To promote the delivery of energy efficiency and carbon reduction targets; 10. Reduce consumption of natural resources; 11. To promote adherence to the movement of waste up the waste hierarchy; 12. Enfranchise the community in improving the local environment; 13. Improve accessibility to waste management services and facilities; 14. To ensure that the waste industry plays a central role in the sustainable economic development of Warwickshire; 15. To encourage waste operators to explore new and innovative environmental technologies. 16. To safeguard material assets such as best quality agricultural land, minerals etc

Decision Making Criteria have been developed to assist in applying the Sustainability

Appraisal objectives to the plan development. These Decision Making Criteria were phrased as a series of questions for the Waste Core Strategy, e.g. under the Sustainability Appraisal objective 'conserve and enhance biodiversity', one Decision Making Criteria queried whether the Waste Core Strategy would 'support the key objectives of Warwickshire's and other planning authority's Biodiversity Action Plans (BAP)'. In addition, indicators were developed against which the achievement of objectives may be measured. One example of this is the 'number and status of designated wildlife sites, BAP priority habitats, BAP species directly affected by waste operations'. This information, included within the report, has assisted in the development of Waste Core Strategy appraisal matrices utilised during Stage B (Appendix C).

During the original Stage A process there was extensive consultation to provide stakeholders with an opportunity to comment on the scope of the Sustainability Appraisal and the policy formulation. Comments were invited on the initial Scoping Report in December 2005. The bodies required by Strategic Environmental Assessment Directive and supporting guidance, namely, the Countryside Agency[5], English Heritage, English Nature[6] and the Environment Agency and those relevant bodies were invited to comment directly.

The Scoping Report was revised and comments were again invited in April 2006. Due consideration was given to the output of the consultation including refining Sustainability Appraisal objectives. As an output from this consultation, two additional Sustainability Appraisal objectives, 3 and 8 were added to reflect the need to accord with the provisions of Planning Policy Statement (PPS) 25 in respect of managing flood risk and to protect geological features and promote geological conservation.

During the Revised Spatial Options Consultation in March 2011, the 5 Spatial Options were assessed as part of SA process and a comment was received from the Environment Agency that SA Objective 2 needed to be changed specifically to include "Water Quality" in addition to the more general issue of "Water Resources". This was requested bt the Environment Agency. This was added for the next consultation. When the Scoping Report was re-assessed prior to the Scoping Report in Consultation in January 2012 the objectives were re-assessed against some of the emerging key issues which had been set out in the Warwickshire's Quality of Life Survey 2011.

Whilst none of the existing objectives were taken out of the SA, a new one was added "to safeguard material assets such as best quality agricultural land, minerals etc and to encourage access to local services and housing in the county". "Access to housing and services" was originally included as the result of the re-assessment of the baseline showed that a major issue was access to housing and services. However, having assessed the objective against the Waste Core Strategy objectives, spatial options and policies, it was apparent that this objective did not fit in with the overall strategy and so it was removed. This did not affect any of the options appraisals as the effect of the objective in almost every case was neutral. In the event it was considered that objectives 4 and 5 could be re-merged together as it had been originally in the earliest 2006 versions of the plan at original Issues and Options stage. At the Emerging Options stage they had been two separate objectives.

In terms of the SA Objectives there were numerous references to the Minerals Industry, which reflected the joint Minerals And Waste approach when the plan started. When it was decided that separate core strategies would be developed, the references in the objectives to minerals were removed as the Waste Plan was to be assessed independently through the SA process, from the Minerals Plan.

[5] This function is now performed by Natural England
[6] This function is now performed by Natural England

These changes are part of the iterative process that is required by the SEA Regulations guidance.

Development of Waste Core Strategy Plan Objectives

In preparation for the development of the Waste Core Strategy, plan objectives were developed with due consideration of the data prepared to support the development of the Sustainability Appraisal Framework, including evaluation of international, national and regional commitments. The Sustainability Appraisal Framework was used to evaluate tensions between the Sustainability Appraisal objectives and the plan objectives. In general terms, the Waste Core Strategy objectives were determined as being compatible with the Sustainability Appraisal objectives, although it was acknowledged that to a certain extent, the degree of environmental, social and economic change was a function of how waste management was to be delivered at the local level. The following set of plan objectives was developed following stakeholder feedback during the Emerging Spatial Options Consultation after work was recommenced on the Waste Core Strategy in 2010.

Plan Objectives
To deliver sustainable waste management development by managing waste as a resource by moving it up the waste hierarchy principally through the promotion of waste minimisation, secondly by encouraging the re-use of materials, then through recycling and composting, then energy recovery and only as a last resort disposal to landfill.
To enable the provision of waste management infrastructure to meet an identified need and ensure that the county has equivalent self sufficiency in waste management, recognising that economies of scale within the waste management industry will require cross boundary movements of waste.
To ensure that new waste developments are steered towards the most sustainable and accessible locations, proximate to waste arisings and using the most sustainable transport mode to minimise the distances waste is transported by road.
To engage and empower communities in the waste planning process, ensuring that people recognise the contribution that the waste management industry makes to creating sustainable communities through waste reduction, re-use and recovering value from waste, whilst also contributing to the local economy.
To protect human health and amenity from any adverse effects of waste management development.
To conserve and enhance the natural and built, cultural and historic environment and avoid or mitigate, potential adverse effects associated with the provision of waste management infrastructure.
To safeguard existing waste management sites from non-waste developments.
To encourage high quality sustainable design of waste management facilities, to minimise and mitigate against the impact of waste activities on climate change, flooding and water quality and to reduce emissions of greenhouse gases.

Sustainability Appraisal of Waste Core Strategy Options

Key Issues for Waste Management were identified at an early stage of the Waste Core

Strategy process following consultation with stakeholders.

Key Issues for the Waste Development Framework
• Key Issue 1: Delivering Sustainable Waste Management
• Key Issue 2: Municipal Waste Management
• Key Issue 3: Industrial and Commercial Waste Management
• Key Issue 4: Construction and Demolition Waste Management
• Key Issue 5: Hazardous Waste Management
• Key Issue 6: Waste Management Treatment and Disposal Options;
• Key Issues 7: Waste Management Location Options;
• Key Issues 8: Scale of Waste Management Facilities;
• Key Issues 9: Utilisation of Existing Sites for the provision of new facilities
• Key Issues 10: Protection of Environmental Resources;
• Key Issues 11: Transport Infrastructure;
• Key Issues 12: Site Decommissioning and Restoration;
• Key Issues 13: Monitoring Regime and Stakeholder Engagement.

In the 2006 consultation the SA objectives were assessed against the 13 key issues and a matrix was produced which set out the main significant adverse and beneficial effects of each key issue. These are all set out in the 2007 main SA report produced by Arup. The work has been superseded by the new spatial approach and this section of the work now focuses on what has happened from the "Emerging Spatial Options" (ESO) stage onwards.

The Options were carried forward in to the later consultations and reviewed prior to the ESO Consultation in 2010. These are distinct from the Sustainability key issues for the county which are highlighted above. The Key issues helped to inform the policy principles at the Revised Spatial Options stage and then the policies at the Preferred Options and Policies stage in September 2011.

When work restarted on the Core Strategy and the ESO were produced, an SA was carried out assessing the 5 new spatial options. From this work a Preferred Option was carried forward to the next stage of Consultation which was the Preferred Option and Policies stage of the Waste Core Strategy.

The Sustainability Appraisal assessed five spatial options:

Option 1 - Develop new facilities county wide on industrial estates, brownfield industrial land and existing waste management facilities.

Option 2 - Develop new facilities county wide on existing waste management facilities.

Option 3 - Develop new facilities on industrial estates, brownfield industrial land and existing waste management facilities within the main settlements of over 6000 population* within Warwickshire: Alcester, Atherstone, Bedworth, Bulkington, Coleshill, Kenilworth, Leamington Spa, Nuneaton, Polesworth and Dordon, Rugby, Southam, Stratford, Warwick and Wellesbourne.

Option 4 - Develop new facilities on industrial estates, brownfield industrial and existing waste management facilities within, or in close proximity (*i.e. within approximately 5km)* to

the main settlements of over 6,000 population * i.e. Alcester, Atherstone, Bedworth, Bulkington, Coleshill, Kenilworth, Leamington Spa, Nuneaton, Polesworth and Dordon, Rugby, Southam, Stratford upon Avon Warwick and Wellesbourne.

Option 5 - A 'settlement hierarchy' option based on areas of higher population and/or existing waste management capacity. i.e. Develop facilities on industrial estates, brownfield industrial land and existing waste management facilities within specified locations of higher population.

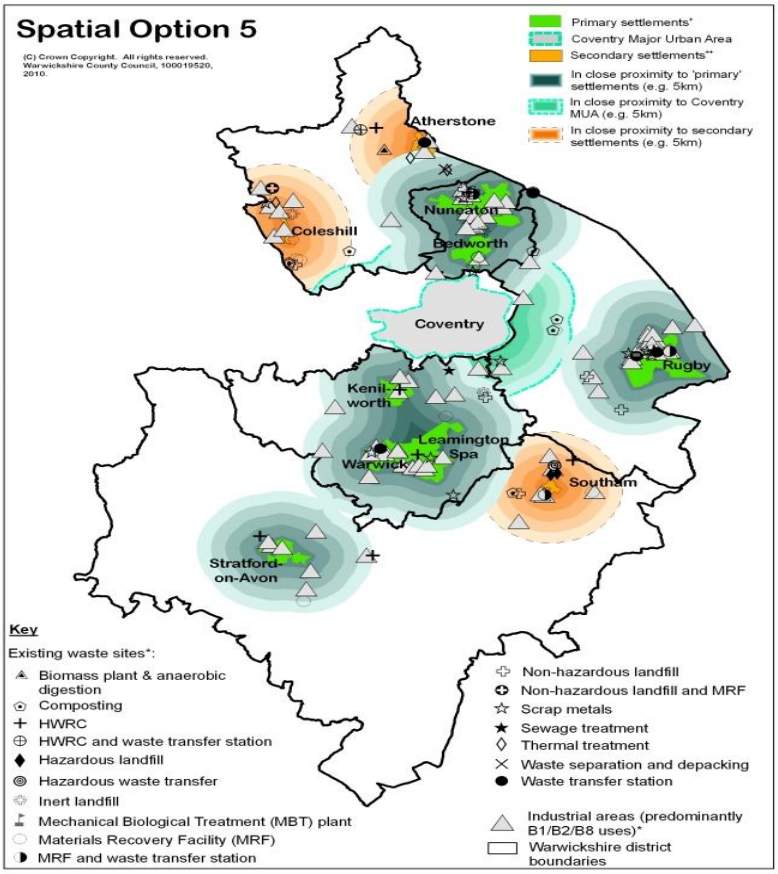

Figure 1.1: Preferred Option 5

Option 5 was the chosen Option based on the Sustainability Appraisal which was carried out and based on the responses received following an analysis of the Consultation Feedback.

i. priority given to within and/or in close proximity *i.e. within approximately 5km* to the 'primary' settlements* of Nuneaton, Rugby, Leamington Spa, Bedworth, Warwick, Stratford-upon-Avon and Kenilworth; or within 5km of the Coventry Major Urban Area (MUA); or

ii. within and/or in close proximity to the 'secondary' settlements' $^{++}$ of Atherstone, Coleshill and Southam where it is demonstrated that the development provides significant transport, operational and environmental benefits; or

iii) sites outside primary and secondary settlements where specific types of waste development might be acceptable where there are no unacceptable adverse environmental effects.

**Primary settlements are defined as the main settlements of over 20,000 population - Source: Warwickshire Observatory; National Statistics mid-year population estimates (www.statistics.gov.uk*

++Secondary settlements are defined as those settlements of over 6,000 population (source as above) that currently deliver a comparatively high proportion of existing waste management capacity.

Summary of the Vision and Objectives Assessment

The Vision was assessed against all the SA Objectives. An assessment was made as to whether the Vision was compatible with each of the SA objectives. The outcome was that the majority of the objectives were accommodated very well within the Vision whilst some others such as the sustainability objectives such as "reducing carbon and providing seeking to be energy efficient" probably be addressed indirectly in conjunction with some of the other objectives. It was concluded that several of the environmental protection objectives such as Biodiversity, Geodiversity and Archaeology were very well

The Objectives were assessed in the same manner using the same methodology as the Vision. A matrix was used whereby the SA objectives on one side were assessed against the Objectives of the waste plan on the other. It was demonstrated that the objectives were compatible with each other. Some of the objectives on both sides were extremely similar. For instance "Protecting Natural and Historical Environment" including issues such as Biodiversity, Geodiversity, Archaeology and the Historic Environment are covered in both sets of objectives and are highly compatible and score well.

Summary of the Options Assessment

The Spatial Options were initially assessed at the Emerging Spatial Options Stage. Option 5 was considered to be the most sustainable of the Options. The Option was considered to have numerous advantages over some of the options because it allowed flexibility for development in and around the main towns of the county and steered development more effectively to the major sources of waste arisings and of particular importance was that it included the area adjacent to Coventry to take account of the new Local Economic Partnership between Coventry and Warwickshire. Following the adaptation of some of the objectives prior to Publication stage the Options were re-assessed using the slightly amended matrix. The changes were minimal and the result of the assessment was very similar with Option 5 again providing the most sustainability benefits. The main pros and cons of each of the options is et out below.

Option 1 - The option was neutral in respect of the main environmental SA objectives as the dispersed pattern of development based on existing sites would mean that biodiversity, geology, archaeology and water resources would probably not be so greatly impacted by new development. At the same time it would be difficult to ensure any enhancements in regard to existing developed sites. It was considered that the pros and cons of these SA options balanced out and therefore neutral scores were predicted. The option fell down on the basis of some of the sustainability options (numbers 9,10,11 and 13) which are hindered by the dispersed pattern of development whereby it was considered that the option could encourage more transportation of waste to the more remote areas of the county to serve existing sites many of which were potentially locate in areas with few waste arisings. This would not reduce carbon emissions, encourage the reduction in use of natural resorces, nor enable better accessibility. In general it was felt that for these reasons and the fact that it did not provide economies of scale by centralising waste management it could make meeting

capacity requirements harder and thereby not encourage the movement up the waste hierarchy.

The SA score for this option, following the analysis was: ST= -1 MT= -1 LT= -3

Option 2 - The Option is very similar to Option 1 with a dispersed pattern of development proposing development only on existing waste sites. The advantages are broadly similar with the added advantage that treating waste is already an accepted use at all of the sites. It may be favourable in comparison to Option 1 in that it would be slightly less dispersed as there would be fewer sites available and a fair proportion of the sites are located already in the urban areas which may accrue some transportation, accessibility and carbon reduction advantages. With fewer sites available there would be less potential for environmental impacts and so this would be slightly better than Option 1 but not as good as the more centralised options. This option would also make it harder to stop undesirable operations especially if waste treatment capacity was low in the county. Being constrained by only using waste sites as an option, could stop future innovation in terms of uses like Anaerobic Digestion plants or composting on farm sites.

The SA score for this option, following the analysis was: ST= -1 MT= -1 LT= -3

Option 3 – The option comprises all potential new waste developments on industrial estates brownfield land and existing waste management facilities within the settlements of over 6000 population. A very centralised pattern of development would make sites very accessible to the majority of the population and make waste collection easier to implement as it attracts economies of scale. The option also allows better accessibility to waste facilities around the county centralising on the major towns whilst enabling carbon reductions and energy efficiency

In terms of disadvantages the option is quite restrictive in limiting the scope for meeting the county's capacity gap through the development of innovative types of facility on farms and industrial land outside the main settlements of over 6000 population. Whilst the effect on many of the environmental SA objectives, whilst ensuring the protection of biodiversity, the natural environment, geodiversity, archaeology etc it it is restrictive in allowing for any further enhancements in these areas.
The SA score for this option, following the analysis was: T= +9 MT= +9 LT= +13

Option 4 – The option proposes new waste management facilities on industrial estates, brownfield industrial land and existing waste management within or in close proximity to the main settlements of over 6000 population. This is an adaptation of Option 3 but with a degree of flexibility built in, to accommodate the urban fringe and countryside within 5km of the main settlements over 6000 population. The options scores quite well in terms of most SA Objectives. The advantages are that the option targets the main areas where the majority of the population lives and this would be good in terms of transport impacts, reduced carbon emissions reduced energy useage and higher accessibility. As in most of the options it is difficult to assess the effects on some of the other environmental factors until detailed planning application stage. Many of these SA Objectives appear to have similar outcomes.

In terms of disadvantages, the Option is probably better than the options 1-3 as it is more targeted towards settlements with some of the highest arisings but it targets some settlements with lower waste arisings as it makes no distinction between the largest settlements over 20000 and the smaller settlements of 6000 population. The option does not target the Coventry LEP unlike Option 5. It also excludes some of the more remote existing

waste sites in the county.
The score for this option was ST= +10 MT= +10 LT= +12

Option 5 proposes a settlement hierarchy based on areas of higher population ie over 20000 which are Primary Settlements and those of 6000 population which are Secondary Settlements. Large scale facilities (ie those managing more than 50000 tonnes of waste per annum) would be steered to these areas. Smaller scale facilities under 50,000 tonnes could potentially be considered on various sites subject to according with a criteria based policy.

The advantages are that the option is more focussed to allow larger waste developments to be better targeted closer to the main sources of arisings as it refines the strategy down to the main smaller settlements which are concluded to have the best transport accessibility and a concentration of existing waste facilities. Unlike Option 4 it does not exclude the existing waste sites in some of the rural areas which are not in the primary and secondary settlements because it still would enable small scale development in this areas. In enabling this to happen it provides greater flexibility to enable innovation and small scale economic enterprise in more rural areas to manage waste at local scale.

Economically it is also better than any of the other including Option 4, which is the most similar option to it, because it also recognises the cross boundary movements of waste and the Council's duty to co-operate by including the area around Coventry, which also includes several waste facilities and a number of large scale brownfield sites. In other respects it is similar to Option 4 in terms of the environmental factors and social factors. There is a close working relationship between Warwickshire and Coventry through sub-regional working groups and the Local Economic Partnership. This option is the only one that reflects the current economic ground conditions fully.

The option performs well against the SA Objectives in terms of transport impacts, reduced carbon emissions reduced energy usage and higher accessibility because it targets the main urban areas and at the same time allows for economies of scale which is likely to be attractive to the waste industry. Consequently this is the option that has been chosen; the Sustainability Appraisal work has contributed to the formulation and choice of the option.

The score for this option was ST= +13 MT=+13 LT= +16

Summary of the Policies Assessment

The Policies were assessed against the 16 Sustainability Objectives. Generally all the policies performed well against the objectives. In each case the positive and negative effects of the policy was considered prior to giving each option a score varying between positive and negative using the scoring methodology set out in Section 2.3.7. In each case the impact of the policy and its method of implementation were considered. Finally, methods of enhancement and mitigation were considered if negative effects were predicted.

Summary of Overall Significant Effects of the Waste Core Strategy

The full details of the Options appraisals Including the Preferred Option appraisal and the likely significant sustainability effects are included in Appendix C to this report. In addition, the most significant sustainability effects of the Options appraisals are summarised below, along with areas for potential improvement to the Waste Core Strategy to ensure it accords with the principles of sustainable development.

Significant Beneficial Effects

First and foremost the overall strategy is based on the principles of sustainable development. This means that new waste sites should be located as close as possible to where waste arises. Evidence in the Waste Background Technical Document shows that the vast majority of C & I waste produced in Warwickshire is produced in the main urban areas. C and I waste accounts for about 33% of all the waste in the county but Construction and Demolition waste and Municipal waste also follow a similar pattern in terms of where the waste arises.

The chosen strategy based on the Preferred Option would focus new waste facilities in and around the main urban areas with the largest populations. In adopting this strategy (Option 5) it addresses many of the SA Objectives even before the policies are considered. For instance, locating waste close to its source will reduce the pollution impacts of vehicle movements by reducing the amount of waste transported on the road. This in turn helps improve air quality (SA Objective 4). It will also help reduce carbon emissions (SA Objective no 9) by reducing transport distances it reduces the amount of fuel required to transport the waste which in turn helps to achieve Sustainability Appraisal objective no 10 to reduce the consumption of natural resources. In future as fuel costs rise the industry will be keen to ensure that strategies are flexible to accommodate waste sites which help to reduce costs. In addition they will require flexibility for sites that perhaps specialise in particular waste types such as anaerobic digesters and composting facilities that may need to be close to an urban area but not necessarily inside the urban area. Allowing flexibility in the plan and making the plan technology neutral would help the industry to feel secure that it could innovate successfully and this would also comply with the SA Objective no 15.

The strategy also focuses development on existing sites which means that fewer material assets (SA Objective no 16) should be affected by new development such as green belt or open space for instance.

What is evident from the overall Sustainability Appraisal is that the most substantial benefits accruing from the policies within the Waste Core Strategy will occur as a result of the cumulative effects of all the policies being implemented together.

Significant Adverse Effects

In general, the Waste Core Strategy may have few significant adverse sustainability effects. However, where effects are evident there is a requirement to ensure that any adverse effects are mitigated and if possible enhancements are made as this may be the only thing that can make a particular development acceptable. Major issues, which were highlighted in the key issues assessment, for Warwickshire include the protection of biodiversity, deteriorating air quality in some areas and preventing an increase in flood risk.

It is strongly encouraged that the policy be informed by information derived from Strategic Flood Risk Assessment (SFRA) in the delivery of new sites. It is anticipated that natural assets will receive an appropriate level of protection through overarching policy and due consideration of impacts to features of intrinsic value during the project EIA phase.

Within some of the Districts and Boroughs, vehicle-derived particulates and nitrogen dioxides are issues which must be taken into account for proposals having an impact on vehicle flows and traffic composition. It is anticipated that waste management facilities would place greater demands on transport infrastructure and this demand would have a consequence for air quality.

Biodiversity can often be lost through development. The key issues identified that there is a general habitat loss throughout the county and this requires to be halted. Planning applications offer the potential to create habitats based on habitats and species in the wider area. Sometimes the benefits can be obtained off site and in the case of biodiversity it could

be through offsetting some development in return for habitat enhancements elsewhere.

Opportunities for Further Enhancement

The Sustainability Appraisal of the Policies has confirmed that there are few predicted significant adverse effects arising from the implementation of the Waste Core Strategy. Notwithstanding this, there may always be adverse impacts on waste developments which require mitigation or enhancement. In such cases there are opportunities to enhance the sustainable delivery of the Waste Core Strategy through implementing the Preferred Spatial Strategy and the waste policies in the plan. Biodiversity in particular offers numerous opportunities both on and off site via habitat creation, species protection and development and biodiversity offsetting potentially in conjunction with the development of Green infrastructure corridors.

In terms of air quality which was highlighted in the previous section, this can be mitigated by ensuring waste sites are situated as close as possible to the potential waste arisings to limit transport movements near waste sites. This has partly been assessed during the site options process and through the refining of potential waste policies in the plan. Consequently, the spatial options which performed best in this regard were the ones which promoted the urban areas which produce the majority of the arisings.

Mitigation of Significant Effects

It is recognised that in many cases, the effects of introducing the Waste Core Strategy will be dependent on the particular nature of the proposals and the site in which those proposals are to be delivered. Notwithstanding, there are general measures which should be implemented to ensure that the delivery of the Waste Core Strategy does not compromise Sustainability Appraisal objectives at the project level. In particular, these include:

- Application of the Environmental Impact Assessment (EIA) Regulations in determining each planning application for waste management facilities (where this assessment process is required);
- Appropriate cross-referencing of policies supporting the protection of natural assets and biodiversity as well as management of water resources (including flood risk); transport; air quality and promoting social and economic development;
- Ensure that measures for good on site practice are adhered to through appropriate conditions to planning.

Monitoring of Significant Effects

Guidance on the undertaking sustainability appraisals (now produced by the Planning Advisory Service) indicates that the performance of the Waste Development Framework should be monitored to ensure its long term viability. The most appropriate vehicle for this monitoring process is through Warwickshire's Annual Monitoring Report (AMR), the requirement for which was established through Regulation 48 of the Town and Country Planning (Local Development) (England) Regulations 2004. This made it incumbent on Warwickshire County Council to prepare an Annual Monitoring Report, within which the implementation of the Waste Development Framework must be evaluated. The Sustainability Appraisal Framework includes indicators against which the implementation of the Waste Development Framework Core Strategy may be monitored. Within the context of the Annual Monitoring Report, these were seen as the appropriate tool to evaluate the success of the Waste Development Framework Core Strategy in meeting sustainability objectives.

Difference that the Sustainability Appraisal has made

The Sustainability Appraisal has tested the different options for the delivery of the Waste

Core Strategy in respect of their likely significant environmental, social and economic effects. The most sustainable option has been carried forward from the Revised Spatial Options stage to the Preferred Option and Policies stage and finally through to the Publication stage. Mitigation and enhancement measures were suggested to further enhance the development of the Waste Core Strategy. These mitigation and enhancement measures took the form of highlighting key actions necessary to minimise significant impacts, suggesting potential amendments to policies and forging links with other plans, policies and strategies.

Next Steps

This Sustainability Appraisal Report is now issued for public consultation alongside the publication of the Waste Development Framework Core Strategy. The Waste Core Strategy will then be submitted at the end of the summer and then examined in early 2013. The Sustainability Appraisal Report is a critical part of the evidence base which accompanies the Waste Development Framework Core Strategy.

How to Comment

Comments on this Waste Development Framework Sustainability Appraisal Report may be made as follows:

By post	**Telephone and other services**
Waste Development Framework Planning Policy Environment and Economy Warwickshire County Council P O Box 43 Shire Hall Warwick CV34 4SX	Telephone: 01926 412391 This publication can be made available in alternative forms on request. For information on this service please contact the numbers above. Email: Planningstrategy@warwickshire.gov.uk

1 Introduction

1.1 Preamble

This report has been produced by Warwickshire County Council to Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) of their Waste Development Framework (WDF) Core Strategy. This report presents the findings of Stage C of the SA process, in accordance with the provisions of the SEA Directive the latest SEA guidance from the Planning Advisory Service Plan Making Manual.

Context for the Sustainability Appraisal

Warwickshire has a challenge of recovery and recycling targets for waste within the County in common with other local authorities. In response to this challenge, Warwickshire County Council has established a vision for the WDF:

By the end of the plan period in 2028, Warwickshire will have delivered equivalent self sufficiency in its waste management capacity, having met its identified treatment gap and enabled the development of a range of sustainable waste facilities in the most sustainable locations. Development will have been focused within and around the main primary centres of waste arisings of the major towns of Warwick, Leamington, Nuneaton, Bedworth, Kenilworth, Stratford and Rugby and in the most sustainable secondary locations of Atherstone, Coleshill and Southam.

Cross boundary waste management links, especially those with the sub-region, will continue to be recognised. All new waste developments will have facilitated the management of waste in accordance with the principles of the Waste Hierarchy. The volume of waste produced per person will have reduced significantly from 2011 levels and waste will have been treated as a resource and led to the reduction in the use of natural resources in moving towards a zero waste economy.

Recycling, composting and energy recovery will have increased significantly in the county to meet national targets in line with the Waste Framework Directive and waste to landfill will have been minimised, with the County Council having met its landfill diversion targets.

Waste management facilities will have been of high quality design and will have minimised greenhouse gas emissions and mitigated against climate change. In delivering Warwickshire's waste management capacity, the Core Strategy will have safeguarded communities from adverse environmental impacts, protected human health, amenity and well-being and will also have protected and enhanced the natural, historic, cultural and water environment of the county.

Engagement and communication with local communities, industry and landowners will have enabled a greater understanding of the principles of sustainable waste management. In turn this will have facilitated waste reduction and prevented the unnecessary use of resources by promoting the value of managing waste a resource and recognising

The Waste Core Strategy establishes the mechanism through which the vision may be realised. It is objective-driven and includes practical measures for the guidance of waste management planning and delivery. The WCS presents an opportunity to shape the management of waste in the county until 2027/28. Baseline information has been gathered (and recently updated) and used to develop suitable options for waste management in Warwickshire. The potential impacts associated with each option were assessed in developing a Preferred Option. This in addition to the consideration of cumulative impacts

forms the basis of a statement of likely significant effects. The SA process was integral to the plan-making process and was used to guide decision-making throughout.

1.2 Strategic Environmental Assessment and Sustainability Appraisal

The European Directive 2001/42/EC requires Strategic Environmental Assessment (SEA) to be carried out on a range of plans and programmes including this Waste Core Strategy. SEA is a process of assessing strategic policies, plans and programmes to ensure that potential significant environmental effects are identified. Once identified, decision makers are made aware of these effects and appropriate mitigation and monitoring of these effects is applied. This report conforms to the requirements of the SEA Directive.

The Government also requires that Sustainability Appraisal (SA) is carried out on Local Development Frameworks to ensure that plans are balanced and integrate environmental, social and environmental objectives to secure the best overall outcome for the area. The Government has developed a methodology for a combined SA/SEA approach to satisfy both SEA and SA requirements in a single appraisal process. The methodology proposed in 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents' (ODPM November 2005) has been used to prepare this SA Report.

The purpose of the SA is the promotion of sustainable development via enhanced consideration of sustainability considerations within the preparation of plans and as defined within paragraph 8 of The Planning System: General Principles[7] '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'. 'Sustainable Development' has been commonly used term since the 1990's and sustainable development is a key global and local issue. A commonly used definition of sustainable development is:

'Development that meets the needs of the present without comprising the ability of future generations to meet their own needs' Brundtland Commission, 1987.

