Nottinghamshire County Council

Minerals and Waste
Sustainability Appraisal

Final Scoping Report
February 2012

Nottingham City Council

Contents

This Scoping Report has been prepared to cover all of the planning policy documents that will make up the Nottinghamshire Minerals and Waste Development Framework. It sets out the key issues and baseline information/evidence that will be used to help assess the impacts of our future policies and plans.

Non-technical summary

Introduction to Sustainability Appraisal

The Sustainability Appraisal (SA) process is a way of ensuring that all plans and programmes which relate to land use issues are compatible with the aims of sustainable development. This includes all of the documents that will make up the Minerals and Waste Development Framework. The first documents to go through this process will be the Minerals Core Strategy and the Waste Core Strategy. As they develop they will be tested against an agreed set of sustainability objectives. These objectives are defined during the early stages of the process and set the framework for assessing the emerging plan documents and also monitoring their effectiveness. By going through this process, we can ensure that each plan document contributes towards the overall development of Nottinghamshire and does not conflict with the aims of other strategies and programmes that are intended to enhance our social, environmental and economic well-being.

SA is an on-going, iterative process. The initial information gathering stage helps to establish significant issues that need to be addressed by the emerging documents. The appraisal process then helps to refine these issues and options into a set of realistic, preferred options that have been assessed thoroughly. The key features of the sustainability process are therefore to:

- Collect baseline information and identify significant issues or trends;
- Predict the effects of the plan;
- Identify possible policy options;
- Consult others on the plan policies;
- Monitor the effects of the plan policies.

The Scoping Report

This scoping report is the first stage in the appraisal process and sets out the baseline data that has been complied as part of the information gathering phase. The report also considers relevant plans and programmes that may influence the Minerals and Waste plan documents or be affected by their policies. Having identified significant issues that should be addressed, the report then seeks to establish a suitable framework of sustainability objectives against which the proposed policies should be assessed.

The purpose of this report is therefore to decide on the scope and level of detail for the SA. The information and findings set out here are not final as the report is intended to involve other interested parties in the appraisal process and to identify any gaps in what is covered. In some cases the data may simply not exist, in which case, this will be noted along with proposals to overcome this when the next appraisal is carried out.

Key findings of this Scoping Report

Population - the majority of the population of the plan area is concentrated within the main urban areas around Nottingham and Mansfield and the outlying market towns of Newark, Worksop and Retford. Significant growth in population is expected as the result of the planned future development of new housing and employment areas employment including two designated Growth Points around Nottingham and Newark.

Transport - there are generally good road and rail links to the rest of the UK, especially via the main north-south routes. Major improvement works are also underway or planned for several key roads. Key transport concerns are congestion and air quality. Although some mineral loads are transported by rail or barge the majority of both minerals and waste transport is by road. It may be possible to move more materials by rail or water in future but the economic viability of this is uncertain.

Natural Environment and Biodiversity - despite a wide range of important wildlife habitats and species, there have also been significant past losses due to the pressures of development.. However the condition of key nature conservation sites is improving and the importance of maintaining the area's green infrastructure as well as designated sites is increasingly recognised.

Historic and cultural heritage - much of our preserved heritage dates from the middle ages onwards and can be seen in the large country estates, market towns, medieval castles and more recent industrial archaeology and the legacy of coal mining in many areas. The proportion of buildings at risk is higher than the national and regional average. There are a large number of conservation areas, registered parks and gardens and Scheduled Ancient Monuments but not all of our heritage assets are protected and much of the evidence of our past has not yet been investigated.

Landscape, countryside and townscape - parts of our countryside and open space remain threatened by development pressures to deliver new housing and employment opportunities, especially in the urban fringes and the Green Belt around Nottingham. Mineral working has had a significant impact in some areas but sensitive restoration can provide opportunities for landscape improvements or to create new features. The possible impacts of climate change may also alter the appearance of our landscape as the local temperature and water levels will dictate what kinds of vegetation can be sustained.

Climate - Nottinghamshire's climate is likely to follow the patterns generally being observed and predicted across the UK with increased rainfall, hotter and more unsettled summers, increased flooding and more frequent and severe storm events. The use of fossil fuels for energy is a major contributor to so-called greenhouse gas emissions along with methane from landfill. Transporting both minerals and waste also contributes to the overall level of vehicle emissions making the need to minimise road transport of minerals and waste a priority.

Air quality - is generally improving but air pollution along major transport corridors such as the A1 and M1 and around the main urban areas is still a concern. Power stations are a major source of Co_2 emissions. The transport of minerals and waste and emissions from the different types of waste processing are also potential sources of air pollution. However technologies that recover energy from waste also have potential benefits in terms of offsetting the need to burn fossil fuels.

Water - water supplies are likely to be sufficient to meet the current levels of planned housing and employment growth, but they are unlikely to support any additional increases and may be a constraint on the exact locations of new development. Groundwater protection is a major issue across a large part of our area and a significant constraint to the future development of landfill sites.
River quality has seen a slight improvement but is still marginally lower than the regional and national figure. Nottinghamshire is also vulnerable to nitrate pollution, especially in north Nottinghamshire around Worksop, although the whole county is covered by a Nitrate Vulnerable Zone to limit further damage and try to lower existing levels.

Soils - outside of the urban areas, the county is largely agricultural and approximately 70% of Nottinghamshire's agricultural land is classed as grade 3 or above. Housing demand, in particular, means there are significant pressures for built development, especially on the urban fringe around Nottingham, Newark and Mansfield.

Flood risk - the wide Trent flood plain is a major development constraint for Nottingham and Newark especially. River and surface water flooding is a significant issue within the Trent Valley and also parts of Hucknall, Sutton-in-Ashfield and Kirkby-in-Ashfield. Mansfield, Worksop and Warsop could also experience localised problems.

Health - overall health indicators for Nottinghamshire are slightly worse than both the regional and national comparisons although life expectancy has grown closer to the national average. There are also wide variations between different parts of Nottinghamshire especially between urban and rural areas.

Energy - energy consumption has fallen slightly and the proportion of renewable energy used is increasing through the use of biomass fuels and wind turbines. The long term future of our three coal-fired power stations is uncertain but a new gas-fired station has recently been developed near Newark. As well as supplying coal, more recently a number of small-scale onshore oil and gas sites have been developed and there are schemes to utilise mine gas from old mineral workings and possible coal bed methane deposits. Waste is also a source of energy in the county with small-scale landfill gas recovery, the development of anaerobic digestion schemes and a municipal waste incinerator in Nottingham. The need to provide local, decentralised sources of renewable, or low carbon energy, could increase the scope for using waste as a source of energy.

Economy and Employment - traditional industries have now largely given way to commercial, service and high-tech industries. Employment rates are slightly better

than the national average, but the number of businesses has declined over the last 2-3 years as a result of the recession. There are also wide variations in employment rates and income across the various districts. As the economy recovers, predicted growth levels will need to be supported by new infrastructure, especially in and around the main urban areas including new waste management facilities and the provision of construction and energy minerals. Minerals and waste are not themselves major employers but the development of a modern and innovative waste management industry based on greater re-use and recovery of resources could provide new employment opportunities.

Minerals - historic production levels have fallen from 5 million tonnes to 3.8 million tonnes during the recession. The most critical issues over the next 10-15 years will be maintaining adequate land banks of permitted reserves as there are shortfalls for aggregates and most other building and construction minerals. Rising energy prices are also expected to increase the pressure to work the County's surface coal mining resource and may see further investigation of new energy minerals such as coal bed methane and shale gas. Mineral extraction can have significant environmental impacts but also provides opportunities for creating new wildlife habitats, areas of open space and possible landscape improvements in some cases.

Waste - levels have fallen from an average of around 4 million tonnes of municipal, commercial and industrial and construction and demolition waste a year to an estimated 2.6 million tonnes. Waste is being managed more sustainably with an average of 42% of municipal waste and 52% of commercial and industrial waste now being recycled. Between 80% and 90% of construction and demolition waste is estimated to be re-used or recycled. Less waste is going to landfill and some municipal waste is recovered for energy through an existing incinerator in Nottingham. Existing waste management infrastructure is adequate to meet existing recycling targets but there is a significant shortfall of long term waste disposal capacity which will mean finding new disposal sites or the development of alternative recycling and recovery capacity. Significant new waste management infrastructure may also be needed to support the planned housing and employment growth across the area. Overall, there is sufficient employment and industrial land available for additional waste recycling, recovery and sorting/transfer facilities but opportunities for new waste disposal sites are very constrained.

Taking a spatial approach

Although the issues highlight above have been grouped broadly into three themes, many of the issues highlighted above are inter-linked and should not be considered in isolation. One of the features of the spatial planning system is to look at the wider context and how different issues relate to each other. The minerals and waste documents will need to ensure that they provide an appropriate basis to identify adequate mineral resources/waste treatment to meet local and national need. It will therefore need to identify suitable locations for mineral extraction and waste treatment or disposal provide sufficient capacity whilst at the same time ensuring these are the most socially and environmentally acceptable.

Proposed Sustainability Appraisal objectives

A range of draft SA objectives have been developed that take into account all the factors identified through the review of plans, policies, baseline data and key sustainability issues identified for Nottinghamshire. These SA objectives will then be used to focus further work in future SA documents.

Proposed SA Objectives
1. Ensure that adequate provision is made to meet local and national mineral demand and to provide a network of suitable waste management sites for the safe treatment and disposal of waste.
2. Protect and enhance biodiversity at all levels and safeguard features of geological interest.
3. Promote sustainable patterns of movement and the use of more sustainable modes of transport.
4. Protect the quality of the historic environment above and below ground.
5. Protect and enhance the quality and character of our townscape and landscape.
6. Minimise impact and risk of flooding.
7. Minimise any possible impacts on and increase adaptability to climate change.
8. Protection of high quality agricultural land and soil.
9. Promote more efficient use of land and resources
10. Promote energy efficiency and maximise renewable energy opportunities from new or existing development.
11. Protect and improve local air quality.
12. Protect and improve water quality and promote efficient use of water.
13. Support wider economic development and promote local job opportunities.
14. Protect and improve human health and quality of life.

What happens next?

The scoping report provides an early opportunity for interested parties to comment, and ensure that the final SA report is robust enough to achieve its sustainable development objectives when appraising the MWDF. Copies of the SA Scoping Report have been provided to the main consultation bodies (Local Strategic Partnership, environment groups and neighbouring authorities for starters) and to other relevant authorities and stakeholders with an interest in the plan area. Chapter 6 of this report contains details of these consultees. Feedback from the consultation process, along with any other additional findings and updates, will be incorporated into the ongoing SA process.

1. Introduction – What is Sustainability Appraisal?

1.1 This scoping report represents the first stage of the Sustainability Appraisal process that was introduced through the Planning and Compulsory Purchase Act 2004. When complete the SA will ensure the authority integrates sustainable development principles into all of its plans and programmes undertaken as part of the MWDF process.

1.2 Sustainable development has a number of different definitions however for the purpose of the SA process the definition in the Government's *'Securing the future - Delivering UK sustainable development strategy'* (March 2005) has been used. It states that:

"*The goal of sustainable development is to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations. This will be pursued in an integrated way through a sustainable, innovative and productive economy that delivers high levels of employment; and a just society that promotes social inclusion, sustainable communities and personal wellbeing. This will be done in ways that protect and enhance the physical and natural environment, and use resources and energy as efficiently as possible*."

1.3 The strategy contains five guiding principles for sustainable development:

- **Living within environmental limits**
  Respecting the limits of the planet's environment, resources and biodiversity, to improve our environment and ensure that natural resources needed for life are unimpaired and remain so for future generations.

- **Ensuring a strong, Healthy and just society**
  Meeting the diverse needs of all people and future communities, promoting personal well being, social cohesion and inclusion and creating equal opportunity for all.

- **Achieving a sustainable economy**
  Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised.

- **Using sound science responsibly**
  Ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty (through the precautionary principal) as well as public attitudes and values.

- **Promoting good governance**
  Actively promoting effective, participative systems of governance in all levels of society, engaging people's creativity, energy, and diversity.

1.4 These principles form the basis for delivering sustainable development within the UK. Nottinghamshire County Council and Nottingham City Council have a vital role in supporting the aims of these principles in preparing their own policies and proposals for future development.

The relationship between Sustainability Appraisal and Strategic Environmental Assessment

1.5 When preparing the various policy documents that make up our statutory development plan (the Plan), every authority must carry out an environmental assessment in accordance with the requirements of European Directive 2001/42/EC on the 'assessment of the effects of certain plans and programmes on the environment'. This is known as the Strategic Environmental assessment or SEA Directive.

1.6 Within the UK the concept of SEA has been broadened to include an assessment of economic and social impacts as well the specific environmental issues identified in the SEA Directive. This wider process of Sustainability Appraisal therefore incorporates all of the requirements of the SEA Directive. Throughout this document, the term SA is used to refer to the joint SA/SEA process and the methodology used incorporates all of the requirements of SEA. Table 7 in chapter 6 shows how this report meets the relevant SEA requirements.

Other appraisals

1.7 The findings of the SA process will also be supported by other appraisals that are being carried out. As Nottinghamshire has a site of international importance for nature conservation, the Sherwood Forest Special Area of Conservation (SAC), we are also required to carry out what is known as a Habitats Regulations Assessment under separate legislation, which may lead to the need to undertake a more detailed Appropriate Assessment[1]. The other appraisal being undertaken is a county-wide Strategic Flood Risk Assessment[2]. This will build upon work already done by the Greater Nottingham authorities and the other Nottinghamshire Districts and look specifically at minerals and waste issues.

What is the purpose of SA?

1.8 The purpose of SA is to promote better integration of sustainability considerations into plan preparation and adoption. SA is therefore an integral part of good plan-making and should not be seen as a separate activity. It is an ongoing and iterative process that will help us to identify and report on the

[1] The Conservation of Habitats and Species Regulations 2010, which enact the EU Council Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora
[2] Scott Wilson Strategic Flood Risk Assessment for Nottinghamshire 2011.

likely significant effects of the Plan (i.e. our various minerals and waste documents) and the extent to which implementation of the Plan will achieve the social, environmental and economic objectives by which sustainable development can be defined.

1.9 The SA process and the various stages of the plan making process are interlinked. Figure 1 illustrates the stages of both processes based on current Government guidance which has been used in preparing this report[3].

Purpose of the SA Scoping Report

1.10 The integration of sustainability considerations into the preparation and adoption of Plans is the key focus of the SA process. In line with Government guidance the SA Scoping Report is intended to determine consistency and compatibility between the SA Framework objectives and the Plan objectives.

1.11 The Scoping Report therefore lays the foundation for the whole SA process and focuses on the context of the Plan, which in this case is the Minerals and Waste Development Framework for Nottinghamshire (N.B. the waste policy documents of this framework are being prepared jointly with Nottingham City Council whereas the minerals policy documents will only cover the administrative area of Nottinghamshire County Council). The Scoping Report takes a holistic approach in order to determine if the Plan's objectives contribute towards sustainable development.

1.2 The Scoping Report is also the mechanism for developing a sound and robust SA Framework and appraisal methodology. Hence the Scoping Report forms the basis for the appraisal and the production of the SA Environmental Report. The Scoping Report details:

- Other policies, plan's and programmes influencing the Plan and SA, including the international, national, regional and local policy context;
- Baseline information and key sustainability issues, including economic, environmental, social and spatial factors;
- Development of the SA framework and objectives;
- Testing the emerging Plan objectives against the SA framework;
- Methodology for testing development options and appraising effects of the Plan; and

[3] *Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks (September 2004); Planning Policy Statement 12 (PPS12): Local Spatial Planning (2008); A practical guide to Strategic Environmental Assessment Directive (September 2005).*

- Outline of the proposed format and content of the SA Environmental Report.

The role of our minerals and waste policy documents

1.13 Every local authority must prepare a formal development plan for its area setting out its priorities for future development, where this should be located and key environmental constraints that should be addressed. The County and City Councils have a specific duty to do this for minerals and waste, where it is relevant to their area. We will therefore be preparing a series of individual policy documents to set out how much development we want to see and where. Minerals documents will only be prepared by the County Council but the waste documents (or Plan) will be prepared jointly with Nottingham City Council as waste issues affect both our areas. You can find full details of the documents we are preparing on our website as shown below.

Community Involvement in SA

1.14 Community involvement, including the general public, interest groups, statutory bodies, local businesses and the minerals and waste industry, is a key part of the planning process. At this stage, the only formal requirement is to consult the Environment Agency, Natural England and English Heritage. These will all give their views on the work that has been carried out so far and will continue to provide advice on future stages of the appraisal. We have also sought informal advice from other stakeholders where appropriate. These include representatives from the minerals and waste industry, environmental and community groups. Other comments on the Scoping Report are welcome but can only be treated informally at this stage.

Further information

1.15 If you would like any further information on this report or the Minerals Core Strategy please contact the Minerals and Waste Policy Team at Nottinghamshire County Council on 08449 808080 or email development.planning@nottscc.gov.uk . Full contact details are also printed on back cover of this report. The information in this report can be made available in alternative formats and languages if required.

2. Methodology

Carrying out SA

2.1 Government guidance on carrying out SA defines 5 key stages leading up to the production of a Scoping Report. These are set out in Figure 1 below and our report has been structured according to these key stages

Figure 1. Preparation of Scoping Report

Identifying other relevant policies, plans and programmes, and sustainability objectives
Collecting baseline information
Identifying sustainability issues and problems
Developing the SA framework
Consulting on the scope of the SA

2.2 Information gathering is therefore the starting point for any SA in order to understand the current social, environmental and economic situation and possible future trends. The focus of the initial information gathering stage is therefore a review of all other relevant plans, programmes and strategies and the collection of baseline environmental, social and economic data. This will help to shape our future policies and proposals. A summary of the key messages and findings are included at the start of each chapter with the detailed results shown in the accompanying appendices.

2.3 This work has been carried out 'in-house' using our own environmental information where available, but also relies heavily on data from other agencies and organisations. Their input is acknowledged throughout and has helped to refine both the baseline data and the detailed objectives that will underpin this appraisal process. Copies of the comments received from these groups will be posted on the minerals and waste section of the County Councils website.

The Nottinghamshire Partnership Approach to SA

2.4 All of the Nottinghamshire local authorities have come together to establish a county-wide joint sustainability appraisal partnership. This draws together a wide range of social, economic and environmental monitoring data, and policy information from across the county and city. Sharing information and expertise has helped to develop a common approach towards sustainability appraisal across each authority. This also includes a common template for

Scoping Reports to provide a consistent basis for SA in each area. This Scoping Report for minerals and waste follows the same basic approach but has been adapted where necessary to reflect specific minerals and waste issues.

Independent assessment

2.5 A team of independent consultants (from URS Scott Wilson Ltd) has also been appointed to audit and verify each stage of the Sustainability Appraisal to provide an independent and objective overview of the process. This ensures a consistent approach and draws on best practice from other authorities.

Key findings and draft SA objectives

2.6 The key outcomes of each of the information gathering stages are summarised in the body of the text of the following chapters. With reference to the national and regional sustainable development objectives (where still applicable), these form the basis of the draft SA objectives. A full list of the relevant plans and programmes reviewed as part of the appraisal is shown in Appendix 1. The topics and indicators used in the baseline survey are shown in Appendix 2.