The UK Government updated its sustainable development strategy and has published Securing the Future (March 2005). It set out five key principles for sustainable development illustrated below which are still relevant to the SA process.

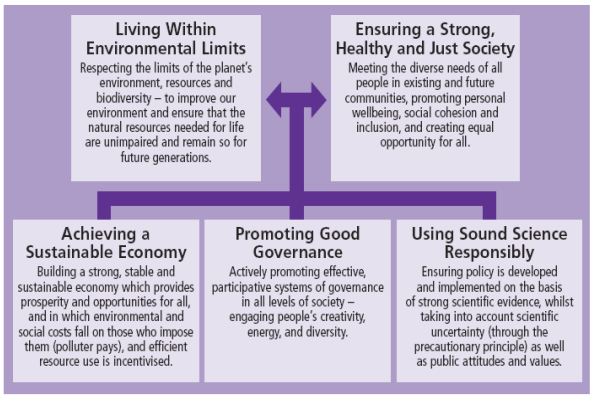

Figure 1.2: Key principles for Sustainable Development

[7] The Planning System: General Principles: ODPM January 2005

These five principles have informed the development and approach to this SA of the WDF.

1.3 Spatial and Temporal Scope of the SA

The SA has been conducted within the geographical scope of the WDF that is the administrative boundary of Warwickshire County. However, it has been noted that the management of waste has implications on a transboundary basis and where appropriate, for example for particular types of waste, the whole of the West Midlands has been considered. This has been particularly instructive in characterising the baseline conditions within the region and allows potential inter-regional barriers to effective waste management to be investigated. In accordance with ODPM Guidance, the SA addresses the same period as the WDF. In addition, the SEA Directive demands that the long term cumulative and synergistic effects of the plan are appraised. As such, timescales beyond the period of the WDF have also been considered where this has been deemed appropriate. For the purposes of this SA, long term has been defined as a period between 10 and 20 years.

1.4 Stages of the SA Process

Whilst legislative requirements and guidance recognise that the SA and SEA process are distinct, CLG Guidance confirms that a single appraisal process is appropriate to satisfy both sets of requirements and provides a suitable framework. As such, where the phrase SA has been used within this report, it can be taken to mean that this incorporates the provisions of the SEA Directive.

SA is a staged process, CLG Guidance providing a breakdown of the key activities which are undertaken at each stage of the development of the plan (in this case the WDF Core Strategy). The following main stages have been undertaken to date (unless otherwise stated):

- Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope;
- Stage B: Developing and refining options and assessing effects;
- Stage C: Preparing the SA Report (this report fulfils the requirements of Stage C);
- Stage D: Consultation on the Preferred Option of the WDF and the SA Report (this stage has yet to be completed);
- Stage E: Monitoring the significant effects of implementing the WDF (this stage has yet to be completed).

The process through which each of these stages have been addressed (and in the case of Stages D and E are to be addressed) are described within the report. The key outputs to this point have included an SA Stage A Revised Scoping Report setting out the approach to the SA (including an assessment of baseline characteristics within Warwickshire and developing an SA Framework and a revised Plan, Policies and Programmes section) consulted on in January 2012.

This followed the consultation of the earlier Scoping Report in 2006 alongside the original Issues and Options Consultation. An interim SA of the Revised Spatial Options was also carried out in March 2011 alongside the Revised Spatial Options when the plan recommenced after a period of uncertainty about the direction of the municipal waste strategy for the county.

Consultations Undertaken in Support of the SA

In undertaking this SA incorporating the provisions of the SEA Directive, those authorities who have an environmental responsibility for aspects potentially affected by the WDF/WCS have been consulted. These consultees have included, but not been limited to:

- Environment Agency;
- English Heritage;
- Natural England; (formerly the Countryside Agency and English Nature)
- Waste Forum (including representatives from industry, community / environmental groups and interested parties (Appendix D)).
- Other stakeholders on the Council's consultation database

The assistance of these and other bodies consulted during the SA process and preparation of this SA report is gratefully acknowledged.

Following the

1.5 Formal Requirements for this Document

Article 5.1 and Annex II of the SEA Directive, requires:

'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 geographical scope of the plan or programme, are identified, described and evaluated.' Given that this SA incorporates the provisions of the SEA Directive, the requirements for the Environmental Report have been met within this SA Report, the structure of which is described below.

1.6 Structure of the Document

This document is comprised of the following Chapters:

Chapter 1: Introduction

Chapter 2: Appraisal Methodology;

Chapter 3: Baseline, Context and Sustainability Objectives;

Chapter 4: WDF Core Strategy Issues and Options Appraisal;

Chapter 5: Mitigation;

Chapter 6: Monitoring;

Chapter 7: Summary

Appendix A: Plans and Programmes

Appendix B: Baseline Data

Appendix C: Appraisal Matrices

Appendix D: Consultation / Stakeholders

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2 Appraisal Methodology

2.1 Compliance with the SEA Directive

The European Directive 2001/42/EC (SEA Directive) came into effect in the UK from the 21st July 2004 in the form of 'The Environmental Assessment of Plans and Programmes Regulations 2004' (SI2004/1633). These regulations require that a Strategic Environmental Assessment (SEA) is undertaken on a range of plans and programmes, including certain planning documents. The objective of the SEA 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 adoption of plans … with a view to promoting sustainable development' (Article 1, SEA Directive).

The SEA Directive, Annex II suggests the significance of effects of a plan relates to the characteristics of the plan as well as its implications. Annex II defines the criteria for determining the likely significance of a plan in regard to the following characteristics:

- The degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;
- The degree to which the plan or programme influences other plans and programmes including those in a hierarchy;
- The relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;
- Environmental problems relevant to the plan or programme; and
- The relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste-management or water protection).

It is evident from the description of the issues addressed in the SEA Directive that the SA and SEA requirements differ in terms of their scope. The subject areas addressed within the SEA Directive focus on environmental aspects, i.e. biodiversity; population; human health; flora and fauna; soil; water; air; climatic factors; material assets; cultural heritage and landscape as well as the manner in which these aspects may have interrelated effects. The SA process addresses the three fundamental tenets of sustainability which include environmental aspects, but in addition, social and economic aspects. It is clear the WDF Core Strategy can have a significant impact and influence on land use practices.

2.11 SEA Directive on Preparing an Environmental Report

A key output from the SEA process is the delivery of an Environmental Report, which, according to the SEA Directive (Article 5.2) '*shall 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*'.

In addition, the following Table 2.1 sets out which sections of this report correspond with requirements of Article 5.2 and Annex I of the SEA Directive and Regulation 12(3), Schedule 2 of the SEA regulations.

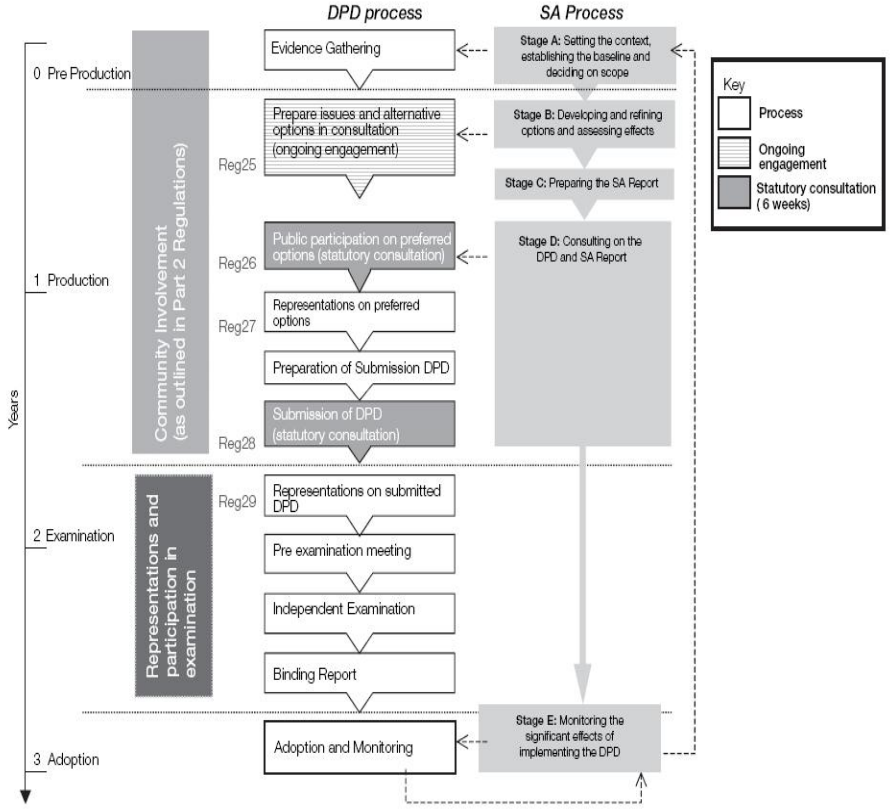
Table 2.1 SEA Requirements for the Environmental Report & SA Report

Section of the SA Report	Description	Compliance with the SEA Directive and Regulations
NTS	Non-technical summary of the SA and SEA	Annex I (j)
1.2 - 1.7, 1.5, 2.4, 2.1 - 2.6	Sets out the main objectives of the SA and SEA and the main purpose of the WDF Core Strategy as well as consultations undertaken in support of the SA	Annex I (a) Article 5.1, 5.2 Annex II
3.1 and 3.2	Describes the baseline and planning context	Article 5 (2)
2.4	Summary of the consultation process to date with the statutory consultation bodies and the public	Article 5 (4) as defined by Article 6 (3).
3.2 and Appendix A	A review of plans and programmes has been carried out as part of the SA/SEA process and is summarised in this section. Full details of the plans that have been reviewed and the key objectives that are relevant to Warwickshire are listed in Appendix A	Annex I (a)
3.2 and Appendix B	This section describes the baseline data collected. Full details can be found in Appendix B	Annex I (b) (c) (d)
3.4	This section summarises the key sustainability issues and problems identified in the review of baseline data, other plans and programmes and consultation. The summary includes environmental issues amongst the sustainability issues	Annex I (d) (e)
4.	This chapter describes the SA and SEA appraisal of alternative options for the WDF Core Strategy. It also describes the main justification for the selection of the various options. Full details of the appraisal matrices can be found in Appendix C	Article 5 (1) Annex I (h) (g) (f)
4.6 Appendix C	This section addresses the appraisal of the preferred policies for the WDF and identifies suitable mitigation and enhancement measures (Appendix C)	Article 5 (1) Annex I (h) (g)
5. Appendix C	This section sets out the mitigation measures and enhancement measures required to reduce or avoid adverse effects and improve neutral or beneficial effects further	Article 5 (1), Annex I (g).
6. Appendix C	This chapter states the proposed monitoring requirements of the significant effects of the WDF Core Strategy, identified in the SA	Article 10 and Annex I (i)
7.	Provides a summary of the WDF Core Strategy SA	

2.2 Sustainability Appraisal Process

Although the requirements to carry out SA and SEA are distinct, CLG has proposed that both can be satisfied through a single appraisal process. SA Guidance has been developed to ensure that SAs meet the requirements of the SEA Directive whilst widening the Directive's approach to include economic and social issues as well as environmental. The plan development stage at which each stage of the SA process should be conducted is illustrated in the figure below.

Figure 2.1 Application of SA to the Development of the Plan (WDF Waste Core Strategy)



Source: ODPM SA Guidance November 2005

2.3 Techniques Employed During the SA

In conducting the SA, the primary method used to assess the effects of the Waste Core Strategy was expert judgment. To minimise subjectivity, Decision Making Criteria (which accompany the SA Objectives) were adopted to act as prompts and the baseline characterisation exercise for Warwickshire served to inform the process and baseline provided the evidence base to support expert judgements. It was also important to consider how the SA Objectives interact with each other. Set out below are some of the issues which were considered when undertaking the SA.

2.3.1 Type of Effect

The SA considered the nature of the effect e.g.:

- Beneficial or adverse;
- Direct or indirect;
- Cumulative;
- Synergistic;
- Temporary or permanent.

2.3.2 Magnitude and Spatial Extent

The SA considered the magnitude and spatial extent of an impact e.g.:

- Where impacts will be;
- Whether impacts will be within areas of greater or lesser population and in or outside city and town centres;
- Possible transboundary issues and impact upon adjacent areas or regionally, nationally or internationally;
- The geographical area and size of population likely to be affected.

2.3.3 Who it will Affect

The impact on human health and population is a key consideration of SA Guidance. The SA objectives adopted to guide the appraisal were therefore designed to encourage the impacts on different groups and communities to be considered. This was developed in order to avoid direct or indirect adverse impacts on different communities and to promote equality, optimise beneficial impacts and identify enhancement opportunities.

2.3.4 What it will Affect

The SA also considered the aspects of the environment that could be affected by proposals in the WDF. Where an individual receptor is likely to be affected it has been highlighted.

2.3.5 Value and Vulnerability of Affected Areas

In considering the significance of the impact it was important to consider the value and vulnerability of affected areas e.g.

- Sensitive receptors;
- Special natural characteristics/areas or cultural heritage;
- Protected areas; and
- Relative importance of the site, whether it is a nationally or internationally important feature or of local significance.

2.3.6 When it will Cause an Effect

It was also important to consider when the delivery of the WCS was likely to cause an effect. SEA Guidance suggests that the timescales will vary depending on the plan or options being considered. For instance, for air pollution the short, medium and long terms could be 3, 10, 25 years, while for climate change they could be 5, 20 and 100 years. In conducting the SA, the following timescales were adopted:

- Short term - 0 - 4 years;
- Medium - 5 - 9 years;

- Long term -10+ years (generally a limit on predictive accuracy has been set at twenty years although it is acknowledged that it is possible that effects are experienced beyond this period).

2.3.7 Significance of Effects

Following the prediction of effects, SEA requires an assessment of effects. For the purposes of this assessment / appraisal, significance criteria were developed to assist in assigning a significance level. This significance criteria is show below.

Table 2.2 Criteria to Determine Significance of Effects

Significance of effect		Definition/Criteria of Significance
+/+	Major beneficial	A beneficial effect which may have a long lasting or permanent effect or will benefiting a large number or variety of receptors
+	Minor beneficial	A beneficial effect which may have a temporary or short lived effect, or only likely to affect a limited number of receptors
0	Neutral	Either there are no effects predicted, or the effects that are predicted will cancel each other out (e.g. the effects of an adverse impact being mitigated by the beneficial effects resulting from another effect)
-	Minor adverse	An adverse effect, which is relatively short lived or does not affect the most sensitive or important receptors
-/-	Major adverse	An adverse effect that is either permanent or long term affecting a very sensitive receptor or a high number of receptors
U	Unknown	Unable to make an assessment of significance because of uncertainty in the prediction of likely effects

2.3.8 Assessing Cumulative and Synergistic Impacts

The SEA Directive insists that appraisals should consider these impacts and the purpose of this is described in the SA Guidance 2005 as follows 'Many sustainability problems result from the accumulation of multiple small and often indirect effects, rather than a few large and obvious ones. The SEA Directive requires an assessment of secondary, cumulative, and synergistic effects, which should be incorporated in the SA.'[8] Examples of these effects are given in Annex 13 of the Guidance 'loss of tranquillity, changes in the landscape, economic decline, and climate change. These effects are very hard to deal with on a project-by-project basis through Environmental Impact Assessment. It is at the SA level that they are most effectively identified and addressed[9].' A definition of these effects is outlined below:

- **Secondary or indirect effects** are effects that are not a direct result of the WDF, but occur away from the original effect or as a result of a complex pathway. An example of a secondary effect is development that changes a water table and thus affects the ecology of a nearby wetland; and construction of one project that facilitates or attracts other developments;
- **Cumulative effects** arise where several developments each have insignificant effects

[8] Paragraph 3.3.14 ODPM SA Guidance 2005
[9] The Matrices developed for appraisal enable the secondary, cumulative and synergistic effects to be considered in the appraisal process

but together have a significant effect; or where several individual effects of the plan (e.g. noise, dust and visual) have a combined effect;

- **Synergistic effects** interact to produce a total effect greater than the sum of the individual effects. Synergistic effects often happen as habitats, resources or human communities get close to capacity. 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.

These terms are not mutually exclusive. Often, the term cumulative effects is taken to include secondary and / or synergistic effects[10].

2.3.9 Mitigation and Enhancement Opportunities

Following the assessment of the effect of a WDF Issue, Option or Policy, mitigation and enhancement opportunities were identified. These should 'prevent, reduce or offset any adverse effects and enhance positive effects' (ODPM SA Guidance 2005). They should seek to improve beneficial impacts as well as adverse impacts.

Paragraph 3.3.21of the ODPM SA Guidance 2005 suggests that the following mitigation measures could be considered and these have informed our approach to evaluating mitigation and enhancement opportunities:

- 'Changes to the DPD as a whole or options concerned, including bringing forward new options, or adding or deleting options';
- Refining options, in order to improve the likelihood of beneficial effects and to minimise adverse effects (e.g. by strengthening policy criteria);
- Technical measures to be applied during the implementation stage, e.g. buffer zones, application of design principles;
- Proposals in accompanying planning applications; and
- Proposals for changing other plans and programmes.

2.4 Consultation

Consultation has been carried out during the development of the WDF Core Strategy and has been used to inform the development of the SA Framework as well as the preferred policy options for the WDF. The following table sets out the consultation process carried out to date.

Table 2.3 Consultations Undertaken During the SA of the WDF Core Strategy

Date	Activity	Comments
December 2005 to February 2006 consultation	Warwickshire County Council WDF Core Strategy Scoping Report published for consultation	Comments were received on the Scoping Report including adjustment of the objectives and demonstrating enhanced linkages between baseline environment, plans and programme and formulation of SA objectives
April to May 2006	Warwickshire County Council WDF Core Strategy Scoping Report published for	Comments on a Scoping Report, which incorporated the

[10] Annex 13 of ODPM SA Guidance 2005

Date	Activity	Comments
consultation	consultation	comments received from the previous round of consultation
February 2006	Warwickshire County Council WDF Core Strategy Issues and Options Paper and SA published for consultation	Comments from stakeholder consultation on Options and SA
August to October 2006	Warwickshire County Council WDF Preferred Options incorporating SA	Comments from stakeholder consultation on Preferred Options considered in developing SA Report (including development of mitigation)
March 2011	Revised Spatial Options incorporating Sustainability Appraisal Revised Spatial Options	Refreshed options generated comments from stakeholders
January to March 2012	Revised Scoping Report to reflect the change to baseline and plans policies and programmes	Comments from Stakeholders
March to May 2012	Publication Draft Consultation with accompanying final SA Report.	Stakeholder comments - all previous stages incorporated.

In addition to the above, stakeholder workshops, including a Waste Forum and meetings with statutory consultees, have been undertaken to discuss the approach to and content of the SA Report from Stage B onwards.

2.5 Key Stages of the SA Process

The SA process[11] must be applied to all Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs) including the Waste Development Framework. Each of the SA Stages leading up to the production of this report is described in detail below in the following sections:

- Stage A: Setting the Context, Baseline and SA Objectives;
- Stage B: Developing and Refining Options and Assessing Effects;
- Stage C: Preparing the Sustainability Appraisal Report.

2.6 Stage A: Setting the Context, Baseline and SA Objectives

During Stage A, a SA 'Scoping Report' was produced which addressed the following key stages used to inform the later stages of the SA process:

- A1: Identifying other relevant policies, plans and programmes, and sustainability objectives;
- A2: Collecting baseline information;
- A3: Identifying sustainability issues and problems;
- A4: Developing the SA framework; and

[11] as defined in the SA of Regional Spatial Strategy (RSS) and Local Development Documents (LDDs) - Guidance for Regional Planning Bodies and Local Planning Authorities (November 2005)

- A5: Consulting on the scope of the SA.

These tasks were conducted iteratively as illustrated within the following figure.

Figure 2.2: Stage A of the SA Process

Source: ODPM (2004, 2005)

The Scoping Report set out common elements to the scope and level of detail of the SA process. In addition, locally relevant baseline information and interrelated policy was used to assist in the development of the SA Framework.

The Scoping Report was updated in 2012 to reflect more recent baseline data and the inclusion of new plans policies and programmes. However, it was considered that the methodology of the initial report, produced by Arups, was sound

2.6.1 Stage A1: Identifying Relevant Plans, Programmes and Environmental Protection Objectives

The purpose of reviewing other plans and programmes and sustainability objectives as part of the SA is to ensure that the relationship with these other documents and requirements are explored to enable Warwickshire County Council to take advantage of any potential synergies and to deal with any inconsistencies and constraints. The plans, programmes and sustainability objectives that have been considered include those at an international, national, regional and local scale. The information contained within the plans was used to inform the assessment of sustainability issues for Warwickshire, within the context of which, SA objectives were later developed.

Appendix A contains a list of plans and programmes which were reviewed as part of the SA.

2.6.2 Stage A2: Collecting Baseline Information

An appreciation of the baseline conditions was gained from the review of available plans and programmes and feedback derived from the consultation process as well as data gathered through desk-based study. This approach is consistent with the requirements of the SEA Directive and SA Guidance.

The purpose of the baseline study was to characterize the area within which the WDF would be delivered in order to understand how the presence or absence of the plan may affect environmental, social and economic aspects of the region.

Both qualitative and quantitative information has been collated during the baseline information gathering stage, to assist in predicting and monitoring effects and identifying sustainability issues. Information was gathered from the following sources:

- Office of National Statistics (www.statistics.gov.uk);
- Department for Environment, Food and Rural Affairs (Defra) (www.defra.gov.uk);
- Environment Agency (www.environment-agency.gov.uk);
- MAGIC (GIS-based interactive mapping tool) (www.magic.gov.uk);
- NETCEN and the Air Quality Archive (www.airquality.co.uk/archive/index.php);
- Department of Communities and Local Government (CLG) formerly ODPM
- West Midlands Regional Observatory (www.wmro.org.uk);
- Natural England (www.naturalengland.org.uk)
- The Carbon Trust (www.thecarbontrust.co.uk);
- English Heritage (www.english-heritage.co.uk);
- Department for Transport (www.dft.gov.uk);
- Department of Health (www.dh.gov.uk);

- Home Office (www.homeoffice.gov.uk); and
- Department of Trade and Industry (www.dti.gov.uk/regions/regionalstats.htm).

Information has been derived on social, environmental and economic characteristics in terms of the issues which are likely to be influenced by the WDF Core Strategy. Chapter 3 provides a full description of the baseline conditions.

2.6.3 Stage A3: Identifying Sustainability Issues and Problems

In identifying sustainability issues, the aim was to identify environmental problems (as required by the SEA Directive) and in addition, social and economic factors which may be influenced by, or have a bearing on the delivery of the WDF Core Strategy. The sustainability issues raised were linked to the baseline information (where possible) and attempts made to identify trends or patterns which may be influenced by the WDF Core Strategy.

The following primary key issues were identified by Warwickshire County Council as critical in delivering an effective WDF:

- **Role of the County in the Sub-region and wider area** - Warwickshire has a role to play in ensuring that sustainable waste management is delivered in the county, whilst also working alongside its districts and neighbouring authorities, including the Local Enterprise Partnership, in ensuring that where waste crosses the county boundaries that appropriate facilities are available to manage the waste produced.
- **Waste and Recycling** – The EU Waste Framework Directive and the National Waste Strategy require that the principles of the Waste Hierarchy are followed firstly to reduce the amount of waste produced then to enable recovery value from waste through recycling and energy production and only as a last resort to send waste to landfill. Warwickshire must ensure that national and regional recycling and other landfill diversion targets are met whilst moving towards a Zero Waste Economy.
- **Perception and Image** – enhancing Warwickshire County Council's reputation within the region for responsible environmental performance;
- **Transport and Movement** – support more sustainable modes of transport through effective planning of waste management facilities
- **Population Growth** – seeking to provide opportunities within the waste sector and stimulate economic activity as well as providing high quality waste services to support a sustainable growth in population;
- **Inequality and Deprivation** – protecting and seeking to enhance opportunities for deprived areas through improved access to engage in consultation on waste management planning;
- **Access to Services**– tackling inequalities in accessibility from more remote areas to locations where services are provided. This includes access to waste facilities.
- **Housing provision** – will new housing put added pressure on infrastructure including waste management facilities?
- **Health** – recognising that in delivering waste management facilities, there is a need to protect human health;
- **Crime** – ensuring that facilities can be delivered in a secure manner which reduce opportunities for criminal behaviour;
- **Economic Activity** – stimulating innovation in the economy through novel waste

management techniques and processes;

- **Economic Structure** – providing opportunities to all tiers of the economy to become involved in managing the delivery of sustainable waste management practices;
- **Entrepreneurship and Innovation** – allow opportunities in the waste sector to be pursued;
- **Education and Skills** – encourage stakeholder / community engagement programmes enhancing an understanding of the need for effective waste management;
- **Unemployment and worklessness** - Recognise that Warwickshire has increasing rates of unemployment and worklessness and that the Waste industry can provide employment in what is a growing section of the economy.
- **Energy production and use** – Formulate waste policies which enable renewable energy to be produce whilst enabling a strategy which seeks to reduce the distances waste is transported for treatment.
- **Historic Environment** – ensuring that the historic environment is protected against inappropriate development;
- **Climate Change and Flood Risk** - recognising that resource consumption / utilisation and management of waste have potential consequences for climate change. Understanding the need to support waste management planning which seeks to 'future-proof' waste management facilities against predicted effects of climate change. Recognise that resource consumption / utilisation and management of waste have consequences for climate and flooding and that waste management must safeguard against flooding.
- **Water Resources** – to ensure that waste management practices do not compromise water quality and supply;
- **Biodiversity** – seek to protect the significant biodiversity assets within the region and engage with stakeholders in waste management planning;
- **Protection of natural resources** – to seek to reduce dependency on natural resources through recovery and recycling activities as well as supporting sustainable waste management techniques. This includes air, ground water and soil.

These issues have been identified through with reference to the baseline information collected for Warwickshire, national guidance and legislation, regional objectives and the Regional Sustainable Development Framework (RSDF). There are a number of sustainability issues representing both challenges and opportunities in Warwickshire which are relevant to the WCS and which the Core Strategy can influence. These are included in full within Appendix A.

Stages A1 and A2 sought to provide a robust information source in respect of baseline social, environmental and economic characteristics within Warwickshire. The information is of significant value in ensuring that the SA Framework Objectives and Indicators developed under SA Stage A4 are pertinent to both the WDF and the prevailing conditions within the County.

2.6.4 Stage A4: Developing the SA Framework

The SA Framework provides the tool for considering, assessing and comparing the sustainability effects of the WDF Core Strategy. The SA Framework is made up of a series of SA Objectives and Decision Making Criteria, which have been developed specifically for Warwickshire. These are supported by a range of indicators and targets. Through a series of appraisal procedures the WDF Core Strategy was compared against the SA Objectives and Decision Making Criteria, and potential effects predicted and assessed. To aid the

appraisal process and ensure all the requirements of the SEA Directive are met a series of matrices were developed. These provide a structure for completing and documenting the process, and correspond to different stages of the appraisal process.

The SEA Directive does not specifically require the adoption of objectives or indicators, but they are widely used in SA studies because they are recognised as being useful in determining the environmental, social and economic performance associated with a proposed plan or programme. The following SA objectives were adopted against which the sustainability of the WDF Core Strategy was evaluated:

1. **Conserve and enhance biodiversity;**
2. **Protect and improve water resources and quality;**
3. **Avoid, reduce and manage flood risk;**
4. **To safeguard environmental quality in order to minimise potential impacts on community health;**
5. **To conserve and enhance the character and quality of the County's natural landscape and built environment**
6. **Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings;**
7. **Protect soil resources;**
8. **To preserve and protect geological features and promote geological conservation;**
9. **To promote the delivery of energy efficiency and carbon reduction targets;**
10. **Reduce consumption of natural resources;**
11. **To promote adherence to the movement of waste up the waste hierarchy;**
12. **Enfranchise the community in improving the local environment;**
13. **Improve accessibility to waste management services and facilities;**
14. **To ensure that the waste and minerals industry plays a central role in the sustainable economic development of Warwickshire;**
15. **To encourage waste operators to explore new and innovative environmental technologies.**
16. **To safeguard material assets such as best quality agricultural land minerals and open space**

Decision making criteria have also been developed to assist with defining the extent to which the objective is supported or compromised by the WDF Core Strategy options. In addition, indicators have been developed through which the WDF may be measured in terms of achieving sustainability aims.

2.6.5 Stage A5: Consulting on the Scope of the SEA

The revised Scoping Report, the key output from the Stage A process, was subjected to a five week consultation period. Consultation on the Scoping Report took place in January 2012. This included the three SEA Consultation Bodies: English Heritage, Natural England and Environment Agency) other stakeholders with social, environmental and economic responsibilities or interests and all the contacts on our the Waste Core Strategy Database including all the Parish and District Councils.

Following consultation, stakeholder feedback was used to refine the SA Framework and to inform the main SA report. The consultee list is included in Appendix D as is a table

illustrating the changes that were made to the Scoping Report during the consultation process. A summary of the consultee comments and feedback explaining how these were addressed are shown in Appendix D. This also sets out the commenst from the earlier consultations in 2006.