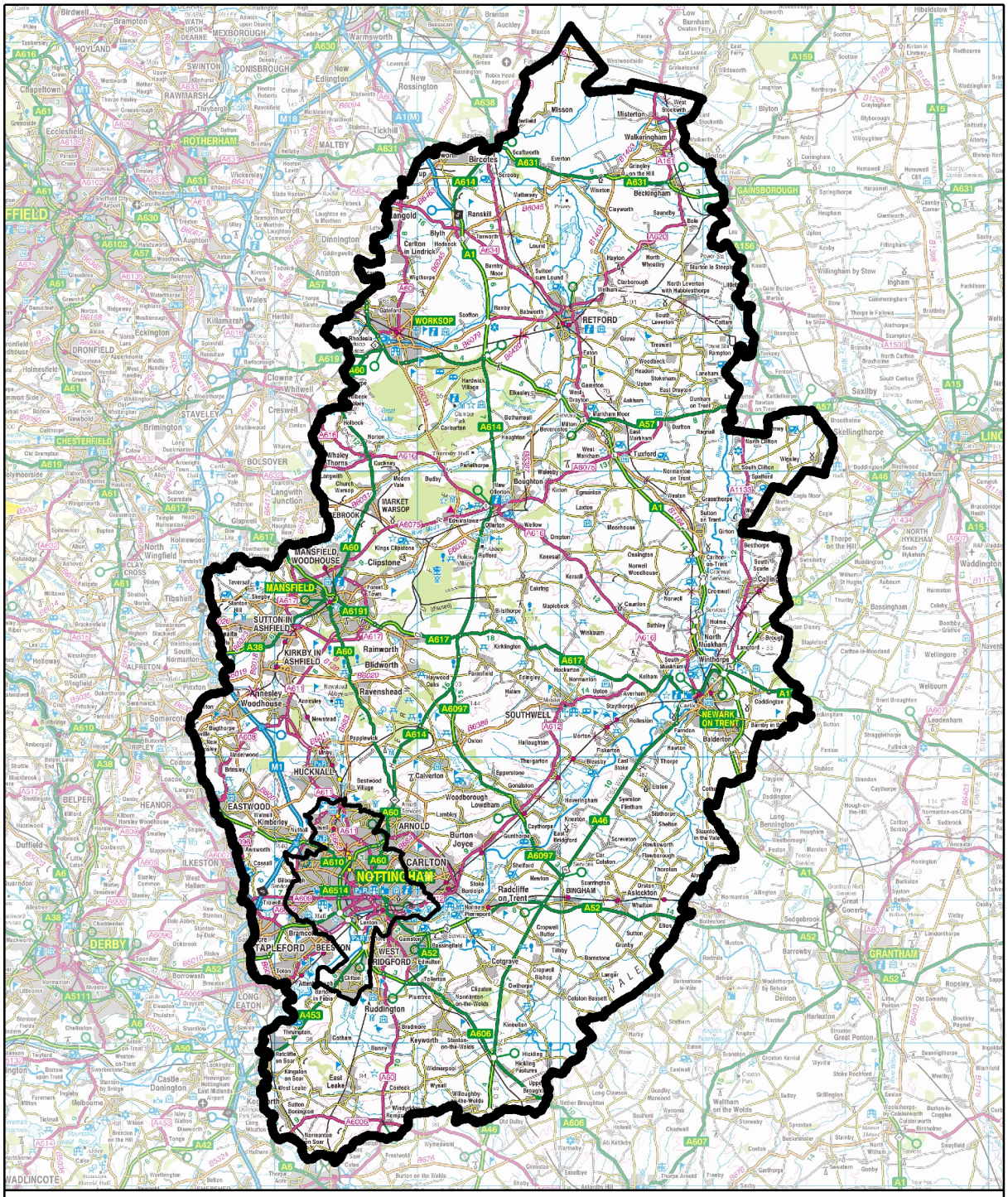
Limitations of the SA process

2.7 Part of the SA process is to establish what information is currently available and whether there is other information that should be collected in future. This involves a wide range of organisations that may hold different sets of data. The data they hold may not always be comparable or it may not have been collected at regular intervals. This can make it difficult to identify significant trends. Considerable progress is being made to collate this information so that it is up to date and accessible but it is inevitable that the way data is collected, interpreted and monitored, will improve over time. Future stages of SA work will take account of any relevant changes.

Future Timetable

2.8 As this scoping report will form the basis of future appraisal work for all or minerals and waste documents we cannot show a detailed timetable here. However, we will keep our programme for preparing new documents and carrying the relevant SA work up to date on the county council website at www.nottinghamshire.gov.uk.

Plan 1. Map of the area covered by this scoping report



3. Other relevant Plans, Policies, and Programmes

Introduction

3.1 The purpose of reviewing other plans, programmes and policies is to identify relevant sustainability objectives and ensure that the aims and objectives of the Core Strategy and Development Control Policies are consistent with the purpose and aims of these strategies and plans. It is important to identify where there may be potential conflicts and also where our own minerals and waste policies or proposals could help contribute to the aims of other plans.

3.2 The review has looked at relevant documents, including legislation, plans, guidance and strategies, at the international, national and local level. These are listed in full in Appendix 1. The key messages from this review are set out in Table 1 below and have been carried through into the set of appraisal objectives that is being developed to help assess the likely effects of the Plan (see Chapters 5 and 6).

3.3 The key messages highlighted below are those which are considered relevant to minerals and waste as not all issues covered in other appraisals (i.e. at the district/borough level) will be relevant.

Table 1: Key messages from the documents review

Key messages	Source of information	Implications for SA Framework
Natural environment and biodiversity • Ensure biodiversity is considered in all areas of decision making; • Maintain, enhance and restore biodiversity and the natural environment in general; • Avoid damage to designated nature conservation sites and protected species and habitats and species identified as conservation priorities. Ensure mitigation and/or compensation where damage is unavoidable; Maximise biodiversity gain through restoration schemes • Maintain environmental quality and biodiversity in all areas to make them safe & attractive places to live and work; • Prevent or reduce as far as possible any negative effects, actual or potential on the environment from waste or extractive industries. • Promote the importance of positive and early planning for green infrastructure in plans and developments. • Recognise the environmental, social and economic value of our green infrastructure • Ensure that we maintain an appropriate network of habitats and the vital links/wildlife corridors between these habitats; • Recognise that the distribution of habitats and species will be affected by climate change • Recognise the limits of the environment to accept further	• The Johannesburg Declaration on Sustainable Development, 2002 • EU Directive on the management of waste from extractive industries 2006/21/EC • EC Directive on the Conservation of Wild Birds 1979/409/EEC • EC Directive on the Conservation of Natural Habitats and of Flora and Fauna 1992/43/EC • Directive 2008/98/EC on waste (Waste Framework Directive) • The Convention on Biological Diversity, Rio de Janeiro, 1992 • RSS8 • Planning Policy Statement (PPS)1 (and supplement to PPS1) • PPS9 (and supplement to PPS9) • PPS12 • PPS23 • Minerals Policy Statement (MPS) 1 • MPS2 • Draft Planning Policy Statement: Planning for a Natural and Healthy Environment 2010 DCLG • White Paper on the Natural Environment (in prep.) • The new England Biodiversity Strategy (in prep.) • Natural Environment and Rural Communities Act 2006 • Green Infrastructure Guidance, 2009 • Protection of Badgers Act 1992 (as amended) • Breathing Space: Revised Strategy for the management and maintenance of Nottingham's Open and Green Spaces 2010 - 2020, Nottingham City Council, 2010 • Ambitious for Wildlife. Position Statement on Biodiversity, Nottingham City Council, 2007 • 6Cs Green Infrastructure Strategy, 2010 • Wildlife and Countryside Act 1981 (as amended) • Countryside and Rights of Way Act 2000, • Working with the Grain of Nature: A Biodiversity Strategy for England 2002, • UK Biodiversity Action Plan, 1994 (2007 review) • Securing the future – UK Government Sustainable Development Strategy 2005, • Conservation of Habitats and species regulations 2010, • Regional Strategic River Corridors Initiatives 2004? • Environment Protection Act 1990 • East Midlands Regional Plan 2009 • Putting wildlife back on the map – A Biodiversity Strategy for the East Midlands, 2006 (EM Biodiversity Forum & EMRA) • 6Cs Green Infrastructure volume 6: Strategic GI Network for the Nottingham Principal Urban area and Sub-Regional Centres, 2010 • Natural England and The Wildlife Trusts 6Cs Growth Point Biodiversity Opportunity Mapping – Pilot Study • Interim Planning Guidance Note11: Green Infrastructure, April 2009 Mansfield	Requires objectives to protect and enhance biodiversity and habitats at all levels.

Key messages	Source of information	Implications for SA Framework
development without irreversible damage.	District Council • A green Infrastructure Strategy for Newark and Sherwood 2010 • Nottinghamshire Local Biodiversity Action Plan for Nottinghamshire 1998, • Sherwood Study: A vision for Sherwood Forest , • Nottinghamshire Heathland Strategy, Sherwood Habitats Forum 2004 • Sherwood Study: A vision for Sherwood Forest, Sherwood Advisory Group 2000, • Nottinghamshire District Local Plans / emerging LDFs, • On-Trent Initiative, • Nottinghamshire Sustainable Community Strategy 2010-2020 • Greater Nottingham Aligned Core Strategies Option for Consultation 2010 • A Living Landscape for Nottinghamshire, Nottinghamshire Wildlife Trust, 2011	
Soil • Protect the best and most versatile agricultural land and minimise the loss of high quality land by identifying lower quality land for development where this does not conflict with biodiversity interests and by ensuring good soil management techniques to work and restore best and most versatile agricultural land and natural habitats satisfactorily ver possible; • Soils play an important role in supporting ecosystems, improving drainage and providing green space for communities. If not managed carefully during construction and development, these important functions can be lost. • Encourage better management of soil in new developments to minimise damage to soil structure and ensure land is restored to its former quality; • Avoid soil pollution and seek remediation of contaminated land where necessary;	• PPS7 • PPS23 • MPS1and annex • MPS2 • MPS3 • MPG7 • Environmental Protection Act, 1990 • Pollution Prevention and Control Act, 1999 • Working with the grain of nature: A Biodiversity Strategy for England 2002; • Safeguarding our Soils – A Strategy For England 2009 • First Soil Action Plan for England 2004-2006 Securing the Future • Government Sustainable Development Strategy 2005 • East Midlands Regional Plan 2009 • Nottinghamshire District Local Plans / emerging LDFs	Requires objectives to protect high quality agricultural land and minimise disturbance / damage and pollution to soils.
Water • Maintain and improve existing water quality to protect health; • Use water resources sustainably and minimise future demands on supply; • Protect groundwater resources where development could result in environmental harm or risk to water supplies;	• EU Water Framework Directive 2000/60/EC • EU Urban Waste Water Treatment Directive 1991/271/EC; • Urban Waste Water Treatment (England and Wales) Regulations 1994 • PPS23 • MPS2 • Future Water – The Government's Water Strategy for England, 2008 • Regional Environmental Strategy • Environmental Protection Act, 1990 • Working with the grain of nature: A Biodiversity Strategy for England, 2002 • Securing the future – UK Government Sustainable Development Strategy 2005 • Pollution Prevention and Control Act 1999	Requires objectives to protect and improve water quality.

Key messages	Source of information	Implications for SA Framework
• Protect surface water quality i.e. rivers and lakes; • Ensure restoration schemes re-naturalise watercourses, reconnect floodplains and contribute to good ecological condition • Provide new or improved waste water treatment capacity to meet EU standards.	• Policy and Practice for the Groundwater Protection: Policy and Practice (GP3) (Edition 1), EA 2008 • East Midlands Regional Plan 2009 • Nottinghamshire District Local Plans / emerging LDF's • Policy and practice for the protection of groundwater (Environment Agency) • Nottinghamshire District/Borough Water Cycle Studies • Humber River Basin Management Plan • Catchment Abstraction Management Plans • Severn Trent Water Water Resource Management Plan	
Flood risk • Seek to lessen effects of flood and drought; • Avoid inappropriate development on flood plains; • Ensure that in areas of flooding, development proposals do not have a significant adverse impact on flood flows or flood storage capacity; • Avoid development likely to increase flood risk and incorporate sustainable drainage systems in new development where appropriate. • Climate change could lead to more frequent, widespread and severe flooding events and there is a need to 'future-proof' development.	• EU Water Framework Directive 2000/60/EC • PPS1and annex • PPS23 – Annex 1 • PPS25 • National Flood and Coastal Erosion Risk Management Strategy for England, Environment Agency, 2011 • East Midlands Regional Plan 2009 • Environment Agency River Basin Management Plans • Environment Agency Fluvial Trent Strategy • River Trent Catchment Flood Management Plan, 2009 Environment Agency. • Nottinghamshire SFRA • Nottinghamshire District/ Borough SFRAs	Requires objectives to minimise flood risk by locating new developments and associated plant in the most suitable (lowest risk) areas.
Historic and cultural heritage • Recognise that heritage assets are a non renewable resource; • Protect the historic environment from inappropriate development; • Conserve heritage assets in a manner appropriate to their level of importance; • There should be a presumption in favour of the conservation of	• The Venice Charter 1964 • European Convention on the Protection of Archaeological Heritage 1992; • Regional Environmental Strategy • PPS1and annex • PPS5 • MPS1 • MPS2 • Securing the future – UK Government Sustainable Development Strategy 2005 • Ancient Monuments and Archaeological Areas Act 1979 • Planning (listed Buildings and Conservation Areas) Act 1990 • 'Heritage Protection for the 21st Century' 2007 Heritage White Paper • Regional Strategic River Corridors Initiatives 2004 • East Midlands Regional Plan	Require objectives to conserve and protect high quality heritage and archaeological assets and their settings. Where protection of archaeological remains is not possible ensure detailed records are taken.

Key messages	Source of information	Implications for SA Framework
designated heritage assets and the more significant the designated heritage asset, the greater the presumption in favour of its conservation should be. • Where loss of heritage is deemed acceptable, processes should be in place to ensure that a detailed record and understanding of the resource is gained prior to its loss; • Promote good quality design to minimise the visual impact of the new development. • Consider the positive contribution that conservation of heritage assets and the historic environment generally can make to sustainable communities and economic vitality.		
Landscape and countryside • Protect and enhance the characteristics of the County's Landscape Character Areas and locally important landscape features such as listed parks and gardens and other protected areas incorporating landscape features, for example Clumber Park.; • Recognise the value and distinctiveness of the wider countryside and landscape quality and character; • Minimise the impact of development on landscape/townscape at all levels • Where possible bring about improvements to the environment through high quality restoration; • Maintain access into the countryside; • Protect the open character of the Green Belt from inappropriate development.	• European Landscape Convention 2004 • PPS1and annex • PPG2 • PPS7 • MPS1 • MPS2 • MPG3 • MPG7 • The Countryside and Rights of Way Act 2000 • Working with the Grain of Nature: A Biodiversity Strategy for England 2002 • Securing the Future – UK Government Sustainable Development Strategy 2005 • East Midlands Regional Plan 2009 • Regional Strategic River Corridors Initiatives 2004? • Nottinghamshire Countryside Appraisal, 1997, Nottinghamshire County Council • Landscape Character Assessment – Guidance for England and Scotland, Countryside Agency 2002 • Nottinghamshire Landscape Guidelines 1997, Nottinghamshire County Council • Nottinghamshire Landscape Character Assessments 2009/2010, coordinated by Nottinghamshire County Council • Nottinghamshire County Council Historic Landscape Characterisation • Nottinghamshire District Local Plans / emerging LDFs • On-Trent Action Plan 2010-2016	Requires objectives to protect the landscape and rural areas, and where possible enhance it through high quality restoration schemes.
Air Quality	• Kyoto Agreement • European Air Quality Directive 2008/50/EC • EC Directive Ambient Air Quality and Management 1996/62/EC	Requires objectives to prevent pollution and protect

Key messages	Source of information	Implications for SA Framework
• Prevent and reduce the detrimental impact on human health, quality of life and the environment, including sensitive habitats; • Meet air quality standards and minimise emissions (including greenhouse gasses) to air from new development and associated infrastructure; • Minimise emissions to air from transporting minerals/waste by reducing travel distances and using more sustainable methods of transport. • Ensure that the possible impact on air quality from new development is considered beyond the boundary of the development. • Ensure development does not harm designated AQMAs • Consider the cumulative impacts of development on air quality.	• Directive 1999/31/EC on the landfill of Waste • Directive 2000/76/EC on Incineration of Wastes • Directive 2002/3/EC relating to ozone in ambient air • Directive 2001/80/EC Large Combustion Plant • Directive 2006/21/EC Management of Waste from Extractive industries. • Directive 1999/30/EC relating to limit values for Sulphur Dioxide, Oxides of nitrogen, particulate matter (dust) and Lead in ambient air. • UK Climate Change Programme?? • Pollution Prevention and Control Act 1999 • PPS1and annex • PPS23 • MPS2 • National Air Quality Strategy • Air Pollution: Action in a Changing Climate 2010 Defra • Air Quality (England) Regulations 2000 • Securing the future – UK Government Sustainable Development Strategy 2005 • The Future of Transport; A network for 2030 • 'Our Energy Future- Creating a Low Carbon Economy' • Environmental Protection Act, 1990 • East Midlands Regional Plan 2009 • Local Transport Plans – North Nottinghamshire & Greater Nottingham 2006-2011 and Nottingham 2011-2026 • The Nottinghamshire Air Quality Strategy 2008 • The Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 • Nottinghamshire District Local Plans / emerging LDFs • Air Quality Action Plans for Nottinghamshire Districts	air quality.
Climate Change • Integrate climate change considerations into all aspects of spatial planning; • Minimise the effects of climate change on human health and on the environment; • Minimise greenhouse gas emissions from development and associated infrastructure; • Shape sustainable communities that are resilient to and appropriate for the climate change • Ensure that developments can withstand the likely impacts of climate change.	• The Johannesburg Declaration on Sustainable Development, 2002 • Kyoto Agreement on Climate Change 1997 • European Sustainable Development Strategy 2001 • PPS1 and annex • PPS22 • PPS23 • MPS2 • Planning Policy Statement consultation: Planning for a low carbon future in a changing climate 2010 DCLG • Securing the Future – UK Government Sustainable Development Strategy; • Climate Change and Sustainable Energy Act 2006 • Climate Change Act 2008 • 'Our Energy Future – Creating a Low Carbon Economy' 2003 Energy White Paper. • UK Climate Change Programme, 2006, DEFRA • East Midlands Regional Plan 2009 • Zero 2100 A climate Protection Policy for Nottingham, Nottingham City Council 2006 • Climate Change Framework for Action in Nottinghamshire 2008 • Towards Carbon Neutrality: A Carbon Management Plan for Nottinghamshire County Council, 2007 (NCC) • The Nottinghamshire Air Quality Strategy 2008 • Nottinghamshire District Local plans / emerging LDFs	Requires objectives to reduce greenhouse gas emissions that contribute to climate change, and to ensure that new development is able to cope with the effects of climate change

Key messages	Source of information	Implications for SA Framework
• Consider how the climate may change over the lifetime of developments.		
Transport • Reduce the impact of travel on the environment (e.g. reduce traffic noise, pollution and congestion); • Reduce the need to transport minerals & waste and promote alternatives to road transport such as rail, water or pipeline, where possible • Encourage sites that are close to mineral markets / waste sources. • Locate sites close to the primary road network and maximise the use of existing roads / infrastructure.	• European Sustainable Development Strategy 2001 • PPS1 (and PPS1 supplement) • PPS7 • PPS10 • PPG13 • MPS2 • Planning Policy Statement consultation: Planning for a low carbon future in a changing climate 2010 DCLG • The Future of Transport; A Network for 2030, 2004 • East Midlands Regional Plan 2009 • Local Transport Plans – North Nottinghamshire and Greater Nottingham 2006-2011 and Nottingham2011-2026 • Securing the Future – UK Government Sustainable Development Strategy 2005 • Climate Change Act 2008 • Our Energy Future – 'Creating a low carbon economy' 2003 Energy White Paper. • Target Programme of Improvements, Highways Agency • Regional Freight Strategy EMRA 2005 • Nottinghamshire District Local Plans / emerging LDFs	Requires objectives that reduce the impact of transport by encouraging alternative, more sustainable forms of transport and efficient use of the highway network.
Health • Use the precautionary principle when assessing pollution risk; • Ensure wider health issues are considered to provide the right environment to promote healthier lifestyles. • Maintain / improve access to open space for leisure and recreation; • Locate sites where the potential impact on the health and well being of local communities is minimised; • Properly regulated and managed waste management facilities should pose little risk to health; • Minimise potential disturbance from noise, dust, and odour.	• The Johannesburg Declaration on Sustainable Development, 2002 • European Air Quality Directive 2008/50/EC • Directive 2002/3/EC Ozone in ambient air • Directive 1999/30/EC limiting values for Sulphur Dioxide, Oxides of Nitrogen, particulate matter (dust) and lead in ambient air • Directive 2008/98/EC on waste (Waste Framework Directive) • EU Directive on the management of waste from extractive industries 2006/21/EC • PPS10 • PPS23 • PPG24 • MPS2 • Securing the future – UK Government Sustainable Development Strategy 2005 • Review of Environmental & Health Effects of Waste Management (DEFRA 2004) • Draft Guidance on Health in Strategic Environmental Assessment: A consultation. DofH 2007 • Review of Environmental and Health Effects of Waste Management: Municipal Solid Waste and Similar Wastes DEFRA 2004 • Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 DEFRA • East Midlands Regional Plan 2009 • Nottinghamshire's Sustainable Community Strategy 2010-2020 • Nottinghamshire County Joint Strategic Needs Assessment 2008 • Nottingham City Joint Strategic Needs Assessment 2010-2011	Requires objectives to improve health by minimising emissions from sites and providing opportunities for recreation.
Sustainable communities	• Aarhus convention: Access to information, public participation in decision making	Requires objectives to ensure

Key messages	Source of information	Implications for SA Framework
• Reflect the concerns and interests of communities in all stages of decision making and provide early and effective opportunities for community involvement; • Encourage developers to seek and maintain effective consultation and liaison with local communities before submitting planning applications and during operations, restoration and aftercare of sites; • Take account of the wider social, cultural economic and environment benefits or impacts of new development; • Improve rural quality of life and enhance the rural economy by increasing employment, competition and enterprise • Minimise the impacts of development on local communities and quality of life through good location, design and management of sites and high quality restoration; • Noise and dust emissions should, as far as possible, be controlled, mitigated or removed at source; • Ensure a reliable and sufficient supply of minerals to maintain and develop community infrastructure such as buildings, roads, energy supplies; • Encourage waste prevention and re-use and provide appropriate waste management facilities to ensure waste is managed sustainably, in line with the waste hierarchy • Enable waste to be managed close to source • Encourage waste awareness and best practice to reduce waste as part of the construction and operation of new development. • Encourage the sustainable use of natural resources and raw materials including the efficient use of minerals, water and	and access to justice in environmental matters. • Directive 2006/21/EC Management of waste from extractive industries. • Directive 1999/31/EC on the landfill of Waste • PPG2 • PPG24 • PPS1 • PPS3 • PPS4 • PPS7 • PPS12 • MPS1and annex • MPS2 including Annex 1; dust and annex 2 noise • MPG2 • Draft Planning Policy Statement: Planning for a Natural and Healthy Environment 2010 DCLG • Waste Strategy for England 2007 • The Hazardous Waste Regulations 2005 (England and Wales) • Animal By-Products Regulations 2003 • Waste Management Regulations 2005 (England and Wales) • 'Heritage Protection for the 21st Century' 2007 • Regional Waste Strategy • East Midlands Regional Plan 2009 • Greater Nottingham Aligned Core Strategies Option for consultation 2010 • Local Transport Plans - Greater Nottingham and North Nottinghamshire 2006-2011 and Nottingham 2011-2026 • Nottinghamshire Council Strategic Plan 2010-2014 • Nottingham City Council Corporate Plan 2006-2011 • Nottinghamshire Sustainable Community Strategy 2010-2020 • The Nottingham Plan to 2020: Nottingham City's Sustainable Community Strategy. • Greater Nottingham Aligned Core Strategies Option for consultation 2010	communities have the opportunity to participate in the production of plans and that new development minimises its impact on its surroundings.