Stage B: Developing and Refining Options and Assessing Effects

Stage B of the SA process is where the significant effects of the plan as defined by the SEA Directive, and mitigation and enhancement opportunities are identified. However, it is important to note the SA informs decision making but will not make decisions. The key stages of Stage B include:

- B1: Testing the Development Plan Document (DPD) objectives against the SA framework (see Table 4.1 Chapter 4);
- B2: Developing the DPD options;
- B3: Predicting the effects of the DPD;
- B4: Evaluating the effects of the DPD;
- B5: Considering ways of mitigating adverse effects and maximising beneficial effects; and
- B6: Proposing measures to monitor the significant effects of implementing the DPDs.

2.6.6 Stage B1: Testing Plan Objectives Against the SA Framework

During Stage A4 an SA Framework was developed including objectives and indicators as well as decision making criteria. These objectives and indicators were used to measure the performance of the plan options and later, the preferred option and policies. The primary aim of this stage was to ensure that the objectives of the Waste Core Strategy were in accordance with sustainability principles, established through the SA Framework. In addition, this phase establishes the consistency of SA Objectives with one another. A matrix was produced to illustrate the performance of the plan and SA objectives relative to each other. This is included in Chapter 4 within Table 4.1.

2.6.7 Stage B2: Developing Options

In order to achieve the objectives of the Waste Core Strategy stakeholders were consulted on five spatial options, (the Revised Spatial Options Consultation) against which the SA Framework was applied. The options comprised different spatial strategies.

These were

Option 1 - Develop new facilities county wide on industrial estates, brownfield industrial land and existing waste management facilities.

Option 2 - Develop new facilities county wide on existing waste management facilities.

Option 3 - Develop new facilities on industrial estates, brownfield industrial land and existing waste management facilities within the main settlements of over 6000 population* within Warwickshire: Alcester, Atherstone, Bedworth, Bulkington, Coleshill, Kenilworth, Leamington Spa, Nuneaton, Polesworth and Dordon, Rugby, Southam, Stratford, Warwick and Wellesbourne.

Option 4 - Develop new facilities on industrial estates, brownfield industrial and existing waste management facilities within, or in close proximity (*i.e. within approximately 5km)* to the main settlements of over 6,000 population * i.e. Alcester, Atherstone, Bedworth, Bulkington, Coleshill, Kenilworth, Leamington Spa, Nuneaton, Polesworth and Dordon, Rugby, Southam, Stratford upon Avon Warwick and Wellesbourne.

Option 5 - A 'settlement hierarchy' option based on areas of higher population and/or existing waste management capacity.

i.e. Develop facilities on industrial estates, brownfield industrial land and existing waste management facilities within the following specified locations of higher population:

i. priority given to within and/or in close proximity *i.e. within approximately 5km* to the 'primary' settlements* of Nuneaton, Rugby, Leamington Spa, Bedworth, Warwick, Stratford-upon-Avon and Kenilworth; or within 5km of the Coventry Major Urban Area (MUA); or

ii. within and/or in close proximity to the 'secondary' settlements $^{++}$ of Atherstone, Coleshill and Southam where it is demonstrated that the development provides significant transport, operational and environmental benefits; or

iii) sites outside primary and secondary settlements where specific types of waste development might be acceptable where there are no unacceptable adverse environmental effects.

Matrices were utilised to illustrate the assessment, as outlined in 2.3.7 above, with each policy option appraised as having either a major beneficial effect (denoted by +/+); a minor beneficial effect (+); a major adverse effect (denoted by -/-); a minor adverse effect (-); a neutral effect (0) and uncertainty in predicting the likely effects (U) for each of the SA objectives. Comments were included against each evaluation to ensure that the anticipated change, relative to the baseline environment, could be identified. As noted previously, professional judgement informed the appraisal, this being informed by the Decision Making Criteria developed with the SA Framework.

2.6.8 Stage B3: Predicting the Effects of the Plan

This stage addressed the requirement to predict the social, environmental and economic effects of the WDF Core Strategy. It made reference to the sustainability baseline established during Stage A to determine the changes brought about by each plan option. These changes were described in respect of their magnitude, geographical scale, the time period during which they are likely to occur, their permanence, whether they are likely to be beneficial or adverse, whether they may occur frequently and also whether there are likely to be secondary, cumulative or synergistic effects. This stage is also intended to determine the uncertainties or limitations in data gathered during the assessment and defines the manner in which the predictions have been made i.e. the mix between qualitative and quantitative analysis. In predicting the likely effects, due consideration was given to the degree of change which may occur without the plan in place i.e. external trends which the plan may have a limited influence over. As identified in section 2.3, the predicted effects were expressed against the following:

- Nature of the effect i.e. beneficial or adverse and duration / timing;
- The magnitude and spatial impact;
- The groups affected by the change;
- The assets and resources which could be affected;
- Interrelated, cumulative and synergistic effects.

2.6.9 Stage B4: Evaluating the Effects of the Plan

During this stage an assessment has been made of the potential significance of predicted effects. In determining whether an effect is likely to be significant, due consideration has

been given to the probability, duration and frequency of effects as well as any cumulative effects. Comments are also included in respect of the likely population that may be affected, the spatial extent and magnitude of effects and whether thresholds or standards are likely to be breached. This stage also outlines the overall sustainability of the WDF, together with options. Due reference has been to ODPM Guidance on SA and the Town and Country (Environmental Impact Assessment) (England and Wales) Regulations 1999 to guide the assessment of significance. In accordance with the provisions of Annex II of the SEA Directive significance has been considered in light of the scale of effects; their duration i.e. whether permanent or temporary; the sensitivity of the receiving environment and whether cumulative and / or synergistic effects are likely to be sustained. The significance criteria applied are detailed within Table 2.3 above. For the purposes of the appraisal, those effects which are evaluated as being major are deemed to be significant.

2.6.10 Stage B5: Mitigating Adverse Effects and Maximising Beneficial Effects

This stage seeks to ensure that the SA Report captures measures aimed at preventing, reducing or offsetting the potential adverse effects associated with the DPD and to maximise beneficial effects. This includes reviewing options to ensure that they reflect the requirements of the WDF Core Strategy whilst being realistic and achievable, the interrelationship with the Environmental Impact Assessment (EIA) process and other related plans and programmes.

2.6.11 Stage B6: Proposing Measures to Monitor Significant Effects

During Stage B6, there is a requirement to monitor significant effects of the Waste Core Strategy implementation and compare them to predicted effects during formulation of the SA. This stage is also useful for identifying and collating additional baseline information to assist in the development of future DPDs. The monitoring proposals must be considered early in DPD formulation and are an inherent element of the SA process.

The SEA Directive requires the impacts of a plan on sustainability to be monitored and it is an important ongoing element of the SA process. Monitoring can test predicted effects, help ensure the SA Objectives (included within the SA framework) are being achieved (although it is acknowledged that there will be many factors that influence this) and help ensure unforeseen issues are identified so they can be mitigated where possible. As each DPD is appraised, the monitoring needs should be identified.

It is intended that the indicators and targets produced for the SA Framework be utilised to form a sensible basis for developing a monitoring system given that:

- Data for each of the indicators needs to be collected to keep the baseline up to date;
- They have already been aligned as far as possible with other Warwickshire data collection systems and the Annual Monitoring Report and
- It has been recommended that all DPD indicators align themselves to these.

Appendix 14 of the CLG Guidance (formerly ODPM)[12] provides a guide to developing monitoring systems. The recommendations for developing the monitoring process within this report have made reference to this guidance.

2.7 Stage C: Preparing the Sustainability Appraisal Report

This report constitutes Stage C in the SA process. Stages A and B have been completed and details of their respective tasks have been discussed above. Stages D and E will be performed once this Stage C of the SA process is complete.

[12] ODPM SA Guidance for Regional Planning Bodies and Local Planning Authorities November 2005

This SA report details the SA process and the findings of the options and Preferred Options appraisals. It also describes how the requirements of the SEA Directive for an Environmental Report and ODPM Guidance on the SA Report (the key output from this stage) have been met. In preparing this SA Report, due reference has been made to the recommended content and structure for SA reports, contained within ODPM Guidance.

The SEA Directive states that 'the information to be provided in the Environmental Report includes:

- The likely significant effects on the environment, including 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. These effects should include secondary, cumulative, synergistic, short, medium and long-term, permanent and temporary, beneficial and adverse effects;
- An outline of the reasons for selecting the alternatives dealt with; and
- 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'.

These issues have been incorporated into this SA Report.

2.8 Difficulties in Compiling Information or Carrying Out the Assessment

This report has endeavoured to capture relevant plans, programmes and baseline data which is in the public domain and considered of relevance to the WDF Core Strategy. It should be noted that the policy context relating to waste planning is dynamic and requires a monitoring programme to ensure that the list included within this report remains pertinent. It is recommended that the monitoring regime takes account of emerging / developing legislation within the SA process.

Given that the Waste Core Strategy is such a high level plan it does not afford details such as the proposed location of future waste management facilities. As such, this lack of information is reflected in the amount of detail afforded to the potential significant effects which have been identified. It should be noted however, that appropriate detailed mitigation would be addressed through project level Environmental Impact Assessment, as well as through related plans and policies.

3 Baseline, Context and Sustainability Objectives

3.1 Introduction

This chapter addresses the baseline assessment conducted in support of the SA process and the manner in which this information has been used to inform the SA of the WDF Core Strategy. In particular, this chapter discusses the development of the SA Objectives, one of the fundamental building blocks to undertaking the SA process.

3.2 Links to other Policies, Plans and Programmes

In respect of policies, plans and programmes, the SEA Directive confirms that the Environmental Report should include information on 'the plan's relationship with other relevant plans and programmes and the environmental protection objectives, established at international, 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'[13].

The purpose of reviewing other plans and programmes and sustainability objectives as part of the SA is to ensure that the relationship with these other documents and requirements are explored to enable the Responsible Authority (in this case Warwickshire County Council) to take advantage of any potential synergies and to deal with any inconsistencies and constraints. The plans, programmes and sustainability objectives that need to be considered include those at an international, national and regional and local scale. The plans that have been considered in preparing this SA Report are included in Appendix A. This policy, plan and programme data has been crucial in assisting with the development of the SA objectives. The links between policy and SA objectives i.e. how policy consideration have shaped the SA objectives, is shown in Appendix A.

3.3 Description of the Social, Environmental and Economic Baseline

In terms of the SEA Directive, the content of the Environmental Report should include information on 'relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan' and 'environmental characteristics of the areas likely to be significantly affected'[14]. In addition, the Environmental Report should address 'any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC'[15]. The area within which the WDF is to be delivered is within the administrative area of Warwickshire County Council. However, it is recognised that the management of waste incurs some cross-boundary issues and where appropriate, the baseline characterisation exercise has considered the broader West Midlands region.

3.3.1 Context of the Study Area

Warwickshire is located to the south and east of the West Midlands conurbation, having strong links with Coventry, Solihull and Birmingham. With a total area of over 197,500 ha, the County is the gateway from the West Midlands to identified key growth areas within the

[13] Annex I (a), (e)
[14] Annex I (c)
[15] Annex I (c)

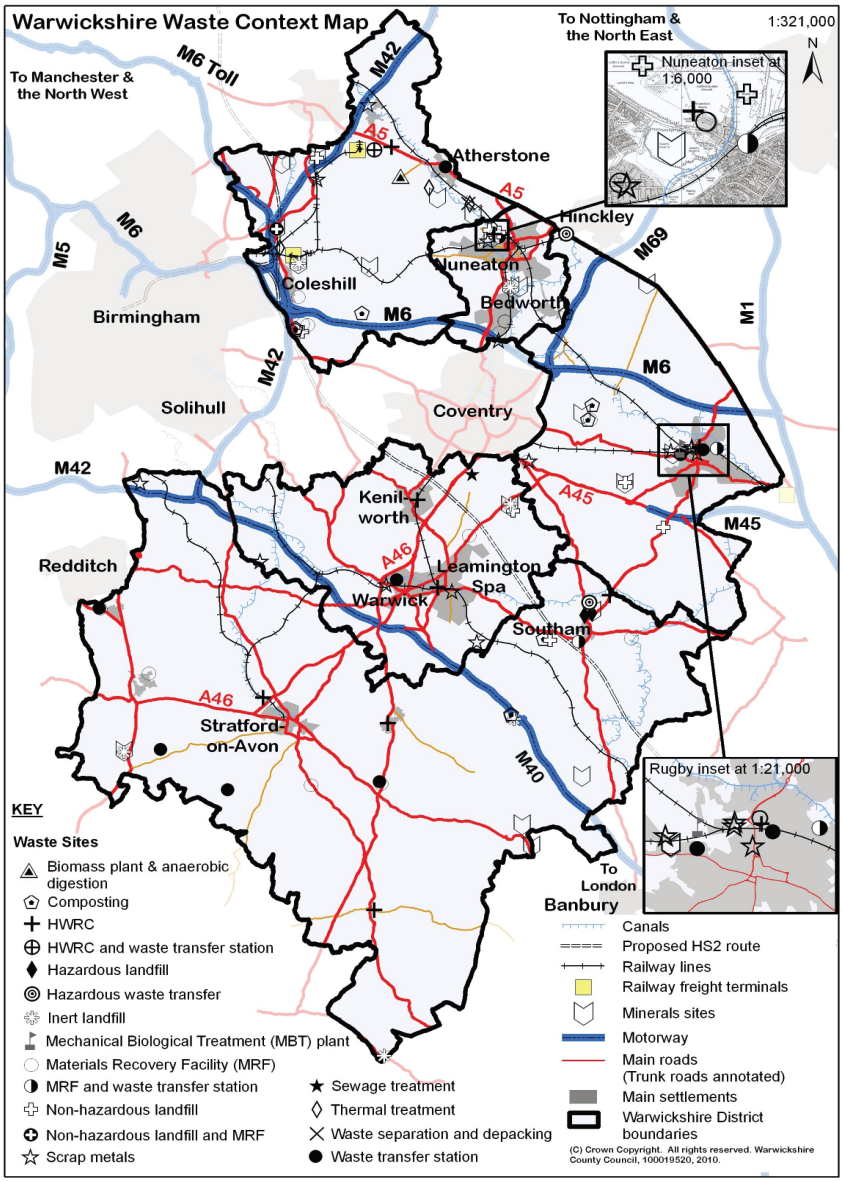


Figure 3.1: Warwickshire Waste Context Map

rest of the UK. Warwickshire comprises the Boroughs of North Warwickshire; Nuneaton and Bedworth and Rugby as well as the Districts of Warwick and Stratford on Avon.

3.3.2 Population Trends and Demographics

In 2009 Warwickshire had a population of 535,100 and this has been growing for the past four decades. Population sizes within the districts and main settlements are shown in Table

3.1 and Table 3.2, but the largest towns in Warwickshire as of 2008 are Nuneaton (pop 79,750), Rugby (63,950), Leamington Spa (47,500) and Bedworth (36,150). The County's population is projected to reach 634,900 by 2033 – an increase of just over 100,000 from 2008. Migration is seen as the key reason for the increase but there is evidence that this is slowing.

Across Warwickshire, as a whole the highest rates of projected population growth are in the groups aged 65 and over. The rate of growth increases with age, with the oldest age group (those aged 85 and over) projected to almost treble in size (from 12,000 to 35,000) by 2033. This trend is reflected across all of the boroughs and districts. There are also projected increases in the number of single person households.

Table: 3.1 Population Sizes

Population sizes (mid 2009 estimates) -	
Districts	**Population**
North Warwickshire	61,900
Nuneaton and Bedworth	122,000
Rugby	93,300
Stratford-upon-Avon	118,900
Warwick	139,000
Warwickshire	**535,100**

The population of the main settlements in Warwickshire			
	Mid 2003 Super Output Area Estimates	Mid 2008 Super Output Area Estimates	% change 2003-2008
Alcester	5,950	6,050	1.7
Atherstone and Mancetter	10,800	11,000	1.9
Bedworth	35,250	36,150	2.6
Coleshill	6,350	6,600	3.9
Kenilworth	23,100	23,750	2.8
Leamington Spa	45,050	47,500	5.4
Nuneaton	78,850	79,750	1.1
Polesworth/Dordon	6,950	6,850	-1.4
Rugby	61,650	63,950	3.7
Shipston-on-Stour	4,600	5000	8.7
Southam	6,550	6,600	0.8

Stratford-upon-Avon	22,600	26,150	15.7
Studley	5,900	5,800	-1.7
Warwick	26,900	29,250	8.7
Wellesbourne	6,850	6,900	0.7
Whitnash	8,750	9,500	8.6
Notes: Mid-2008 population estimates are the most recent population estimates available. The definition of Bedworth used here includes the wards of Bede, Exhall, Heath, Poplar, Slough but not Bulkington ward, which has a population of 6,150.			
Source: Warwickshire Observatory; National Statistics mid-year population estimates, (www.statistics.gov.uk) © Crown Copyright 2009.			

Table 3.2: Population of the main settlements

3.3.3 Waste Production and Management

Municipal waste

The Government Review of Waste Policy includes an aim to continue to increase the percentage of waste collected from both households and businesses that is recycled, at the very least, meeting the revised waste framework directive target to recycle 50% of waste from households by 2020.

Warwickshire Waste Partnership have set a target to recycle 60% by 2015/16, and 67% of waste by 2027/28. The cost of waste disposal (per tonne) is continuing to rise; landfill tax is now £56 per tonne and will increase by £8 per tonne per year until at least 2014/15. This is placing increasing pressure on the need to reduce the amount of waste sent for disposal. Total waste in Warwickshire fell by 1% between 2009/10 and 2010/11, and the amount of residual waste sent to landfill reduced by 10% with more waste being sent for energy recovery. Warwickshire Waste Partnership will look to write a new high level waste policy document in light of the Government's Review of Waste Policy.

The amount of waste produced per head of population is continuing to fall. This could be attributed to the economic climate as people are becoming more mindful about what they are discarding, linked with a national and local 'Love Food, Hate Waste' campaign.

Table 3.3 shows a continued rise in waste recycled, composted or sent for energy recovery and a fall in the amount sent to landfill.

Table 3.3: Warwickshire's Waste Indicators 2003/04 – 2010/11

	03/04	**04/05**	**05/06**	**06/07**	**07/08**	**08/09**	**09/10**	**10/11***
Waste per head of population (kg)	525kg	556kg	550kg	547kg	539kg	522kg	510kg	493kg
Cost per tonne of waste (£)	£31.14	£30.81	£36.28	£37.55	£41.89	£55.87	£58.25	£63.55
Total waste recycled (%)	13.3%	13.8%	14.5%	15.9%	17.5%	21.5%	23.8%	23.4%

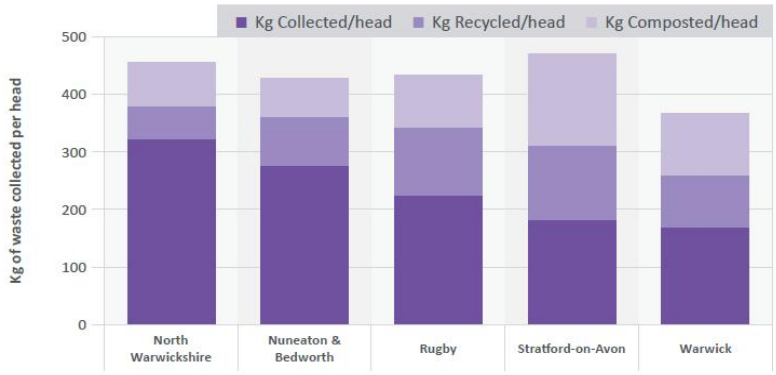
Total waste composted (%)	8.2%	13.8%	15.4%	16.8%	17.9%	21.7%	24.3%	25.7%
Recycled and composted (%)	21.5%	27.6%	29.9%	32.7%	35.4%	43.2%	48.1%	49.1%
Waste to energy recovery (%)	2.7%	3.8%	4.9%	7.2%	6.6%	7.0%	10.1%	18.4%
Landfilled (by difference) (%)	75.8%	68.6%	65.2%	60.1%	58.0%	49.8%	41.8%	32.5%

Source: Warwickshire Quality of Life Report, 2011

***Provisional figures**

Warwick District is the best performing authority with the lowest number of kilograms of waste collected per head of population. Stratford-on-Avon-District continues to have the highest rates for recycling and composting. North Warwickshire has the lowest recycling rate but produces the highest number of kilograms of waste per head of population, however both of these factors have seen improvement in the last twelve months.

Figure 3.2: Waste Performance by District/Borough 2010/11



Source: Warwickshire Quality of Life Report, 2011

A number of factors can affect the level of waste collected, recycled and composted such as the economic climate, the introduction of recycling schemes and publicity campaigns. There will therefore be year on year changes between the success rates of boroughs and districts. For example, Nuneaton & Bedworth Borough Council will introduce a new waste and recycling service from October 2011, which should help them to improve their recycling rate in future years.

Commercial and Industrial Waste

This is a broad category that includes business waste, construction and demolition waste from commercial/industrial premises and waste from agriculture, fishing and forestry.

Waste produced by businesses is important because it is a large waste stream, but there is little information, as there is not a statutory requirement for businesses to provide data on

the wastes that they produce. There is, however a need to provide data for reporting under the European Union Waste Statistics Regulations.

In the County Council's 2007/2008 AMR, it was reported that work was being undertaken by the Environment Agency to produce updated estimates of arisings for 2006. The EA estimate of arisings in 2006 was derived by grossing up the EA 2002/03 Industrial and Commercial Waste Survey information using employment census data at the regional level. This work suggested that total industrial and commercial waste arisings may have increased marginally, by approximately 1 percent, since 2002/03 and gave an estimate for the West Midlands of some 7,336,000 tonnes of industrial and commercial waste in 2006.

The same methodology was also applied to gross up the 2002/03 Warwickshire figure, which implied that the total amount of industrial and commercial waste produced in the county would increase from 635,000 tonnes (2002/03) to around 641,029 tonnes in 2006. However, this estimate should be treated with caution.

Subsequently, a North West Survey of Commercial and Industrial Waste was commissioned by the North West RTAB. The aim of the survey was to provide detailed information on the production of waste by commercial and industrial companies within the North West region during 2005-06. It was also hoped that it would help make reasonable projections for the type and capacity of waste management facilities required to deal with such waste in the future.

In early 2009, the Chairs of all of the RTABs in England agreed to use the work of the North West RTAB. A report outlining the methodology and results from this work is available on the following website www.eera.gov.uk/publications-and-resources/studies/topic-based-studies/waste-studies/. This report was used to calculate how much commercial and industrial waste is produced in each of the other English regions. Using the assumption that companies in the same sectors and employee band sizes will produce similar quantities and types of waste. The extrapolated results for the West Midlands region gave a total figure for Commercial and Industrial waste arisings in 2006/07 of 6,289,718 tonnes. An illustrative future projection of waste arisings for 2020 was given as 6,249,758 tonnes for the West Midlands.

At the county level, the latest 2006/07 ADAS study suggests there was a total of 503,349 tonnes of commercial and industrial waste arisings in Warwickshire in 2006/07. This is considerably less than previously estimated (in our 2007/08 AMR) and reflects the different methodology used in the North West study and the subsequent regional extrapolations.

Construction, Demolition and Excavation Waste (CDEW)

Construction, demolition and excavation waste (CDEW) includes all waste streams which can be identified as wholly or mainly construction sites, including those where preparatory activities such as demolition and earthworks are being carried out. Construction and demolition wastes typically include soils, concrete, bricks, glass, wood, plasterboard, asbestos, metals and plastics. All of these materials are classified under Chapter 17 of the European Waste Catalogue List of Wastes and data on these wastes are required for reporting under the European Union Waste Statistics Regulations. The data can also be used to inform the construction industry sector in general.

The 2008/09 AMR contained the most up to date information on construction and demolition waste produced. The AMR also reported on results from the 2005 DCLG Survey of Arisings and Use of Construction, Demolition and Excavation waste. This is still the most comprehensive and up to date source of information at the regional level. Although DEFRA commissioned Capita Symonds to undertake a Construction, Demolition and Excavation Survey for 2008, the final report published estimates for England in 2008, but due to

confidentiality issues, it did not include comparable results at the regional level. In summary, around 9.84mt of CDEW waste was generated in the West Midlands region in 2005. Half (50%) of this waste was recycled as aggregate or soil and 30% was used at Paragraph 9A(1) and 19(A)2 registered exempt sites. The remaining 20% of unprocessed CDEW went to licensed landfill sites, where, 8% was used for landfill engineering or capping and 12% was disposed of as waste.

Hazardous Waste

The (2009/10) AMR reported that the West Midlands produced 524,000 tonnes of hazardous waste in 2007. The West Midlands was a net importer of hazardous waste, with 567,496 tonnes of hazardous waste disposed of in the region (2007).

The disposal options used for hazardous waste in 2006 and 2007 were reported in detail in the 2008/09 AMR which remain the most recent figures available at the regional level. To recap, the main options were treatment (accounting for 30% by volume in 2007) and recycling/re-use (21% by volume). There was a slight decrease in both the proportion and the amount of hazardous waste being processed by these methods (down from 57% in 2006 to 52% in 2007, or a decrease of 26,894 tonnes). At the same time, the amount of hazardous waste being sent to landfill increased year-on-year by 11,514 tonnes, to account for 9.5% of all hazardous waste deposits in the West Midlands region in 2007.

Data available at the county level for 2009 taken from the Environment Agency Hazardous Waste Data Interrogator 2009 shows the hazardous waste arisings for Warwickshire to be 38,309 tonnes. However, in that year, Warwickshire disposed of 51,198 tonnes of hazardous waste. Of that quantity 38,766 tonnes or in excess of 75% was landfilled.

Environment

Warwickshire has a landscape of considerable variety and complexity, with seven distinct landscape character areas: Arden, Dunsmore, Avon Valley, Feldon, Cotswolds, High Cross Plateau and Mease Lowlands. Part of the Cotswolds character area is designated as an Area of Outstanding Natural Beauty (AONB), a national designation to conserve the natural beauty of landscapes of recognised importance.

Furthermore, a large proportion of the County is covered by a swathe of designated Green Belt (depicted in Fig. 3.3). There are many sites designated for nature conservation purposes within the County. There is one site designated as of European importance for nature conservation - the Ensor's Pool Special Area of Conservation (SAC) in Nuneaton. There are approximately 62 nationally designated Sites of Special Scientific Interest (SSSIs) and 253 locally designated Local Wildlife Sites (LWSs). 20 of the SSSIs are designated for reasons of geological interest. Furthermore, there are approximately 90 Local Geological Sites (LGSs, formerly Regionally Important Geological Sites) within the County. There are no National Nature Reserves, although there are 22 Local Nature Reserves.

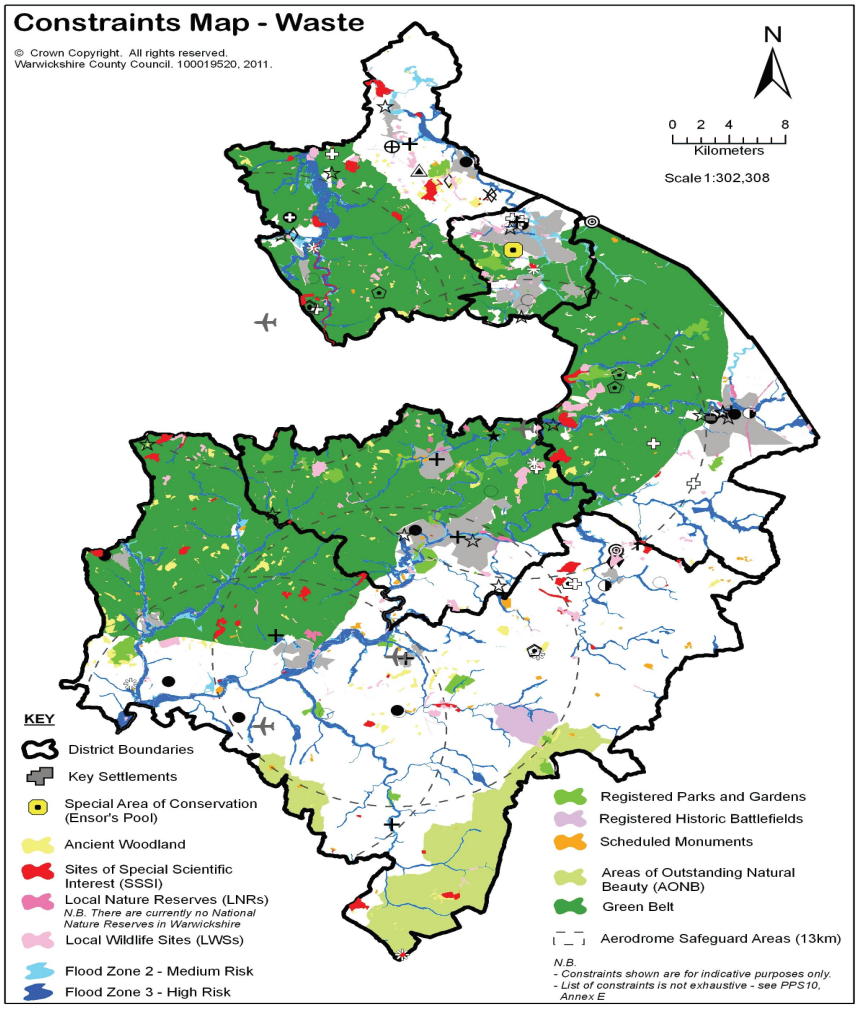
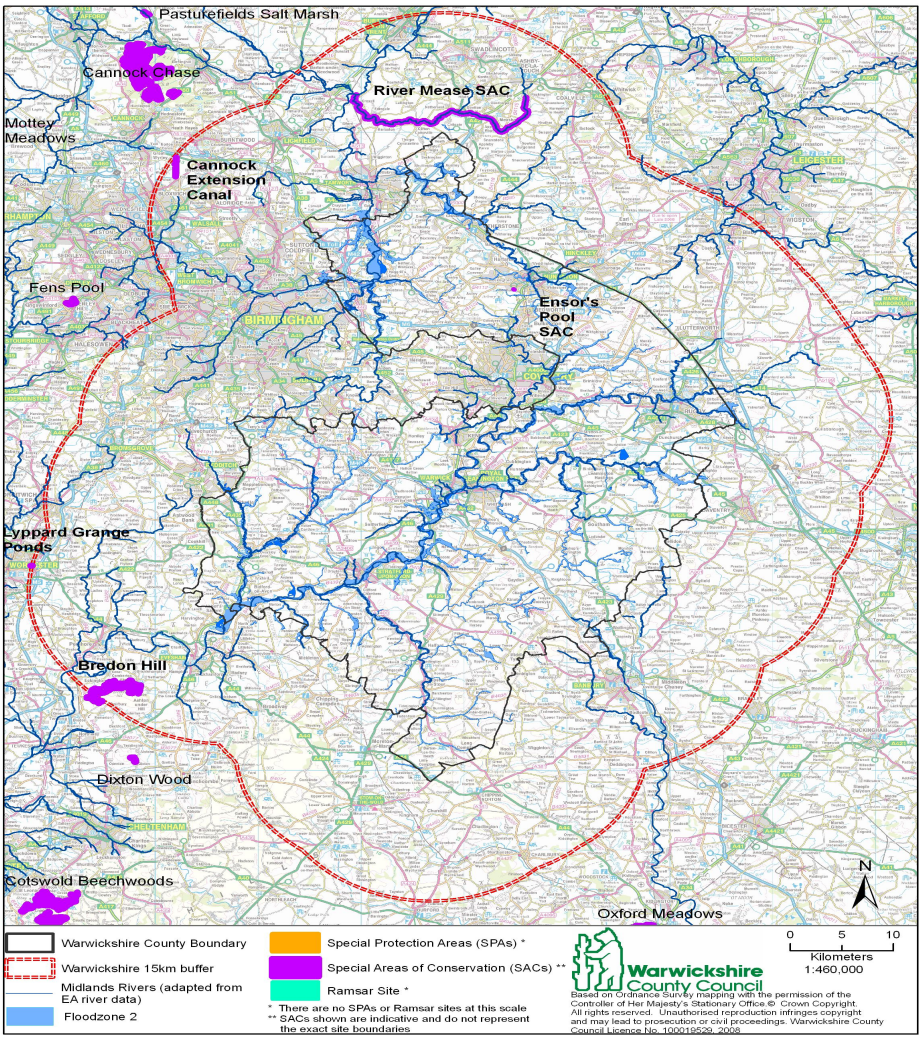


Figure: 3.3 : Constraints Map

Source: Warwickshire Preferred Options and Policies Document – Sept 2011

In accordance with Articles 6.3 and 6.4 of the European Habitats Directive, Warwickshire County Council must undertake a Habitats Regulations Assessment (HRA) to assess that its plans or projects, either individually or in combination, do not impact upon the conservation objectives of European designated sites. As Warwickshire is host to a site of European importance (shown on Fig 3.4) and there are sites in proximity of the County (shown on Fig 5.4) an initial screening assessment was undertaken and a HRA Scoping Report for the Waste Core Strategy has also been undertaken. The HRA Screening and Scoping Reports has been published alongside the other background evidence documents. They demonstrate that the HRA has identified that the policies and proposals set out in the Warwickshire Waste Core Strategy are highly unlikely to have any adverse impact upon the integrity of Natura 2000 sites (which include SACS) either alone or in combination with any other plans.

Figure 3.4: Special Areas of Conservation in Warwickshire and in close proximity to the county



Source: Warwickshire Habitats Regulation Assessment Document 2011

Wildlife Habitats

Table 3.4 shows the distribution of habitats within Warwickshire, inferring that the county primarily comprises arable land made up of 47% and improved grassland which is 25%. These are the two primary habitats in each borough and district, although they make up 78% of Stratford-on-Avon District and 45% of Nuneaton and Bedworth Borough. Around one-third of Nuneaton and Bedworth is regarded as 'unclassified', due to the more urban nature of the borough. Only 6% of Warwickshire is classified as woodland, despite it being

known traditionally for its 'Forest of Arden' landscape. This is noted as a particular area of concern in the Warwickshire Local Biodiversity Action Plan.

Table 3.4: Distribution of habitats within Warwickshire

	North Warwickshire	Nuneaton & Bedworth	Rugby	Stratford-on-Avon	Warwick	Warwickshire
Arable	44%	29%	45%	52%	43%	47%
Improved Grassland	23%	16%	28%	26%	23%	25%
Woodland	7%	4%	3%	5%	6%	6%
Neutral Grassland	4%	4%	6%	5%	4%	5%
Amenity Grassland	3%	7%	2%	2%	4%	3%
Other	9%	8%	4%	3%	6%	4%
Unclassified	12%	34%	12%	8%	16%	12%

Source: Quality of Life report, 2011

Sites of Special Scientific Interest (SSSIs) are the country's best wildlife and geological sites and include some of the most spectacular and beautiful habitats. In England, there are over 4,100 SSSIs, 62 of which are within Warwickshire. In order to be able to record the condition of SSSIs, they are split into units where appropriate and graded by Natural England. There are 99 units in Warwickshire.

As of 1st June 2011, 79.2% by area of the 99 SSSI units in Warwickshire have been rated as 'favourable' by Natural England. This suggests that the land is being adequately conserved and is meeting its 'conservation objectives'. There are a further 19.5% by area of SSSI units that are considered to be 'unfavourable recovering'. This indicates that the area is not yet fully conserved but all the necessary management measures are in place to reach a favourable condition over time.

The remaining 1.3% by area of SSSI units are classified as 'unfavourable no change'. This indicates that these areas are not being conserved and will not reach a favourable condition unless there are changes to the site management or external pressures. In Warwickshire, the only units within this category are on the River Blythe as it flows through North Warwickshire Borough, due to water abstraction, invasive species and water pollution from discharges and agriculture.

Butterflies are increasingly being recognised as valuable environmental indicators, both for their rapid and sensitive responses to subtle habitat or climatic changes and as representatives for the diversity and responses of other wildlife. In Warwickshire, Butterfly Conservation volunteers scientifically monitor nearly 50 sites including seven sites designated as SSSI's. This monitoring allows the performance of butterfly species to be compared between these sites in Warwickshire and with the other 2,000 sites which are monitored nationally.

The natural environment within Warwickshire is monitored through the County Council's Biodiversity Strategy, which outlines how it can work with partners to protect and enhance

Warwickshire's wildlife.

Brandon Marsh, Harbury Spoilbank, Stockton Cutting and Quarries, Ufton Fields, several sites within the Blythe Valley and Whitacre Heath contain biological SSSIs and RIGSs are present at several sites. Several further sites have been formally designated as SINCs, but the majority are informally-designated County Ecosites, including two of the best limestone sites (which are now confirmed as having nationally important insect assemblages).

To the east of Coventry, in the Avon Valley is the Brandon Marsh Wildlife Trust reserve and partial SSSI and 2km south of this off the floodplain, the satellite sand pits such as The Dell, Ryton and the Brandon Hall Sand Pit occur nearby.

Newbold Quarry and Stockton Cutting are Local Nature Reserves. Kingsbury Water Park, Ryton Pools and Ufton Fields are Country Parks. Several sites support great-crested newts, which are specifically protected under the Wildlife & Countryside Act and Ensor's Pool supports native crayfish, resulting in candidate SAC status (of International Significance).

Limited information exists for quarries lying within or adjacent to a Site of Special Scientific Interest (SSSI). The following information has been published by English Nature and reports on the condition of the SSSI:

The sand and gravel quarry at Coleshill, North Warwickshire, includes a section of the River Blythe SSSI. All sections of this SSSI were assessed during March 2004 as reported as being in an unfavourable, but recovering condition.

The sand and gravel quarry at Wood Farm, Bubbenhall in Warwick District is adjacent to the Ryton Woods SSSI. In their most recent assessment (part in March 2002 and part in November 2004), all sections of this SSSI were reported to be in a favourable condition.

Biodiversity Offsetting

The main issue in respect of habitats is their fragmentation, where although a particular site may be protected by a statutory designation, if it becomes isolated from other parts of the same habitat it becomes isolated and the natural corridors which link them are lost. This can hinder species moving around the countryside and eventually can lead to a decline in species. By GIS habitat mapping it is possible to identify areas at risk of decline and areas of future opportunity so that habitats can be better linked. One way of targeting such critical areas is where planning applications in the vicinity are able to provide off site habitat improvements, where it may be more advantageous to do this that on the particular site. This is called biodiversity offsetting which is a new initiative and which can be used in conjunction to inform and plan for the District and Borough Green Infrastructure studies as part of their Local Development Frameworks.

Historic and Cultural Heritage

There is a substantial cultural heritage resource within Warwickshire, with a high proportion of Listed Buildings and Conservation Areas. Table 3.5 shows the number of listed buildings, scheduled monuments, registered parks & gardens and conservation areas in the whole of Warwickshire.

Table 3.5: Listed Buildings, Scheduled Monuments, Registered Parks & Gardens and Conservation Areas in Warwickshire

Area	Listed Buildings I and II*	Listed Buildings II	Scheduled Monuments	Registered Parks and Gardens	Conservation Areas
Warwickshire	465	5,523	182	32	138

Source: English Heritage, 2011

Geological Assets

Regionally Important Geological and Geomorphological Sites (RIGS), designated by locally developed criteria, are currently the most important places for geology geomorphology outside statutorily protected land such as Sites of Special Scientific Interest (SSSI).

For many years, quarries near Bubbenhall in Warwickshire, operated by Smiths Concrete, have been the source of the high quality aggregate produced from the extraction of Pleistocene sands and gravels. A result of this mineral excavation has been formation of the large Ryton Pools or Bubbenhall complex, which now forms a part of the Country Park. Important geological and archaeological finds resulting from the excavations, have provided evidence for major climate changes and human habitation during Warwickshire's Ice Age past.

Landscape

The Stratford-upon-Avon District of Warwickshire is home to the Cotswolds Area of Outstanding Natural Beauty (AONB). This is a national designation, indicating a landscape of the highest status. The Cotswolds is the third largest protected landscape in the UK. It is given unity by its underlying limestone geology and the visible character of this stone seen throughout its buildings, walls and other structures.

Together with neighbouring Solihull and Coventry, Warwickshire's biodiversity is encompassed by a local Biodiversity Action Plan which in turn includes specific plans aimed at conservation of 27 specific species and 24 specific habitats considered to be of specific conservation value to the region.

A vast amount of Warwickshire's land is in agricultural use. It is an important natural resource and how it is used is vital to sustainable development. The Agricultural Land Classification (ALC) recognises that Warwickshire contains areas of agricultural land of Grade 3a and above and provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. It helps underpin the principles of sustainable development. Figures show that Warwickshire has a very small amount of Grade 1 land (0.1%) which is all in North Warwickshire. The county has 11.9% of land in Grade 2 category.

Natural Resources (Ground Water Air and Soil)

Warwickshire takes in two of the major water catchments of the Midlands region. The Avon Catchment takes water from the south and east of the Midlands into the River Severn and Bristol Channel via the Avon and its tributaries (e.g. the Sowe, Leam, Dene, Stour, Alne and Arrow), while the Tame Catchment takes water from the north-west of the County (as well as much of the West Midlands) into the Trent, Humber and North Sea via River Leam the Tame and its tributaries (e.g. the Blythe, Cole and Anker). In addition to these two major catchment areas, an element of the Thames Catchment also lies within the extreme southern tip of Warwickshire.

Environment Agency Catchment Abstraction Management Strategies

On a National scale, Catchment Abstraction Management Strategies (CAMS) have been developed by the Environment Agency in order to provide a means of managing the quantity of water abstracted from surface and underground water resources. Through considering the management needs of the individual catchment areas which comprise the country, the Environment Agency is developing the strategies for managing the rivers' natural characteristics and abstraction permitting.

Warwickshire is captured substantially within two Catchment Abstraction Management

Strategies. The northern local authorities of Warwickshire lie within the geographic scope of the Tame, Anker and Mease CAMS, which also takes in the Rivers Bourne, Blythe and Cole. To the south, the Warwickshire Avon CAMS represents most of the County, particularly Rugby, Warwick and Stratford upon Avon Districts. In addition, the strategy reaches to other transboundary areas of the Avon catchment including the urban centre of upstream Coventry and downstream rural counties of Worcestershire and Gloucestershire.

CAMS divided each catchment into a number of Water Resource Measurement Units and compares water availability with licensed abstractions. With the exception of a short section of the Avon upstream of Warwick, all sections of the Avon are assessed to have "no water available" and that current abstraction meets the minimum available water supply. Upstream of the town of Rugby and passing into Leicestershire, the surface water is considered to be over-abstracted.

The CAMS further defines groundwater management units (GWMU) within the area covered by Warwickshire Avon. Within the Warwickshire region and immediate surroundings, the Coventry GWMU, Kenilworth GWMU, Whitely GWMU and Warwick GWMU are defined as the groundwater abstraction sources for the south of the County. Lying beyond and on the periphery of Warwickshire, the Coventry GWMU is considered to be "over-abstracted" while capacity of the adjacent Whitely GWMU, lying within Warwick District, has not yet been exceeded. Further south, yet still within Warwick District, resource availability within the Kenilworth aquifer is classed as "no water available" while that of Warwick aquifer is exceeded.

Surface Water Quality

The Environment Agency has assessed the characteristics of surface waters against the recent European Water Framework Directive (WFD) which aims to protect and enhance water resources, promote sustainable water consumption, reduce water pollution and lessen the effects of floods and droughts. As a result they have compiled statistics of abstraction and flow regulation, physical or 'morphological' alteration to water bodies and alien species. All rivers within Warwickshire classified under the WFD assessment were determined to be "at risk" from one or more of the criteria.

In addition to rivers and streams, Warwickshire's water resources are complemented by the addition of seven navigable canals, the Grand Union, Oxford, Coventry, Ashby, Birmingham, Fazeley and Stratford upon Avon Canals. A few stretches of these are classified by British Waterways as 'unsatisfactory' for a combination of physical and chemical reasons, however water quality has improved dramatically over the last decade to reach the current grades, allowing others to return to the canals to breed, rest and predominantly fish.

Groundwater and Source Protection Zones

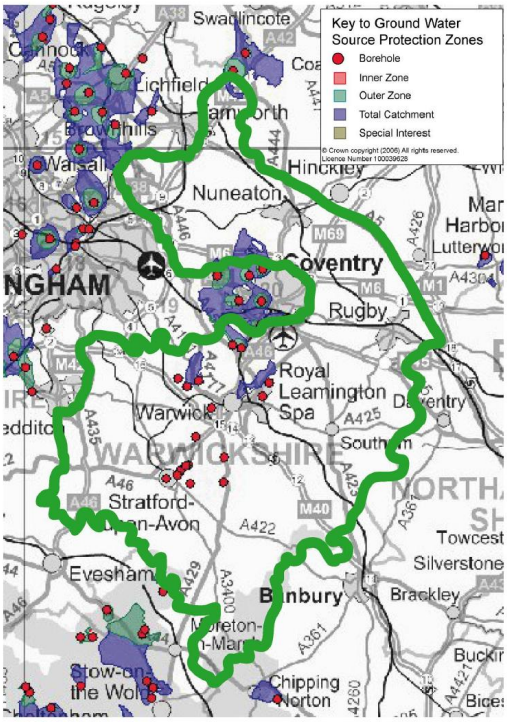
Groundwater in England and Wales provides up to a third of drinking water resources together with providing a major contribution to maintaining the natural flow of many surface waters and rivers. The Environment Agency has defined Source Protection Zones (SPZs) for 2,000 groundwater sources as wells, boreholes and springs used for public drinking water supply. These zones show areas where groundwater supplies are considered particularly vulnerable to contamination from pollution in the area and are divided into three main zones (inner, outer and total catchment), the spatial extent of which are determined through a combination of ground conditions, how the groundwater is removed, and other environmental factors.

Any pollution that can travel to the borehole within 50 days from any point within the zone is classified as being inside the inner protection zone, a minimum of a 50 metre radius around the borehole to protect against the transmission of toxic chemicals and waterborne disease.

An outer zone covers either a 400 days pollutant travel path or 25% of the total catchment area – whichever area is the biggest. This travel time is determined as the minimum amount of time considered necessary for pollutants to be diluted, reduced in strength or delayed by the time they reach the borehole. The total catchment is the total area needed to support removal of water from the borehole, and to support any discharge from the borehole.

An extract of the Environment Agency Source Protection Zone map for Warwickshire in shown in Figure 3.5. Warwickshire is relatively free from Source Protection Zones which tend to concentrate in urban centres and more densely populated settlements. Environment Agency data records 24 groundwater abstraction boreholes centred on the County's urban settlements. Most southerly, six boreholes are located close to the centre of Stratford on Avon and a further two close to neighbouring Wellesbourne. More northerly, in Warwick District the closely situated settlements of Warwick and Leamington Spa are served by a further total of six boreholes, to the north of each is demarcated a protected catchment area.

Figure 3.5 : Source Protection Zones in Warwickshire



Source: http://www.environment-agency.co.uk

Towards the centre of the County lies the city of Coventry, and while not included within the scope of this report, the accumulation of water abstraction sources, together with densely populated settlement, causes much of the area to be protected as catchment zones and outer protection zones, some of which overlap into Warwickshire's local authority administered land. No further abstraction boreholes are demarcated in either of the three northern local authorities, although the most northerly North Warwickshire District borders of North Warwickshire District come under the influence of catchments of boreholes located in the Staffordshire settlement of Donisthorpe.

Climate Change and Flooding

The UK Climate Impacts Change Programme (UKCIP) has predicted that the Midlands' climate will continue to get warmer and wetter, with more storms and flooding in the winter and more droughts in the summer. There is evidence to show that the climate of the West Midlands changed in the 20th Century. Most notably the annual average temperature rose by 0.6°C, the growing season lengthened by 30 days, summer rainfall decreased and winter rainfall increased. More intense rainfall events and more storms could cause damage to buildings, roads, rails, crops and drainage systems through flooding and storm damage. Higher temperatures in summer could increase the demand for water, reduce water availability and cause soils to dry, increasing the risk of building subsidence.

There are three major Rivers in the Midlands, the River Severn, River Trent and River Avon, and many smaller tributaries. This makes the region particularly prone to flooding. The Avon catchment covers 2,900 square kilometres of central England and some 900,000 people live in the area. Coventry is the largest city in the catchment with a population of about 300,000. Other major urban areas are Rugby, Leamington and Warwick. The lower, western parts of the catchment are more rural with the main towns being Stratford-upon-Avon, Evesham, Redditch and Tewkesbury.

The River Avon is a major tributary of the River Severn. It rises near Naseby, on the Northamptonshire and Leicestershire borders. From here, it flows south west and forms an important part of the landscape character of Rugby, Warwick, Stratford-upon-Avon, Evesham and finally Tewkesbury, where it joins the River Severn after a journey of 179km.

The major tributaries of the River Avon are the Rivers Leam, the Stour, and the Arrow, and significant smaller tributaries are the Rivers Sowe, Isbourne and Dene and the Badsey and Bow Brooks. Other watercourses in the catchment are also important for water resources.

In Warwickshire, the most common causes of flooding are river flooding, surface water flooding and sewer flooding. In some parts of the county, there has also been groundwater flooding and there is always the threat of flooding of land and property that is near the canal network or a reservoir should there be a structural failure.

Warwickshire hasn't suffered from widespread flooding since 2007, however more localised problems have been experienced by households and businesses. Even some minor occurrences can have a devastating effect, both financially and emotionally.

Following the 2007 floods, the Government commissioned an independent review and in addition to this the County Council commissioned consultants to produce a Level One Strategic Flood Risk Assessment. This mapped all forms of flood risk for use as an evidence base to locate new development, primarily in low flood risk areas.

The key tasks for the Lead Local Flood Authorities (LLFA) are:

- To carry out a Preliminary Flood Risk Assessment (PFRA), which is a high level exercise based on existing and available information relating to areas with a history of flooding. Where flood situations have arisen from a combination of surface water with main river or coastal flooding, investigations in conjunction with the Environment Agency are to be carried out.
- On the basis of this assessment, establish Flood Risk Areas. These are areas of significant risk as defined by European thresholds and Environment Agency Guidance, which take into account local sources of flood risk, density of population, and number of critical infrastructures. The PFRA has to be submitted to the Environment Agency on June 22nd 2011, and will be scrutinised before being submitted to the European Commission by December 22nd 2011.

- Prepare maps showing the level of hazard and risk in Flood Risk Areas by June 2013.

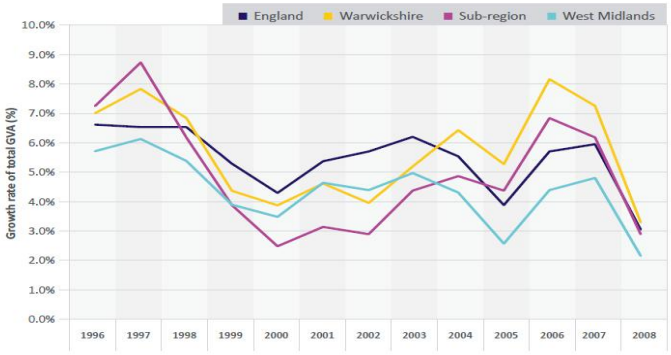
3.3.4 Economic Trends and Performance

Gross Value Added (GVA) data for Warwickshire is only available up to 2008, and so the impact of the recession is not included. In 2008, the total GVA generated within Warwickshire was £10.9bn. Over the time period where data is available, the total GVA more than doubled in the county. This compares to growth of 99% for England as a whole. This suggests that the Warwickshire economy is slightly out-performing relative to the national economy.

Some parts of Warwickshire have suffered from structural economic changes (particularly Nuneaton & Bedworth and parts of Rugby), but data is not yet available at a local level to demonstrate this. The reliance on key industries, and the path dependencies of the local economy clearly made it difficult to adjust and adapt, and so growth rates will have been much lower. South Warwickshire was less dependent on these sectors and therefore has experienced strong growth in newer sectors around business and professional services. This has helped the county see stronger than average growth rates. There has been a significant investment in two employement sites in North Warwickshire over the past 10 years, which has led to strong growth, particularly in the transport and distribution sector.

Figure 3.6 Growth of the productivity gap in Warwickshire, the sub-region and the West Midlands (1995-2008)

Source: Warwickshire Quality of Life Report, 2011



Source: Warwickshire Quality of Life Report, 2011

The structural mix in Warwickshire is lower than average growth. This is largely due to a stronger than average presence in manufacturing, particularly in the lower value end of metal and machinery manufacturing. Warwickshire also has a higher than average share in hotels & catering and transport & logistics. Warwickshire does, however benefit from above average levels of competitiveness within its business base, which more than compensates for the structural mix and enables stronger overall growth.

To compare levels of wealth and prosperity in local economies, GVA per head of population can be used. In Warwickshire, the GVA per head figure was £20,461 in 2008. This is 2.8% lower than the average figure for England. However, Warwickshire is substantially above the West Midlands average (£17,335).

From 1995-2001, the strong growth of the economy in Warwickshire has led to a steady improvement of the county's relative performance. GVA figures have also been estimated for each of the five boroughs and districts. There is a significant variation with Warwick District and North Warwickshire Borough performing very well and in the top 20% of all local areas in the UK, while Nuneaton and Bedworth Borough performs relatively poorly, and falls within the bottom 20%. Using this measure, Nuneaton & Bedworth Borough is nearly half (55%) as prosperous as Warwick District (the top performing area).

An analysis to try and identify why the above figures vary so much at a local authority level was undertaken as part of the Coventry and Warwickshire Economic Assessment. Warwick District and North Warwickshire Borough who both had higher than average figures for England, both benefit from significant in-commuting from Birmingham, Tamworth and Nuneaton, while Warwick District gains employees mainly from Coventry, Stratford-on-Avon and Solihull. In Nuneaton & Bedworth the main driver for their relatively poor performance is out-commuting. Less than 50% of employed residents of Nuneaton & Bedworth Borough actually work in the area, with a significant number commuting to Coventry.

Productivity is measured through GVA per employee (i.e. the total amount of GVA produced in an area, divided by the number of full-time equivalent employees in an area, divided by the number of full-time equivalent employees in an area). In 2008, the GVA per employee for Warwickshire was £43,105 – 8.2% lower than the England average. This translates to a "productivity gap" of £972 million. This means that if Warwickshire employees have created as much output as the average employee of England, the local economy would have generated an additional £972 million in output in 2008.

Of even greater concern, the productivity levels compared to England have been falling over the past few years. Since 2000, the sub-region has seen a growing and sustained productivity gap compared to the England average. Structural change, significant business closures and low GVA growth have combined to see decline in relative performance.

The sub-region as a whole combining the strong performing South of the sub-region and the generally weaker north make it fairly "mid-table" in terms of overall economic performance. The socio-economic drivers suggest that the southern parts of the sub-region will be affected by an ageing population, increased pressures of housing and employment land affordability, and high levels of congestion as a result of further economic activity. In the north of the sub-region, there are opportunities for growth and regeneration. These significant efforts to try and address the structural change of the economy and create new economic pathways are starting to pay dividends.

3.3.5 Employment

Unemployment levels vary throughout the County and there are a number of disparities between north and south of the county. At a district level, claimant rates range from a low of 1% in Stratford-on-Avon to 2% in Nuneaton & Bedworth. The claimant count rate is below the average for England and Wales in all five Warwickshire Districts.

3.3.6 Inequality and Deprivation

The highest levels of deprivation in the county are within Nuneaton & Bedworth Borough, indicated by the highest average SOA score. It ranks as the 108th most deprived Local Authority District out of the 326 Local Authorities in England. Stratford-on-Avon District is the least deprived in the county with a national rank of 278th. Rugby Borough has seen the most deterioration while Warwick District has seen a marked improvement in its rankings.

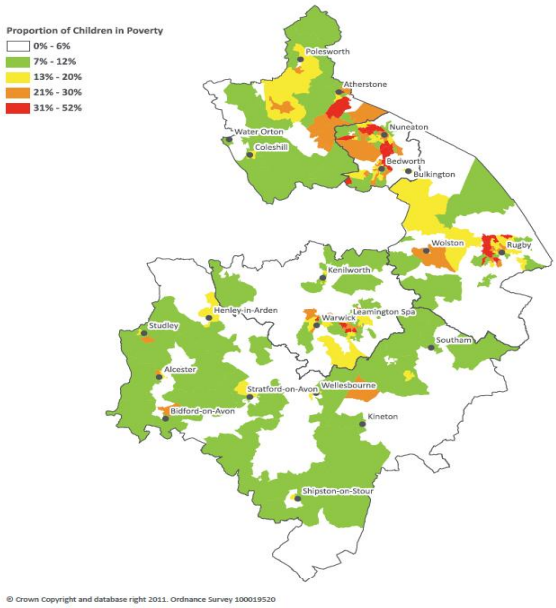
Using data available for SOAs, it means that it is possible to identify pockets of relatively high deprivation that may be hidden at Local Authority level. Although, around half of the

SOAs in the county have shown a relative improvement in rankings, all of the top 13 most deprived SOAs have shown considerable deterioration in rankings[16]. This suggests that the gap between the most and least deprived areas of the county is widening. Within Warwickshire, there are nine SOAs ranked within the top 10% most deprived SOAs nationally, all of which are located within Nuneaton & Bedworth Borough. None of Warwickshire's boroughs/districts has seen a fall in SOAs within the top 30% most deprived nationally.

When looking at the most deprived SOAs (all within Nuneaton & Bedworth Borough) and the least deprived SOAs (based in Warwick and Stratford-on-Avon Districts), it would appear that the areas are separated by income, Employment, Education & Skills and Crime in equal measures. There seems to be higher deprivation in terms of barriers to housing and services than in the otherwise least deprived areas.

In 2008, there were 14,760 children considered to be living in poverty. This equates to 13.2% of all children in the county. This proportion is considerably lower than the national figure of 23.3% and regional figure of 20.9%. Although these figures are below the national and regional figures, this masks some notable 'hotspots' at a more local level. There are two neighbourhoods in Nuneaton & Bedworth Borough where over half of children are considered to be living in poverty

Figure 3.7: Proportion of children in "poverty", 2008, at SOA level.



Source: Warwickshire Quality of Life Report, 2011

In Warwickshire, there are fewer SOAs in the most 30% most deprived nationally for income deprivation affecting older people in 2010 than there were in 2007. In 2007 there were 49

[16] Indices Multiple Deprivation (IMD) 2010

SOAs in the most deprived nationally compared with 42 SOAs in the 2010 data. Therefore, there has been a slight improvement for this indicator.

Overall, the overall level of income deprivation affecting older people has improved slightly. In addition, the gap in performance between the best and worst performing areas has declined. However, these improvements are relative and relate to geographical areas.