Key messages	Source of information	Implications for SA Framework
energy in new development.		
Minerals • Secure adequate and steady supplies of minerals by safeguarding mineral resources from sterilisation and maintenance of appropriate land banks; • Reduce the reliance on primary minerals, by encouraging the increased use of recycled and secondary materials; • Maximise the benefits and minimise the impacts of minerals operations over their full life cycle • Minimise environmental impacts from mineral working and promote best practice at all sites. • Consider the impacts of planned future growth across the county when assessing the need for minerals	• The Johannesburg Declaration on Sustainable Development, 2002 • European Sustainable Development Strategy 2001 • 'Securing the Future' The UK Government Sustainable Development Strategy 2005 • National and Regional Guidelines for Aggregates Provision in England 2005-2020 • PPS1 and annex • PPG2 • MPS1 • MPS2 inc Annex 1: Dust and Annex 2:Noise • MPG2 • MPG3 • MPS5 • MPG7 • MPG15 • Revised Draft National Policy Statement, Fosil fuel electricity generating infrastructure (EN-2), Department of Energy and Climate Change 2010 • East Midlands Regional Plan 2009 • On-Trent Initiative • Nottinghamshire Local Biodiversity Action Plan for Nottinghamshire 1998, • Greater Nottingham Aligned Core Strategies Option for Consultation 2010 • Nottinghamshire District Local Plans / emerging LDFs	Requires objectives to maintain an adequate supply of minerals, make efficient use of minerals and minimise the local impacts of minerals development
Waste • Protect the environment and human health from potentially harmful impacts of waste management • Manage waste as sustainably as possible according to the waste hierarchy; • Provide an adequate number of facilities for the safe recovery, treatment and final disposal of waste • Ensure there is sufficient waste management capacity to support planned future growth across the county; • Ensure we are able to meet national, regional and local targets for waste recycling, recovery and disposal; • Help to break the link between economic growth and waste	• The Johannesburg Declaration on Sustainable Development, 2002 • Directive 2008/98/EC on waste (Waste Framework Directive) • Directive 2000/53/EC on end of life Vehicles • Directive 002/96/EC on Waste Electrical and Electronic Equipment • Regulation 2037/2000 on ozone depleting substances • Animal by-products regulations 2003 (EC 1774/2002) • Landfill (England and Wales) Regulations 2002 • The Hazardous Waste (England and Wales) Regulations 2005 • Animal By-Products Regulations 2003 • Waste Management (England and Wales) Regulations 2005 • Waste (England and Wales) Regulations 2011 • 'Securing the Future' The UK Government Sustainable Development Strategy 2005. • Waste Strategy for England 2007 • Environmental Protection Act, 1990 • Site Waste Management Plans Regulations 2008 • PPS1and annex • PPS3 • PPS10 • PPS22 • Planning Policy Statement consultation: Planning for a low carbon future in a changing climate 2010 DCLG • Revised Draft National Policy Statement for Renewable Energy infrastructure (EN-3), DECC 2010	Requires objectives to provide an appropriate range of waste management facilities.

Key messages	Source of information	Implications for SA Framework
production by encouraging more sustainable resource use and measures to prevent/reduce waste. • Continue to reduce our reliance on landfill but recognise that some disposal may still be necessary for residual waste; • Use resources more efficiently to reduce waste – including more sustainable construction and manufacturing practices and 'waste audits'; • Encourage communities to take responsibility for their own waste by providing for waste to be managed close to source wherever possible. • Re-use previously developed land and existing buildings/infrastructure for new development wherever possible; • Ensure waste issues are considered as part of all development in an integrated way;	• East Midlands Regional Plan 2009 • Waste Strategy for the East Midlands: January 2006, East Midlands Regional Assembly • Nottingham Energy Strategy 2010, Nottingham City Council • Nottinghamshire Integrated Municipal Waste Management Strategy 2001 • A Waste-Less Nottingham, Waste Strategy 2010-2030, December 2010, Nottingham City Council • Greater Nottingham Aligned Core Strategies Option for Consultation 2010 • Nottinghamshire District Local Plans / emerging LDFs	
Economy and employment • Planned future growth across the county will increase overall demand for minerals and could increase local waste arisings; • Ensure an adequate supply of minerals to support economic development; • Ensure an appropriate range of waste management facilities to meet local needs; • Prevent/reduce waste and recognise the value of waste as a resource; • Support the rural economy and encourage rural diversification; • Help to promote diverse range of employment opportunities and skills development;	• 'Securing the Future' Government Sustainable Development Strategy 2005 • PPS1 and annex • PPS4 • PPS7 • PPS12 • East Midlands Regional Plan 2009 • Regional economic strategy – 'Destination 2010' • Nottinghamshire's Sustainable Community Strategy 2010-2020. • The Nottingham Plan to 2020: Nottingham City's Sustainable Community Strategy. • Greater Nottingham Aligned Core Strategies Option for Consultation 2010 • Nottinghamshire District Local Plans / emerging LDFs	Requires objectives to minimise employment from mineral and waste activities.

Key messages	Source of information	Implications for SA Framework
• Encourage new and innovative technologies; • Provide an appropriate framework for investment to enable the timely delivery of key infrastructure (i.e. clear planning policies showing where development is likely to be acceptable)		
Energy • Minimise energy usage and promote the use of renewable sources of energy; • Help to limit climate change and secure 'a diverse and viable long term energy supply; • Reduce reliance on fossil fuels • Recognise waste as a potential source of low carbon or renewable energy, including use of biomass and energy from waste to help meet the UK's energy needs; • Promote energy recovery from existing or proposed landfill sites / incineration schemes; • Ensure that the sustainable location and design of new development to minimise energy/fuel usage, including reducing the need to travel • Plan new development to make good use of opportunities for decentralised and renewable or low carbon energy.	• Climate Change and Sustainable Energy Act, 2006 • Climate Change Act 2008 • PPS1 and annex • PPS10 • PPS22 • Planning Policy Statement Consultation: planning for a low carbon future in a changing climate, 2010. DCLG • National Waste Strategy • Revised Draft National Policy Statement - Fossil Fuel Electricity Generating Infrastructure (EN-2), Department of Energy and Climate Change, Oct 2010 • Revised Draft National Policy Statement for Renewable Energy Infrastructure (EN-3), Department of Energy and Climate Change, Oct 2010. • Climate Change Framework for Action in Nottinghamshire 2008 • East Midlands Regional Plan 2009 • Regional Energy Strategy Part 2, May 2007, East Midlands Regional Assembly • Nottingham Energy Strategy 2010 • A Waste-Less Nottingham, Waste Strategy 2010-2030. 2010 Nottingham City Council	Requires objectives to minimise energy usage and encourage alternative energy sources.
Land use • Use previously developed land existing buildings for new development wherever possible; • Set out an appropriate spatial strategy showing where development of different types is likely to be acceptable.	• PPS1 and annex • PPS12 • East Midlands Regional Plan 2009 • Sustainable Developer Guide for Nottinghamshire • Nottinghamshire District/ Borough adopted Local Plans and emerging Local Development Frameworks • Greater Nottingham Aligned Core Strategies Option for consultation 2010	Requires objective to maximise the use of previously developed land where it does not compromise biodiversity and environmental assets.

Key messages	Source of information	Implications for SA Framework
• Recognise that previously developed land can often have significant biodiversity value		

4. Baseline information and characteristics of Nottinghamshire

Introduction

4.1 It is also important to have a good understanding of the current situation in terms of the social, economic and environmental wellbeing of Nottinghamshire. This helps to highlight any problems which the Core Strategies and subsequent documents should seek to address. It also provides a baseline of information against which to predict and subsequently monitor the effects of our policies.

4.2 A key part of the SA process is that each of the objectives is underwritten with comprehensive and up-to-date baseline information, using a reliable set of indicators that can be monitored over time. The indicators that have been used for each objective are shown in Table 4 (Chapter 6).

4.3 By comparing our own position to what is happening across the region, and nationally, we can establish where we are doing well and what needs to improve. Where there are also specific targets, such as those for recycling municipal waste, we can also use these as a benchmark to monitor our performance.

4.4 The baseline data collected for this report is set out in Appendix 2. This shows the most recent data for Nottinghamshire along with regional and national comparisons, where available. The table also includes any relevant targets and provides a commentary on the current position and any noticeable trends. Whilst, not all of the information is currently available, the data will continue to be refined and updated as part of the ongoing SA process.

4.5 The following paragraphs identify the key environmental, social, economic and physical characteristics of Nottinghamshire that have been identified from the baseline data and other information that is available.

Key characteristics of Nottinghamshire

Area and population

4.6 Nottinghamshire is a large county, covering 2,085 square kilometres of the East Midlands area. It is made up of three distinct areas comprising the relatively affluent suburbs around Nottingham; the north-west towns and villages which share a coal-mining and textile heritage; and more rural areas to the south and east which are

characterised by prosperous market towns and villages along the Trent Valley. Nottingham, to the south of the county, is one of the UK's eight core cities and a major regional centre for the East Midlands. Although the administrative boundary of the city is drawn quite tightly, the extent of the built up area, its associated housing market and travel to work patterns reflect a wider influence over a more general area known as Greater Nottingham. This includes part of Ashfield, reaching north up to Hucknall and all of Nottingham's other surrounding districts which house the city's key suburbs. Outside Greater Nottingham, the main towns are Mansfield, Sutton-in-Ashfield and Kirkby-in-Ashfield, Newark, Worksop and Retford.

4.7 Nottinghamshire's overall population is just over 1 million people with around two thirds of these living in, or within easy reach of, Nottingham. Administratively, there are seven district and borough councils within the County Council area whilst Nottingham City Council carries out both the district and county functions as a unitary authority. Geographically and economically there are close links between the three cities of Derby, Leicester and Nottingham and the neighbouring towns such as Chesterfield and Doncaster. The county shares borders with Yorkshire, Rotherham and Doncaster to the north, Derbyshire to the west, Leicestershire to the south and North Lincolnshire and Lincolnshire to the east.

Transport

4.8 There are good transport links to the rest of the UK, especially via the main north-south routes of the M1, A1 and the East Coast and Midland Mainline rail lines. Work is taking place to widen sections of the A46 which should improve access to Leicester and Lincoln and improvements to the the A453 link into Nottingham from the motorway have now been approved by Government. Key transport concerns include congestion and air quality and the effect this may have on the rate of climate change. Congestion is improving but is focussed on the main routes into Nottingham, Mansfield, Newark and Worskop. Air pollution within Nottinghamshire is concentrated along major transport corridors such as the A1 and M1 and around the main urban areas, particularly Nottingham where eight AQMAs have been designated and another is about to be declared. Nottinghamshire supplies minerals locally, regionally and nationally. The majority is currently transported by road although some coal and desulphogypsum is transported by rail and some sand and gravel is moved by barge. Most of our municipal waste is managed within Nottinghamshire although small amounts do go to neighbouring counties for treatment. It is also likely that some of our commercial and industrial waste goes out of the county, with some specialist wastes possibly travelling regionally or even nationally.

Natural Environment and Biodiversity

4.9 Nottinghamshire has a wide range of important wildlife habitats and species although it has suffered significant losses due to the effects of industrialization and coal mining, urban expansion, intensive agriculture and commercial forestry. Large areas of semi-natural woodland have been lost along with traditional hedgerows and species-rich grasslands, plus 90% of the county's lowland heathland had been lost by early in the last century. Cumulatively, this has seen a dramatic reduction in biodiversity across the county and Nottinghamshire's Local Biodiversity Action Plan lists over 900 species and 25 habitats that are of conservation concern. However these downward trends are now being halted or reversed through pro-active management schemes, including the high quality restoration of minerals sites to create new habitats.. Examples include the wetlands the Idle Valley Nature Reserve near Sutton and Lound, the creation of healthland habitats within Sherwood Forest and woodland planting across the Greenwood Community Forest.

4.10 Although there are comparatively fewer areas of designated nature conservation value here than in other parts of the East Midlands and the UK as a whole, Nottinghamshire still maintains important populations of key species such as great crested newt ,water vole, white-clawed crayfish along with populations of notable invertebrates. There are also significant areas of heathland and acid grassland sites within Sherwood Forest which contains the only internationally important conservation site within the county - the Birklands and Bilhaugh Special Area of Conservation (SAC). However part of the county is now being considered as a possible Special Protection Area (SPA) for birds on the basis of its significant populations of nightjar and woodlark. The county has 1 National Nature Reserve and 68 Sites of Special Scientific Interest (SSSIs) which account for only 1.6% of the county area, compared to 7.5% nationally[4]. The condition of these sites is improving but fell just short of meeting the national target of 95% of SSSIs being in favourable or recovering condition by 2010. There are 50 Local Nature Reserves (LNRs) and more than 1300 local Sites of Importance for Nature Conservation (SINCs) also known as Local Wildlife Sites (LWSs), of which only around 20% are known to be in positive conservation management. In addition, there are areas of LDAP habitats that fall outside these designated sites, including species-rich grasslands , woodlands, wetlands and waterways, and other features that make up the wider network of green infrastructure across the county.

Historic and cultural heritage

4.11 Nottinghamshire has a long and rich heritage with evidence of early Iron Age and Bronze Age settlements in northern and central parts of the county, and a significant roman settlement at Mansfield. Important

[4] http://www.nottinghamshire.gov.uk/home/environment/countryside/nature_conservation/protectingbiodiversity.htm

Viking finds are now also coming to light within Sherwood Forest. The county remained important through the middle ages and medieval times with royal castles and hunting grounds and enduring links to the legend of Robin Hood. Market towns at Worksop, Retford, Newark and Mansfield expanded during these times and the dissolution of the monasteries and forest clearances paved the way for the creation of large estates such as Clumber and Rufford. Nottingham and Newark played key roles in the skirmishes and sieges of the Civil War.

4.12 Nottinghamshire also has a long association with textile and clothing production with early cottage industries being subsumed by the spread of industrialisation and the mass development of factories, canals and railways. Throughout our history the River Trent has provided important trade links with many settlements along its banks. It also remains an important source of power for industry, with three major power stations along the Trent Valley. Just as important as the industrial revolution, have been the changes in agriculture which have changed our landscape and help to build the trade in wool and establish the rich merchants whose philanthropy then founded many of our important civic buildings. Nottingham's Lace Market area is a prime example of this historic legacy. Coal mining has also played a major part in our development as the power behind our industrialisation and a major employer until recent times.

4.13 Much of our preserved heritage dates from the middle ages onwards and can be seen in the large country estates, market towns and medieval castles and historic field patterns. From more recent times, the county has a large collection of industrial archaeology including frame-knitters cottages, lace factories and mills along with our former mining villages with their characteristic long terraces of worker's housing and skyline of colliery headstocks and spoil heaps.

4.14 Across Nottinghamshire there are over 4500 listed buildings. 5.8% of Grade I and II* are considered to be at risk. This is worse than the situation both regionally and nationally. There are also 140 conservation areas, 28 registered parks and gardens and 183 Scheduled Ancient Monuments.

Landscape, countryside and townscape

4.15 Nottinghamshire is a generally flat county with rich rolling farmlands to the south, a central belt of mixed woodland and commercial forestry with patches of heathland and oak-birch woodland to the north, open agricultural landscapes to the east and pasture and woodland on the coal measure and magnesian limestone to the west. Key landscape features are the wide, flat river valleys with extensive farmland, and large, historic market towns such as Newark and Retford. More scattered rural villages are settled within the gently rolling Wolds to the south of the county. The concentrated urban development around

Nottingham and the impact of major transport corridors such as the M1 and A1, along with the legacy of coal mining in the west of the county reflect more recent industrial influences. The county's two main rivers are also significant landscape features and show the evidence of continuing sand and gravel extraction with extensive areas of former sand and gravel working that have been restored to open water - including the National Water Sports Centre at Holme Pierrepont. The county's three remaining power stations are also dominant features along the line of the Trent flood plain.

4.16 Much of our countryside and open space remains threatened by the impacts of intensive agriculture, urbanisation and future mineral working and many parts of the county have suffered from the historic loss of hedgerows and traditional field patterns. Urban fringes, especially in the Green Belt around Nottingham, face significant pressure for urban expansion to deliver new housing and employment opportunities. Likely future changes to our climate may also alter the appearance of our landscape as the local temperature and water levels will dictate what kinds of vegetation can be sustained.

Climate

4.17 Although local data is hard to source, Nottinghamshire's climate is likely to follow the patterns generally being observed and predicted across the UK. We have already started to see increased incidences of flooding and we can expect a general pattern of increased rainfall, hotter and more unsettled summers and increased flooding. There will also be increased incidents of freak weather including flash floods, high winds and storms. Overall greenhouse has emissions are falling, especially for Co_2, but some of these changes cannot now be reversed. Mineral working is not a major source of emissions although transporting minerals will contribute to overall transport emissions and the use of fossil fuels for energy is another major contributor. The most significant emissions from waste are methane and Co_2. Within the UK, landfill alone accounts for 27% of our methane emissions and is 20 times more powerful than Co_2.

Air quality

4.18 Air quality is of major importance for climate and health as well as maintaining the diversity and quality of our natural environment. Nottinghamshire's air quality is generally improving but air pollution along major transport corridors such as the A1 and M1 and around the main urban areas is still a concern. Eight Air Quality Management Areas (AQMAs) have been designated on main routes into Nottingham because of the No_2 levels from traffic and a ninth is about to be designated. Emissions of Co_2 are mainly from commercial and industrial sources, especially from our power stations. Whilst there has been a slight overall reduction in Co_2, the actual levels vary quite

widely between districts. Bassetlaw and Newark and Sherwood both have a much higher rate than Gedling for example.

Water

4.19 A large part of Nottinghamshire overlies the Sherwood Sandstone Aquifer which is one of the largest groundwater resources in the UK. This is now fully developed and water conservation measures are being put in place to manage future abstraction levels. Whilst water supplies are likely to be sufficient to meet the current levels of planned growth, they are unlikely to support any additional increases and may be a constraint on the exact locations of new development.

4.20 Our two main rivers are the Trent and Idle which have both seen extensive mineral working for sand and gravel and are an important part of the county's landscape, heritage and natural environment. Whilst there has been a slight improvement in river quality, this is still marginally lower than the regional and national figure. Nottinghamshire is also vulnerable to nitrate pollution, especially in north Nottinghamshire around Worksop, although the whole county is covered by a Nitrate Vulnerable Zone to limit further damage and try to lower existing levels.

Soils

4.21 Nottinghamshire's soil profile varies from generally light sandy soils in the north and central parts of the county with heavier, clay based soils in the far east and west. Outside of the urban areas, the county is largely agricultural and most (approximately 70%) of Nottinghamshire's agricultural land is classed as grade 3 or above suggesting that there is a significant amount of high quality agricultural land. Housing demand in particular, means that there are significant pressures for built development, especially on the urban fringe around Nottingham, Newark and Mansfield.

Flood risk

4.22 Nottinghamshire is a relatively flat county. The Trent Valley and the eastern edge of the county are the lowest lying areas, with slightly higher ground through the central and western belts. The main river catchments are the Trent, Leen, Derwent. Erewash and Soar. In terms of flooding, the Trent Valley accounts for a large percentage of the flood zone area across the county and it is estimated that over 20,000 properties along the urban part of the River Trent may be at risk from a 1 in 100 flood event.

4.23 The wide Trent flood plain is a signficant development constraint for Nottingham and Newark but other areas including parts of Hucknall, Sutton-in-Ashfield and Kirkby-in-Ashfield are also at risk of surface water flooding from local rivers and drainage/sewer overflows.

Mansfield is considered to be at less risk overall but could still experience localised problems along with towns further north such as Warsop and Worksop.

Health

4.24 Overall health indicators for Nottinghamshire are slightly worse than both the regional and national comparisons although life expectancy has grown closer to the national average. There are also wide variations between different parts of Nottinghamshire with a twelve year gap in life expectancy between the least and most deprived wards. Worst affected are main urban areas of Nottingham, Ashfield and Mansfield with more rural, affluent areas such as Rushcliffe and Gedling having noticeably higher health scores. Obesity affects up to 15% of children and 25% of adults in Nottinghamshire and is linked to heart disease, diabetes and some cancers.

Energy

4.25 Nottinghamshire has traditionally been a significant energy supplier from its coal-fired power stations along the Trent Valley. A new gas-fired power station near Newark is now operational. The county is also a source of fossil fuels from its remaining coal fields and the more recent development of small-scale onshore oil and gas sites. There are also a number of schemes using mine gas from old mineral workings for energy and permission has been granted for the exploration of possible coal bed methane deposits. Energy consumption here is highest for industry but overall consumption has fallen slightly and local figures also show an increase in the proportion of renewable energy used.

4.26 There are now 14 wind farms or smaller collections of turbines that have been developed and many of the county's schools have been converted to wood-fuelled boilers. Two of our three remaining power stations have also been converted to enable them to co-fire biomass fuels from energy crops. Waste is an existing source of energy in the county with small-scale landfill gas recovery helping to meet on-site needs or power adjacent development, and an increasing number of anaerobic digestion schemes. Within Nottingham municipal waste is recovered for energy at the Eastcroft Incinerator which has planning permission to expand in future. This generates 40,000 MWh of electricity and feeds the UK's largest district heating scheme which serves almost 5,000 homes and businesses in the city.

4.27 The City Council is ambitious to remain the UK's leading low carbon city and this could include further energy from waste schemes such as anaerobic digestion and a significant further expansion of the Eastcroft plant.

Economy and Employment

4.28 Nottinghamshire is historically known for its coal mining and textile manufacturing and Nottingham is still known internationally for its lace-making. Although many of our traditional industries are in decline, these have now largely given way to commercial, service and high-tech industries. Nottingham is an important centre for financial services, administration, telecommunications, pharmaceuticals and science and research - supported by its two universities. The M1 corridor hosts a concentration of industrial and business park developments and Worksop has recently become a major centre for distribution.

4.29 Although employment rates here are slightly better than the national average, the number of businesses has declined over the last 2-3 years as a result of the recession. There are also wide variations in employment rates and income across the various districts/boroughs with parts of Nottingham, Ashfield and Mansfield particularly affected by low employment and deprivation. As the economy recovers, predicted growth levels will need to be supported by new infrastructure, especially in and around the main urban areas which are expected to be the main focus of future growth including the designated growth points for Nottingham and Newark. The minerals and waste industries are not themselves major employers although a large number of other sectors rely on minerals products for their raw materials (e.g. manufacturing, construction, energy generation). There are 9 national or multi- national firms currently working in Nottinghamshire and 10 smaller and locally based quarry operators. Waste management is again a relatively small employer with 8 national, 3 regional and around 70 smaller local firms and council run sites.

Minerals

4.30 Nottinghamshire has a diverse range of mineral resources including sand and gravel, building and asphalting sand, limestone, gypsum, silica sand, clay, coal and oil. Historic production levels have fallen dramatically during the recession from 5 million to 3.8 million tonnes per annum. The county is a major supplier of sand and gravel in the region and nationally and this accounts for the largest land take with over 3 million tonnes extracted every year. The deep mined coal industry which used to be the largest extractive industry in Nottinghamshire and which has had a huge influence on the social economic development of the county has been in major decline over the last 30 years. Today only one colliery remains active at Thoresby, near Edwinstowe.

4.31 The County faces a number of critical mineral planning issues over the next 10-15 years. The most significant will be maintaining adequate land banks of permitted reserves as there are shortfalls for aggregates and most other building and construction minerals. Resource depletion of sand and gravel in the Idle Valley is likely to see a major transfer of production to the Trent Valley over the next 10 years if the County is to

meet its reasonable share of regional aggregate production. Shortfalls in adjacent areas may also have an impact – for example a nationally important industrial limestone quarry at Whitwell in Derbyshire could extend into Nottinghamshire due to options in Derbyshire being limited.

4.32 Whilst mineral extraction is often seen as being environmentally destructive it provides some of the best opportunities we have for creating new wildlife habitats needed to restore our biodiversity and meet Local Biodiversity Action Plan targets, especially for wetlands. Many wetlands and other wildlife sites that exist today have been created out of former sand and gravel workings.

4.33 There has been no surface coal mining in Nottinghamshire for over 10 years but rising energy prices are expected to increase the pressure to work the County's surface coal mining resource found in the Erewash Valley. This factor combined with new technologies could also see the development of new energy minerals such as coal bed methane and shale gas which exist at depth beneath significant parts of the county. Although the timing and scale of the development of these resources are very uncertain these new resources could raise significant planning issues if they prove to be commercially viable.

Waste

4.34 Nottinghamshire produces around 4 million tonnes of municipal, commercial and industrial and construction and demolition waste a year. Figures over the last 2-3 years suggest there has been some reduction in the amount of waste produced but it is too early to tell whether this is a long term change or a more short term impact of the recent recession. However, it is clear that waste is progressively being managed more sustainably with just over 40% of municipal waste and more than 50% of commercial and industrial waste now being recycled[5]. Most of our construction and demolition waste is re-used or recycled on site – possibly as much as 80% or 90% based on national figures.

4.35 Existing recycling capacity for municipal waste is adequate to meet current targets (i.e. 50% by 2020) but additional capacity will be needed to increase recycling above this level. There is a network of 15 Household Waste Recycling Centres across the county and two large Materials Recycling Facilities in Nottingham and Mansfield manage the majority of recyclables that are collected from kerbside. Recycling of commercial and industrial waste is focussed around Nottingham, Mansfield and Worksop but the number of capacity of sites will need to increase to achieve any further recycling increases. There are relatively few permanent recycling sites for construction and demolition waste, which are again concentrated around Nottingham, Mansfield and Worksop, but there are a number of temporary sites at existing

[5] This is a national average based on Defra's 2009 Survey as no local data is available

quarries and inert landfill sites. As most construction and demolition waste is now managed on site existing capacity is considered adequate.

4.36 The Eastcroft Incinerator recovers energy from up to 160,000 tonnes of municipal waste a year but has permission to expand by a further 100,000 tonnes of either municipal or commercial and industrial waste. There are not currently any operational energy recovery schemes for commercial and industrial waste in the county.

4.37 Disposal capacity within Nottinghamshire is very limited with only three non-hazardous landfill sites serving the whole county. These are located near Nottingham, Newark and Worksop. There is also a fourth site near Retford which is currently moth-balled. At current disposal rates these sites are estimated to have around 4-5 years overall capacity remaining albeit one site has a relatively long life-span but can only take restricted quantities of waste each year. The sites in the north of the county are also very remote in terms of serving the main waste producing areas around Nottingham and Mansfield. There is only one inert site which is on the outskirts of Mansfield.

5. Sustainability issues

5.1 Based on the themes identified in the review of relevant plans and programmes (see table 4.1), and the issues highlighted through the collection of baseline data (see Appendix 2), a series of key sustainability issues, which are relevant to minerals and waste development within Nottinghamshire, have been identified and these are summarised in Table 2 below. This also considers the significance of each issue and how the Plan is likely to influence future outcomes (N.B. not all of the issues that are commonly covered in other SA work are relevant to minerals and waste and therefore issues such as educational achievement and housing standards are not considered within this scoping report). This section of the report also meets another key part of SEA/SA by looking at what would happen without the Plan i.e. how would this issue develop if we did not try to manage it? This therefore gives us a better understanding of how the Plan can be used to change the situation where necessary.

Table 2: Sustainability Issues

Sustainability Issue Identified	Significance to Plan	How can the plan influence this issue?
Natural Environment and Biodiversity - Nottinghamshire has fewer internationally and national important sites compared to other parts of the East Midlands and England as a whole. Although there is currently only one internationally important Special Area of Conservation (SAC), part of the county is also being considered as a possible Special Protection Areas (SPA) for birds, and the county is host to a number of important habitats and species. There is also an important wider network of habitats that fall outside these designated sites, including species-rich grasslands, woodlands and wetlands.. Historically, however, there have been dramatic losses of many habitats, including heathland, woodland and species-rich grassland because of development, intensive agriculture and commercial forestry, and although some losses continue, especially as a result of a decline in traditional management techniques, these previous downward trends are now being halted and reversed, with positive action to re-establish a number of habitats, including healthland within Sherwood Forest and reedbed in the Trent and Idle Valleys. Less than a quarter of the county's locally designated nature conservation sites are known to be in positive conservation management, although the overall condition of our statutorily designated nature conservation sites is improving, and there has also been an increase in the number of Local Nature Reserves. These positive changes should be reinforced in future to maintain and enhance the quality and extent of the county's biodiversity and the supporting network of green infrastructure.	**Moderate/high** - minerals and waste development both have the potential to significantly harm wildlife and biodiversity if not carefully managed. Without appropriate policies on the location and operation of sites there could be irreversible losses of habitat and indirect impacts from dust, noise, traffic and changes to hydrology. Waste sites also pose potential risk in terms of pollution of surface and groundwater and emissions to air. Without a positive planning framework opportunities to secure habitat improvements or create new areas of habitat could be lost or would not be coordinated effectively.	Policies should guide minerals extraction and waste management facilities to the most suitable locations in order to minimise environmental impacts and avoid losses to important sites. They can also ensure that appropriate mitigation, compensation or enhancement is put in place to offset unavoidable losses and secure the creation of new habitat, especially as part of restoration schemes for new or pre-existing minerals sites. This can provide opportunities to contribute to the Local Biodiversity Action Plan targets by delivering not just replacement but additional woodland, heathland and wetland areas for example. Without these measures in place the minerals and waste LDFs will make no contribution to meeting LBAP targets.

Sustainability Issue Identified	Significance to Plan	How can the plan influence this issue?
Historic Environment and Cultural Heritage - the level of Listed Buildings at Risk is considerably here higher than the national average. Significant archaeological remains are thought to lie along the Trent Valley but farming and potential mineral working are a risk to crop marks and the other limited evidence of these remains. Further damage to the historic cultural heritage of the area should be avoided. Where possible archaeological remains should be preserved in situ.	**Moderate/High** - unlikely to impact on cultural heritage (i.e. local traditions, arts/crafts etc.) but, without proper controls, mineral extraction in particular could significantly affect areas of archaeological interest including physical remains, field patterns and crop marks for example. Both minerals and waste sites could also affect the settings of listed buildings and conservation areas.	Ensure development is located so as to minimise the impacts on the historic environment. Promote the protection of cultural/historic assets and ensure preservation where possible. Arrange appropriate mitigation and/or compensation where necessary. Properly planned and managed mineral workings can provide unique opportunities to investigate and record archaeological features. Ensure sufficient supplies of local building stones are available for the conservation and restoration of our built heritage.
Air quality – air pollution within Nottinghamshire is concentrated along major transport corridors such as the A1 and M1 and around the main urban areas, particularly Nottingham where eight AQMAs have been designated because of No^2 levels from traffic. Emissions of Co^2 are mainly from commerce and industry, particularly power generation. There has been a slight overall reduction although actual levels vary between districts. Bassetlaw and Newark and Sherwood both have a much higher rate than Gedling for example. It is essential that new development does not make existing problems worse and that the cumulative impacts of development are considered.	**Low/Moderate** – problems are mostly linked to transport; energy and industry but dust and/or emissions from minerals and waste operations, including transport, could worsen existing air quality problems if not properly managed.	Ensure development minimises impacts on air quality and avoids AQMAs. Locate development to minimise transport distances and encourage alternatives to road transport to help reduce emissions of No^2. Encourage reductions in energy use to help limit Co^2 emissions.
Water – there has been a slight improvement in river quality but this is still marginally lower than the regional and national figure. A large part of Nottinghamshire overlies the Sherwood Sandstone Aquifer which is one of the largest groundwater resources in the UK. This is	**Moderate** - mineral extraction and pumping could lower the local water table - affecting surrounding habitats. Waste sites, landfill in particular, could contaminate	Ensure minerals and waste development is located so as to minimise any impacts on water quality and minimises demand on local water resources. Consider opportunities to incorporate sustainable drainage systems. The provision of new/improved

Sustainability Issue Identified	Significance to Plan	How can the plan influence this issue?
now fully developed and water conservation measures are being put in place to manage future abstraction levels. Nottinghamshire is also vulnerable to nitrate pollution and is covered by a Nitrate Vulnerable Zone. Development must not harm existing water quality and should help to improve this where possible. Water abstraction is a particular concern in the area of the SAC at Sherwood Forest.	surface and ground-water sources if not carefully located and managed. Nitrates are generally related to fertilizer/manure but uncontrolled land spreading/composting could have implications in some areas.	waste water treatment facilities should help to improve overall water quality. Ensure land spreading/composting schemes comply with Defra soil management guidelines to avoid nitrate overload.
Soil – most of Nottinghamshire's agricultural land is classed as grade 3 or above suggesting that there is a significant amount of high quality agricultural land. Housing demand in particular, means that there are significant pressures for built development, especially on the urban fringe around Nottingham, Newark and Mansfield.	**Moderate** – mineral workings typically cover a large area and significant amounts of high quality agricultural land could be lost if development is not well located, managed and restored.	Seek to avoid the loss of high quality (best and most versatile) agricultural land and guide development to areas of lower agricultural value where this does not conflict with biodiversity interests. Use development management policies to ensure proper soil handling and storage. Secure restoration to agricultural use to prevent the long term loss of productive land or important habitats.
Sustainable Communities – local communities are dependent on their basic physical infrastructure (e.g. raw materials for housing, roads and energy as well as clean, safe waste treatment and disposal) but there is also increasing community concern about the effects of development on local amenity and quality of life. There has been a growing trend for wider and more effective community involvement in the planning process and this will be reinforced under the present Government's 'localism' agenda. There is also growing awareness of the need to conserve energy, raw material and prevent waste as part of an overall move towards a greener, more sustainable society.	**Moderate/High** – without the planned provision of adequate mineral resources and waste treatment/disposal facilities, local areas would lack essential basic infrastructure. However such development can have significant local impacts (e.g. visual appearance, dust, mud, noise, vibration, odour, light nuisance and traffic). This could lead to an unacceptable loss of amenity/quality of life if not properly planned and controlled and local people would not have the opportunity to be involved in significant local decisions affecting them.	Ensure adequate provision of minerals resources and an appropriate network of waste treatment/ disposal sites. Avoid development close to sensitive areas and guide development to the most suitable locations by balancing need against wider environmental and social issues. Provide for suitable mitigation to minimise noise, visual impact, dust etc. and that sites are restored to a high standard. Ensure that local communities are involved in and understand the decision making process from the outset and that relevant information is widely available.
Population - the population of the county continues to grow steadily, and is forecast to increase above the	**High** – population levels will have a significant effect on the demand for	Ensure an adequate supply of minerals and sufficient new waste treatment and disposal

Sustainability Issue Identified	Significance to Plan	How can the plan influence this issue?
national average over the next 20 years. Nottingham and Newark have been identified as future growth areas, which will see considerable levels of new housing and employment development. Even with greater levels of waste prevention and re-use, this is likely to increase the overall amount of waste produced, particularly if the current trend for smaller households continues. The new buildings and infrastructure needed to deliver this growth will also increase the demand for mineral products for use in construction, industry and for energy generation.	raw materials and energy and is also likely to increase waste production. Without the planned provision of mineral resources and waste treatment and disposal facilities, there would be insufficient infrastructure to support this growth and any new minerals or waste development would be market led without proper consideration of wider social and environmental issues.	capacity to cope with planned growth. . Focus new facilities in/close to those areas earmarked for growth, especially around Nottingham and Newark. Make the most of existing/planned transport infrastructure and locate new development in the most sustainable locations to balance social, environmental and economic needs.
Health - the overall health indicators for Nottinghamshire are slightly worse than both the regional and national comparisons although life expectancy has grown closer to the national average. There are also wide variations between different parts of Nottinghamshire with a twelve year gap in life expectancy between the least and most deprived wards. Worst affected are main urban areas of Nottingham, Ashfield and Mansfield with more rural, affluent areas such as Rushcliffe and Gedling having noticeably higher health scores. NHS priorities include tackling smoking, alcohol problems, drug use and obesity and the local health partnership is keen to encourage greater participation in sport and recreation to promote healthier lifestyles. There is no published evidence to suggest that waste management poses an unacceptable risk to health but there is still a widespread public perception of health risk from waste facilities.	**Low/Moderate** – the plan is unlikely to have a direct impact on specific health targets and outcomes but emissions from vehicles or waste processing could worsen existing problems (e.g. asthma) if not properly controlled. Without effective planning, opportunities to provide possible benefits such as public open space and access for recreation/relaxation as part of site restoration would be lost.	Specific emissions controls would be decided by the Environment Agency as part of the separate environmental permitting system but planning decisions about the type and location of future mineral and waste developments will need to ensure that existing problems (e.g. air quality) are not made any worse and that they do not create any additional risks. Policies could reduce impacts by seeking to minimise transport distances, guiding development away from areas with existing pollution problems, and routeing vehicles to avoid AQMAs for example. Policies could also be used to encourage the restoration of sites to provide additional open space, leisure and recreational facilities which could all contribute to healthier lifestyles for local communities.
Economy and Employment - although unemployment rates here are lower than the national average, the number of businesses has declined over the last 2-3 years as a result of the recession. There are also wide variations in employment rates and income across the various districts/boroughs with parts of Nottingham, Ashfield and Mansfield particularly affected by low	**Low/moderate** –minerals and waste are not major employers but provide some local jobs and the raw materials for many other sectors (e.g. construction, industry and energy). Future economic recovery is likely to increase demand, helping	Ensure an adequate supply of minerals to meet construction, energy and industrial needs e.g. sand and gravel, clay for bricks, silica sand etc. Encourage new/innovative waste technologies and consider opportunities to promote new waste facilities as a possible catalyst for other development where other businesses could make

Sustainability Issue Identified	Significance to Plan	How can the plan influence this issue?
employment and deprivation. Boosting enterprise and skills in these areas is a priority. As the economy recovers, predicted growth levels will need to be supported by new infrastructure, especially in and around the main urban areas which are expected to be the main focus of future growth including the designated growth points for Nottingham and Newark.	to stimulate the local economy and employment – particularly in the planned growth areas. This could be hindered without adequate mineral reserves. New waste technologies and more segregation of materials for recycling and re-use may also generate new jobs and provide opportunities for other businesses to diversify into waste/ resource management but developers may not invest without a positive planning framework.	use of waste materials as a resource or benefit from energy supplied from anaerobic digestion, gasification, incineration schemes etc.
Energy – energy consumption has fallen slightly and local figures also show an increase in the proportion of renewable energy used. Nottinghamshire is a significant energy supplier from its power stations along the Trent Valley and also supplies energy minerals in the form of coal, oil and gas. Renewable energy sources are also increasing with the installation of 14 windfarms/ turbines and the conversion of existing power stations to co-fire biomass fuels. Future energy demands may increase with the development of new housing and businesses across Nottinghamshire. The impacts of climate change and finite supply of fossil fuels means it is becoming increasingly important to source *secure/reliable* and clean energy sources. There is a therefore a need to encourage more energy efficient development to help reduce overall energy use and to promote alternative forms of renewable and low-carbon energy. Waste is increasingly recognised as possible source of renewable/low carbon energy which could provide a local source of heat and power. Nottingham is already well placed to build on its existing district heating scheme (largest in UK) that is served by the Eastcroft Incinerator.	**Moderate** – minerals and waste developments are not major consumers of energy but having appropriate policies in place could secure more energy efficient development and maximise opportunities to generate renewable or low carbon energy from waste. Despite the move away from fossil fuels, there will be a continuing need for energy minerals such as coal, oil and gas for the foreseeable future. Without a proper planning framework we may not be able to ensure that sufficient reserves are allocated.	Ensure adequate supplies of energy minerals where available. Promote energy efficiency in design and operation of minerals/waste processing plants. Encourage use of waste as a source of energy where this does not conflict with waste hierarchy and where it can contribute to wider development aims such as town centre renewal or a new business park for example. Consider possibilities for on-site provision of other sources of renewable energy e.g. solar or wind power, alongside mineral or waste development. Contribution of energy from energy from waste plants, other forms of energy recovery and landfill gas have increased over time.