There has been an increase of 59% in the number of households considered to be in fuel poverty compared to two years ago. Again, the estimated proportion of households who are fuel poor varies around the county. However, all boroughs and districts in the county exceed the estimated average for England where 15.6% of households are in fuel poverty. The highest rates of fuel poverty tend to be clustered in the rural areas of the county, particularly Stratford-on-Avon District, rural Rugby Borough and North Warwickshire Borough. Higher levels of fuel poverty do not appear to be as prevalent in Warwickshire's urban areas.

Table: 3.6 Top ten highest SOAs in terms of percentage of households in fuel poverty, 2010

Top 10 highest SOAs	Borough/District	Estimated number of households in fuel poverty	% of households in fuel poverty
Wootton Wawen	Stratford-on-Avon	259	42.5%
Lapworth South, Bushwood, Lowsonford & Rowington	Warwick	257	39.4%
Ladbroke & Priors	Stratford-on-Avon	193	39.4%
Marston & Water Park	North Warwickshire	270	39.0%
Long Compton	Stratford-on-Avon	372	39.0%
Corley	North Warwickshire	227	38.5%
Brailes	Stratford-on-Avon	328	36.6%
Fillongley & The Packingtons	North Warwickshire	268	35.1%
Fosse East	Rugby	303	35.0%
Bardon	Stratford-on-Avon	312	34.7%

Source: Warwickshire Quality of Life Report, 2011

The highest proportion of households in fuel poverty in the county is Wootton Wawen in Stratford-on-Avon District. This SOA has just over 40% of its households estimated to be fuel poor. Of the top ten SOAs in the county, half are in Stratford-on-Avon District, three are in North Warwickshire Borough; one is in Warwick District and one is in Rugby Borough.

3.3.7 Education and Skills

Since 2008, the proportion of Warwickshire residents with higher level skills has decreased slightly. Nationally, the percentage of the working age population with higher level skills has increased. Although Warwickshire continues to display statistics higher than the national average in relation to residents qualified to NVQ level 2 or above, the gap is considerably narrower than in previous years. Further, there are now more Warwickshire residents than

the national average, of working age who do not hold any qualifications.

Warwick District has consistently maintained the highest percentage of residents qualified to degree level or above in the county. In Stratford-on-Avon District and Rugby Borough the proportion of working age residents holding an NVQ4 or above rose between 2008 and 2009. This dropped for both residents of North Warwickshire Borough and Nuneaton and Bedworth Borough between the same time period.

Table 3.7: Levels of qualification held by resident working age population, by borough and district, 2009

	NVQ4+	NVQ3+	NVQ2+	No Qualifications
North Warwickshire	21.2	39.5	61.1	16.8
Nuneaton & Bedworth	19.3	38.0	57.6	19.9
Rugby	35.4	51.3	66.8	13.7
Stratford-on-Avon	39.0	55.9	69.3	12.8
Warwick	39.5	58.1	72.2	11.3
Warwickshire	32.0	49.8	66.0	14.6
West Midlands	24.7	43.7	60.9	16.2
England and Wales	29.5	48.8	65.0	12.3

Source: Warwickshire Quality of Life Report, 2011

Within the 333 SOAs in Warwickshire, 86 are ranked within the top 30% of low skilled working populations in the country in 2010. Most of these SOAs are within Nuneaton and Bedworth Borough (63%) with North Warwickshire having the second highest majority (20%). The number of SOAs within Rugby Borough, Stratford-on-Avon District and Warwick District are low and where present, are not based within the top 10% of deprived SOAs.

Warwickshire is above the national average for the number of pupils achieving five or more A* - C GCSE grades. Despite these statistics, Nuneaton & Bedworth Borough and North Warwickshire display figures below the national average. The district performing the best out of the five is Stratford-on-Avon District, with a 68% attainment rate.

The five boroughs and districts across Warwickshire cover a large range of national rankings for GCSE attainment across all subjects. Warwick District is placed highest at 85th, to North Warwickshire which is ranked as 285th. This suggests that there is a large gap across the county in terms of performance. This gap is even wider for the attainment of GCSEs grades A* - C, including Maths and English. Stratford-on-Avon District is placed 16th, which is within the top 5% of the country, whereas North Warwickshire Borough is ranked worst in the county, and placed 291st nationally.

Out of 333 SOAs in Warwickshire, 73 are ranked within the top 30% deprived in terms of the education of children and young people, compared to 65 in the previous assessment in 2007. Nuneaton and Bedworth has the largest proportion of SOAs within the 30% more deprived in this sub-domain. It is the only Local Authority in the county to have experienced a decrease in the number of SOAs falling within the top 30% since 2007. The most significant deterioration is seen in Rugby Borough, where the number of SOAs falling within the top 30% has more than doubled since 2007.

All of the most deprived SOAs are within Nuneaton & Bedworth Borough and all of the least

deprived are within Warwick District. The most deprived, Bar Pool North & Crescents is ranked within the top 100 out of over 32,400 SOAs in the country. This shows an extreme level of education deprivation of children and young people.

3.3.8 Crime and Safety

There were a total of 32,789 crimes recorded in Warwickshire between April 2010 and March 2011. This represents a reduction of 3.1% on the previous 12 months (33,828 recorded offences).

There have been reductions in the number of recorded offences in Warwickshire across three of the four volume crime categories, with reductions being seen in criminal damage, domestic burglary and vehicle crime offences.

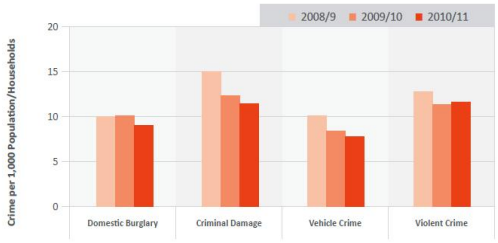
In Warwickshire, there has only been one area of key crime that has seen an increase in 2009/10, that being violent crime. The increase is only slight of 2%. Domestic Burglary has seen the largest reduction of 11% when comparing the period April 2010 – March 2011 to the corresponding period of 2009/10. In the most recent twelve month period there were on average twenty less domestic burglaries recorded per month than in the previous period. This reduction reflects a national trend.

The overall crime rate in Warwickshire has reduced in line with the average for the policing areas deemed to be the most similar to Warwickshire. Warwickshire has an overall crime rate of 61.28 per thousand population against an average of 60.21 for its most similar groups.

The British Crime Survey suggests that Warwickshire residents faced a 15.3% chance of suffering a household crime during 2010. This is only a slight increase of 0.2% from 2009 (15.1%) and compares to an average of 14.4% across similar force areas to Warwickshire.

The residents of Warwickshire faced a 6.3% risk during 2010 of personal crime which is an increase of 0.1% on the previous year.

Figure 3.8 : Recorded crime rates by type, 2006/7 to 2010/11



Source: Warwickshire Quality of Life Report, 2011

Within the 333 SOAs in Warwickshire, there were 63 which occupied the top 30% of most crime deprived areas in the country in 2010. Most of the SOAs are based in Nuneaton and Bedworth Borough (54%). Crime deprivation appears to be more acute, with six more SOAs now in the top 10% of crime deprivation in the country. Warwick District also appears to have worsened since 2007, with five more SOAs in the district in the top 30% of the country, three of which fall within the top 10%. North Warwickshire did not see any SOAs within the top 30% of crime deprivation in the country in 2007, however three joined this percentile in

2010. There does seem to be improvements in Rugby Borough where the number of SOAs falling within the top 10% has reduced.

Table 2.0 shows the five areas most at risk of criminal activity, based on each SOA's crime and disorder score, and also the five safest areas in the county. The most crime deprived area, Abbey Priory in Nuneaton and Bedworth is ranked 431st out of over 32,400 SOAs in the country, demonstrating very high levels of deprivation in this area compared to the rest of the county. Most of the safest areas in the county belong to Stratford-on-Avon District.

Table 3.8: Top and bottom ranked SOAs in crime deprivation, 2010

County Rank of Crime Score	SOA Name	Borough/District	National Rank of Crime Score (out of 32,482)
1	Abbey priory	Nuneaton & Bedworth	431
2	Poplar North West	Nuneaton & Bedworth	878
3	Camp Hill Village Centre	Nuneaton & Bedworth	897
4	Campion Hills & Newbold Comyn	Warwick	965
5	Milverton South East	Warwick	993
329	Snitterfield & Wolverton	Stratford	31,945
330	Long Compton	Stratford	31,946
331	Weddington St. Nicholas East	Nuneaton and Bedworth	31,967
332	Castle Green & Malthouse	Warwick	32,163
333	Wellesbourne South	Stratford	32,291

Source Warwickshire Quality of Life Report, 2011

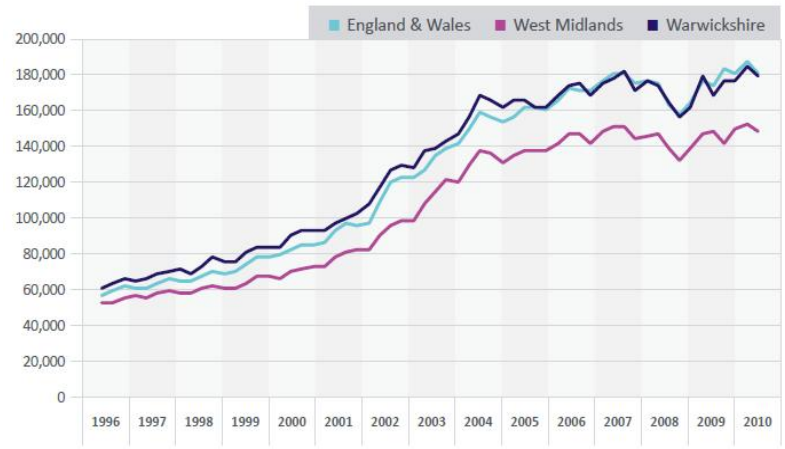
3.3.9 Housing

Until late 2005, the median price paid for a house in Warwickshire was slightly higher than the median for England and Wales as a whole, but in recent years the prices have largely been the same. At the end of 2010, the median price for a house in Warwickshire was £177,500, and for England and Wales as a whole, £180,000. Over the last 12 months the median house price in Warwickshire has increased by £10,000, compared to an £8,000 increase across England and Wales.

The ratio of lower quartile house prices to lower quartile earnings reflects housing affordability (25% of all house prices are below the lower quartile, similarly, lower quartile earnings are those of the lowest paid 25%). Although house prices have levelled off or even fallen in some cases, it is the effect of sustained price increases over ten years that puts even lower-priced housing beyond the means of the lower paid.

In 2010, the lower quartile property price in Warwickshire was, on average, 7.0 times the lower quartile annual wage for a full time employee working in Warwickshire. This is higher than the West Midland region's ratio of 6.1 and the England average of 6.7.

Figure 3.9 : Median Property prices, 1996-2010



Source: Warwickshire Quality of Life Report, 2011

Thirteen years ago (1998) the ratio in Warwickshire was less than 4, but after a period of increases in the first half of this decade, the Warwickshire ratio reached 7.3 in 2006. There have been some small decreases but 2010 saw another increase (from 6.5 to 7.0). At a borough/district level, the highest ratio is in Stratford-on-Avon District (9.8), whilst the lowest ratio is witnessed in Nuneaton & Bedworth Borough (5.6). Despite increases being witnessed in Warwickshire as a whole, the ratios in North Warwickshire and Nuneaton & Bedworth Boroughs have seen small decreases in the last 12 months.

Within the 333 SOAs in Warwickshire, there weren't any areas in the top 20% most deprived nationally for this indicator. However, 11 SOAs were in the most 30% deprived nationally, ten of these SOAs were in Warwick District, whilst the other was in Stratford-on-Avon District.

Table 3.9: Top and bottom ranked SOAs for Wider Barriers to Housing Deprivation, 2010

County Rank of Income Score	SOA Name	Borough/District	National Rank of Wider Barriers to Housing Score (out of 32,482)
1	Old Town West & Railway Bridge	Warwick	7,958
2	Town Centre	Warwick	8,372
3	Milverton South East	Warwick	8,664
4	Stoneleigh	Warwick	8,851

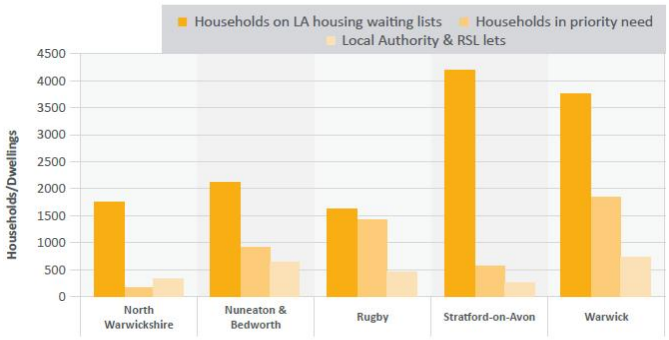
5	Old Town North West	Warwick	9,076
329	Weddington South & Schools	Nuneaton & Bedworth	31,022
330	Overslade South East	Rugby	31,150
331	Brownsover North Campion	Rugby	31,345
332	Caldecott South and Rural	Rugby	31,400
333	Thurlaston	Rugby	31,767

Source: Quality of Life Report, 2011

The number of households on local authority housing registers provides an indication of the demand for social housing. The number of households on local authority housing registers in Warwickshire more than doubled from 5,750 to 13,370; an increase of 133% over a ten year period. This was approaching double the rate of growth for England as a whole. Some of this was due to the general increase in the number of households in the county, but even allowing for this, the proportion of all households in the county which were on a housing register rose between 2000 and 2010, from 2.8% to 5.9%.

Figure 3.10 demonstrates that the gap between the supply and demand for social rented housing is greatest in Stratford-upon-Avon District, where the number of households on the housing register is more than thirteen times the number of dwellings let by the local authority or Registered Social Landlords (RSLs).

Figure 3.10: Social rented housing demand and supply, by borough and district, 2010



Source: Quality of Life Report, 2011

Data available for Warwickshire for January to March 2011, shows that 267 decisions were taken under the homelessness provision. Warwickshire had 97 people accepted as being homeless and in priority need or a rate of 0.4 people per 1,000 households in the county.

The number of households on local authority housing waiting lists has risen for all of Warwickshire's boroughs and districts since 1997. The differences between these numbers have also increased in this time period. In 1997 there was a difference of 1,088 between the highest (Stratford-on-Avon District) and lowest (Nuneaton & Bedworth Borough) figures. In 2010 this difference was 2,632 (between Stratford-on-Avon District and Rugby Borough).

Warwickshire has seen a 120% increase in the number of households on its waiting lists from 1997-2010. This masks variation at a borough/district level as Warwick District has seen the largest increase in the time period whereas Rugby Borough has seen a relatively small increase in comparison. Demand continues to outstrip the supply of social housing even though the demand for social housing has decreased in two of the five boroughs and districts.

Health

In Warwickshire, it is estimated that one in four adults are obese, which equates to nearly 110,000 people. This is not significantly different to that for England. According to the latest data, 8% of reception aged children and 17% of Year 6 children in Warwickshire are classed as being obese. This is significantly lower than both the West Midlands region and England figures.

The highest proportion of Year 6 children who are obese are within North Warwickshire Borough and is statistically significantly higher than both the regional and national figures. In contrast, the equivalent figures for Warwick and Stratford-on-Avon Districts are statistically significantly lower than the regional and national figures.

One in four A&E attendances in related to alcohol in some areas. Although the rate of such admissions in Warwickshire is lower than the regional and national rates it has more than doubled from 689 per 100,000 in 2002/03 to 1,562 per 100,000 in 2009/10 (127%) increase). This is greater than the regional (120%) or national (88%) increases.

Trend information suggests that the level of alcohol related hospital admissions will continue to rise. Partners in Warwickshire have set a target to slow the increase in the rate of admissions and achieve a figure 1% lower than the forecast for in 2011/12.

'Years of Life Lost' (YLL) is an indicator that measures premature mortality. The average YLL rate for all persons in Warwickshire is not significantly different to England in statistical terms. It is statistically significantly lower than the West Midlands average. Warwick District is the only local authority area in the county where the YLL average rate is significantly lower than the England average. This applies to males, females and total persons.

Warwickshire has eight SOAs in the 10% most health deprived nationally. In 2007, it was only 5%. Seven of these SOAs are in Nuneaton and Bedworth Borough and one, Town Centre Rugby has now entered the 10% most health deprived nationally. The five SOAs in the 10% most health deprived in 2007 remain in this group in 2010, although their relative ranks have changed slightly.

Between 1998 and 2009 all but one of Warwickshire's boroughs/districts experienced an overall decline in the under 18 conception rate. However, this overall decline was accompanied by much fluctuation during the intervening years for most of the boroughs/districts. After a pattern of decline in the last couple of years, Nuneaton and Bedworth Borough experienced an increase in its teenage conception rate for 2009, rising to 51.4 from 42.8 per 1,000 conceptions in 2008. North Warwickshire Borough remained at 44.2 conceptions per 1,000, whilst Warwick District recorded a considerable reduction in the number of conceptions (90 to 64), consequently bringing the under 18 conception rate down to 29.3 from 41.3 per 1,000 in 2008.

In 2009, a total of 4,957 deaths were recorded in Warwickshire. This represents a fall of 1.1% on the previous 12 months. In line with the national picture, the four largest causes of mortalities (cancers, heart related diseases, respiratory diseases and liver diseases) account for nearly four out of every five deaths across Warwickshire. Cancer deaths in all of Warwickshire's boroughs and districts were slightly above the national average of 28.6%, however deaths from heart disease across the county were below the England average of

32.5% apart from in North Warwickshire Borough where the proportion was 34.7%.

Within Warwickshire the proportion of deaths by age band are very similar to those nationally. 1% of deaths in 2009 occurred in residents aged under 20, whilst 16% of deaths were residents of working age (20 to 64). The majority of deaths occurred in residents aged 65 and over.

Within Warwickshire, two out of every three deaths do not occur until people are at least 75 years old which is slightly higher than the overall proportion for England. This is a clear sign that life expectancy is increasing.

Community Satisfaction and Cohesion

The Warwickshire County Council Best Value User Satisfaction Survey is a survey of 4,000 randomly selected residents of the county. The purpose of this survey is to gauge levels of satisfaction with the Local Authority and the key services it provides.

The survey is mandatory every three years, although the County Council carry out the survey every year to gather trend data as part of its consultation strategy.

The last published version of the survey was in February 2008 and below are some of the key findings.

The most important issue for residents continues to be the level of crime in making somewhere a good place to live. The activity, which continues to be a major issue and in need of improvement, is the number of activities for teenagers. The residents of Nuneaton & Bedworth, however feel that the level of crime is in most need of improvement.

The priorities for Warwickshire residents in terms of improvement include, the level of crime, health services, affordable decent housing, clean streets and public transport.

A large number of respondents (80%) revealed that they are satisfied with their local area as a place to live, although there are still variations across the County. There is the most satisfaction in Stratford District with 88% and just 68% of residents are satisfied in Nuneaton & Bedworth Borough.

The level of satisfaction with general service areas of the County Council have remained fairly static. There was only one area that witnessed a significant difference and that was with the local authority education service, where satisfaction levels for users of the service has risen from 63% to 80%. Long-term trends indicate that satisfaction levels with environmental services and cultural and recreational services are declining.

Limitations of Baseline Data Gathering

Every effort has been made to provide an accurate baseline review. Production of the baseline has been effective at providing an understanding of current issues and there is generally enough information available to enable and informed and detailed appraisal. However, some problems were encountered and there are some limitations in the data:

- As the scope of the information required is wide, data has not been available for a number of indicators;
- The consistency between data sources;
- The availability of historic data;
- The availability of up to date information;
- As a result of the scale of data, it has not always been possible to divide information up in a way which optimises its value, e.g. by geographic area or by different communities or groups. For example, environmental data is often collected at a high level and it has

not always been possible to collate at a more localised level;

- Warwickshire is interlinked socially, economically and physically to adjacent areas and while transboundary issues are important, and need to be considered in the appraisal process, it was not possible to represent such complex issues in the baseline data collation; and
- The baseline data in Warwickshire is ever changing, and so baseline data can quickly go out of date, including information which is contained within this report.

3.4 Sustainability Issues and Identified Problems

The SEA Directive confirms that the Environmental Report should include the following information: 'any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC'[17]. The examination of policy and baseline characteristics within Warwickshire, has allowed sustainability issues to be identified which may be influenced by the WDF. These are summarised in Table 3.2 below.

[17] Annex I (c)

Table 3.10 Summary of Key Sustainability Issues for Warwickshire

Sustainability Issue	Description	Relevant sustainability issue identified for WDF	Reason	Source / Guidance Includes[18]
Role of the county in the Sub-Region and wider area.	Warwickshire CC has a role to play in ensuring that sustainable waste management is delivered in the county, whilst also working alongside its districts and neighbouring authorities, including the Local Enterprise Partnership, in ensuring that where waste crosses the county boundaries that appropriate facilities are available to manage the waste produced.	Delivering Sustainable Waste and Management	The delivery of sustainable waste management in Warwickshire helps to raise environmental standards in the county and meet European and national targets for recycling. Effective waste management is identified as a priority for Warwickshire and plays a part in the successful implementation of the Coventry and Warwickshire Local Enterprise Partnership.	EU Waste Framework Directive Planning for Sustainable Waste Management (PPS 10) Draft National Planning Policy Framework and SA Objectives Warwickshire and Coventry Local Economic Partnership
Waste and Recycling	The EU Waste Framework Directive and the National Waste Strategy require that the principles of the Waste Hierarchy are followed firstly to	Sustainable Waste Management Municipal waste management	The delivery of effective sustainable waste management practices linked to novel techniques for waste treatment and disposal will assist in recovery and reuse of waste supporting the Waste Hierarchy. In formulating	EU Waste Framework Directive National Waste Strategy 2007

[18] A full list of applicable plans and policies is included in Appendix A

Sustainability Issue	Description	Relevant sustainability issue identified for WDF	Reason	Source / Guidance Includes[18]
	reduce the amount of waste produced then to enable recovery value from waste through recycling and energy production and only as a last resort to send waste to landfill. Warwickshire must ensure that national and regional recycling and other landfill diversion targets are met whilst moving towards a Zero Waste Economy.		a strategy and policies in accordance with the Waste Hierarchy there is an aspiration to move towards Zero Waste Economy as outlined in the Government's Waste Review 2011	PPS10 Planning for Sustainable Waste Management RSDF and SA Objectives Waste Hierarchy
Perception and Image	Many areas within Warwickshire have a positive image which capitalise on the historic and natural resources within the County and which attract people to live in and visit in the county. There is a need to improve this positive perception and image throughout the County to areas which are less attractive.	Protection of Environmental Resources	Warwickshire has a significant historic and nature conservation resource. Waste practices have the potential to affect this resource. With appropriate management, it is possible to ensure that these practices do not have an adversely affect the image of the County.	Wildlife and Countryside Act 1981 PPS7 Sustainable Development in Rural Areas PPS9 Biodiversity and Geological Conservation PPS 5 Planning for the Historic Environment
Population (Growth)	There has been a marked increase in population within the county in recent years. This creates added pressures on resources and need for enhanced public services.	Sustainable Waste Management	There is a need for effective waste facilities to support an increase in population within Warwickshire. Population growth areas must be considered in developing future waste facilities to ensure that future waste capacity is appropriately predicted.	PPS10 Planning for Sustainable Waste Management RSDF and SA Objectives Policy review including Index of Multiple

Sustainability Issue	Description	Relevant sustainability issue identified for WDF	Reason	Source / Guidance Includes[18]
				Deprivation (IMD) Data
Inequality and Deprivation	Data suggests that there is a wide variation in deprivation across the county. Access to employment (particularly in terms of public transport provision) could be a factor limiting economic growth and limiting opportunities. Here is not just a north south divide - there are pockets of deprivation even in prosperous districts. Lack of access to natural green space is a form of deprivation and affects rural and urban areas alike.	Sustainable Waste Management Site Decommissioning and Restoration Monitoring Regime and Stakeholder Engagement	In delivering sustainable waste management practices due consideration is to be given to location, scale and access of facilities in relation to the settlement pattern. This may have a bearing on employment opportunities. Effective planning of waste management processes will enhance access to employment opportunities and potentially create a range of opportunities in a range of social sectors. Access to green space is important and can be addressed in the District and Borough Green Infrastructure Studies. The Waste Core Strategy has the potential to impact directly or indirectly on strategic local green space provision and thus have adverse impacts on deprivation if not considered from the outset	Policy review including Index of Multiple Deprivation (IMD) Data Warwickshire Sustainable Community Strategy Green Infrastructure Studies.
Health	The incidence of poor health and long term illness are relatively low within Warwickshire and life expectancy is relatively high. Access to health services is an important issue.	Hazardous Waste Management Sustainable Waste Management	Waste management practices have the capacity to influence health and safety, both positively and negatively dependent on the success of sustainable waste and minerals management practices.	PPS10 Planning for Sustainable Waste Management RSDF and SA Objectives Policy review including Index of Multiple Deprivation (IMD) Data
Access to Services	Service delivery is affected by location. Warwickshire is a relatively large county with a large rural population especially in the south. Many people are reliant on public services which are currently being cut back due to the	Sustainable Waste Management	There is need to ensure that people's chances and opportunities are not limited by not being able to access services. The WCS must ensure that waste management services are accessible to all and that there is a good geographical spread of municipal facilities and waste collections.	PPS10 Planning for Sustainable Waste Management Warwickshire Sustainable Community Strategy RSDF and SA Objectives Policy review including

Sustainability Issue	Description	Relevant sustainability issue identified for WDF	Reason	Source / Guidance Includes[18]
	economic situation. This may exclude some people from accessing vital services.			Index of Multiple Deprivation (IMD) Data
Housing Provision	In common with many areas there is an issue with the shortage of affordable and appropriate housing for the county's increasing population. Some of this is concentrated in the more prosperous districts in Warwick and Stratford.	Sustainable Waste Management Waste Management Location Options Municipal waste management	The WCS must ensure that it caters for all the population in terms of sustainable waste management facilities are located in the right place. New housing developments must be monitored to ensure that where there are new waste arisings these are not remote from waste facilities.	PPS10 Planning for Sustainable Waste Management PPS3 Housing Warwickshire Sustainable Community Strategy Warwickshire Municipal Waste Strategy
Health	Warwickshire has an increasingly elderly population which will require more resources to be given to healthcare in the future. Access to healthcare and education to lead more healthy lifestyles are issues that need to be addressed. Access to green spaces can help in improving mental health of the population.	Delivering Sustainable Waste Management Hazardous Waste Management Site Decommissioning and Restoration	Waste must be managed safely and with the necessary environmental protection polices in place to ensure that there are no health issues caused by the location waste facilities or from transporting waste around the county. Access to natural green spaces is one of the ways that people can gain health benefits provided by the natural environment and so the Waste Development Framework needs to consider the impact of their polices on such provision and the subsequent effects this could for Health and wellbeing.	PPS10 Planning for Sustainable Waste Management PPS23 Planning and Pollution Control
Crime	Incidences of crime across the County are relatively low although there are areas of crime concentrated particularly in some of the urban centres of the county.	Waste Management Location Options Scale of Waste Management Facilities Waste Management Treatment	The location of waste management locations has a significant bearing on a facility becoming a target for criminal behaviour. In addition, the treatment and disposal options provided i.e. small scale recycling facilities versus large centralised facilities also affect the extent to	PPS10 Planning for Sustainable Waste Management Policy review including Index of Multiple Deprivation (IMD) Data

Sustainability Issue	Description	Relevant sustainability issue identified for WDF	Reason	Source / Guidance Includes[18]
		and Disposal Options	which security measures may be implemented	
Transport and Movement	There are marked variations in accessibility and mobility within Warwickshire, particularly in terms of public transport provision. There is an identified need to provide better linkages between urban and rural communities as well as access to employment opportunities. There is a need to ensure highway especially for pedestrians and cyclists in regard to waste transport especially	Transport Infrastructure	In developing an appropriate solution to waste management planning within Warwickshire, an effective transport infrastructure plays a fundamental role. The transportation and management of hazardous waste materials in particular has a potentially significant effect on preserving environmental quality. Moreover, the availability of appropriate treatment and disposal facilities in close proximity to the source of waste production will have a potentially positive effect upon transportation and mobility. With fewer household waste sites in the county there will pressure on roads around the sites which remain.	Warwickshire County Council's Local Transport Plan (LTP2) Planning Policy Guidance Note (PPG)13 Transport Environmental Protection (Duty of Care) Regulations 1991
Economic Activity	There are relatively high levels of economic activity associated with tourism and knowledge based industries while there is a relatively low dependency on state benefits	Waste Management Location Options Scale of Waste Management Facilities	The delivery of a waste treatment operations will create a demand for employment thus stimulating economic activity. In addition, appropriately managed facilities are likely to have a lesser detrimental effect on natural and built resources within the County which support tourism	PPS10 Planning for Sustainable Waste Management Policy review including Index of Multiple Deprivation (IMD) Data PPS4 Planning for Sustainable Economic Growth
Economic Structure	There is a mix of economic growth in new sectors. As a consequence there is a wide variation in skill and productivity across the County. Impacts to the natural environment can have economic consequences and	Sustainable Waste Management Waste Management Location Options Scale of Waste Management Facilities	The delivery of sustainable new waste management facilities will provide opportunities to ensure local employment provision can be used. The location and scale of facilities will have a bearing on this economic activity. Good waste management practices will help towards the goals of developing a low carbon economy.	PPS10 Planning for Sustainable Waste Management Policy review including Index of Multiple Deprivation (IMD) Data PPS4 Planning for