Sustainability Issue Identified	Significance to Plan	How can the plan influence this issue?
Flooding – the risk of flooding is a significant issue for many parts of Nottinghamshire. The greatest risk is from the main rivers, particularly the River Trent. Surface water drainage and the long-term possibility of mine-water rebound are also a risk in some areas. Across the Greater Nottingham area 20,000 properties are estimated to be at risk of a 1 in 100 year flood. The extensive floodplain for the River Trent also poses a significant constraint to many types of development including waste treatment facilities. Although minerals development is generally flood compatible, any development must be designed so as not to make existing flood problems worse. All new development should also be designed to withstand possible flood impacts and where possible reduce overall flood risk by making space for water and through the layout and form of development.	**Moderate** – the poor location of built development and/or structures that could impede flood flows could increase the risk of flooding in the locality and further downstream. Most future sand and gravel working is likely to be in flood plain of River Trent and could make existing problems worse if not planned carefully. If not properly controlled, there would also be a pollution risk from locating waste treatment or disposal sites in areas at risk of flooding.	Ensure new development does not increase the risk of flooding locally or elsewhere as a result of changes to flood flows because of stockpiles, buildings, hard surfacing etc. Plan the appropriate location of sites managing non-hazardous waste to avoid pollution risk – especially from landfill sites. Where possible incorporate opportunities to contribute to flood management as part of development, such as the creation of flood water storage. Ensure appropriate minerals available to help construct flood defences where needed.
Climate change - emissions of greenhouse gases is a nationwide concern that needs to be tackled in all areas. Although emissions are reducing, the national targets have not yet been made and further improvements are needed. Local impacts are already being seen with increased flooding and there is a need to ensure that future development does not worsen the situation and is itself able to withstand the possible future impacts of climate change such as flooding, more frequent storms and higher temperatures.	**Moderate** – greenhouse gas emissions are a major contributor to climate change, particularly CO^2 and No^2 from vehicles and industry. Methane from landfill is also a potent greenhouse gas along with potential emissions from incineration and other types of thermal treatment. If sites were developed ad-hoc this could lead to minerals/ waste being transported over longer distances and a subsequent rise in vehicle emissions. Without a plan led approach development could take place in the worst affected areas leading to an increase rather than a reduction in overall emissions. There is also a risk that sites would be developed without adequate consideration of the likely	Reduce the need to transport minerals/waste through appropriate site location and encouraging more sustainable forms of transport such as rail or water where viable. Encourage energy efficient development to reduce emissions. The minimisation of emissions should be actively supported. Require site location, design and operation to include safeguards against the likely impacts of climate change such as heat, flooding and storms. Promote waste as a potential source of alternative low carbon/renewable energy to offset the need for fossil fuels.

Sustainability Issue Identified	Significance to Plan	How can the plan influence this issue?
	impacts of future climate change making our resources and infrastructure more vulnerable.	
Transport - to reduce transport emissions and related congestion, need to reduce the distances travelled by minerals and waste and/or promote alternatives to road where transport is essential. Proposals for improved rail links for both freight and passenger services may require additional supplies of construction minerals as well as increase future transport options. Road improvements along the A46 and possibly the A453 could also improve east-west travel across the county. Planned new housing and employment development in the growth areas are likely to affect network capacity. Making the best use of our existing transport network is a priority.	**Moderate** – there is no local data on the proportion of overall freight movements that are made up of minerals/waste but HGV movements are likely to be significant. Without a proactive planned approach there is a risk of increased congestion and worsened air pollution in sensitive areas such as AQMAs. Construction minerals are also essential supplies for new transport infrastructure.	Ensure that the location and distribution of sites takes into account access and transport issues, including potential air quality and congestion and makes the best possible use of the existing network. Ensure adequate supplies of construction minerals. Encourage local waste management schemes and minerals sites close to markets wherever possible and promote alternatives to road transport such as rail or water or even pipeline where viable.
Minerals – Nottinghamshire is a major producer of minerals, especially sand and gravel, but historic production levels have fallen dramatically during the recession. Current working areas for sand and gravel in the Idle Valley are almost exhausted and replacement reserves are needed to maintain an appropriate land bank. Future clay reserves for county's 2 brickworks also need to be secured as these are well below the recommended level. Reserves of silica sand are also very low. Mineral working can have significant environmental impacts but there are also linked opportunities for environmental improvements as part of mitigation and restoration arrangements.	**High** – serious risk to supplies of raw materials if adequate reserves of construction, industrial and energy minerals are not planned and maintained. The lack of certainty may discourage the long term investment required and, without a proper planning framework, development is more likely to adversely affect local communities and environmentally sensitive areas. Opportunities to secure environmental improvements would also be lost.	Long term planning and monitoring of reserves will ensure that an adequate and steady supply of minerals is secured and provide certainty to the industry, landowners and local communities. It will ensure that future mineral working takes place in the most appropriate locations, take account of environmental, social and economic concerns and enable development to be phased in order to minimise impacts and prioritise the most suitable sites.
Waste – arisings have fluctuated over time but previous significant growth has given way to more recent reductions. It is not clear whether this reflects changing behaviour, and better resource management, or is due to the impacts of the recession. Current estimates forecast moderate future growth as the economy	**High** – serious risk of pollution from leachate, gas and emissions to air. Uncontrolled development could have unacceptable impacts on the environment and quality of life if it is in an unsuitable location. Without	The plan cannot directly influence the amount of waste produced although it can help to promote the general need to prevent and re-use waste where possible. The key role of plan is to provide adequate management capacity for the waste that is produced and to encourage recycling, recovery

Sustainability Issue Identified	Significance to Plan	How can the plan influence this issue?
recovers. To manage waste more sustainably we need to move up the waste hierarchy away from landfill, meet national recycling targets, and enable communities to manage their own waste as far as possible. Significant progress has been made with recycling for all waste types and current municipal recycling targets should be met although there are wide variations between districts. National figures also suggest an increase in recycling commercial and industrial waste. Additional recycling capacity for all wastes would be required if we are to increase recycling above current targets. Disposal capacity across the county is very limited and unlikely to meet future needs unless there is significant change. Energy recovery capacity may increase in future if a proposed incinerator near Mansfield is approved and if the agreed extension to Nottingham's incinerator goes ahead. Most waste types are a potential pollution risk therefore waste needs to be managed safely without harm to either human health or the environment.	adequate planned provision of waste management facilities we would be unlikely to meet national recycling and recovery targets and could face EU fines. A lack of planning certainty may also discourage the long term investment required to deliver necessary facilities.	and finally disposal in that order. The plan cannot enforce recycling targets on its own but it can create a positive framework in which to encourage new recycling facilities to meet these targets. Where this meets with the waste hierarchy, it can also be used to encourage energy recovery to help avoid disposal. By giving spatial guidance on the likely acceptability of locations for future waste management as well as clear development criteria on the types of sites considered suitable, this should provide the necessary investment certainly to aid the delivery of new waste management infrastructure. It can also ensure that all development takes place in the most suitable locations to minimise environmental impacts. This could include promoting local facilities to help communities manage their own waste.
Landscape and countryside/ townscape – the emphasis on landscape character means that it is the features that make up a 'sense of place' that are important rather than trying to value one area above another. This approach is particularly important in Nottinghamshire as there are no officially designated sites of landscape importance. Key landscape features here are the wide, flat river valleys and farmland and the local influence of power stations and sand and gravel extraction along the Trent Floodplain; large, historic market towns such as Newark and Retford with more scattered rural villages settled within the gently rolling Wolds to the south of the county; the concentrated urban development around Nottingham and the impact of major transport corridors such as the M1 and A1, and the industrial development and history of mining across the former coalfield areas to the west of the county. Much of the county's landscape and areas of open	**Moderate/High** – mineral workings can be extensive and have significant landscape impacts. Most waste processing operations now take place in an industrial type building which could be intrusive in the wrong location. Landfill sites, often used to restore mineral workings can also be very visible in an open landscape. Without appropriate planning polices there would not be an objective assessment of landscape impacts of proposed development and opportunities to choose less sensitive sites and/or mitigate the visual impact of development might be lost.	Ensure landscape character is taken into account/guide development towards least sensitive areas or ensure schemes are sensitive to important landscape features and character. Promote opportunities for landscape improvements. Require screening and site design, building materials, colours etc. to minimise impacts on neighbouring land and buildings.

Sustainability Issue Identified	Significance to Plan	How can the plan influence this issue?
space are under pressure from the impacts of intensive agriculture, future mineral working and possible changes to our climate which could alter the appearance of our landscape. Urban fringes face significant pressure for housing development to meet future targets and the Green Belt around Nottingham, in particular, faces strong demand for urban expansion. Minerals development, in particular, can provide opportunities for landscape enhancement during restoration but this must reflect local character.		

6. Developing our sustainability objectives (the SA Framework)

Introduction

6.1 Another key function of the scooping report is to establish the sustainability objectives that will be used to appraise the policies and proposals of the Minerals and Waste documents. These are the objectives that will provide the framework for the Sustainability Appraisal (i.e. the means to test the plan). Government guidance indicates that the most appropriate starting point is the UK Sustainable Development Guide. However it is also important that these objectives are relevant to minerals and waste planning and that they are realistic and measurable. Whereas the broader District or Borough Council Local Development Frameworks will cover a wide range of issues including retail, employment, regeneration and social inclusion, it is expected that our minerals and waste policy documents will have less of an impact on these types of issues. Not all of the objectives set out in the national guidance are therefore considered relevant to the minerals core strategy. For example housing and education targets, and social capital are thought unlikely to be affected by, or have any impact on minerals or waste policy. However it is important to ensure that our minerals and waste policies and proposals do not conflict with these wider aims, and that they contribute to them wherever possible. Where relevant, possible links to wider social and economic objectives such as public health and employment have been drawn out in the following sections but your views on the relevance of this approach are particularly welcome.

6.2 The individual objectives are shown in Table 3 below. Table 4 which follows has been used to establish the relevant decision making criteria and possible indicators which will be used to assess how well our emerging policies and proposals meet these objectives and to monitor future performance. Table 5 considers the relationship between the SA objectives and the SA themes whilst Table 6 is then used to test the compatibility of these objectives with each other. Finally, in this section, Table 7 shows how the specific requirements of the SEA Directive have been met within this Scoping Report.

Table 3: Proposed sustainability objectives

SA Objectives
1. Ensure that adequate provision is made to meet local and national mineral demand and to provide a network of suitable waste management sites for the safe treatment and disposal of waste.
2. Protect and enhance biodiversity at all levels and safeguard features of geological interest.
3. Promote sustainable patterns of movement and the use of more sustainable modes of transport.
4. Protect the quality of the historic environment above and below ground.
5. Protect and enhance the quality and character of our townscape and landscape.
6. Minimise impact and risk of flooding.
7. Minimise any possible impacts on and increase adaptability to climate change.
8. Protection of high quality agricultural land and soil.
9. Promote more efficient use of land and resources
10. Promote energy efficiency and maximise renewable energy opportunities from new or existing development.
11. Protect and improve local air quality.
12. Protect and improve water quality and promote efficient use of water.
13. Support wider economic development and promote local job opportunities.
14. Protect and improve human health and quality of life.

Table 4: Proposed SA Objectives, decision making criteria and proposed indicators

Objective	Decision making criteria	Proposed Indicators
1. Ensure that adequate provision is made to meet local and national mineral demand and to provide a network of suitable waste management sites for the safe treatment and disposal of waste.	•Will the plan/proposal provide waste treatment/disposal sites close to where the waste is produced? •Will it reduce the distance waste is transported? •Will it reduce the cost of municipal waste treatment/disposal? •Will it help to reduce fly-tipping? •Will the plan identify adequate resources to meet local and national requirements over the plan period? •Will the plan identify suitable areas of land to serve current/future markets?	•Annual waste arisings •Estimated permitted treatment and disposal capacity •Average distance municipal waste is transported for treatment/disposal (figures for other waste streams unlikely to be available) •Number of 'bring sites' per 100,000 population. •Cost per tonne of municipal waste treatment/disposal •Number of fly-tipping incidents •Annual production figures (where available) •Annual apportionment level (where applicable) •Level of permitted reserves •Land bank requirement
2. Protect and enhance biodiversity at all levels and safeguard features of geological interest.	• Will the plan/proposal have an adverse affect on internationally, nationally or locally important sites or legally protected species? •Will it affect habitats or species identified within the Nottinghamshire Local Biodiversity Action Plan (LBAP)? •Will it restore or create new habitat in line with LBAP priorities?	•Area of UKBAP and LBAP habitats created as part of minerals/waste development •Area of designated sites lost to minerals/waste development mineral extraction. •Number of developments judged to have a harmful

Objective	Decision making criteria	Proposed Indicators
	•Will it support the retention/enhancement of the county's green infrastructure?	impact on legally protected species/habitats or those listed in the LBAP. •Area of UKBAP and LBAP habitat lost to minerals/waste development.
3. Promote sustainable patterns of movement and the use of more sustainable modes of transport.	•Will the plan/proposal reduce overall transport distances for minerals/waste? •Will it reduce road haulage of minerals/waste? •Will it promote alternative forms of transport? •Will it reduce/increase road congestion? •Will it result in sites that are well related to the main highway network? •Will it require new transport infrastructure to be developed?	•Number of permitted sites that would result in less haulage of minerals/waste. •Number of permitted sites that use alternative means of transport other than road. • Number of permitted sites judged to reduce/increase HGV numbers. •Average distance travelled by minerals/waste (no local data currently available) •Number of permitted sites requiring new access/road improvements
4. Protect the quality of the historic environment above and below ground.	•Will the plan/proposal have an adverse impact upon heritage assets and/or their setting, including archaeological remains and historic buildings? •Will it enhance or increase our understanding of the historic environment?	•Number of archaeological sites lost or damaged. •Number of designated heritage assets (including conservation areas, listed buildings, SAMs, registered parks and gardens and battlefields) adversely affected by development. •Number of developments with watching briefs?
5. Protect and enhance the quality and character of our townscape and landscape.	•Will the plan/proposal have an adverse impact on local landscape character or areas of important townscape?	Number of permitted sites judged to have a major overall adverse impact on local landscape character/conservation areas

Objective	Decision making criteria	Proposed Indicators
	• Will it have an adverse affect on the openness and visual amenity of the Green Belt? • Will it affect areas of public open space? • Will it lead to landscape/townscape improvements? • Will it result in development that is sympathetic to its surroundings in terms of design, layout and scale? • Will it contribute to the availability of local building materials to enable local distinctiveness to be retained in conservation projects and reflected in new development?	• Number of permitted sites resulting in landscape/townscape improvements • Area of Green Belt lost to minerals/waste development • Area of public open space lost to minerals/waste development • Number of conservation areas adversely affected by minerals/waste development
6. Minimise impact and risk of flooding.	• Will the plan/proposal increase the risk of flooding? • Will it help to alleviate flood risk or the impact of flooding?	• Number of permitted sites with flood alleviation benefits • Number of sites permitted against EA flood advice • Number of permitted sites with flood management plans in place
7. Minimise any possible impacts on and increase adaptability to climate change.	• Will the plan/proposal increase emissions of greenhouse gases from minerals and waste activities? • Will it reduce emissions of greenhouse gases? • Will it encourage the use of renewable energy sources? • Will it help to reduce our vulnerability to the impacts of climate change? • Will it help to increase the resilience of flora and fauna to climate change?	• Number of permitted sites that include specific carbon reduction measures. • Estimated output of greenhouse emissions from new mineral/waste sites and related transport. • Average distance travelled by minerals/waste (no local data currently available) • Amount of CO^2 produced per tonne of sand and gravel

Objective	Decision making criteria	Proposed Indicators
		• Amount of fossil fuel use offset by use of waste for energy • Number of permitted sites that include climate adaptation measures (e.g. to cope with heat, flood, storms)
8. Protection of high quality agricultural land and soil.	• Will the plan/proposal have an adverse impact on soil quality? • Will it lead to the irreversible loss of best and most versatile agricultural land?	• No of developments permitted which will have an adverse impact on soil quality • No of sites with soil management plans. (where available) • Area of best and most versatile land permanently lost to mineral extraction/development. • Amount lost as % of total agricultural land area.
9. Promote more efficient use of land and resources	• Will the plan/proposal promote the sustainable use of primary minerals? • Will it encourage the use of recycled and secondary aggregates? • Will it prevent the sterilisation of important mineral resources? • Will it promote sustainable waste management and encourage movement of waste up the waste hierarchy? • Will it reduce waste/provide for re-use of waste materials? • Will it make use of previous developed land or buildings?	• Number of new aggregate and other mineral recycling plants permitted. • Amount of recycled/secondary aggregates produced. • Percentage of recycled and secondary aggregates. • Number and capacity of new waste facilities by type • No. of buildings re-used as part of minerals/waste development • Area of previously developed land used for minerals/waste development

Objective	Decision making criteria	Proposed Indicators
10. Promote energy efficiency and maximise renewable energy opportunities from new or existing development.	•Will the plan/proposal minimise energy needs? •Will it contribute to renewable/low carbon energy targets? •Will it offset the use of fossil fuels?	•No. of sites permitted that incorporate energy efficiency measures •Amount of renewable/low carbon energy produced from minerals/waste sites
11. Protect and improve local air quality.	•Will the plan/have an adverse impact on local air quality? •Will it adversely affect a designated Air Quality Management Areas (AQMAs)?	•Number of sites permitted that are judged to have an adverse impact on air quality •Number of sites permitted within AQMAs
12. Protect and improve water quality and promote efficient use of water.	•Will the plan/proposal have an adverse impact upon water quality? •Will it increase demand for water? •Will it help to improve existing water quality? •Will the proposal incorporate sustainable water management and/or drainage?	• Local surface/groundwater quality (where data exists) •No. of sites permitted within groundwater protection zones. •Changes in ground water levels. •Volume of water abstracted for and discharged from minerals/waste developments •No of new/improved water treatment plants permitted •No of schemes with Sustainable Urban Drainage •No of schemes with rainwater harvesting
13. Support wider economic development and promote local job opportunities.	•Will the plan/proposal help to increase training and employment opportunities in Nottinghamshire? •Will it help to enable wider economic development?	•Data on existing job numbers related to minerals/waste •No. of new jobs created by new mineral/waste sites.

Objective	Decision making criteria	Proposed Indicators
		• Minerals production by type • Waste arisings by type
14. Protect and improve human health and quality of life.	• Will the plan/proposal minimise adverse impacts of minerals and waste activity on human health and levels of nuisance including dust, particulate emissions, noise (including traffic noise), vibration, visual amenity and light pollution. • Will it promote best practice in the operation and restoration of sites? • Will it help to enhance health and wellbeing through the provision of new or improved public open space and access? • Will it lead to a loss of public open space/reduction in public access?	• Amount of public open space/ publicly accessible land created by minerals/waste development. • Number of permissions granted contrary to advice from health protection agency. • Number of properties within 250m of mineral working proposals. • Number of properties affected by noise • Number / length of ROW affected by minerals/waste development • No. of confirmed complaints

Testing the plan objectives

Table 5: Relationship between SA objectives and SA themes

SA Objective	SA theme S = Social Ec = Economic Env = Environmental		
	S	Ec	Env
1. Ensure that adequate provision is made to meet local and national mineral demand and to provide a network of suitable waste management sites for the safe treatment and disposal of waste.	✓	✓	×
2. Protect and enhance biodiversity at all levels and safeguard features of geological interest.	✓	✓	✓
3. Promote sustainable patterns of movement and the use of more sustainable modes of transport.	✓	✓	✓
4. Protect the quality of the historic environment above and below ground.	✓	✓	✓
5. Protect and enhance the quality and character of our townscape and landscape	✓	✓	✓
6. Minimise impact and risk of flooding.	✓	✓	✓
7. Minimise any possible impacts on and increase adaptability to climate change.	✓	✓	✓
8. Protection of high quality agricultural land and soil	✓	✓	✓
9. Promote more efficient use of land and resources	✓	✓	✓
10. Promote energy efficiency and maximise renewable energy opportunities from new or existing development.	✓	✓	✓
11. Protect and improve local air quality.	✓	✓	✓
12. Protect and improve water quality and promote efficient use of water.	✓	×	✓
13. Support wider economic development and promote local job opportunities.	✓	✓	×
14. Protect and improve human health and quality of life.	✓	✓	✓

Table 6: Internal compatibility of the SA objectives

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1														
2	✓													
3	✓	✓												
4	✓	✓	-											
5	✓	✓	-	✓										
6	✓	✓	✓	-	-									
7	✓	✓	✓	-	-	✓								
8	✓	✓	✓	-	-	✓	✓							
9	✓	-	✓	-	-	✓	✓	✓						
10	✓	-	-	-	-	-	✓	-	✓					
11	✓	✓	✓	-	-	-	✓	✓	✓	✓				
12	✓	✓	✓	-	-	✓	✓	-	✓	-	✓			
13	✓	✓	✓	✓	✓	✓	-	✓	✓	-	-	-		
14	✓	✓	✓	-	✓	✓	✓	✓	-	-	✓	✓	-	

Key

✓ Compatible
× Incompatible
- No link / insignificant
? Uncertain / unknown

Table 7: Relationship between SEA topics and SA objectives

SEA topic	Related SA objectives
Biodiversity	2, 8,
Population	1, 9, 11 ,12, 13, 14
Human health	1, 11, 12, 14
Fauna	2, 6, 7, 8, 11, 12
Flora	2, 6, 7, 8, 11, 12
Soil	2, 6, 7, 8, 9, 11, 12
Water	2, 6, 12, 14
Air	3, 7, 10, 11, 14
Climatic factors	2, 3, 6, 7, 8, 10, 11, 12, 14
Material assets	1, 2, 8, 9, 10, 13, 14
Cultural heritage including architectural and archaeological heritage	1, 4, 5, 6, 9,
Landscape	3, 5, 7, 9

What happens next?

6.3 This Scoping Report will form the basis of the detailed SA of our emerging and future minerals and waste policy documents. We are asking the three statutory consultees – Natural England, English Heritage and the Environment Agency for their views on the suitability of this report and will incorporate their comments into the final version of the Scoping Report. We are also asking for the views of key stakeholders from community/interest groups, the minerals and waste industry and other local authorities.

Appendix 1: Review of Relevant Plans, Programmes and Policies

International & European

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Kyoto Agreement on Climate Change 1997	Cut greenhouse gas emissions (principally methane and CO^2) by 8% by 2008 - 2012. UK committed to 20% CO^2 reduction by 2010.	Minerals processing can be energy intensive which could affect the overall level of greenhouse gas emissions. Transporting minerals or waste is likely to lead to vehicle emissions. Waste treatment and disposal are potential sources of greenhouse gas emissions. In some cases the use of energy from waste technologies may offset the demand for fossil fuels and help to reduce overall CO_2 levels. Policies should therefore seek to minimise potential greenhouse gas emissions from minerals and waste development, minimise transport distances, encourage energy efficiency and promote energy recovery measures where this could offset other emissions.	SA objectives need to consider impacts on greenhouse gas emissions including energy consumption and transport impacts
The Johannesburg Declaration on Sustainable Development, 2002	Set the framework for a range of global actions to tackle poverty and climate issues leading towards more sustainable development including measures to address unsustainable patterns of consumption and production, protecting and managing the natural resource base; and health and education issues.	Policies need to take account of social and economic issues, where relevant to minerals and waste, as well as environmental issues, including the protection of natural resources and addressing climate change impacts.	Include objectives to promote sustainable development, particularly in relation to the consumption of natural resources, protection of the natural environment and health.
Aarhus Convention, 1998	Provides for better public access to information, involvement in decision making and access to justice in relation to environmental matters.	Ensure a transparent plan-making process and adequate opportunities for community involvement and engagement at all stages.	Include objective(s) to encourage community involvement and awareness raising.
Convention on Biological Diversity, Rio de Janeiro, 1992 - Strategic Plan 2011-2020	Recognizes that biological diversity is about more than plants, animals and micro organisms and their ecosystems – it is about people and our need for food security, medicines, fresh air and water, shelter, and a clean and healthy environment in which to live. Strategic Goals of the 2011-2020 plan include:	Policies should seek to minimise contribution that minerals and waste development makes to the loss of biodiversity and pressures on it as well ensuring that developments seek to improve biodiversity .	Include objective on biodiversity including minimising the pressure on it and its loss and seeking to maximise improvements to it and the benefits derived from it.

Document	Key objectives/targets	Implications for MWDF	Implications for SA
	- Address underlying causes of biodiversity loss - Reduce the direct pressures on biodiversity - Improve the status of biodiversity - Enhance the benefits to all from biodiversity and ecosystem services		
Directive 2008/98/EC on waste (Waste Framework Directive)	Repeals earlier directives from 1975 and 2006. Introduces an amended waste hierarchy of prevention, preparing for re-use, recycling, other recovery, e.g. energy recovery, and disposal. Waste management should not harm human health and the environment; including water, air, soil, plants and animals; not cause nuisance through noise and odour; and should not adversely affect the countryside or places of special interest. Sets re-use and recycling targets for some household wastes (50% by weight) and for non-hazardous construction and demolition waste (70% by weight) by 2020.	Promote the provision of waste management facilities in accordance with the waste hierarchy to support recycling targets. Ensure appropriate protection of natural resources, the environment and health.	Include objectives on sustainable waste management and to minimise impacts on health and quality of life.
Directive 1999/31/EC on the Landfill of Waste	Prohibits landfill of certain wastes and co-disposal of inert, non-hazardous and hazardous wastes. Waste must be -treated before disposal. Disposal of biodegradable municipal waste must be progressively reduced to 35% of 1995 levels by 2020. Requires landfill gas recovery, where viable. Looks to prevent or reduce the negative effects on the environment, in particular, air pollution.	Ensure policy framework promotes appropriate pre-treatment and disposal facilities. Require recovery of landfill gas where viable and that landfill sites are operated so as to minimise potential environmental impacts, especially air pollution.	Include objective(s) to minimise the environmental impacts of waste management, especially air pollution.
Directive 2000/76/EC on Incineration of Wastes	Prevent or limit as far as practicable the negative effects of incineration/co-incineration of waste. Introduced a dioxin emission limit of no more than 1 part in 10 billion.	Waste development, particularly incineration, could result in dioxin emissions. Although regulation and monitoring of emissions is carried out by the Environment Agency, policies should look to ensure that the location and scale of development will not harm air quality.	Include objective(s) to assess possible air quality impacts.
Directive 2000/53/EC on End of Life Vehicles	Reduce the amount of waste from End of Life Vehicles (ELVs). ELVs can only be 'treated' at authorised sites.	Policies should encourage the development of appropriate treatment facilities for these wastes.	Include objectives on sustainable waste management and the provision of appropriate waste management infrastructure.
Directive 002/96/EC on Waste Electrical and	Encourages reuse, recycling and recovery of waste electrical and electronic equipment. Sets		

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Electronic Equipment	criteria for collection, treatment, recycling and recovery. Includes targets for recycling and recovery of materials and components collected		
Regulation2037/2000 on Ozone Depleting Substances	Prevents recycling or disposal of refrigeration equipment without prior treatment to remove potentially harmful chemicals.		
Animal By-Products Regulations 2003 (EC 1774/2002)	Controls the disposal of animal by-products including catering and food processing wastes containing meat. Prescribes specific treatment requirements including composting, anaerobic digestion, rendering and incineration		
Directive 96/62/EC on Ambient Air Quality Assessment and Management	Introduces air quality standards for previously unregulated air pollutants	Although regulation and monitoring of emissions is carried out by the Environment Agency, policies should look to ensure that the location and scale of development will not harm air quality or health.	Include objectives to assess possible air quality and health impacts.
EC Directive 2002/3 relating to ozone in ambient air	Sets long term target values for ozone in ambient air and defines thresholds at which there is a threat to human health.		
EC Directive 1999/30 relating to limit values for Sulphur Dioxide, Oxides of Nitrogen, particulate matter (dust) and Lead in ambient air	Sets limit values for Sulphur Dioxide, Oxides of Nitrogen, Nitrogen Dioxide, particulate matter, and Lead, and defines thresholds at which there is a threat to human health		
EC Directive 2008/1 concerning Integrated Pollution, Prevention and Control	Aims to prevent emissions into air wherever practicable, and where not, minimise them. The Directive is applicable to certain waste management facilities.		
Large Combustion Plant Directive 2001/80/EC	Sets emissions ceilings for plants above a certain size, regardless of fuel type - this can include biomass which can be made up of vegetable waste.		
Directive 2006/21/EC of the European Parliament of the Council on the Management of Waste from Extractive Industries	Looks to prevent or reduce any adverse effects on the air resulting from waste from the extractive industries.		
EC Directive on the Conservation of Wild Birds 79/409/EEC 1979	Sustain populations of wild birds by maintaining appropriate habitat. Provides for the designation of Special Protection Areas (SPAs) as part of the European 'Natura 2000' network.	Minerals and waste development could lead to a loss of habitat and other disturbance to birds. Natural England is considering whether part of Nottinghamshire meets the criteria to be considered as a potential SPA which may	The SA will need to take into account the conservation status of areas within the county and seek to identify measures to further maintain and restore natural habitats. Include objective(s) to protect important

Document	Key objectives/targets	Implications for MWDF	Implications for SA
		have implications for the location and type of development that is appropriate.	wildlife species and habitats and identify opportunities for enhancement.
EC Directive on the Conservation of Natural Habitats of Wild Flora and Fauna 92/43/EEC 1992	Maintain and restore natural habitats and the populations of species of wild flora and fauna. Implement measures to conserve threatened species and to ensure and promote the maintenance of biodiversity. Provides for the designation for Special Areas of Conservation (SACs) as part of the 'Natura 2000' network.	Minerals and waste development could lead to a loss of habitat and other disturbance to wildlife. Restoration and mitigation could provide opportunities for new habitat. Policies should protect and enhance habitats and wildlife.	
European Landscape Convention, 2004	Promotes the protection, management and planning of European landscapes, both outstanding and ordinary. The Convention aims to protect, manage, improve or create landscapes, as well as encouraging European cooperation in landscapes.	Minerals and waste development could have a significant visual impact but there may also be opportunities for landscape enhancement during restoration at some sites. Policies should seek to minimise landscape impacts and enhance where possible.	Include objective(s) to minimise the visual impact and identify opportunities for enhancement.
Water Framework Directive 2000/60/EC	Seeks long-term protection of the water environment and improvements to ground and surface water quality – and associated wetlands. Requires nearly all inland and costal waters to achieve 'good' status by 2015. Promotes the sustainable use of water. Reduce water pollution and lessen the effects of floods and droughts. Introduced a co-ordinated approach to water management based on the concept of river basin planning.	Minerals and waste development has the potential to affect water quality and/or increase flood risk. Policies should seek to protect surface and groundwater resources and minimise any contribution to flood risk.	Include objectives to minimise impacts on water quality and minimise flood risk.
Urban Waste Water Treatment Directive (91/271/EEC)	Requires the provision of specified levels of treatment depending on the scale of discharge and environmental sensitivity.	Policies should allow the development of appropriate treatment facilities.	Include objective(s) to maintain and improve water quality.
European Air Quality Directive 2008/50/EC	Protect human health and the environment as a whole. Combat emissions of pollutants at source and identify and implement the most effective emission reduction measures at all levels. Air quality status should be maintained where it is already good, or improved. Minimise the risk to vegetation and natural ecosystems away from urban areas. There should be a general reduction of concentrations of fine particulate matter (PM2,5).	Although regulation and monitoring of emissions is carried out by the Environment Agency, policies should look to ensure that the location, scale and operation of minerals or waste developments will not harm air quality or pose a risk to vegetation and natural ecosystems.	Include objective(s) to minimise impacts on air quality and the natural environment.
EU Directive on the management of waste from extractive industries 2006/21/EC	Mineral operators should take all necessary measures to prevent or reduce as far as possible any negative effects, actual or potential, on the environment or on human health which are	Policies should ensure that impacts on the environment and human health are minimised.	Include objectives to minimise impacts on the environment and human health.

Document	Key objectives/targets	Implications for MWDF	Implications for SA
	brought about as a result of the management of waste from the extractive industries.		
European Sustainable Development Strategy 2001	Limit climate change and increase the use of clean energy. Manage natural resources more responsibly. Improve the transport system and land use management.	Policies should ensure that potential climate impacts are minimised and promote the sustainable use of minerals and the management of waste as a resource. Development should be located as sustainably as possible in terms of transport and land use.	Include objectives to limit climate change impacts, ensure the sustainable use of natural resources, land and transport infrastructure.
European Convention on the Protection of Archaeological Heritage (Revised) 1992	Main provisions already enshrined in UK policy through Planning Policy Statement 5. Provides for identification and protection of archaeological heritage, integrated conservation and control and recording of excavations. Sets wider definition of the historic environment to include the overall setting and not just the buildings or monuments.	Minerals and waste development has the potential to affect heritage assets above or below ground. Mineral working, especially, has the potential to affect the important archaeology found along the Trent Valley. Policies should ensure that historically important features and their settings are protected from inappropriate development and that there is an adequate system of mitigation and recording.	Include objective(s) to minimise impacts on the historic environment.
The Venice Charter 1964	Sets out an international code of practice for the preservation and restoration of historic monuments.	Minerals and waste development could affect historic monuments or their settings. Policies should seek to minimise the impacts of development through sensitive location and design.	Include objective(s) to protect cultural heritage including historic monuments.

National

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Environmental Protection Act, 1990	Allows standards to be set limiting the concentrations of substances released into the environment and gives regulatory powers to the Environment Agency as the waste regulation authority.	Planning policies are separate to the environmental permitting process and should not seek to duplicate controls with other regulatory processes. This allows for the streamlining of 'development management' policies.	Include general objectives to minimise the impacts of development on water, soil and air quality and seek EA advice in specific cases.
Pollution Prevention and	Aims to prevent or control harmful emissions and	Specific pollution control limits are set and	Include objectives to minimise impacts on

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Control Act, 1999	implements EU requirements on environmental permitting.	monitored by the Environment Agency not planning policies. Likely harm may be a material planning consideration in decision making and policies will need to ensure that the location, type, design and operation of development will not result in harmful impacts.	water, soil and air quality.
Climate Change and Sustainable Energy Act, 2006	Aims to enhance the UK contribution to limiting climate change and secure 'a diverse and viable long term energy supply'.	Plan policies should ensure that the impact on climate change from minerals and waste development is minimised. Aim to reduce the need for vehicular transport of minerals and waste where possible. Consider opportunities to generate energy from waste where this doesn't conflict with other goals and promote more energy efficient development.	Include objectives on climate change, energy efficiency and sustainable transport.
Climate Change Act 2008	Encourage renewable energy production and invest in carbon reduction technologies. Reduce the amount of carbon produced by vehicular transport. Sets legal targets for UK to reduce carbon dioxide emissions by at least 80 per cent by 2050, and 26% by 2020. Allows local authorities to pilot waste reduction schemes with financial incentives.		
Air Quality (England) Regulations 2000	Local Authorities must designate Air Quality Management Areas where there is a risk that pollution limits might be exceeded.	Policies should consider the possible air quality impacts of minerals and waste development arising from dust and particulates, vehicle movements and direct emissions from waste treatment and disposal. Ensure that direct or cumulative effects of development do not have a harmful impact on designated Air Quality Management Areas.	Include objective(s) on air quality.
Urban Waste Water Treatment (England and Wales) Regulations 1994	Transposes requirements of Urban Waste Water Treatment Directive into UK law	Policies should allow the development of appropriate treatment facilities.	Include objective(s) on water quality.
Landfill (England and Wales) Regulations 2002	Implements the Landfill Directive in the UK	Policies should promote appropriate pre-treatment and disposal facilities, require recovery of landfill gas where viable and ensure that landfill sites are operated so as to minimise potential environmental impacts, especially air pollution.	Include objective(s) to minimise the environmental impacts of waste management, especially air pollution.
The Hazardous Waste (England and Wales) Regulations 2005	Widens the types of waste that are now classed as hazardous and strengthens controls on the management and disposal of hazardous waste.	The Waste Core Strategy will need to consider whether there is a need for additional hazardous waste treatment or disposal facilities within Nottinghamshire.	Include objectives on environmental protection and protecting human health as well as ensuring the provision of appropriate waste management infrastructure.
Animal By-Products Regulations 2003	Enacts corresponding EU regulations in the UK	Wastes which contain animal by-products such as kitchen and catering waste can only be treated by 'in-vessel' composting or anaerobic digestion. The Waste Core Strategy will	Include objectives on environmental protection and protecting human health as well as ensuring the provision of appropriate waste management infrastructure

Document	Key objectives/targets	Implications for MWDF	Implications for SA
		therefore need to consider whether additional facilities are needed to enable the safe treatment of these wastes.	
Waste Management (England and Wales) Regulations 2005	Brought agricultural waste within the controls already in place through the Waste Framework Directive.	Need to consider the need for additional treatment or disposal facilities to serve rural areas depending on the likely volumes and types of waste generated.	Include objectives(s) on sustainable waste management and the provision of appropriate waste management infrastructure.
Waste (England and Wales) Regulations 2011	Transposes EU requirement for a national waste management plan and waste prevention measures alongside strict controls over waste collection to promote use of waste as a resource.	The various waste policy documents will need to reflect the importance of waste as a resource and the need to prevent waste as part of wider goals that go beyond the planning system alone.	Include objectives(s) on sustainable waste management and the provision of appropriate waste management infrastructure to maximise resource recovery.
Wildlife and Countryside Act 1981 (as amended)	Sets out protection afforded to wild plants and animals in the UK, including SSSIs.	Minerals and waste development has the potential to harm the natural environment but site restoration schemes may also provide opportunities for enhancement through the creation of new habitat. Policies should therefore seek to protect internationally, nationally and locally designated sites (including nationally designated SSSIs) and species and legally protected species, as well as recognising the importance of wider nature conservation and countryside interests.	Include objective(s) to minimise impacts on the natural environment
Natural Environment and Rural Communities Act 2006	Confers powers to a number of bodies; Natural England for the management (and other associated tasks) of the natural environment, the Commission for Rural Communities for the promotion (and other) of rural communities needs and sustainable development and the Inland Waterways Advisory Council.	Minerals and waste development could impact adversely on rural areas and communities in terms of landscape, quality of life and habitat. Site restoration and employment opportunities could also bring a positive impact in terms of new habitat and job creation.	Include objective(s) to minimise impacts on landscape, natural environment and quality of life.
Countryside and Rights of Way Act 2000	Sets out legal provisions relating to rights of way and promotes conservation of habitats and species, and applies further protection to SSSIs	Minerals and waste development could lead to a loss of habitat and other disturbance to wildlife. Restoration and mitigation could provide opportunities for new habitat. Policies should protect and enhance habitats and wildlife. Policies should protect internationally designated sites and an appropriate assessment of plans or projects affecting these sites must be completed. Policies should also seek to protect European protected species.	Include objective(s) to minimise impacts on the natural environment
Conservation of Habitats and Species Regulations 2010	Consolidates the earlier 1994 regulations and is now the principal means by which the Habitats Directive is transposed in England and Wales . Provides a strict regime of protection for certain 'European protected species'.		
Ancient Monuments and	Sets out the protection and procedures relating	Policies should seek to minimise the impact of	Include objective(s) to minimise impacts on