Sustainability Issue	Description	Relevant sustainability issue identified for WDF	Reason	Source / Guidance Includes[18]
	so that the safeguarding and enhancement where possible of natural assets, in moving towards a green economy can help play a part in encouraging economic activity and investment in the county.		The Natural Environment White Paper identifies that the natural environment has an important economic function in terms of the resources and the ecosystem systems services it provides. In assessing the effects of the Waste Development Framework on Economic Activity, the economic implications of natural environment degradation and loss is also taken into account as well as the potential for improvements to natural assets.	Sustainable Economic Growth
Entrepreneurship and Innovation	Entrepreneurship and Innovation is vital for the success of the local economy. There is evidence of entrepreneurship and new business start-ups mainly linked to urban centres of the county. Educational and research centres support entrepreneurship	Sustainable Waste Management Waste Management Location Options	It is possible that the delivery of new waste management technologies will assist in stimulating innovative technology and entrepreneurship in the waste sector.	PPS10 Planning for Sustainable Waste Management Policy review including Index of Multiple Deprivation (IMD) Data PPS4 Planning for Sustainable Economic Growth
Education and Skills	Educational attainment is relatively high within the County, with few adults having limited education or skills and with above average performance by pupils at GCSE level. There is a generally high level of aspiration across the County.	Delivering Sustainable Waste Management	In delivering sustainable waste practices there is a need to ensure that the community are enfranchised throughout site feasibility, design and delivery. Education plays a significant role in ensuring the community and key stakeholders are able to provide informed comment on new facilities and contribute to recovery and recycling targets at the local level	PPS10 Planning for Sustainable Waste Management Policy review including Index of Multiple Deprivation (IMD) Data PPS4 Planning for Sustainable Economic Growth
Unemployment and Worklessness.	Only Nuneaton and Bedworth has a claimant count higher than the average for England	Waste Management Location Options Scale of Waste Management	New waste facilities can help to provide local employment. Waste management is a growth area and will continue to provide new	PPS4 Planning for Sustainable Economic Growth

Sustainability Issue	Description	Relevant sustainability issue identified for WDF	Reason	Source / Guidance Includes[18]
	and Wales (3.6%) – 2010. Warwickshire has traditionally had low unemployment but the downturn which began in 2008 is starting to push the figures higher.	Facilities	employment opportunities especially as new technologies are developed.	
Community Engagement	Social inclusion is not as good as it could be in Warwickshire; 25% of people feel they can't influence the decision making process.	Waste management location options Scale of waste management facilities Utilisation of existing sites for the provision of new facilities Protection of environmental resources Transport Infrastructure Site decommissioning and restoration	The WCS must enable people to participate in decision making. The framework by which this can be achieved is set out in the SCI. This will help influence the strategy and policies within the Waste Core Strategy.	PPS1 Planning for Sustainable Development Warwickshire Waste Core Strategy Statement of Community Involvement Warwickshire Annual Monitoring Report
Climate Change and Flood Risk	There is a national need to consider the impact of climate change and manage the risk of flooding. Parts of the County are within flood risk areas and the region has a part to play in achieving regional and national targets relating to reducing the impact of climate change	Waste Management Location Options Sustainable Waste Management Monitoring Regime and Stakeholder Engagement	It is important that future waste processes are planned and safeguarded from the potential effects of climate change. Delivering sustainable waste management practices, will in their own right, reduce potential effects on climate change e.g. through reduced dependency on transportation	PPS25 Development and Flood Risk PPS10 Planning for Sustainable Waste Management
Protection of Natural Resources	Natural resources must be protected: there are numerous	Protection of Environmental	Delivering sustainable waste management practices should ensure effective control over	EU Water Framework Directive

Sustainability Issue	Description	Relevant sustainability issue identified for WDF	Reason	Source / Guidance Includes[18]
- air, groundwater and soil	ways of doing this eg through AQMA's in terms of air quality and Groundwater Protection Zones in the case of ground water. groundwater is vulnerable to contamination and is difficult to clean. Nitrate, pesticides, solvents and other chemicals can get into groundwater from surface water and soils. Soils need to be protected from contamination on waste sites. Planning Conditions can ensure effective control.	Resources Waste Management Location Options Sustainable Waste Management Transport Infrastructure Site decommissioning and restoration	these issues. Over-use of groundwater depletes the public water supply, Many rivers and wildlife also depend heavily on groundwater and may be harmed, or lost, if groundwater levels become too low. Thirty-five per cent of groundwater bodies are classified as at 'poor quantitative status' under the EU Water Framework Directive because of Abstraction pressures.	PPS1 Planning for Sustainable Development PPS23 Planning and Pollution Control
Energy Production and Use	Without sustainable waste development in accordance with the waste hierarchy there would be increased carbon emissions in to the atmosphere.	Protection of Environmental Resources Sustainable Waste Management Waste Management Location Options	Moving waste up the waste hierarchy will ensure that scarce resources are re-used and recycled rather than sent to landfill. Energy from Waste can also generate power whilst at the same time disposing of waste	PPS1 Planning for Sustainable Development and Supplement. PPS 22 Renewable Energy PPS23 Planning and Pollution Control PPS 10 Planning for Sustainable Waste Management Draft NPPF
Historic	Warwickshire's historic natural and built environment attracts	Protection of Environmental	Warwickshire has a significant historic and nature conservation resource. Waste	PPS 5 Planning for the

Sustainability Issue	Description	Relevant sustainability issue identified for WDF	Reason	Source / Guidance Includes[18]
Environment	tourists and people to come and live and work in the county.	Resources	development could potentially affect this resource. Protection of the resource through the development management policies in the Waste Core Strategy is therefore required.	Historic Environment Draft NPPF
Biodiversity	There is a requirement to protect sites and species of national, regional and local importance and minimise the loss of biodiversity, including that biodiversity which is not statutorily protected, within the County. In particular, the contribution that the extensive rural areas make to biodiversity in Warwickshire is valued within the County. In addition there is a general need to cover a complete ecological network within the county based on designated sites and areas/ corridors to link them.	Protection of Environmental Resources Delivering Sustainable Waste Management Practices Waste Management Location Options	Waste facilities have the potential to affect biodiversity resources due to the scale of the footprint and the nature of the processes involved. Delivering sustainable waste management practices should inherently consider the implications for biodiversity assets and resources. Warwickshire is already working to these ends with Warwickshire Wildlife Trust's Living Landscapes projects, the proposed Nature Improvement Area, biodiversity opportunity mapping and the sub-regional green infrastructure study. It is therefore important that this sustainability issue considers the wider measures needed to achieve effective and sustainable nature conservation and include this within the Appraisal process for the Warwickshire Waste Development Framework.	Wildlife and Countryside Act 1981 PPS 7 Sustainable Development in Rural Areas PPS9 Biodiversity and Geological Conservation

3.5 Future Trends and the WDF

Demographically, Warwickshire has undergone significant changes in terms of population, with an increase of 11.9% over the last (circa) 30 year period, 8.9% higher than the increase in England as a whole. It is anticipated that national growth forecasts will be reflected in Warwickshire County placing considerable pressure upon services including waste management.

There is a strong emphasis on private vehicle use within Warwickshire, with considerable reliance on private car gain access to services. This is likely to lead to an increased burden on the Warwickshire's transport infrastructure, in terms of the WDF there will be a need to provide suitable access to waste management facilities.

There is a distribution of waste management facilities across the five Boroughs and Districts of Warwickshire which also extend across into neighbouring counties of Staffordshire, Leicestershire, Worcestershire and the West Midlands. The current reliance on landfill is likely to be pressured in the future with alternative waste management techniques being favoured, stimulating innovation within the waste management sector and creating a shift in terms of the manner in which waste is handled. This may induce beneficial benefits for the regions economy and is also likely to have spatial implications which need to be managed to allow for predicted increases in population and demand for housing.

There is clearly a substantial environmental resource within Warwickshire. The protection of these natural and built assets within the County will remain paramount, and in particular, there will need to be a balance, at the project level, to ensure that the provision of new waste management facilities does not compromise environmental assets. The WDF will have an important role in ensuring that this achieved during both the commissioning and operational phases of the facility, and in addition, during aftercare and restoration.

3.6 SA Framework, Objectives, Targets and Indicators

The SA objectives were shaped by the consultation on the SA Scoping Report, including rewording of objectives and decision making criteria for the protection of geological features and the addition of Objective 3 (geological conservation) and Objective 8 (to avoid, manage and reduce flood risk). In addition, further indicators were added to assist with the monitoring of the WDF Core Strategy via the Annual Monitoring Report. The 'adopted' SA Framework, used for the SA, is illustrated below.

Table 3.11 SA Framework for the WDF Core Strategy

Proposed SA Objectives, Indicators and Decision-Making Criteria

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
Environmental			
Conserve and enhance biodiversity	Will the WDF • Support the key objectives of Warwickshire's and other planning authorities' Biodiversity Action Plans? • Avoid damage to designated wildlife and geological sites, protected species and their habitats? • Maintain biodiversity, and avoid irreversible losses? • Promote the restoration of habitats and species to viable levels at waste management / minerals facilities? • Encourage operators to promote the sustainable management of wildlife resources and ecological processes at operational or decommissioned facilities and workings?	• Number and status of designated wildlife sites, BAP priority habitats, BAP species etc directly affected by waste and minerals operations • Number of sites and species recorded as being in decline or recovery as a result or waste or minerals operations or constructive intervention by operators • Data on non-compliance issues relating to impacts on designated habitats / species • Monitoring data on post-working restoration and aftercare, particularly in regard to minerals operations	5,6
Protect and improve water quality and resources	Will the WDF • Compromise surface water or groundwater quality or flow characteristics? • Increase the likelihood of releasing substances prescribed	• Number and location of facilities located within groundwater protection zones • Data on non-compliance issues / prosecutions undertaken by the Environment Agency	5,8

[19] Minerals Development Framework Issues and Options Objectives and Indicators are to be included within an alternative draft of this document specifically for minerals

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
	under relevant EU and national legislation? • Encourage compliance with the Water Framework Directive? • Aim to redress any adverse water quality impacts arising from existing waste disposal activities?	associated with waste disposal or minerals operations • Specific water consumption rates associated with surface or groundwater abstractions serving waste management or minerals operations	
To avoid, reduce and manage flood risk	Will the WDF • Promote facilities and management practices that avoid increased flood risk, and comply with local and national flood control policies? • Encourage operators to reduce specific water abstraction and consumption rates connected with their operations?	• Number of premises vulnerable to flood risk, and measures taken to mitigate flood risks Proactive environmental management measures instigated to redress existing water quality impacts	5,6,8
To safeguard environmental quality in order to minimise potential impacts on community health	Will the WDF Limit statutory nuisance associated with air pollution, noise, dust, light pollution and gaseous emissions? • Promote high standards of air pollution control and management at waste handling and minerals facilities? • Indirectly minimise carbon emissions through a sustainable waste and minerals haulage / transport strategy?	• Nature, scope and number of public nuisance complaints / non-compliances targeted at operators • Number / scope of implementation of clean and low emission technology initiatives • Design and adoption of strategic level carbon dioxide / greenhouse gas accounting procedures – need to be measurable, easily adoptable and	3,5,8

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
	• Encourage the use of 'clean' / low emission technologies? • Provide a clear strategy for the safe handling, storage and disposal of ozone-depleting substances in fridges, freezers etc • Promote partnership working between operators and environmental health officers at facilities which have historical air pollution or noise problems • Require the adoption of good practice lighting design standards at new facilities to minimise light overspill and pollution, particularly in rural locations?	meaningfully linked to operational activities • Design and adoption of management strategies that deal quantitatively with estimated generation rates for hazardous wastes, WEEE Directive, ELV Directive etc material streams • Data on destination and ultimate fate of these streams, e.g. recovery or disposal, county or country of final processing, e.g. Warwickshire, UK, other EU countries, non-EU countries, with emphasis on proactive approach to treatment, recovery and disposal as close to source as commercially practicable • Establishment of steering groups between operators and regulatory agencies specifically targeting key amenity and legislative non-compliance issues affecting Warwickshire sites	
To conserve and enhance the quality of the natural landscape and built environment	Will the WDF • Improve landscape quality and the character of open spaces and public realm? • Enhance the quality of priority areas for townscape and public realm enhancements? • Seek to minimise the visual intrusion of waste management and minerals operations through high quality architectural design and landscape treatment, while protecting and enhancing existing high quality views? • Promote the control of litter and other nuisances arising from waste collection / waste handling / disposal sites in	• Data on the locational inter-relationships between active or proposed operations and designated landscape resources • Data on the area and quality of agricultural and greenfield land affected by proposals contained in the WDF / MDF • Tangible and auditable initiatives to promote discussion with rural businesses, in particular agricultural interests, targeting potential conflict areas within the WDF / MDF as they relate to the rural economy	5,6,8

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
	urban areas and open spaces • Pay regard to statutorily protected land or other land of high environmental value? • Pay regard to rural employment and agricultural interests, ensuring that farm businesses are considered fully in the decision making process	• Architectural, environmental and landscape design awards for creative and high quality design solutions that protect residential amenity and contribute positively to the urban and rural built environment	
Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	Will the WDF • Protect and enhance the setting of Conservation Areas, Listed Buildings, SAMs and other features of cultural, historical and archaeological value • Encourage the avoidance of archaeological features and remains potentially affected by waste management operations? • Seek to promote liaison between waste operators and agencies tasked with the protection of archaeological and cultural heritage sites at vulnerable locations?	• Data on sites of archaeological and cultural heritage interest adversely or potentially affected (directly or indirectly) by waste management operations • Tangible and auditable steps taken by the waste industry to specifically redress adverse impacts on cultural heritage assets • Establishment of steering groups between operators and regulatory agencies (English Heritage, Conservation Officers, Museums Services etc.) to redress specific adverse impacts (existing or anticipated)	5,6,8
To protect and enhance soil resources	Will the WDF • Ensure that, wherever possible, new development occurs on derelict, under-used, contaminated, or previously used land? • Ensure that contaminated land is remediated as appropriate prior to development, and that	• Proportion and type of new build / new operations located on previously-used land • Ratio of previously used land : undeveloped land subject to development under the new WCS	3,6,8

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
	aftercare provisions meet regulatory requirements as a minimum? • Ensure that waste operators are obliged to adopt the highest standards of maintenance, restoration and aftercare of land	• Area of land on local authorities' Part IIA contaminated land register subject to remediation and re-use • Number of designated geomorphological sites affected by the WCS • Number of non-compliance actions taken by local authorities and / or the Environment Agency in connection with land contamination issues • Area of former waste management returned to public realm or other non-waste related uses that enhance community resources	
To preserve and protect geological features and promote geological conservation	• Protect and enhance the features of geological value • Encourage the avoidance of geological features and remains potentially affected by waste management operations?	• Number of developments which could affect features of geodiversity. • Number of RIGS and geological SSSI'S protected sites in the county	3,5,6,8
To promote the delivery of energy efficiency and carbon reduction targets	Will the WDF • Promote a proactive reduction in the volume of greenhouse gas emissions released by waste management and minerals activities across the County? • Encourage high standards of engineering design to 'future proof' structures and facilities against more extreme climate and weather events? E.g. higher	• Qualitative / quantitative monitoring system that tracks the nature and volume, at a strategic level, of greenhouse gas emissions associated with transport, energy consumption, methane emissions etc • Establish fuel efficiency / sustainable fuel type (e.g. biodiesel) targets for vehicle fleets under the	1,3,8

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
	average, and more extreme, temperatures; soil moisture deficits; urban drainage system flooding? • Prevent inappropriate development on flood plains, particularly those increasing flood risk to Warwickshire residents, or exposing waste facilities or personnel to greater risks?	control of Warwickshire and the local authorities • Proportion or absolute area of new build and development occurring on flood plains • Drafting and development of design guides, or reliance on established performance assessment tools, aimed at setting energy efficiency targets for new buildings • Area of new build subject to Sustainable Urban Drainage (SUDS) design solutions • Total waste / minerals transport km by transport mode • Average volume of waste / commodity transported by road vehicle • Volume of each waste / resource stream exported from the County, and the average kms transported to ultimate disposal / handling location • Improved operational efficiency of collection, haulage and recovery / disposal routes	
To reduce consumption of natural resources	Will the WDF • Promote sustainability principles in the design, procurement, operation and decommissioning of waste and minerals facilities? • Encourage developers and operators to subscribe to 'greening' their supply chains, by controlling and influencing the indirect environmental impacts of their operations?	• Enhanced corporate responsibility, through the publication of publicly-available annual environment reports among relevant companies, authorities and operators • Number of relevant companies and operators committed to exploring and implementing (where commercially practicable) supply chain initiatives	1,2,3,4,7,8

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
	• Reduce the consumption rates of virgin materials through sustainable construction methods, such as the re-use and recycling of secondary aggregates and demolition wastes? • Aim to develop a clearer understanding of the direct and indirect impact of operations upon natural resource demands, and the means to reduce these impacts?	among the suppliers of goods and services within the waste management and minerals sectors • Number of business and authority linkages with national and regional trade and public sector organisations that promote sustainable thinking and good practice, e.g. CIRIA, IWM, Construction Industry Environment Forum, Envirolink, CBI • Number of companies and public sector bodies designing and implementing (where none currently exist) monitoring systems that aim for a better understanding of priority natural resource issues	
To promote adherence to the movement of waste up the waste hierarchy	Will the WDF • Lead to reduced consumption of materials and resources? • Reduce specific household waste generation rates? • Increase waste recovery and recycling? • Reduce specific hazardous waste generation rates? • Encourage and deliver reduced waste volumes generated by the construction industry? • Ensure full compliance with EU, national and local waste policies and recovery targets?	• % household waste recovered rather than landfilled • % biodegradable waste sent to landfill • % industrial and commercial waste landfilled • % and absolute volume of waste recovered and recycled • Volume of hazardous waste that cannot be recovered / recycled, i.e. destined for landfill • Data on ELV waste and WEEE items • Volume of these materials exported out of Warwickshire, UK, other EU states; destination of these wastes – net importer or exporter? • Performance against national waste strategy	1,2,7,8

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
		targets and indicators • % of material recovered from kerbside collection schemes and entered into added value supply chains	
To safeguard material assets such as best quality agricultural land, Green Belt, minerals reserves and open space.	Will the WDF • Will the Ensure that areas where there are material assets are not picked for allocation for waste development ahead of land where there is a lesser value material asset ie brownfield land.	• Number of Green Belt sites / open space sites / land in Mineral Safeguarding Areas / sites on best quality agricultural land	5,6,7,8
Social			
To enfranchise the community in improving the local environment	Will the WDF Avoid neighbourhood 'dissatisfaction' as places to live adjacent to waste management and minerals facilities, thereby encouraging 'ownership'? • Aim to improve residential amenity and 'sense of place' at locations currently adversely affected by waste and minerals operations • Encourage a 'secure through design' approach to the planning of new waste management and minerals facilities, reducing the likelihood of anti-social behaviour, crime and a general sense of apprehension within the community	• Number of upheld nuisance and amenity complaints against operational waste management and minerals locations • Community engagement initiatives aimed at delivering low cost / no cost 'grass roots' enhancements to public amenity and open space	4,5,6
To improve accessibility to	Will the WDF / MDF…		1,2,3,7

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
waste management services and facilities	• Enhance the range of key waste management services available within the community? • Encourage social inclusion by ensuring that waste management and recycling services are accessible for all members of the community? • Encourage less reliance on the private car when rolling out new recycling, recovery and general waste management programmes?	• Number of civic amenity sites per household, and level of turnover (i.e. use versus amenity site capacity) • Average and maximum distance that households must travel to civic amenity sites • Volume of waste and materials going into civic amenity sites • % of major new developments (residential, commercial, industrial etc.) committing to provision of composting and 'green' waste facilities, separation of waste streams at source, etc. • Delivery of waste management strategy for major developments, including highways and infrastructure, as part of the planning application process	
Economics and Innovation			
To ensure that the waste industry plays a central role in the sustainable economic development of Warwickshire	Will the WDF Support stable employment and employment in Warwickshire? • Explore opportunities for the waste management sector to contribute to regeneration objectives, reducing economic disparities within the County?	• Number of new business start-ups in the waste management sector • New waste management related businesses surviving more than three years • Job creation in waste management technologies and sub-sectors • Qualitative and quantitative delivery of urban and rural regeneration objectives, and reduction in	2

SA Objective	Decision Making Criteria	Proposed SA Indicators	Relevant WCS (Objectives[19])
		economic disparities within Warwickshire (as contained within the Regional Economic Strategy)	
To encourage waste operators to explore new and innovative environmental technologies	Will the WDF • Explore the commercial opportunities of renewable energy production and procurement, and increased energy efficiency? • Encourage both statutory agencies and operators to explore funding opportunities for innovative technologies within the waste and minerals sectors? • Support regional policy in promoting linkages between operators and higher education establishments, to seek opportunities for the pilot scale testing and commercialisation of new ideas and technologies being developed in the academic / R&D sector?	• Contribution to renewable energy targets through the procurement and adoption of energy from waste facilities – this to be based upon a sound technical and commercial footing • Establishment of industry – higher education sector steering groups with both parties offering practical exchanges of people and knowledge to encourage knowledge and know-how transfer • Measure year on year expenditure on R&D as a percentage of total turnover	2,7

4 Waste Core Strategy Options Appraisal

4.1 Introduction -

The Waste Core Strategy has been revised and updated from 2010 onwards following the first Issues and Options Report produced in 2006 and Preferred Options in 2007. As part of the process the plan objectives were also reviewed. These new objectives replace the previous ones outlined in the 2007 Sustainability Appraisal carried out by Arup. In addition to the Waste Core Strategy Objectives it is also necessary to ensure that the Vision is also assessed as well as the 5 Spatial Options which were put forward in the Revised Spatial Options Consultation and the 16 Plan policies (8 Core Strategy policies and 8 Development Management policies).

Waste Core Strategy Objectives

Plan objectives for the Waste Core Strategy were developed and were informed by the range of considerations such as the baseline information within this SA Report and with regard to the international, national, regional and local policy context as well as the extensive consultation processes carried out during the course of the Core Strategy. The plan objectives were selected as follows:

WCS1 To deliver sustainable waste management development by managing waste as a resource and by moving it up the waste hierarchy.

WCS2 To enable the provision of waste management infrastructure to meet an identified need and ensure that the county has equivalent self sufficiency in waste management, recognising that specialisation and economies of scale within the waste management industry will require cross boundary movements of waste.

WCS3 To ensure that new waste developments are located in the most sustainable and accessible locations, proximate to waste arisings and use the most sustainable transport mode.

WCS4 To engage and empower communities in the waste planning process, ensuring that people recognise the contribution that the waste management industry makes to creating sustainable communities through waste reduction, re-use and recovering value from waste, whilst also contributing to the local economy.

WCS5 To protect human health and amenity from any adverse effects of waste management development.

WCS6 To conserve and enhance the natural, built, cultural and historic environment and avoid or mitigate potential adverse effects associated with the provision of waste management infrastructure.

WCS7 To safeguard suitably located and permanent existing waste management sites from non waste developments.

WCS8 To encourage high quality sustainable design of waste management facilities, to minimise and mitigate against the impact of waste activities on climate change, flooding and water quality.

These objectives set out how we intend to implement the principles of the waste hierarchy in delivering sustainable waste management infrastructure in the county over the next 15 years. The issues to which the objectives refer are discussed in some detail throughout the document and reflected in the waste management policies which are set out in the Strategy

4.2 Testing the Plan Objectives and SA Objectives

An appraisal was undertaken of the plan objectives and the SA objectives to identify tensions or areas of potential conflict. Each of the plan objectives was assessed against each of the SA objectives. The matrix included below illustrates the conformity or tensions that exist between the plan objectives and the SA objectives.

Summary of the Objectives Assessment

The Assessment of the Objectives demonstrates that there are no potential areas of conflict between the WCS Objectives and the SA Objectives, which would be expected at this stage of the Waste Core Strategy Consultation process. Most of the SA Objectives are only highly compatible in terms of one or two of the WCS Objectives.

WCS Objectives 6 (to conserve and enhance the natural, built, cultural and historic environment and avoid or mitigate potential adverse effects associated with the provision of waste management infrastructure) covers many different types of feature and covers designated site sand the non designated areas. Consequently there this objective cross references well with many of the SA Objectives. Similarly Objective 8 (to encourage high quality sustainable design of waste management facilities, to minimise and mitigate against the impact of waste activities on climate change, flooding and water quality) also is highly compatible with several SA objectives namely flooding and water quality but it also has considerable benefits with the general protection of amenity and the environment which may help protect human health the landscape and biodiversity. In terms of the SA Objectives the two which scored highly when compared to the WCS objectives were SA Objective 9 - To promote the delivery of energy efficiency and carbon reduction targets and 10 – To reduce consumption of natural resources. Both objectives related well to the thrust of the plan and linked well to the concepts of the Waste Hierarchy, the proximity principle ie siting waste management facilities close to where waste arises.

WCS Objective 3 also links in to this theme as its aim is is to ensure that new waste developments are located in the most sustainable and accessible locations, proximate to waste arisings and use the most sustainable transport mode. The thrust of this is the principle of proximity of linking waste sites close to where it arises. This fits well with the SA Objective 13.

Generally there are no objectives which contradict either the SA or the WCS.

Table 4.1 Matrix for the Comparison of WDF Core Strategy Objectives and SA Objectives

SA Objective		WCS Objective 1	WCS Objective 2	WCS Objective 3	WCS Objective 4	WCS Objective 5	WCS Objective 6	WCS Objective 7	WCS Objective 8	Comments
1	**Conserve and enhance biodiversity**	+	0	+	0	+	++	0	+	The SA Objective most closely correlates with the WCS Objective 6 to protect the natural environment. Conserving and enhancing biodiversity can benefit from good design of waste facilities when applications are submitted. Treating waste efficiently using the principles of the Waste Hierarchy and Proximity Principle may indirectly relieve pressure on biodiversity through the use of brownfield land and industrial estates for waste sites in urban areas. It may be difficult to assess any benefit or adverse impact until a specific planning application is submitted.
2	**Protect and improve water resources and quality.**	++	0	+	0	++	+	0	++	The SA objective sits well with Objectives 5 and 8. ie to protect human health from the adverse effects of waste developments and to encourage high quality sustainable design to

SA Objective		WCS Objective 1	WCS Objective 2	WCS Objective 3	WCS Objective 4	WCS Objective 5	WCS Objective 6	WCS Objective 7	WCS Objective 8	Comments
										minimise the impact on water quality. There may also be some close correlation with Objective 1 which is to deliver sustainable waste management. The other objectives are a mix of neutral impacts or very slight positive ones.
3	**Avoid, reduce and manage flood risk**	++	0	0	0	++	+	0	++	Similar outcomes as SA Objective 2 are expected for the same reasons as set out above for water quality.
4	**To safeguard environmental quality in order to minimise potential impacts on community health**	++	+	+	+	++	0	0	++	WCS Objectives 5 and 8 in common with most of the environmental objectives in the Waste Core Strategy accord well with the SA Objective to safeguard environmental quality to minimise impacts on community health. Environmental impacts can affect community health quite strongly whereas protection from flooding, safeguarding water quality and general protection of environmental impact will be beneficial to human health.

SA Objective		WCS Objective 1	WCS Objective 2	WCS Objective 3	WCS Objective 4	WCS Objective 5	WCS Objective 6	WCS Objective 7	WCS Objective 8	Comments
5	**To conserve and enhance the character and quality of the County's landscapes, townscapes and built environment**	+	0	0	0	0	++	0	+	Sustainable forms of waste management are likely to enable the conservation of landscapes. High quality design is likely to retain existing landscape and the built environment. WCS Objective 6 is most relevant in terms of the SA objective. Most WCS objectives are neutral in terms of the SA.
6	**Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings**	+	0	0	0	0	++	0	+	The SA Objective most closely correlates with the WCS Objective 6 to protect the natural environment. There may also be some close correlation with Objective 1 which is to deliver sustainable waste management.
7	**Protect soil resources**	++	0	+	0	0	+	+	++	Reduction of waste going to landfill will help protect soil resources. Safeguarding of existing sites helps reduce pressure on new greenfield land. High quality design in relation to water will take soil resources in to account.