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Archaeological Areas Act 1979	to Scheduled Ancient Monuments.	minerals and waste development on Scheduled Ancient Monuments by avoiding harm wherever possible and seeking appropriate mitigation and preservation where impacts cannot be avoided.	cultural heritage including Scheduled Ancient Monuments.
Planning (Listed Buildings and Conservation Areas) Act 1990	Sets out statutory protection and procedures relating to Listed Buildings and Conservation Areas.	Policies should seek to minimise the impact of minerals and waste development on Listed Buildings and Conservation Areas by avoiding harm wherever possible and seeking appropriate mitigation and preservation where impacts cannot be avoided.	Include objective(s) to minimise impacts on cultural heritage including Listed Buildings and Conservation Areas.
'Heritage Protection for the 21st Century' 2007 Heritage White Paper	Aims to develop a unified approach to the historic environment; maximise opportunities for inclusion and involvement; and supporting sustainable communities by putting the historic environment at the heart of an effective planning system.	Policies should seek to minimise the impact of minerals and waste development on the historic environment by avoiding harm wherever possible and seeking appropriate mitigation and preservation where impacts cannot be avoided.	Include objective(s) to minimise impacts on cultural heritage/the historic environment.
'Securing the Future' The UK Government Sustainable Development Strategy 2005	Sets out key themes for sustainable development including climate change, natural resource protection and sustainable consumption and production. Key objectives are living within environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; using sound science responsibly; and promoting good governance.	Policies should promote sustainable development and the protection of natural resources and quality of life. Ensure appropriate opportunities for community consultation and engagement throughout the plan making process.	Include objectives on climate change, environmental protection and natural resources, biodiversity, health, energy, sustainable transport, economic growth and community involvement.
UK Climate Change Programme, 2006, DEFRA	Reduce man-made emissions (i.e. greenhouse gases); encourage the production of renewable energy and invest in carbon reduction technologies. Reduce carbon from various sources including vehicular transport and business.	Plan policies should ensure that the impact on climate change from minerals and waste development is minimised. Aim to reduce the need for vehicular transport of minerals and waste where possible. Consider opportunities to generate energy from waste where this doesn't conflict with other goals and promote more energy efficient development.	Include objectives to minimise climate impacts, consider energy use and limit the climate impacts of transporting minerals and waste.
'Our Energy Future - Creating a Low Carbon Economy' 2003 Energy White Paper, (DTI)	Sets out policies for reducing CO^2 from the use of energy, including transport. Seeks 60% cut in UK dioxide emissions by 2050. Sets targets for renewable generation of 10% by 2010 and 20% by 2020.	Policies should seek to minimise impacts on air quality including minimising the distance minerals and waste is transported and encouraging alternative forms of transport other than road. Consider opportunities to generate energy from waste where this doesn't conflict with other goals and promote more energy efficient development.	Include objectives on air quality, energy efficiency and sustainable transport.
Air Quality Strategy for	Sets health-based targets for specified air	Mineral development tends to be rural and	Include objective(s) to minimise impacts on

Document	Key objectives/targets	Implications for MWDF	Implications for SA
England, Scotland, Wales and Northern Ireland, July 2007, (DEFRA)	pollutants. The predominant source for most of these pollutants is road traffic. Also includes objectives to protect vegetation and ecosystems.	away from the areas worst affected by poor air quality. However dust is a possible issue from mineral sites. Waste developments in or around urban areas are more likely to have a possible impact through dust or emissions. However the transportation of both minerals and waste could also contribute to wider air quality issues. Although emissions are regulated and monitored by the Environment Agency, development should be located and operated so as to minimise transport distances, and avoid harmful emissions to air.	air quality impacts.
Air Pollution: Action in a Changing Climate, March 2010, (DEFRA)	Highlights health benefits of closer integration of air quality and climate change policies in the future.	Ensure air quality and climate change issues are considered in an integrated manner.	Include objectives on air quality, climate and health.
The Future of Transport White Paper: A Network for 2030 Department for Transport 2004	Promotes more effective use of our transport network and aims to minimise the environmental and health effects of transport. Seeks a modal shift in freight transport away from roads towards rail, sea and inland waterways.	The majority of minerals and waste are transported by road within Nottinghamshire. Policies should seek to minimise the impacts of this by reducing the distances travelled and encouraging alternatives such as rail, water or pipeline where opportunities exist.	Include objectives on sustainable transport and making use of existing infrastructure to minimise additional impacts.
Circular 1/2003 Safeguarding, Aerodromes, Technical Sites and Military Explosive Storage Areas	Highlights the potential risk to aircraft from tall structures and birds. The circular is linked to safeguarding maps for certain specified airfields (civil/military) and consultation is required for proposals within the notified safeguarding areas.	Open water areas created from the restoration of minerals sites and operational non-hazardous landfills are the key concerns for attracting flocks of birds. Plan policies need to ensure impacts are considered in the location and design of sites and restoration schemes.	Ensure risk of bird strike is considered as part of the assessment of potential environmental impacts.
UK Biodiversity Action Plan, 1994 (reviewed 2007)	A detailed action planning process targeting conservation action to priority habitats and species. Comprises Species Action Plans and Habitat Action Plans aimed at protecting the priority species and habitats identified. Local Action Plans are usually developed at a county level to identify local priorities and to determine the contribution they can make to the delivery of the national Species and Habitat Action Plan targets.	Seek to minimise possible impacts on priority habitats and species.	Include objective(s) to minimise impacts on biodiversity.
Working with the Grain of Nature: a Biodiversity Strategy for England, DEFRA, 2002	Aims to deliver the UK Biodiversity Action Plan. Sets out conservation priorities and action plans for a series of habitats and species across the themes of agriculture, water and wetlands, woodland, marine and coastal, and urban areas.	Policies should reflect the aims of the national biodiversity strategy which are expanded in the Nottinghamshire Local Biodiversity Action Plan	

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Green Infrastructure Guidance, 2009, (Natural England)	Promotes importance of positive and early planning for green infrastructure and integrating green infrastructure strategies within spatial planning.	Ensure policies and proposals reflect the importance of green infrastructure assets.	Ensure that the appraisal objectives collectively cover the assets that make up our area's green infrastructure
Landscape Character Assessment – Guidance for England and Scotland, Countryside Agency 2002	Sets out the recommended approach and encourages Local Authorities to undertake character assessments of theirs areas. It is intended as a tool to aid informed decision making.	Ensure policies and proposals take account of Nottinghamshire Landscape Character Assessments (see local level entry).	Include objective(s) to minimise the impact of development on landscape quality
National Character Areas Map, Natural England 2005	Landscape character is defined as what makes an area unique by virtue of its natural features (landform, geology etc.) and human influences (e.g. settlement patterns, forestry and farming). The approach looks at what makes one landscape different from another, rather than better or worse.		
Safeguarding our Soils – A Strategy for England, 2009, DEFRA	Sets out an ambitious vision to improve the sustainable management of soil and tackle degradation within 20 years. The sustainable use of agricultural soils; the role of soils in mitigating and adapting to climate change; protecting soil functions during construction and development; and preventing pollution and dealing with historic contamination.	Plan policies should help to protect soil quality and ensure proper handling of soils during development and restoration.	Include objective(s) to protect soil quality
Future Water – The Government's Water Strategy for England, 2008, DEFRA	Defines the Government's strategic vision for the direction of water policy to 2030 including improvements in water quality standards, supply and infrastructure resilience to withstand the impacts of climate change.	Policies should provide for adequate new waste water treatment infrastructure and ensure that other waste development minimises potential impacts on water quality.	Include objectives to provide suitable waste water treatment facilities and minimise impacts on water quality.
National Flood and Coastal Erosion Risk Management Strategy for England, Environment Agency 2011	Sets out what all responsible authorities need to do to reduce the risk of flooding and coastal erosion and manage its consequences. Once approved it will be a statutory framework. Effective management includes knowledge of where and when they are likely to happen, taking reasonable steps to reduce likelihood, forecasting and warning communities and services and adaptation. It also mentions transferring risk to where consequences are low (e.g. letting land to flood).	Policies should recognise flooding and its risks, try to minimise additional impact on flooding and seek to adapt to it.	Include objectives to reduce any increase in the risk of flooding and to alleviate where possible.
Waste Strategy for England	Aims to reduce the environmental impact of	Policies should encourage the provision of	Include objectives(s) on sustainable waste

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2007 (DEFRA)	waste, and manage waste according to waste hierarchy and in ways that protect human health and the environment. Encourages waste prevention and reuse across all sectors including householders, business and industry. Promotes best practice and community initiatives. Waste should be managed (i.e. treated or disposed of) at the nearest appropriate site. Sets a series of legal targets for municipal waste recycling and recovery (including 67% recovery of municipal waste by 2015) and voluntary targets for some other wastes.	new treatment and disposal facilities according to the 'waste hierarchy', to help meet relevant targets, and enable waste to be managed close to source wherever possible.	management and the provision of appropriate waste management infrastructure.
Site Waste Management Plans Regulations 2008	These are required for development projects costing more than £300,000 with the aim of ensuring that building materials are managed efficiently, waste is disposed of legally, and material recycling, reuse and recovery is maximised.	As this is already a legislative requirement there is no need for this to be repeated in policy but supporting text could be used to promote best practice.	Include objective(s) on sustainable waste management and resource use.
Planning Policy Statement (PPS)1: Delivering Sustainable Development, 2005 (ODPM)	Sets out key planning objectives including making suitable development land available in line with economic, social and environmental objectives to improve quality of life; contribute to sustainable development; protect and enhance the natural and historic environment, the quality and character of the countryside; ensure good design and the efficient use of resources and support sustainable communities.	Plan policies should have regard to all the key principles and objectives of PPS1 and work to ensure the progression of sustainable development.	Include objectives covering quality of life, use of resources, design and the protection and enhancement of the natural and historic environment and landscape quality.
Planning Policy Statement: Planning and Climate Change – Supplement to Planning Policy Statement (1), December 2007	Outlines how planning should contribute to stabilising climate change. Aims to ensure reduction of emissions in provision of services, patterns of growth that reduce the need to travel, minimise vulnerability to climate change and select land for potential development considering the likely effects of climate change utilising the 'Precautionary Principle', minimise CO_2 emissions, and provide for sustainable waste management.	Ensure plan policies promote reductions in emissions from minerals and waste development, including transport, and ensure new development is located and designed to withstand the likely impacts of climate change such as higher temperatures, drought, flooding and storms.	Include objectives to minimise climate impacts of minerals and waste development and to ensure new development is designed to cope with possible climate change effects.
Planning Policy Guidance note2: Green Belts, DoE 1995 (Amended 2001)	Protect the open character of designated Green Belt areas. There is a general presumption against inappropriate development within green	Minerals development may be acceptable in the Green Belt but this is likely to restrict the type, scale and location of waste treatment	Include objective(s) to cover landscape and Green Belt issues.

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	belt areas. However, minerals can only be worked where they are found and providing that high environmental standards are maintained and sites are well restored, mineral extraction can be compatible with the aims of green belt policy.	facilities. Landfill may be an appropriate use when this is used to reclaim a former mineral working. Policies need to protect the open character of the Green Belt whilst recognising the need for appropriate minerals and waste development.	
Planning Policy Statement 3: Housing, June 2010, CLG	The planning system should deliver a sufficient supply of high quality housing in appropriate locations to meet a variety of needs.	The development of additional housing will depend upon the availability of suitable construction materials. Mineral policies will need to ensure an adequate supply of minerals to meet projected needs. At the local level, significant new housing development may also require additional waste management infrastructure.	Include objective(s) to ensure adequate minerals and waste management provision.
Planning Policy Statement 4: Planning for Sustainable Economic Growth, December 2009, CLG	Planning should help to achieve the Government's overarching objective of sustainable economic growth by building prosperous communities and improving the economic performance of areas, reducing economic disparity between areas, delivering more sustainable patterns of development, reducing the need to travel and responding to climate change. It should also help to raise the quality of life and the environment in rural areas.	Minerals and waste sites could provide limited employment opportunities but may also be seen as detracting from inward investment if they are not well designed, well run and in appropriate locations. Higher levels of economic growth could lead to greater demand for minerals and increased waste production from commerce and industry Policies should seek to ensure development is in the most appreciate locations and makes the best use of existing infrastructure wherever possible including the transport networks and the re-use of land buildings where feasible.	Include objective(s) on sustainable waste management, ensuring an adequate supply of minerals resources, land use, good design and supporting wider economic development.
Planning Policy Statement 5: Planning for the Historic Environment, 2010, CLG	Heritage assets are a non-renewable resource and there should be a presumption in favour of the conservation of designated heritage assets based on their level of significance. Decisions affecting all heritage assets (whether designated or not) should take account of the wider social, cultural, economic and environmental benefits of heritage conservation. Intelligently managed change may sometimes be necessary but evidence of any assets to be lost should be recorded.	Plan policies should seek to protect and conserve the historic environment from the impact of minerals and waste development; recognise the value of 'sense of place' and take account of wider social, cultural, economic and environmental issues. This should include provision for preservation and/or recording and appropriate mitigation as necessary.	Include objective(s) to minimise impacts on the historic environment.
Planning Policy Statement 7: Sustainable development in rural areas 2004, ODPM	Protect areas of national landscape importance from adverse development. Conserve and enhance wider landscape character and quality.	Minerals and waste development has the potential to affect rural areas, particularly in terms of landscape impacts. However	Include objectives to help protect the rural quality of life and landscape and support the rural economy.

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(now partly replaced by PPS4)	Improve rural quality of life, discourage development of Greenfield land, and enhance the rural economy by increasing employment, competition and enterprise. Protect best and most versatile agricultural land. Where development is unavoidable, this should be on poorer quality land unless that would harm other sustainability interests. Promote sustainable economic growth and diversification, protect open countryside, discourage development on 'greenfield' sites. Establish landscape character assessment in development planning and management.	development could, in some cases, help to increase or diversify local employment opportunities. Policies should seek to protect the rural quality of life and landscape character and contribute to wider economic goals where possible.	
Planning Policy Statement 9: Biodiversity and Geological Conservation, ODPM, August 2005	Protect and enhance sites according to their relative international, national, local or informal importance. Seek mitigation and/or compensation for unavoidable harm and ensure that any reasonable alternative sites are considered fully. Development provides opportunities for building in beneficial biodiversity or geological features as part of good design	Policies should seek to minimise the impact of new development on biodiversity and geodiversity and encourage any opportunities for gain. Encourage location of development on alternative sites of lesser value where possible	Include objective(s) to minimise the impacts of minerals and waste development on wildlife and habitats and identify opportunities for enhancement.
Planning Policy Statement 10: Planning for Sustainable Waste Management, ODPM, July 2005	Planning should help to deliver sustainable development via the waste hierarchy, recognise waste as waste as a resource and look to disposal as the last option, but one which must be adequately catered for. Provide a framework in which communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet local needs. Help implement the national waste strategy, and supporting targets, and help secure the recovery or disposal of waste without endangering human health or the environment. Enable waste to be disposed of close to source and reflect social and economic needs as well as environmental. Protect green belts but recognise the particular locational needs of some types of waste management facilities. Ensure the design and layout of new development supports sustainable waste management. The planned provision of new capacity and its spatial distribution should be based on	Policies should promote facilities that will help to move away from landfill and increase the recycling and recovery of waste. Also need to ensure there is adequate provision for all waste types and that sites are located close to where the waste is produced wherever possible. The Waste Core Strategy will need to take account of the specific locational guidance in developing its spatial approach and in establishing any criteria based policies which will influence the Site Specific Document and decisions on planning applications.	Include objective(s) on sustainable waste management and the protection of natural resources, amenity and quality of life.

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	clear policy objectives, robust analysis of available data and information, and an appraisal of options. Annexe E identifies a range of locational criteria to be considered.		
Planning Policy Statement 12: Local Spatial Planning, 2008, CLG	Spatial planning is a process of place shaping and delivery which aims to produce a vision for the future of places that responds to local challenges and opportunities and helps to meet community objectives and provide sustainable social, economic and environmental infrastructure. This includes identifying suitable locations for development whilst maintaining an appropriate level of protection to designated sites, landscapes, habitats and protected species; alongside creating a positive framework for environmental enhancement more generally.	Policies should set out a future vision for the development of minerals and waste in Nottinghamshire taking account of local needs and circumstances. Where appropriate this should include identifying suitable development land and set out how environmental assets should be protected.	Include objectives on the use of natural resources, sustainable waste management, minerals supply, community involvement and environmental protection.
Planning Policy Guidance 13: Transport, Jan 2011, CLG	Promotes more sustainable transport choices, accessibility, and the need to reduce journey lengths.	Plan policies should ensure that more sustainable forms of transport are encouraged wherever possible. Where there is a choice of suitable sites policies should encourage the use of existing infrastructure including the re-use of previously developed land and buildings where this could minimise transport distances.	Include objective(s) on sustainable transport and re-use of previously developed land and buildings.
Planning Policy Statement 22: Renewable Energy	Aims to reduce carbon dioxide emissions; facilitate the delivery of the Government's commitment on climate change and renewable energy; and to contribute to the Government's sustainable development strategy. Ensure that local development documents contain policies to encourage the development of renewable energy sources including looking for opportunities to incorporate small-scale renewable development as part of all types of new development. Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and also from biomass. This can include energy from waste in some cases and Annexe C compares various energy from waste technologies.	Consider opportunities to generate energy from waste where this doesn't conflict with other goals. Promote more energy efficient development and encourage provision of on-site renewables where viable.	Include objectives on energy efficiency and renewable energy.
Planning Policy Statement 23: Planning and Pollution	Potential land use impacts on the quality of land, air or water possibly leading to impacts on health	Policies should ensure that pollution from minerals and waste development is kept to a	Include objective(s) to minimise climate change impacts, protect human health and

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Control, ODPM Nov 2004	are capable of being a material planning consideration. The planning system plays a key role in determining the location of development which may give rise to pollution, either directly or indirectly, and in ensuring that other uses and developments are not, as far as possible, affected by major existing or potential sources of pollution. Controls under the planning and pollution control regimes should complement rather than duplicate each other. Local Development Documents should set out the criteria against which applications for potentially polluting developments should be considered. Advocates use of the 'precautionary principle'. Includes specific Annexes on air, water and contamination.	minimum. Although emissions are regulated and monitored by the Environment Agency, development should be located and operated so as to minimise transport distances, and impacts, and avoid harmful emissions to air, soil or water.	reduce pollution impacts on air, soil and water quality.
Planning Policy Guidance 24: Planning and Noise, DoE 1994	The planning system should ensure that noise sensitive properties are separated from major sources of noise. Sets specific day and night limits on noise levels for general development. Specific guidance for minerals development is covered in Minerals Policy Statement (MPS) 2 – Annex 2.	Policies to should ensure that noise impacts from minerals and waste development are minimised and do not exceed acceptable limits.	Include objective(s) to minimise noise disturbance.
Planning Policy Statement 25: Development and Flood Risk, Revised March 2010, DCLG	Flood risk should be an integral part of all land use decisions. Aims to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk. Sets out a sequential risk-based approach and promotes use of the precautionary principle. Encourages use of sustainable drainage systems for new development. There is a requirement to carry out Strategic Flood Risk Assessment for development plans. The PPS highlights that the impacts of climate change could lead to more frequent, widespread and severe flooding events and there is a need to 'future-proof' development Annexes to the PPS provide contingency estimates for sea level rises and peak rainfall.	Nottinghamshire is most at risk from flooding from rivers, the effects of poor surface water drainage, rising groundwater or overwhelmed sewers and drainage systems. Policies will need to take account of the findings of the Strategic Flood Risk Assessments carried out across Nottinghamshire and seek to minimise the impact of minerals and waste development on flooding. Development should also be designed for future flood resilience. Mineral working is normally acceptable in areas of flood risk but waste treatment or disposal should generally be located away from flood risk areas because of the pollution risk. Built development, plant and storage areas should be designed and located so as not to impede flood flows. Promote the use of sustainable drainage systems where appropriate. Old mineral workings restored to lakes can affect	Include objective(s) to minimise flood risk and reduce the impact of flooding on minerals and waste developments.

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		flood flows although in some cases they can be designed to create additional flood storage areas.	
Planning Policy Statement consultation: Planning for a low carbon future in a changing climate, March 2010, DCLG	Review of PPS1 supplement and renewable energy guidance in PPS22. Planning should shape places so as to help secure radical cuts in greenhouse gas emissions. The location and layout of new development should deliver the highest viable energy efficiency, including the use of decentralised energy; reduce the need to travel, and the fullest possible use of sustainable transport. It also promotes the delivery of renewable and low carbon energy. Plan new development to minimise vulnerability to the effects of climate change.	Ensure plan policies promote reductions in emissions from minerals and waste development, including transport, and ensure new development is located and designed to withstand the likely impacts of climate change such as higher temperatures, drought, flooding and storms. Consider opportunities to generate energy from waste where this doesn't conflict with other goals. Promote more energy efficient development and encourage provision of on-site renewables where viable.	Include objectives to minimise the impacts of minerals and waste development on climate change and energy use and to promote renewable sources of energy where viable.
Draft Planning Policy Statement: Planning for a Natural and Healthy Environment, March 2010, (DCLG)	Streamlines and consolidates existing planning policy on biodiversity and a range of other environmental issues. Aims to provide a clear, strategic framework for the protection and enhancement of the natural environment. Also recognises that green infrastructure can provide a wide range of environmental benefits in both rural and urban areas including flood water storage, sustainable drainage, urban cooling and local access to shady outdoor space. It also provides habitats for wildlife, and through the creation and enhancement of "green corridors", should aid the natural migration of more species responding to the changing climate.	Policies should reflect the importance of biodiversity and wider environmental issues, including the importance of maintaining and where possible enhancing our green infrastructure.	Include objectives to protect, and, where possible, enhance biodiversity and green infrastructure.
Minerals Policy Statement 1: Planning and Minerals, 2006, CLG	Sets out key principles and planning policy objectives including the need to secure adequate and steady supplies of minerals needed by society and the economy within the limits set by	Policies should provide for an adequate and steady supply of minerals to meet Nottinghamshire's own needs and to meet regional or national needs as appropriate.	Include objectives on sustainable development and resource use; protection of natural resources and the environment and economic growth.