SA Objective		WCS Objective 1	WCS Objective 2	WCS Objective 3	WCS Objective 4	WCS Objective 5	WCS Objective 6	WCS Objective 7	WCS Objective 8	Comments
8	**To preserve and protect geological features and promote geological conservation**	+	0	0	0	0	++	0	+	The SA Objective most closely correlates with the WCS Objective 6 to protect the natural environment. There may also be some close correlation with Objective 1 which is to deliver sustainable waste management.
9	**To promote the delivery of energy efficiency and carbon reduction targets**	++	+	++	+	0	0	+	++	High quality design (Objective 8) can enable the promotion of energy efficiency and carbon reduction through the incorporation of energy efficiency measures. Sustainable waste management processes (Objective 1) will enable carbon reduction targets to be met as will the sustainable location of waste facilities (SA Objective 3)
10	**Reduce consumption of natural resources**	++	+	++	+	0	+	++	++	High quality design (Objective 8) can enable the promotion of energy efficiency and carbon reduction through the incorporation of energy efficiency measures. Sustainable waste

SA Objective		WCS Objective 1	WCS Objective 2	WCS Objective 3	WCS Objective 4	WCS Objective 5	WCS Objective 6	WCS Objective 7	WCS Objective 8	Comments
										management processes (Objective 1) will enable carbon reduction targets to be met as will the sustainable location of waste facilities (SA Objective 3). By reaching carbon reduction targets (see above) it will inevitably reduce the consumption of natural resources.
11	**To promote adherence to the movement of waste up the waste hierarchy**	++	+	++	0	0	0	+	+	The SA objective sits well alongside WCS Objectives 1 and 3 (to deliver sustainable waste management by treating waste as a resource. I.e. move it up the waste hierarchy) and ensuring facilities are located in the most sustainable and accessible locations. Safeguarding waste sites will help
12	**Enfranchise the community in improving the local environment**	0	+	+	++	+	+	0	0	WCS Objective 5 is undoubtedly the most in accordance with the SA Objective. Several other WCS Objectives are addressed indirectly. No negative impacts are predicted.

SA Objective		WCS Objective 1	WCS Objective 2	WCS Objective 3	WCS Objective 4	WCS Objective 5	WCS Objective 6	WCS Objective 7	WCS Objective 8	Comments
13	**Improve accessibility to waste management services and facilities**	+	+	++	0	0	0	+	+	WCS Objective 3 (accessibility and sustainability) is in accordance with the SA Objective. WCS Objective 1 in promoting sustainable waste management will also have a minor beneficial impact. WCS Objective 3 is to ensure that new waste developments are located in the most sustainable and accessible locations, proximate to waste arisings and use the most sustainable transport mode. The thrust of this is the principle of proximity of linking waste sites close to where it arises. This fits well with the SA Objective 13.
14	**To ensure that the waste industry plays a central role in the sustainable economic development**	++	+	+	+	0	+	+	0	Treating waste as a resource using the principles of the Waste Hierarchy, will deliver economic benefits to the community (WCS Objective 1).

SA Objective		WCS Objective 1	WCS Objective 2	WCS Objective 3	WCS Objective 4	WCS Objective 5	WCS Objective 6	WCS Objective 7	WCS Objective 8	Comments
	of Warwickshire									
15	**To encourage waste operators to explore new and innovative environmental technologies.**	+	+	+	0	0	+	0	+	No one WCS objective stands out as being particularly strong in relation to this SA Objective. Several of the WCS Objectives could be indirectly closely correlated though. For instance making design more sustainable (WCS8) could give incentives for the waste industry to make new developments to explore new technologies as could being more creative about how waste can be made in to a resource (WCS Objective1).
16	**To safeguard material assets such as best quality agricultural land, minerals and open space**	+	0	+	0	+	++	++	+	WCS Objective 7 ensures that existing waste sites are retained which means that more capacity is retained in areas which do not generally pose a threat to material assets. WCS Objective, if achieved, 6 will ensure most material assets are protected. The other objectives only match to a limited degree with the SA

SA Objective		WCS Objective 1	WCS Objective 2	WCS Objective 3	WCS Objective 4	WCS Objective 5	WCS Objective 6	WCS Objective 7	WCS Objective 8	Comments
										Objective.

Key

++	Highly Compatible
+	Compatible
0	Not related/ Neutral
×	Not compatible
?	Uncertain link

Appraisal of Waste Core Strategy Vision till 2028

Waste Core Strategy Vision till 2028

By the end of the plan period in 2028, Warwickshire will have delivered equivalent self sufficiency in its waste management capacity, having met its identified treatment gap and enabled the development of a range of sustainable waste facilities in the most sustainable locations. Development will have been focused within and around the main primary centres of waste arisings of the major towns of Warwick, Leamington, Nuneaton, Bedworth, Kenilworth, Stratford and Rugby and in the most sustainable secondary locations of Atherstone, Coleshill and Southam. Cross boundary waste management links, especially those with the sub-region, will continue to be recognised.

All new waste developments will have facilitated the management of waste in accordance with the principles of the Waste Hierarchy. The volume of waste produced per person will have reduced significantly from 2011 levels and waste will have been treated as a resource and led to the reduction in the use of natural resources in moving towards a zero waste economy. Recycling, composting and energy recovery will have increased significantly in the county to meet national targets in line with the Waste Framework Directive and waste to landfill will have been minimised, with the County Council having met its landfill diversion targets.

Waste management facilities will be of high quality design and will have minimised greenhouse gas emissions and mitigated against climate change. In delivering Warwickshire's waste management capacity, the Core Strategy will have safeguarded communities from adverse environmental impacts, protected human health, amenity and well-being and will also have protected and enhanced the natural, historic, cultural and water environment of the county.

Engagement and communication with local communities, industry and landowners will have enabled a greater understanding of the principles of sustainable waste management. In turn this will have facilitated waste reduction and prevented the unnecessary use of resources by promoting the value of managing waste a resource and recognising the importance of communities taking responsibility for their own waste.

The Vision was assessed against the 16 Sustainability Appraisal Objectives. It was found that the Vision accommodates all the objectives to a greater or lesser degree as would be expected. Most of the objectives score either "Major Beneficial" or "Beneficial". The only objectives which do not score so well are the SA Objectives 14 and 15 "to ensure that the waste industry plays a central role in the sustainable economic development of Warwickshire and to encourage waste operators to explore new and innovative environmental technologies". These were both given a neutral / beneficial score. These objectives could be secures indirectly through the implementation of the principles of the Waste Hierarchy and the Principle of Proximity.

Table: 4.2: SA Objectives

SA Objectives			Comments
1	Conserve and enhance biodiversity	+/+	The Vision seeks to protect and enhance the natural environment of the county. This is a general statement which seeks to include all species and habitats whether of local, national and international importance. This is in line with national planning guidance.
2	Protect and improve water quality and resources	+/+	The Vision seeks to safeguard all aspects of the water environment.
3	Avoid, reduce and manage flood risk	+	The Vision also seeks to safeguard the water environment including flood risk.
4	To safeguard environmental quality in order to minimise potential impacts on community health	+	This is an important element of the Vision whereby it is recognised that if communities are adequately safeguarded from the adverse impacts of waste developments which can include noise, dust and odour.
5	To conserve and enhance the character and quality of the County's natural landscapes, and built environment.	+/+	All aspects of the natural, historic and cultural environment are reflected in the Vision which seeks to ensure that they are adequately safeguarded.

SA Objectives			Comments
6	Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	+/+	All aspects of the natural, historic and cultural environment are reflected in the Vision which seeks to ensure that they are adequately safeguarded.
7	Protect soil resources	+	All aspects of the natural, historic and cultural environment are reflected in the Vision which seeks to ensure that they are adequately safeguarded.
8	To preserve and protect geological features and promote geological conservation	+	All aspects of the natural, historic and cultural environment are reflected in the Vision which seeks to ensure that they are adequately safeguarded.
9	To promote the delivery of energy efficiency and carbon reduction targets	+	Energy efficiency and carbon reduction is reflected in the Vision through the adherence to the Waste Hierarchy and through the delivery of a Strategy based on the Principle of Proximity.
10	Reduce consumption of natural resources	+/+	By adhering to the principles of the Waste Hierarchy the Vision sits well with this SA Objective as the first principle of the Hierarchy will be to reduce waste rather than create waste for treatment or disposal. This will ensure that the consumption of natural resources is substantially reduced.
11	To promote adherence to the movement of waste up the waste hierarchy	+/+	This principle underpins the whole Core Strategy and is reflected in the Key Issues, the Vision, Objectives and Policies.

SA Objectives			Comments
12	Enfranchise the community in improving the local environment	+	The Vision seeks to require the promotion the value of managing waste as a resource such as through the engagement with the general public via campaigns such as "Love Food Hate Waste" to ensure that they understand the principles of sustainable waste management. It also sets out the principle of communities taking responsibility for their own waste.
13	Improve accessibility to waste management services and facilities	+	One of the main principles of the Vision is the development of a range of waste management facilities in the most accessible locations. This is reflected in the Preferred Spatial Strategy where new waste developments will be located in and around the main urban centres of population in the county. Improving accessibility will reduce the transport impacts of waste developments.
14	To ensure that the waste industry plays a central role in the sustainable economic development of Warwickshire	0+	The SA objective is quite aspirational. However it is recognised that waste management is one area of the economy which is growing in importance and will be provide future employment in the county as well as ensuring that companies know they can have their waste collected safely and effectively in the local area. The location of new waste sites in and around urban areas will enable reduced transport costs to operators and the public.
15	To encourage waste operators to explore new and innovative environmental technologies.	0+	Whilst this is not a direct element of the Vision, the objective is covered by providing a flexible spatial strategy which would allow future waste development in a variety of different locations both urban and rural to harness future opportunities.
16	To safeguard material assets such as best quality agricultural land, minerals and open space	+	The Vision seeks to protect all material assets.

Table 2.3 Criteria to Determine Significance of Effects

Significance of effect		Definition/Criteria of Significance
+/+	Major beneficial	A beneficial effect which may have a long lasting or permanent effect or will benefiting a large number or variety of receptors
+	Beneficial	A beneficial effect which may have a temporary or short lived effect, or only likely to affect a limited number of receptors
0	Neutral	Either there are no effects predicted, or the effects that are predicted will cancel each other out (e.g. the effects of an adverse impact being mitigated by the beneficial effects resulting from another effect)
-	Minor adverse	An adverse effect, which is relatively short lived or does not affect the most sensitive or important receptors
-/-	Major adverse	An adverse effect that is either permanent or long term affecting a very sensitive receptor or a high number of receptors
?	Unknown	Unable to make an assessment of significance because of uncertainty in the prediction of likely effects

4.3 Developing Waste Core Strategy Options

The SEA Directive stipulates that the Environmental Report contain 'reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme' and in addition provide 'an outline of the reasons for selecting the alternatives dealt with'[20].

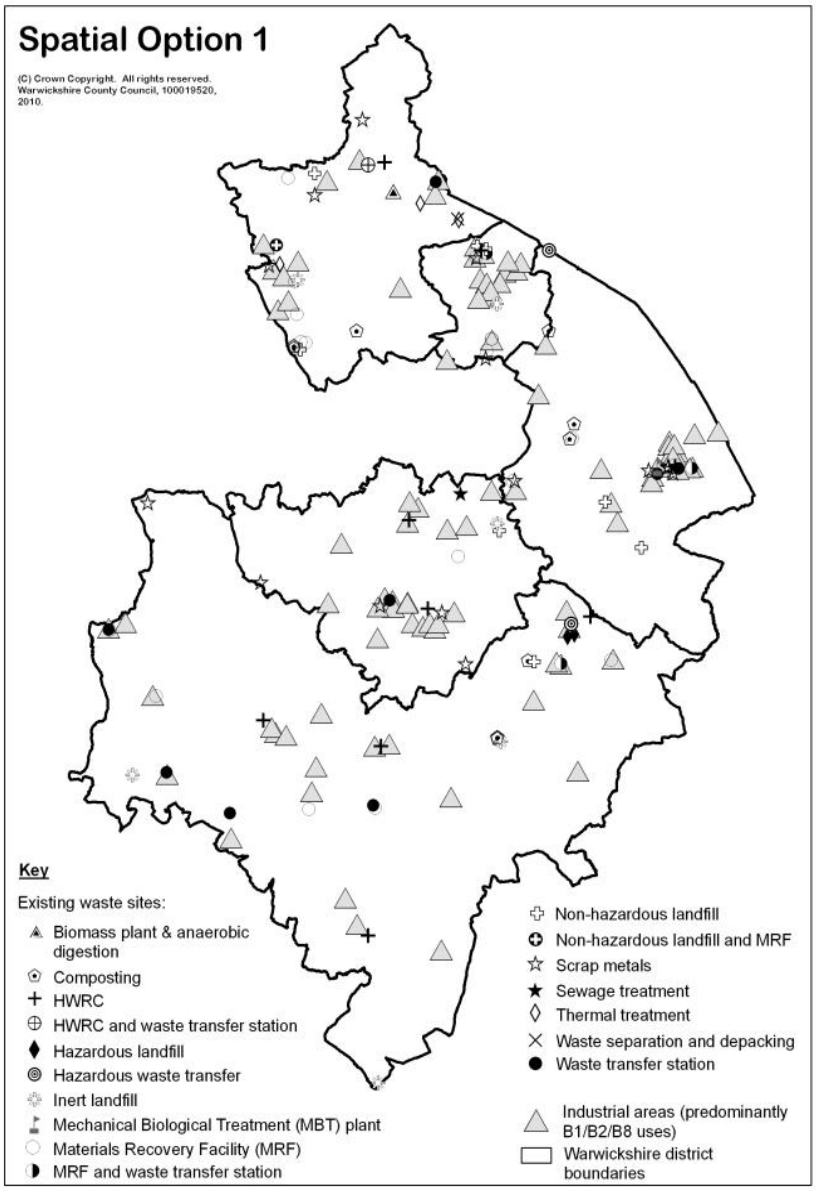
The appraisal process initially involved the assessment of each option against 14 SA objectives. Following consultation on the SA Scoping Report in 2012 and the amendment and addition of objectives, the appraisal process was repeated to take account of the full 16 SA objectives. The matrices produced from this process are documented within this report under Appendix E. Initially the appraisal assumed the worst case scenario where mitigation or enhancement measures are not implemented. Then suitable mitigation measures or enhancement opportunities are identified. In developing the options, it should be noted that consultation was a key factor.

The five options put forward are set out below which give different spatial emphasis from options which are very dispersed around the county and ones which are highly concentrated in urban areas. Each option has been assessed through the methodology set out above in section 4.2 and from this it has been possible to ascertain which option should be taken forwards as a Preferred Option which is effectively the Spatial Strategy of the Waste Core Strategy.

[20] Article 5.1 and Annex I(h)

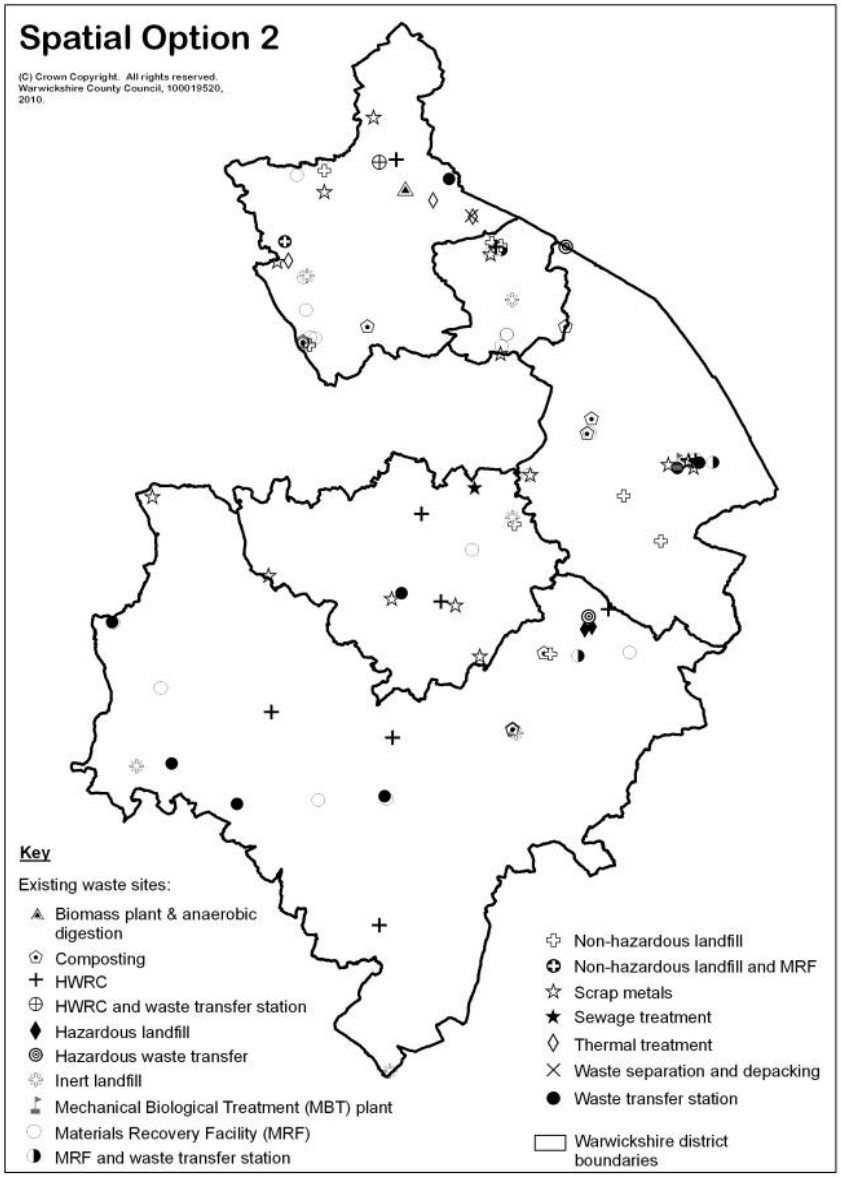
1. Develop new facilities County wide on industrial estates, brownfield industrial land and existing waste management facilities.

Figure 4.1: Spatial Option 1



2. Develop new facilities County wide on existing waste management facilities.

Figure 4.2: Spatial Option 2



3. Develop new facilities on industrial estates, brownfield industrial land and existing waste management facilities within the main settlements of over 6000 population* within Warwickshire: Alcester, Atherstone, Bedworth, Bulkington, Coleshill, Kenilworth, Leamington Spa, Nuneaton, Polesworth and Dordon, Rugby, Southam, Stratford, Warwick and Wellesbourne.

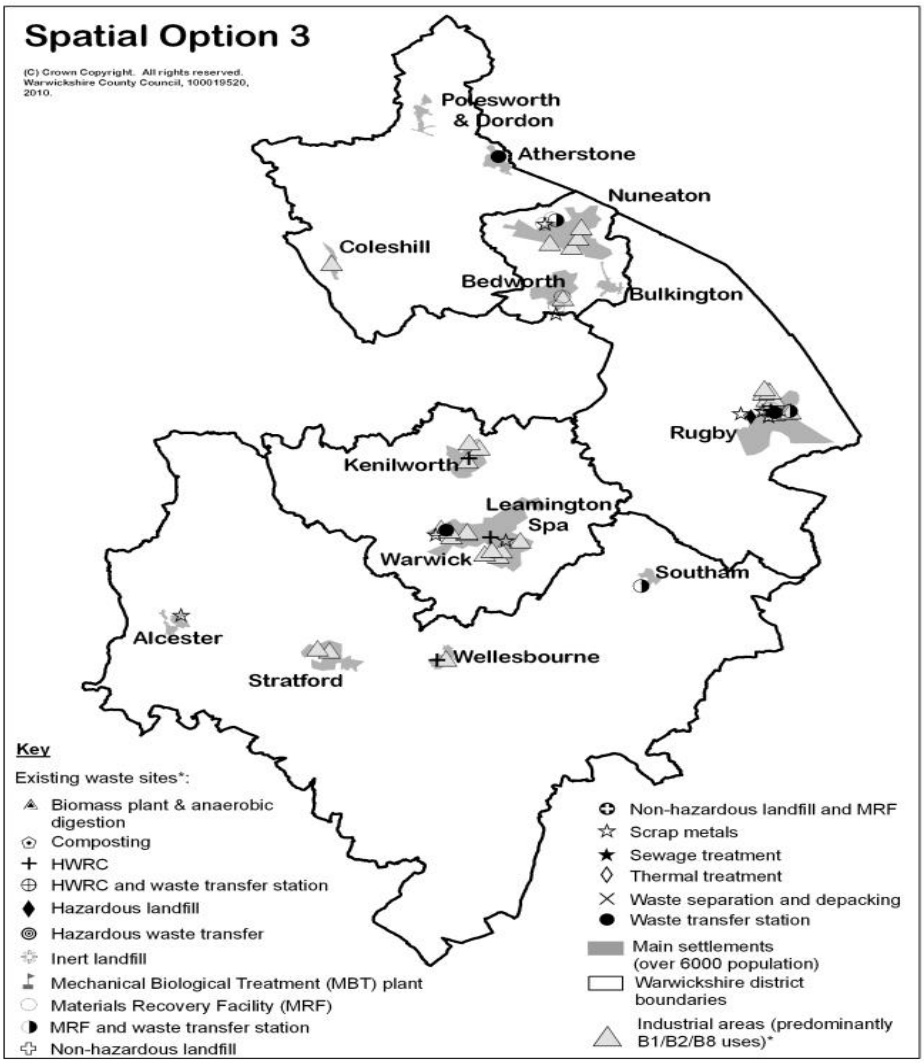
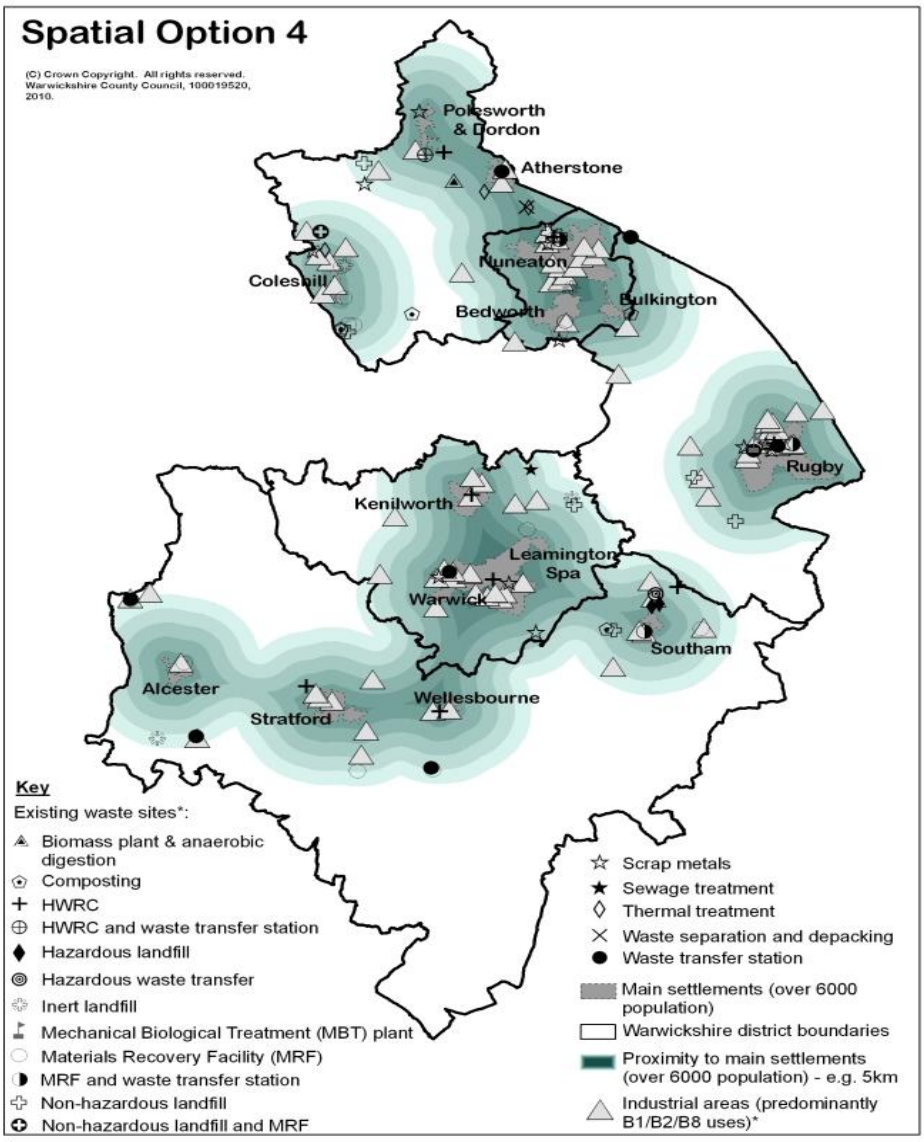


Figure: 4.3: Spatial Option 3

** Source: Warwickshire Observatory; National Statistics mid-2008 estimates (www.statistics.gov.uk)*

4. **Develop new facilities on industrial estates, brownfield industrial and existing waste management facilities within, or in close proximity (***i.e. within approximately 5km)* **to the main settlements of over 6,000 population * i.e. Alcester, Atherstone, Bedworth, Bulkington, Coleshill, Kenilworth, Leamington Spa, Nuneaton, Polesworth and Dordon, Rugby, Southam, Stratford-upon-Avon, Warwick and Wellesbourne.**

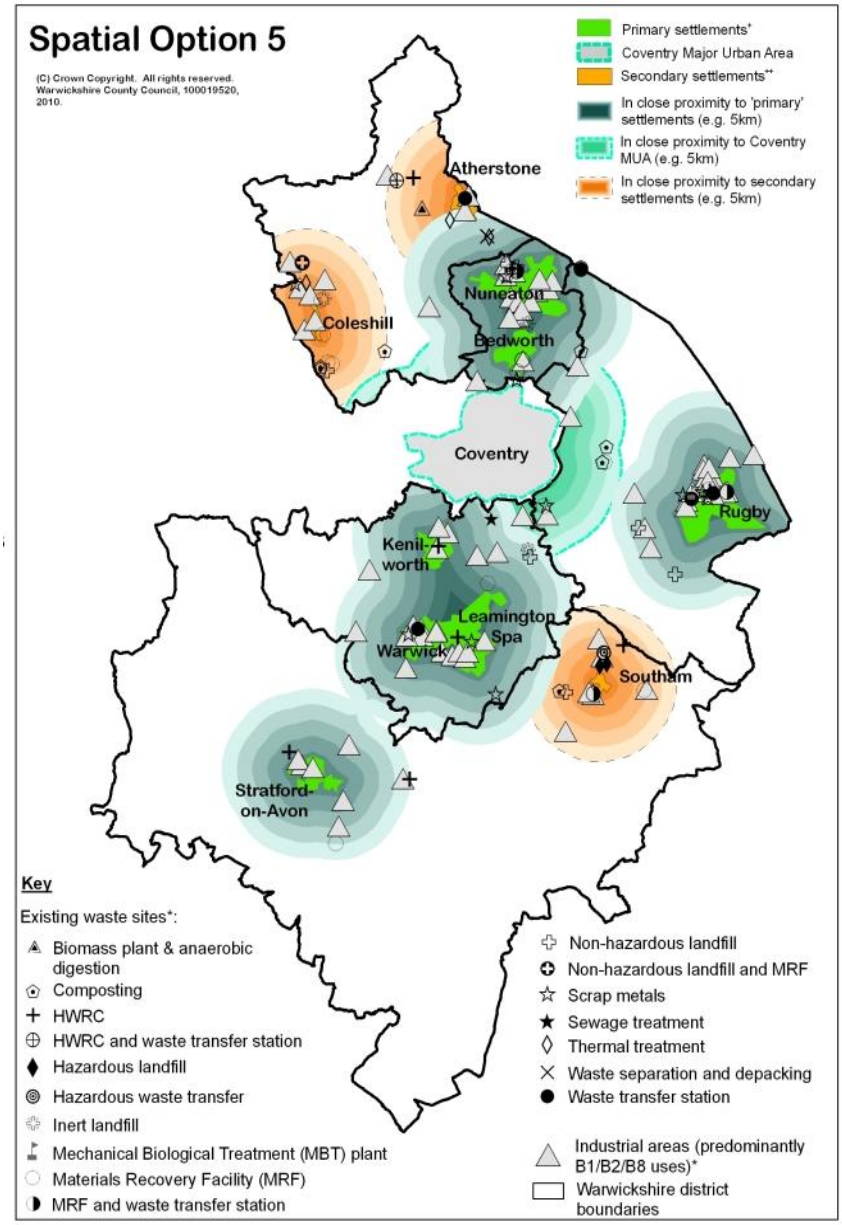


*** Source: Warwickshire Observatory; National Statistics mid-year estimates (www.statistics.gov.uk)**

Figure 4.4: Spatial Option 4

5. A 'settlement hierarchy' option based on areas of higher population and/or existing waste management capacity -

i.e. Develop facilities on industrial estates, brownfield industrial land and existing waste management facilities within the following locations:



Source: Warwickshire Preferred Options and Policies Report Sept 2011

Figure 4.5: Spatial Option 5

Notes on Option 5

i. priority given to within and/or in close proximity *i.e. within approximately 5km* to the 'primary' settlements [+] *Primary settlements are defined as the main settlements of over 20,000 population - Source: Warwickshire Observatory; National Statistics mid-year population estimates (www.statistics.gov.uk)* of Nuneaton, Rugby, Leamington Spa, Bedworth, Warwick, Stratford-upon-Avon and Kenilworth; or within 5km of the Coventry Major Urban Area (MUA); or

ii. within and/or in close proximity to the 'secondary' settlements [++]*Secondary settlements are defined as those settlements of over 6,000 population (source as above) that currently deliver a comparatively high proportion of existing waste management capacity.* of Atherstone, Coleshill and Southam where it is demonstrated that the development provides significant transport, operational and environmental benefits; or

iii) sites outside primary and secondary settlements where specific types of waste development might be acceptable where there are no unacceptable adverse environmental effects.

Comparison of Social, Environmental & Economic Effects

Appendix C sets out the matrices of all the 5 Options and describes the social, environmental and economic effects of each of the various options when assessed against the 16 SA Objectives. The approach to the assessment of options and the techniques employed therein are described in Section 2.3 of this SA Report. In addition, the table 4.3 below illustrates the range of factors that were considered for each of the SA Objectives when applied to the options.

Mitigation measures are afforded by means of thorough selection of preferred solutions in terms of minimal social, environmental and economic effect. The further refinement of certain options provides another tier of mitigation. Table 4.4 provides a summary of the performance of each of the options for each of the plan issues against the SA objectives in the long term. Preferred options i.e. options that were refined during the consultation period, are discussed in Sections 4.5 and 4.6.

Table 4.3 Considerations for Each SA Objective

SA Objective	Considerations in Assessing Options
1. Conserve and enhance biodiversity	Due consideration was given to the conservation and enhancement of biodiversity assets and resources. The nature of sites in terms of their designated status and intrinsic value was taken into consideration, as was the importance for those non designated sites. Due reference was made to the policy assessment conducted during SA Stage A and the baseline characterization exercise in assessing value. In terms of enhancement potential for biodiversity offsetting and green corridor development was also a consideration
2. Protect and improve water quality and resources	Due consideration was given to the capacity of the options to affect water resources in terms of water quality and potential supply.

SA Objective	Considerations in Assessing Options
3. Avoid, reduce and manage flood risk	In conducting the assessment, the options were considered against the potential effect upon water resources and, under this objective, the particular implications for flooding in accordance with the provisions of PPS25 Development and Flood Risk. This included the potential for the plans to support mitigation measures to offset potential effects on floodplain
4. To safeguard environmental quality in order to minimise potential impacts on community health	In applying this objective, due consideration was given to the extent to which the plan may influence factors having a consequence for community health for example the effects on localized emissions of fugitive dusts or an increase in nitrogen dioxide levels within an Air Quality Management Area. This objective was also considered in terms of the capacity for the plan to influence restoration and aftercare of waste management facilities i.e. providing community recreational resources
5. To conserve and enhance the character and quality of the County's natural landscape and built environment	The assessment reviewed the potential for the WCS to influence THE rural landscape and built environment through the scale and location of waste management facilities. In particular, it was considered whether the plan would maintain and seek to enhance areas of open space and the countryside and support landscape character areas
6. Preserve and enhance sites, features and areas of historic, archaeological or architectural importance, and their settings	Due consideration was given to the extent to which the plan would influence statutorily and non statutorily protection heritage assets including Listed Buildings, Conservation Areas and Scheduled Ancient Monuments. This extended to both an evaluation of the capacity for direct losses to features and indirect influences upon their setting
7. Protect soil resources	The extent to which the WDF would avoid adverse effects upon soil resources and seek to protect and enhance them was considered through this SA objective
8. To preserve and protect geological features and promote geological conservation	The assessment considered the extent to which the plan would maintain and protect geological features such as Regionally Important Geological and Geomorphological Sites (RIGs)
9. To promote the delivery of energy efficiency and carbon reduction targets	This objective sought to promote a consideration of the plan effects upon energy efficiency with a view to assisting in combating climate change both through operational practices within waste treatment facilities and the method of transporting waste to and from these facilities
10. Reduce consumption of natural resources	A consideration was given to the capacity of the plan to influence resource waste minimization, waste recovery and reuse rather than placing an increased burden upon natural resources
11. To promote adherence to the movement of waste up the	The extent to which the plan would assist in moving waste up the hierarchy, placing a greater emphasis on resource recovery and reuse rather than disposal was assessed

SA Objective	Considerations in Assessing Options
waste hierarchy	
12. Enfranchise the community in improving the local environment	Due consideration was given to the capacity of the plan to encourage community-led / supported schemes to combat the production of waste and to encourage recovery, reuse and recycling
13. Improve accessibility to waste management services and facilities	The extent to which the plan was able to assist in the incorporation of waste management facilities in development and to align facilities in proximity to the source of waste was considered under this objective
14. To ensure that the waste industry plays a central role in the sustainable economic development of Warwickshire	A consideration was given to the capacity of the plan to support economic development within Warwickshire through appropriate new commercial and industrial development, addressing employment needs and providing a diverse market
15. To explore linkages between the waste and minerals sectors	Due consideration was given to the extent to which the plan may assist in identifying opportunities for sites used for mineral extraction providing appropriate waste management treatment facilities, whilst allowing for aftercare and restoration programmes
16. To safeguard material assets such as best quality agricultural land, minerals and open space	Consideration was given to ensure material assets are not affected by new and existing waste facilities and infrastructure.

Developing the Preferred Option

Warwickshire County Council utilised the SA to inform the decision making in respect of the Preferred Option. It should be noted that whilst the SA played an important role in shaping the options and policy directions pursued, it was by no means the only aspect informing the selection. Thus, in accordance with the SEA Directive and SA Guidance, the SA was used to assist in the decision making process but was not used to make the decision.

The comparative performance of each of the various options was described in relation to each SA Objective. This along with consultation feedback informed the development of a preferred solution.

The potential effects of the Preferred Option were then described as far as possible given the lack of detailed information on implementation of the respective draft policies. Potential effects were also described in terms of relative severity and anticipated duration. These were later used to inform the description of cumulative impacts.

4.4 Assessing the Preferred Option

The 5 spatial options were consulted on in the Emerging Spatial Options Consultation in March 2012. The assessment of the options

The SA matrices comparing the performance of the options is included in full within Appendix C. These matrices include a description of the predicted beneficial and adverse effects of the Preferred Options together with suitable enhancement and mitigation

programme.

Option 1 has a very dispersed pattern of development on existing waste sites industrial estates and previously developed land on industrial estates. It has sustainability advantages in that much of the infrastructure is already in place, transport routes are already in place and there is also a large choice of sites available. In terms of benefits, development on existing sites would not harm biodiversity, archaeology, geology and should ensure protection of the natural environment to enable protection of human health. Where some facilities are located in the more remote areas they may have benefits in terms of being located away from people.

Conversely a dispersed approach means that there are not so many advantages with economies of scale with a small number of larger facilities potentially being more efficient in dealing with much larger tonnages of waste than a large number of smaller facilities. More centralised facilities in urban areas would be more likely to be accessible to a larger population than the dispersed approach such as Option 1 as evidence shows that the majority of waste arisings come from the urban areas for the largest waste streams (Municipal, C & I and C & D) . A dispersed approach will also be less efficient in use of resources and energy useage as this would require more vehicle movements around the county which in turn requires greater use of energy and potentially greater amounts of carbon emissions. In some cases these sites may have poor accessibility.

Enhancement potential was considered to be limited in this option.
The score for this option was ST= -1 MT= -1 LT= -3

Option 2 also has a dispersed pattern of development proposing development only on existing waste sites. The advantages are broadly similar with the added advantage that treating waste is already an accepted use at all of the sites. It may be favourable in comparison to Option 1 in that it would be slightly less dispersed as there would be fewer sites available and a fair proportion of the sites are located already in the urban areas which may accrue some transportation, accessibility and carbon reduction advantages. With fewer sites available there would be less potential for environmental impacts and so this would be slightly better than Option 1

The disadvantage with this option are that it would restrict the amount of waste management capacity in the county by not allowing other types of site to be used and a proportion of the sites My be existing sites only with temporary permissions or uses which have been attained by virtue of being a lawful use whilst not always a desirable use for that particular area and one that might not be encouraged in the future, This option would make it harder to stop undesirable operations especially if waste treatment capacity was low in the county. Being constrained by only using waste sites as an option, could stop future innovation in terms of uses like Anaerobic Digestion plants or composting on farm sites. Also it could discourage new developments in areas where new facilities would be beneficial in terms of new development for housing and industry.
The score for this option was ST= -1 MT= -1 LT= -3

Option 3 comprises all potential new waste developments on industrial estates brownfield land and existing waste management facilities within the settlements of over 6000 population. A very centralised pattern of development would make sites very accessible to the majority of the population and make waste collection easier to implement as it attracts economies of scale. The option also allows better accessibility to waste facilities around the county centralising on the major towns whilst enabling carbon reductions and energy efficiency

In terms of disadvantages the option is quite restrictive in limiting the scope for meeting the county's capacity gap through the development of innovative types of facility on farms and industrial land outside the main settlements of over 6000 population. Whilst the effect on many of the environmental SA objectives, whilst ensuring the protection of biodiversity, the natural environment, geodiversity, archaeology etc it it is restrictive in allowing for any further enhancements in these areas.
The score for this option was ST= +9 MT= +9 LT= +13

Option 4 proposes new waste management facilities on industrial estates, brownfield industrial land and existing waste management within or in close proximity to the main settlements of over 6000 population. This is an adaptation of Option 3 but with a degree of flexibility built in, to accommodate the urban fringe and countryside within 5km of the main settlements over 6000 population. The options scores quite well in terms of most SA Objectives. The advantages are that the option targets the main areas where the majority of the population lives and this would be good in terms of transport impacts, reduced carbon emissions reduced energy useage and higher accessibility. As in most of the options it is difficult to assess the effects on some of the other environmental factors until detailed planning application stage. Many of these SA Objectives appear to have similar outcomes.

In terms of disadvantages, the Option is probably better than the options 1-3 as it is more targeted towards settlements with some of the highest arisings but it targets some settlements with lower waste arisings as it makes no distinction between the largest settlements over 20000 and the smaller settlements of 6000 population. The option does not target the Coventry LEP unlike Option 5. It also excludes some of the more remote existing waste sites in the county.
The score for this option was ST= +10 MT= +10 LT= +12

Option 5 proposes a settlement hierarchy based on areas of higher population ie over 20000 which are Primary Settlements and those of 6000 population which are Secondary Settlements. Large scale facilities (ie those managing more than 50000 tonnes of waste per annum) would be steered to these areas. Smaller scale facilities under 50,000 tonnes could potentially be considered on various sites subject to according with a criteria based policy.

The advantages are that the option is more focussed to allow larger waste developments to be better targeted closer to the main sources of arisings as it refines the strategy down to the main smaller settlements which are concluded to have the best transport accessibility and a concentration of existing waste facilities.

Unlike Option 4 it does not exclude the existing waste sites in some of the rural areas which are not in the primary and secondary settlements because it still would enable small scale development in this areas. In enabling this to happen it provides greater flexibility to enable innovation and small scale economic enterprise in more rural areas to manage waste at local scale.

Economically it is also better than Option 4 which is the most similar option to it, because it also recognises the cross boundary movements of waste and the Council's duty to co-operate by including the area around Coventry, which also includes several waste facilities and a number of large scale brownfield sites. In other respects it is similar to Option 4 in terms of the environmental factors and social factors.

The option performs well against the SA Objectives in terms of transport impacts, reduced carbon emissions reduced energy useage and higher accessibility because it targets the main urban areas and at the same time allows for economies of scale which is likely to be attractive to the waste industry.

As in most of the options it is difficult to assess the effects on some of the other environmental factors until detailed planning application stage. Many of these SA Objectives appear to have similar outcomes.

In regard to negative impacts, it is possible that focussing development to the main urban areas could lead to some adverse impacts close to the larger populations. It was considered that there are satisfactory safeguards in terms of planning and permitting whereby adverse effects could either be mitigated or enhancements could be derived and that most of these would be tested at planning application stage. As in most of the options it is difficult to assess the effects on some of the other environmental factors until detailed planning application stage. Many of these SA Objectives appear to have similar outcomes.
The score for this option was ST= +13 MT=+13 LT= +16

Therefore, on balance, using the SA as a guide to decision making, it was considered there were a number of sustainability advantages to choosing Option 5 as the Preferred Option and the eventual Spatial strategy for the plan. This is the Option that has formed the basis of the Waste Core Strategy. The Matrix used for Option 5 is set out below. All the matrices for all the Options are set out in

4.5 Assessing the Waste Core Strategy Policies

A number of policy principles were consulted upon in the Emerging Spatial Options document in March 2011 which had originated from the WCS key issues. These were developed further in to a set of 8 Development Management Policies and 8 Core Strategy polices which were consulted on in September 2011. A sustainability Appraisal was carried out as part of the process of refining the policies. The SA of the policies is incorporated in to Appendix C. The conclusion from this work is that the policies can be considered to be sustainable and to comply with the SEA Regulations.

Table 4.3: Policies

Waste Core Strategy Option 5 – A 'settlement hierarchy' option based on areas of higher population and/or existing waste management capacity. i.e. Develop facilities on industrial estates, brownfield industrial land and existing waste management facilities within specified locations of higher population in Primary or Secondary Settlements.

SA Objective		Predicted Nature of Effect Positive	Predicted Nature of Effect Negative	Spatial Option Net Effect (+/+, +, 0,-, -/-)			Commentary/ Explanation *Note predicted nature of effect, how, who and where it will impact, and enhancement opportunities*	Enhancement and mitigation
				ST	MT	LT		
1	Conserve and enhance biodiversity	Unlikely to have a great impact on this objective. Some benefits possible because of development steered on to brownfield land	Unlikely to have a great impact on this objective. Less possibility of greenfield development therefore less chance of biodiversity improvements	0	0	0	Any minor benefits or negative effects will be cancelled out.	The option and policies in tandem should seek to ensure no habitat is lost.
2	Protect and improve water quality and resources	Unlikely to have a great impact on this objective. Existing sites less likely to disturb water resources as operational measures should be in place in most cases.	Unlikely to have an impact on this objective.	0	0	0	Water quality and resources would be protected through the overall strategy.	The policy does not impact on water quality directly.
3	Avoid, reduce and manage flood risk	Unlikely to have a great impact on this objective. Existing permitted sites should have flood risk assessments in place.	Unlikely to have a great impact on this objective.	0	0	0	Impacts would only be evident at planning application stage. Where there is a flood risk each site would have to be assessed through a FRA.	There is potential to mitigate or enhance at planning application stage.
4	To safeguard	Using existing sites would		+	+	+	Community health	Human health could be indirectly

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				ST	MT	LT		
	environmental quality to minimise potential impacts upon community health.	ensure development in areas where there are already likely to be environmental safeguards. The focussed pattern pattern of development on sites in and around the urban areas would mean less lorry movements throughout the county.					should always be protected when allocating or assessing individual planning applications.	improved by stricter environmental controls and tighter monitoring of adverse impacts.
5	To conserve and enhance the character and quality of the County's natural landscape and built environment	Less new greenfield development would be likely to protect existing landscapes and townscapes.		+	+	+	Greenfield land should be avoided where possible for the development of waste sites.	Where existing sites are the subject of new applications there is scope for improvement particularly through the county's landscape character surveys where appropriate.
6	Preserve and enhance sites, features and	Using mainly brownfield land would mean less likelihood of disturbance for archaeological sites on	There are no predicted negative effects on most existing waste sites.	+	+	+	Archaeological sites are more likely to be affected where sites are located on	Archaeological sites where impacted by large waste development such as landfilling or composting may be beneficial in enabling new

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				ST	MT	LT		
	areas of historic, archaeological or architectural importance, and their settings	Greenfield land.					greenfield land. The option proposes all development on brownfield sites.	discoveries through new excavation work. Archaeological surveys would normally be required as part of a planning application affecting archaeology.
7	Protect soil resources	Soils should not be adversely affected if most development is mainly taking place on brownfield land.	There are no negative impacts identified.	+	+	+	Soil resources are more likely to be affected where sites are on greenfield land. The strategy seeks to ensure most waste development will be on previously developed land.	Soil surveys at a planning application stage should pick up any scope for soil improvement. Soils should be managed appropriately during the development of the site.
8	To preserve and protect geological features and promote geological	Using mainly brownfield land would mean less likelihood of disturbance for geological sites on Greenfield land.	There are no predicted negative effects on most existing waste sites.	+	+	+	Geological sites are more likely to be affected where large waste developments are located on greenfield land. The	Geological sites where impacted by waste development such as landfills or composting sites may be beneficial in enabling new discoveries through new excavation work. Geological surveys would

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				ST	MT	LT		
	conservation						strategy seeks to ensure most waste development will be on previously developed land.	normally be required as part of a planning application affecting geology. However, such sites need to properly restored afterwards.
9	To promote the delivery of energy efficiency and carbon reduction targets	The pattern of site selection based on the main urban areas would enable carbon reduction benefits. Energy savings could potentially be made by using existing infrastructure	There are no predicted negative effects on most existing waste sites.	+	+	++	More positive effects are noted towards the end of the plan period.	Centralised facilities should enable economies of scale and transport benefits.
10	Reduce consumption of natural resources	Energy savings could potentially be made on not having to create new infrastructure. The pattern of site selection based on the main urban areas would enable carbon reduction benefits. Energy savings could potentially be made on not having to	There are no predicted negative effects on most existing waste sites.	+	+	++	The larger sites would be focussed on the main urban areas near the main waste arisings which should allow for reduced transportation distances and costs. More positive effects are noted towards the	Centralised facilities should enable economies of scale and transport benefits

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				ST	MT	LT		
		create new infrastructure					end of the plan period.	
11	To promote adherence to the movement of waste up the waste hierarchy	A very centralised pattern of development would make sites very accessible to the majority of the populations and make waste collection easier to implement as it attracts economies of scale	The policy is neutral in the context of this objective.	+	+	++	More positive effects are noted towards the end of the plan period.	The LEP arrangement may make it easier to implement joint facilities and a joint approach to waste management in certain areas.
12	Enfranchise the community in improving the local environment	The policy is neutral in the context of this objective.	The policy is neutral in the context of this objective	0	0	0	The policy does not directly address this issue	The policy does directly not address this issue
13	Improve accessibility to waste management services and facilities	The option allows better accessibility to waste facilities around the county centralising the major facilities in the major towns.	The majority of waste arises in the main towns of the county. There are no negative effects.	++	++	++	More positive effects are noted towards the end of the plan period	The policy does not address this issue
14	To ensure	The option allows better	The majority of waste arises in	++	++	++	More positive effects	Benefits through economies of scale

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				ST	MT	LT		
	that the waste industry plays a central role in the sustainable economic development of Warwickshire	accessibility to waste facilities around the county centralising on the major towns. The Option includes the Warwickshire and Coventry LEP so should enable waste management benefits for both areas.	the main towns of the county. There are no negative effects.				are noted towards the end of the plan period. Potential benefits may accrue from cross boundary working through the LEP.	and joint strategies between Coventry and Warwickshire may be an advantage in the long term for waste managment.
15	To encourage waste operators to explore new and innovative environmental technologies.	Economies of scale in siting larger facilities in urban areas could encourage waste operators to be more innovative.	The policy is neutral in the context of this objective	0	0	0	The policy does not address this issue.	The policy does not address this issue
16	To safeguard	Most material assets	The policy is neutral in the	+	+	+	Impacts would only be	Where sites are the subject of

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				ST	MT	LT		
	material assets such as best quality agricultural land, minerals and open space	should be protected through this option. The option does not propose greenfield development.	context of this objective				evident at planning application stage.	planning applications opportunities may arise for improvements in mitigation for any potential adverse impacts.

5 Mitigation

5.1 Introduction

Mitigation may be defined as a measure to limit the effect of an identified significant impact or, through the most successful application, avoid the adverse impact altogether. It is common practice that a range of mitigation measures are employed to offset an impact, few issues being reconciled through one measure in isolation.

5.2 Employing Mitigation Measures

It should be noted that mitigation provides the opportunities to not only lessen adverse effects, but also to promote or enhance beneficial effects. This has been the approach adopted for the mitigation measures outlined in the preceding tables which illustrate a number of proposals as follows:

- Mitigation measures delivered through modifications to options and the adoption of new options which incorporate the more sustainable aspects of options, whilst eliminating those aspects which are less sustainable;
- Examination of linking policies to maximise opportunities for beneficial synergistic or cumulative plan effects which strengthen the overall beneficial impact of the WCS;
- Developing a remit within which the plan options are to be delivered i.e. criteria to guide the delivery of the Waste Core Strategy during its implementation;
- Evaluating the strategic level at which the WCS may have influence and recognising other legislation or guidance 'vehicles', particularly the Town and Country Planning (Environmental Impact Assessment) Regulations 1999 in delivering the principles of the Waste Core Strategy;
- Mechanisms to monitor the effects of the plan such that an appropriate range of responses may be delivered for unpredicted adverse effects.

The above tables illustrate the range of mitigation measures which have been put forward at this point in time. It is proposed that the Annual Monitoring Report (AMR) be used to monitor the effective delivery of the plan, adopting the SA Framework indicators for measurement purposes. The AMR and indicators should also provide the platform for developing mitigation measures, responding to adverse effects as the plan guides the effective delivery of waste management within Warwickshire.

6 Monitoring

6.1 Introduction

In evaluating the requirement for monitoring, it is useful to refer to the SEA Directive which confirms 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'[21]. Furthermore, the Environmental report should contain a 'description of the measures envisaged concerning monitoring'[22]. As described in the mitigation section above, it is critical that the significant adverse effects of the WCS are monitored to provide for an appropriate level of empirical evidence through which a planning response may be made and that beneficial effects are monitored to maximise the benefits of the plan.

[21] Article 10.1
[22] Annex I (i) (SA/SEA Stage E ODPM Guidance)

6.2 The Monitoring Process

It is recognised that the most appropriate vehicle for monitoring will be the Annual Monitoring Report and this is accommodated via the SA Framework indicators included within this SA Report. Comments were invited on the SA Framework during the Stage A consultations and these comments have been responded to in respect of amendments to the indicators to allow a more robust monitoring process. Recently in January 2012 a further consultation was added to update the Scoping Report. Prior to consultation some of the main stakeholders such as the Environment Agency and some of the internal stakeholders within the county council were given a prior consultation to tailor some of the SA indicators prior to the main Scoping re-consultation. At this stage it was evident that numerous indicators needed to be superseded as much had changed since 2007 in terms of new indicators appearing over time. Further comments have been received since the consultation which has helped to update the methodology of the SA. This will ensure that the WCS is furnished with the most up to date indicators based on the most recent methodology and data available and these will be reflected in the Annual Monitoring Report in future years.

Notwithstanding the above work recently completed, comments are also invited on this Stage C Report with a view to developing the monitoring programme further. In particular, views are sought on the direction of future annual monitoring of the plan and whether further indicators should be proposed to reflect the chosen Spatial Strategy and policies in the plan.

7 Summary

Warwickshire County Council is currently producing a Waste Development Framework Waste Core Strategy in response to the new system of Local Development Frameworks introduced through the Planning and Compulsory Purchase Act 2004. This Act makes Sustainability Appraisal [23] a requirement for LDFs including the WDF. It is a requirement that SA incorporates the provisions of the Strategic Environmental Assessment (SEA) Directive[24] as they apply to waste management. Arup Consultants were appointed by Warwickshire County Council to assist in the delivery of the SA incorporating SEA to produce the initial Sustainability Appraisal Main Report in 2007. Warwickshire County Council planners have continued the work after this stage to produce Emerging Spatial Options which have been assessed using the same methodology as before. Further to this process, a revised Scoping Report was produced in January 2012 to take account of the changing baseline conditions and the new array of Plans Policies and Programmes which now exist, compared to 2007. This report concludes the final stage of the process with a re-assessment of all the Spatial Options, the Vision and the Policies.

This report presents the findings of Stage C of the SA process, in accordance with the provisions of the SEA Directive and Office of the Deputy Prime Minister (ODPM)[25] Guidance on SA. This document is the consultation Sustainability Appraisal Report produced to support stakeholder engagement in the development of the Waste Core Strategy.

The SA has sought to systematically 'test' the performance of the Waste Core Strategy and its individual objectives and policies against sustainable development criteria. This has been achieved through developing SA objectives, informed by an appreciation of the baseline conditions encountered within Warwickshire, and identified during the SA Stage A.

In conducting Stage A, sustainability issues were identified for the Waste Core Strategy to assist in developing plan-led solutions. In addition, baseline conditions, related international,

[23] Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents: ODPM: November 2005
[24] European Directive 2001/42/EC (SEA Directive) enacted through The Environmental Assessment of Plans and Programmes Regulations 2004 (SI 2004/1633)
[25] This function is now performed by the Department for Communities and Local Government (DCLG)

national, regional and local policy, identified challenges within the region and the county and the aspirations which can be supported through the delivery of the Waste Core Strategy were identified during Stage A such that SA objectives could be developed.

The detailed review of baseline conditions within Warwickshire and its current performance in sustainability terms has allowed an identification of the particular sustainability issues that may be influenced by the Waste Core Strategy. Sustainability objectives have been developed partly in response to these sustainability challenges and opportunities, and in conjunction, indicators have been developed through which the beneficial and potentially adverse impacts of the Waste Core Strategy can be monitored.

Following the review of baseline conditions, relevant plans and programmes and key sustainability issues for Warwickshire County Council, SA objectives were developed. A number of SA objectives were adopted during Stage A, including reference to issues such as a need to 'conserve and enhance biodiversity'; 'avoid, reduce and manage flood risk'; 'improve accessibility to waste management services and facilities' and 'reduce the consumption of natural resources'. During the process some of these have been changed following feedback from consultees during the various stages of the consultation process.

In preparation for the development of the WCS, plan objectives were developed with due consideration of the data prepared to support the development of the SA Framework, including evaluation of international, national and regional commitments. The SA Framework was used to evaluate tensions between the SA objectives and the plan objectives. In general terms, the WDF objectives were determined as being compatible with the SA objectives, although it was acknowledged that to a certain extent, the degree of environmental, social and economic change was a function of how waste management was to be delivered at the project level.

Following the development of the plan objectives, Warwickshire County Council undertook an optioneering exercise to aid the development of policies for incorporation into the Waste Core Strategy. A series of issues were identified, against which the plan options could be formulated. These issues, illustrated in full within the report, include a need to 'deliver sustainable waste management practices' and 'municipal waste management practices'. Against each of these issues, options were developed through which the issue may be addressed.

Matrices were used to allow a transparent and auditable process in evaluating the effects of plan options. Summary matrices have been prepared and are included within this report to illustrate how the SA process has been applied to the development of the Waste Core Strategy. The officers at Warwickshire County Council retained the ultimate decision as to what plan options should be pursued, however, both the SA and stakeholder engagement were considered key aspects guiding the decision making process.

The SA process has supported the selection of a Preferred Option for the WCS. Stage B made provision for a consideration of ways in which adverse effects of delivering the WCS could be mitigated and beneficial effects exploited.

The matrix assessment process employed during the Emerging Spatial Options Stage was used to produce the chosen Preferred Option. The matrices recorded the nature of the predicted effect i.e. beneficial / adverse or unknown, whether the effect may be considered significant and time frame during which the effects are likely to be sustained, i.e. short, medium or long-term. The matrices measured the performance of all the options including the Preferred Option against each of the SA objectives. The same process was also used to measure the potential performance of all the Policies and the Vision in comparison to Sustainability objectives.

The overall purpose of the Waste Core Strategy is to guide, coordinate and stimulate effective waste management within Warwickshire.

The Preferred Option (ie the Spatial Strategy) performs well when assessed against SA objectives the Environmental and Economic SA Objectives in particular

It is recognised that the protection of environmental resources, including natural assets will in part, be a function of due consideration of the planning application process for waste management planning applications on a case by case basis.

What is evident from the overall SA is that the most substantial benefits accruing from the policies within the WDF will occur as a result of the cumulative effects of all the policies being implemented together.

In general, the Core Strategy has few significant adverse sustainability effects however, their importance cannot be discounted. Major environmental issues for Warwickshire include the protection of biodiversity, protecting air quality and preventing an increase in flood risk. It is considered that the Core Strategy has taken in to account the main significant environmental effects of the plan and sought to ensure that the most beneficial spatial option is chosen alongside the most sustainable policies. In this way the SA objectives can be achieved and the Waste Core Strategy can be implemented in the most sustainable manner, through the interaction between the Plan and Policies, using mitigation and enhancement where particular impacts in the final instance.

Within some of the Districts and Boroughs there are Air Quality Management Areas (AQMAs) to address higher levels of particulates and nitrogen dioxides which are heavily affected by vehicle movements, particularly HGVs. Consequently, it is important that new waste facilities are located in the most accessible and sustainable locations. SA objective 4 to safeguard environmental quality has helped inform the preferred strategy to reduce the transport impacts of the plan; this will be further enhanced by the policies in the plan which have also been assessed for sustainability impacts and which will ensure that potential impacts on air quality are mitigated.

The SA of the plan has confirmed that there are few predicted adverse effects arising from the implementation of the Core Strategy. Notwithstanding, there are opportunities to enhance the sustainability of the plan during delivery.

However, before the delivery of sustainable waste management in the county is even discussed, there is a need to ensure that as far is possible does not even have to enter the chain whereby it is required to be managed. This means that prevention of waste in the first instance must be the aim, and this is what the Waste Hierarchy seeks to guide. This may be done with better via a programme of education and engagement to enhance understanding about effective waste prevention at source which means reducing the amount of waste from even entering the chain whereby it is required to be managed. This not only will save local authorities and industry money but will enable gains through carbon reduction in to the atmosphere with less waste required to be managed or disposed.

This SA Report is now issued for final stakeholder consultation alongside the Publication of the Waste Core Strategy Document at the Publication stage (see Appendix D). Following consideration of comments received, the SA Report will be submitted to the Secretary of State as part of the evidence base accompanying the Waste Core Strategy.

If there are significant changes or new additions to the final draft of the Core Strategy which could have sustainability impacts then these must be appraised and the results documented in an amended SA Report, prior to submission to the Secretary of State. However, if the final draft document is simply a refinement of the Preferred Option Draft, further sustainability appraisal may not be necessary.