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	the environment. Secure closer integration of minerals planning policy with national policy on sustainable construction, waste management. Protect and enhance nationally and internationally designated areas of landscape and nature conservation importance as well as regional and local areas. Indicate areas where future mineral working might be sustainable. Take account of the contribution secondary or recycled aggregates to supply and encourage their use wherever practicable. Encourage operators to maximise the efficient use of extracted minerals. Encourage the recycling of construction, demolition, excavation and minerals waste, and identify sites where this could take place.	This must be balanced against the need to minimise the impact of development on the environment. Where appropriate, polices should identify suitable areas for future working and encourage the sustainable use of mineral resources including the use of secondary and recycled aggregates.	
Minerals Policy Statement 2; Controlling and mitigating the environmental impacts of minerals extraction in England 2005	Environmental impacts from mineral working and the transport of minerals should be kept to an acceptable minimum. Encourage sensitive working, restoration and aftercare practices. Protect areas of nationally-designated landscape or archaeological value, cultural heritage or nature conservation importance from mineral development, other than in exceptional circumstances where it has been demonstrated that the proposed development is in the public interest.	Policies should ensure that the environmental impact of mineral operations is minimised and areas of nationally designated landscape, cultural heritage, archaeological and nature conservation value protected.	Include objectives to minimise the impact of mineral working on landscape, cultural heritage/archaeology and biodiversity.
Minerals Policy Statement 2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England – Annex 1: Dust, ODPM 2005	Promotes good practice to minimise dust impacts including measures such as dust action plans, watering, hard surfacing, not working in windy conditions, monitoring and stand-off distances from sensitive properties/land-uses.	Policies should ensure that dust impacts do not pose a risk/nuisance to other sensitive uses.	Include objective(s) to minimise the impact of mineral working on quality of life (including dust impacts).
Minerals Policy Statement 2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England – Annex 2: Noise, ODPM 2005	Sets specific daytime, evening and night-time noise limits. Promotes good practice in terms of site location and layout, choice of plant and equipment, plant maintenance, site operations, the phasing of works on site and the use of acoustic screening measures.	Policies should ensure that noise impacts from minerals development are minimised and do not exceed acceptable limits.	Include objective(s) to protect quality of life and minimise noise disturbance.
Minerals Policy Guidance 2: Applications, permissions and conditions 1998	Outlines recommended steps when planning and developing a minerals extraction site, including development permission, consultations,	Promote best practice for minerals operations and include appropriate development management policies.	Include objective(s) to promote the sustainable location and operation of minerals sites.

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	Environmental Assessment, planning application and planning permission		
Minerals Policy Guidance 3: Coal mining and colliery spoil disposal	Ensure that the extraction of coal and disposal of colliery spoil only takes place at the best balance of community, social, environmental and economic interests, consistent with the principles of sustainable development.	Policies should guide development to the most appropriate location(s) taking account of wider social, environmental and economic issues.	Include objectives to minimise the environmental impacts of development but also consider possible social or economic impacts.
Minerals Planning Guidance 5; Stability in surface mineral workings and tips 2005	Land stability should be considered in terms of both extraction, and related development, and subsequent restoration.	Policies should ensure that land stability has been taken in account and should direct development away from areas of known risk.	Ensure that land stability issues are addressed at site specific stage.
Minerals Planning Guidance 7; Reclamation of mineral workings 1996	Provides guidance on the effective restoration of mineral sites including the planning and preparation of restoration schemes, site operation and financial provision as well as more detailed information on soils and aftercare.	Polices should ensure that restoration proposals form a key part of the planning process.	Include objective(s) to minimise the adverse environmental impacts of minerals extraction and identify opportunities for environmental improvements.
Minerals Planning Guidance 15; provision of silica sand in England 1996	Silica sand is a nationally important, essential, raw material for many industrial processes. Extraction must be carefully balanced against the need and the impact it may have on the environment. Efforts to recycle, and reduce the impact of extraction on the environment should be encouraged.	Plan policies will need to ensure that an adequate land bank of silica sand is maintained whilst seeking to minimise any environmental impacts.	Include objective(s) to ensure an adequate supply of minerals resources in line with identified needs.
National and Regional Guidelines for Aggregates Provision in England 2005 – 2020	Sets out national and regional guidelines for aggregates provision in England	Plan will need to identify broad areas that could provide adequate reserves to meet apportionment levels.	SA outcomes will help inform the decision making process on how to balance the predicted demand for minerals against social and environmental issues.
NPPF			
Policy and Practice for the Groundwater Protection: Policy and Practice (GP3) (Edition 1), Environment Agency, 2008	Aims to protect entire groundwater resource including water supply and dependent ecosystems but recognises that cannot protect all groundwater from any change in quality. Priority is to prevent pollution and reverse environmentally significant deterioration. Identifies a series of source protection zones based on their vulnerability to potentially polluting activities. Takes a precautionary approach in most sensitive areas.	Mineral working and waste treatment / disposal are all potentially harmful to groundwater resources. Policies need to ensure the appropriate location and operation of development to minimise risk. Extensive groundwater resources in Nottinghamshire are likely to be a major constraint on future waste disposal options. In some cases new or improved waste water treatment facilities could help improve overall water quality.	Include objective(s) to protect water quality and enhance where possible.
Revised Draft National Policy Statement Fuel	Part of a series of policy statements on nationally significant energy infrastructure. It recognises	Although the specific guidance is aimed at electricity generating infrastructure ,which will	Include objective(s) to maintain adequate supply of energy minerals supply and

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Fossil Fuel Electricity Generating Infrastructure (EN-2), Department of Energy and Climate Change, Oct 2010	that fossil fuel generating stations play a vital role in providing reliable electricity supplies and a secure and diverse energy mix as the UK makes the transition to a low carbon economy.	not be covered by minerals policies, there may be local implications in terms of the need to ensure adequate supplies of fossil fuels such as coal, oil and gas.	encourage more sustainable consumption to help conserve natural resources.
Revised Draft National Policy Statement for Renewable Energy Infrastructure (EN-3), Department of Energy and Climate Change, Oct 2010	Part of a series of policy statements on nationally significant energy infrastructure. It includes guidance on biomass and energy from waste projects above 50 megawatts. It highlights that the combustion of biomass and the recovery of energy from waste combustion, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs. Where the waste burned is deemed renewable, this can also contribute to meeting the UK's renewable energy targets.	Consider opportunities to generate energy from waste where this doesn't conflict with other goals. Promote more energy efficient development and encourage provision of on-site renewables where viable.	Include objective(s) to promote renewable sources of energy where viable.
Draft Guidance on health in strategic environmental assessment: A consultation, Department of Health, 2007	Provides guidance on the coverage of health issues within the SEA/SA process and highlights the benefits of providing the right environment for healthier lifestyles and ensuring wider health issues are considered by plan makers where relevant. Key considerations are emissions to land air and water. Important policy links are to the promotion of alternative forms of transport to reduce emissions and increasing opportunities to walk and cycle as well as reducing inequalities in income and access to services. Climate impacts may also be relevant e.g. the use of shade to protect from heat.	Policies need to be aware of the wider determinants of health and ensure that emissions from minerals and waste development are minimised whilst also seeking to promote opportunities to provide new walking/cycling routes and recreation areas where feasible. Ensure that the likely impacts of climate change are considered in the location, design and layout of new development.	Ensure that SA objectives consider the impacts of emissions to land air and water, including from transport, and assess whether policies or proposal would help contribute to healthier lifestyles e.g. through recreation opportunities. Include objective(s) on good design as part of measures to adapt to climate change effects.
Review of Environmental and Health Effects of Waste Management: Municipal Solid Waste and Similar Wastes, DEFRA 2004	Review of available research concludes that there is little risk to health from waste management activities. However, it does suggest areas for possible future research.	The perception of health risk is capable of being a material consideration in planning decisions although planning authorities should be guided by the advice of relevant health experts (PPS10). Policies should ensure that minerals or waste development does not pose any unacceptable additional risk based on relevant advice.	Include objective(s) to minimise health impacts
Target Programme of Improvements, Highways Agency	This programme, managed by the Highways Agency, runs until 2021 and is designed to improve the major trunk road and motorway network through the building of new roads and improving and widening existing ones. It	Spatial approach will need to take account of improvements to existing transport infrastructure. Planned or completed road improvements will be a consideration in assessing overall transport impacts.	Include objective(s) on sustainable transport and making use of existing infrastructure to minimise additional impacts.

Document	Key objectives/targets	Implications for MWDF	Implications for SA
	identifies major road improvements to the M1, A1 and A453 in Nottinghamshire.		

Regional

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East Midlands Regional Strategy	This is an interim Regional Strategy made up of the East Midlands Regional Plan 2009 and the Regional Economic Strategy 2003 which were combined in April 2010. Together these set out strategic policies on housing, economy and regeneration, natural and cultural resources and transport. • The strategy aims to reduce the causes and impacts of climate change and encourages sustainable resource and energy consumption. • Promotes efficient and effective use of existing infrastructure and encourages alternatives to road transport for freight. Nottinghamshire is expected to provide an additional 43,500 homes in Nottinghamshire by 2021. • Local Development Frameworks should identify sufficient environmentally acceptable sources of minerals to maintain an appropriate supply of aggregates and other minerals of regional or national significance; safeguard important mineral resources and appropriate rail, wharf or pipeline facilities; and identify likely adverse environmental impacts and proposed mitigation and after uses. • Waste priorities are to achieve zero waste growth by 2016; move waste management up the 'waste hierarchy' and to recycle 50% of municipal waste by 2015. • The RSS gives specific guidance on waste	Levels of economic growth and housing development will impact on the demand for construction and energy minerals. It could also lead to the generation of more waste, depending on whether or not the aspiration of zero growth is successful. Policies will need to ensure that there are adequate minerals resources and waste treatment/disposal facilities available to support this growth and to meet the 50% municipal waste recycling target. Policies will also need to take account of the wider social, economic and environmental goals set out in the Regional Plan including issues such as resource efficiency, making the best use of existing buildings and infrastructure, encouraging low carbon energy schemes and encouraging development that reduces dependency on travel. **N.B.** On 6th July 2010 the revocation of Regional Strategies with immediate effect was announced by the Secretary of State for Communities and Local Government. However following a legal challenge Regional Strategies have been reinstated and the RS therefore remains part of the statutory development plan at time of writing.	Ensure that SA objectives address the need to provide adequate supplies of minerals and appropriate waste management facilities; minimise environmental impacts, use resources as sustainably as possible, assist low carbon energy generation and support wider social and economic goals where possible.

Document	Key objectives/targets	Implications for MWDF	Implications for SA
	volumes to be managed in each area and promotes a pattern of centralised development for larger facilities in the Three Cities and Northern Sub-areas which cover Nottinghamshire. • It also highlights additional waste water treatment capacity needs around Mansfield, Worksop and Newark to meet proposed housing development. Infrastructure. • Priorities for low carbon energy generation include safeguarding sites for access to coal mine methane reserves, encourage CHP provision and consider safeguarding former power station and colliery sites for low carbon energy generation.		
Putting Wildlife Back on the Map – A Biodiversity Strategy for the East Midlands, 2006 (East Midlands Biodiversity Forum & EMRA)	Works with the objectives of the Biodiversity Strategy for England. The objectives are to conserve designated areas in the East Midlands, restore degraded wildlife and create new areas, create a high quality natural environment for the benefit of humans and for financial sustainability of the natural environment, and to monitor the state of wildlife.	Minerals and waste development has the potential to harm the natural environment but site restoration schemes may also provide opportunities for enhancement through the creation of new habitat. Policies should therefore seek to protect internationally, nationally and locally designated sites and species as well as recognising the importance of wider nature conservation and countryside interests.	Include objective(s) to minimise impacts on biodiversity.
Regional Strategic River Corridors Initiatives, 2004, EMRA	Promotes an integrated spatial development strategy for the management and enhancement of the natural, cultural and historic environment of river corridors. Has a wide range of social, cultural, economic and environmental goals.	Take account of any projects or initiatives identified through when developing plan policies. Investigate potential for water-borne transport where this could meet environmental and economic goals.	Include objectives to minimise impacts on river quality and to consider potential transport benefits where viable
Waste Strategy for the East Midlands: January 2006, East Midlands Regional Assembly	Sets ambitious targets for recycling municipal waste and landfill reduction – **25% by 2005, 30% by 2010 and 50% by 2015.** Identifies acute shortage of waste treatment and disposal facilities within the East Midlands. Seeks to raise waste awareness and promote best practice in all sectors.	Enable the delivery of an appropriate range of waste management facilities to meet anticipated needs and drive a move away from landfill towards more sustainable forms of waste management in line with targets.	Include objectives(s) on sustainable waste management and the provision of appropriate waste management infrastructure.
6Cs Green Infrastructure Strategy, 2010, Chris Blandford Associates.	This comprises 6 volumes of technical information and guidance on the combined East Midlands Growth Point which covers the three cities of Nottingham, Derby and Leicester and their respective counties. The Strategy"s long	Policies should reflect the importance of Green Infrastructure when considering the location, design and operation of development and identify any opportunities to enhance existing, or provide additional green space.	Include objectives(s) on protecting and maintaining green structure assets.

Document	Key objectives/targets	Implications for MWDF	Implications for SA
	term vision is to protect, enhance and extend networks of green spaces and natural elements in and around the three cities of Leicester, Nottingham and Derby, connecting with their surrounding towns and villages.		
Low Carbon Energy Opportunities and Heat Mapping for Local Planning Areas Across the East Midlands: Final Report, East Midlands Councils, Land Use Consultants, March 2011	Sets out (including mapping) low carbon and renewable energy resources and opportunities and maps local heat demand and supply. It then goes on to provide recommendations on locations with high potential for district heating and the use of waste heat as well as providing generic guidance and specific examples of how the renewable and low carbon resources and opportunities identified can be used to formulate local planning policies.	Policies should reflect the opportunities and resources identified in the area in terms of opportunities to contribute to local heat demand and supply.	Include objectives on the recognition of waste as a source of renewable energy.
EMids Food waste report	Highlights Nottingham and Worksop as food waste 'hotspots' due to the concentration of food and drink manufacturing in these areas. Food and Drink Federation target of zero food waste to landfill by 2015	Policies should reflect opportunities for more sustainable management of food waste.	Include objectives on sustainable waste management.

Local

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Climate Change Framework for Action in Nottinghamshire, 2005 (Nottinghamshire Agenda 21 Forum)	Aims for a low carbon economy by 2050 and a carbon neutral economy by 2100. Promotes renewable energy sources. Targets are progressive based on percentage reductions against a 1997 baseline and will require an average 2% reduction each year..	Plan policies should ensure that the impact on climate change from minerals and waste development is minimised. Aim to reduce the need for vehicular transport of minerals and waste where possible. Consider opportunities to generate energy from waste where this doesn't conflict with other goals and promote more energy efficient development.	Include objectives on climate change, energy efficiency and sustainable transport.
Zero 2100 A Climate Protection Policy for Nottingham, Nottingham City Council, Sept 2006	Outlines Nottingham's strategy for tackling the causes and impacts of climate change and becoming a carbon neutral city.		
Towards Carbon Neutrality: A Carbon Management Plan for Nottinghamshire	The plan aims to reduce Carbon levels by at least 1% per annum on 1998 baseline levels (with a stretch target of 2% for the first five		

Document	Key objectives/targets	Implications for MWDF	Implications for SA
County Council, 2007, (NCC)	years).		
Nottingham Energy Strategy 2010, Nottingham City Council	Aims to accelerate Nottingham's development as the UK's leading City in low carbon energy security. Prioritises a 26% reduction in carbon dioxide levels and 20% energy generation from low or zero carbon sources by 2020. Proposals for biomass processing and transfer, a biomass CHP plant linked to the district heating network and a significant anaerobic digestion are all designed to help meet national and local targets for heat and power. Significant expansion of the existing energy from waste facility (Eastcroft Incinerator) is envisaged as playing a major part in delivering much of the additional heat and power required.	Promote/consider opportunities to offset fossil fuel use through the use of energy from waste technologies able to provide heat and/or power where this does not conflict with the waste hierarchy.	Include objectives to minimise carbon dioxide emissions from minerals and waste development and transport; encourage energy efficiency and promote appropriate opportunities for energy recovery.
Local Transport Plan for Greater Nottingham 2006-2011, March 2006 (NCC & Nottingham City) North Nottinghamshire Local Transport Plan, March 2006, (NCC) Nottingham Local Transport Strategy 2011-2026, April 2011 (Nottingham City Council)	Aim to improve road safety and traffic management and reduce congestion; improve air quality and protection of the environment; enhance quality of life and support regeneration and neighbourhood renewal. Seek to tackle and reduce air pollution, specifically within Air Quality Management Areas, and reduce greenhouse gas emissions from transport and the use of fossil fuels. Aim to reduce the need to travel, minimise use of green field land, and reduce the impact of freight traffic. Set detailed programmes of infrastructure improvements.	Promote a spatial approach that minimises the need to transport minerals and waste, makes use of existing transport infrastructure and encourage alternatives to road transport where possible. Planned improvements to existing transport infrastructure may be significant in deciding on suitable sites for future development.	Include objectives to reduce the impacts of minerals and waste transport on air quality and encourage sustainable transport measures including alternative forms of transport and making the best use of existing infrastructure.
A Breath of Fresh Air For Nottinghamshire, 2008, (The Nottinghamshire Environmental Protection Working Group)	Outlines how the local authorities of Nottinghamshire intend to collectively tackle problems highlighted in their review and assessments. Aims to minimise air pollution and the impact of global warming and climate change; encourage sustainable development protect the health and wellbeing of the population, and encourage sustainable improvements in air quality.	Ensure minerals and waste development and/or transport does not have a harmful impact on existing air quality.	Include objective(s) to minimise impacts on air quality impacts.
6Cs Green Infrastructure Strategy volume 6: Strategic GI Network for the Nottingham Principal Urban Area and Sub-Regional	Collectively the various Green Infrastructure Strategies for the Greater Nottingham area and the remaining Districts identify existing Green Infrastructure assets, deficiencies and opportunities. They highlight key landscape and	Policies should reflect the importance of maintaining and where possible enhancing our green infrastructure.	Include objectives to protect, and, where possible, enhance green infrastructure.

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Centres, 2010, Chris Blandford Associates Interim Planning Guidance Note 11: Green Infrastructure, April 2009, Mansfield District Council Green Infrastructure Strategy, May 2010 Bassetlaw, District Council A Green Infrastructure Strategy for Newark and Sherwood, February 2010, Newark and Sherwood District Council	nature conservation designations as well as significant water features and green spaces or corridors that help to support important habitats and species. Sherwood Forest, Greenwood Community Forest and the River Trent are significant examples but each areas has its own important areas of countryside, woodland, grassland, river corridors and public open space.		
Natural England and The Wildlife Trust 6Cs Growth Point Biodiversity Opportunity Mapping – Pilot Study, Chris Blanfords Associates, June 2009	Tests the methodology for biodiversity opportunity mapping across the 6Cs region for its applicability across the East Midlands Region. As part of this it completed the opportunity mapping for the 6Cs area – identifying opportunities for new or enhanced habitats, including areas for investment in 'landscape-scale' strategic biodiversity assets.	Minerals and waste development can impact on biodiversity, but also presents opportunities for contributing to it. Policies should seek to protect biodiversity and seek to develop it where opportunities arise, taking into account such mapping where it is available.	Include objective(s) to minimise impacts on biodiversity and identify opportunities for enhancement.
Nottinghamshire Local Biodiversity Action Plan, and associated species and habitat protection plans, 1998, Nottinghamshire Biodiversity Action Group	Identifies those habitats and species within Nottinghamshire which are particularly under threat, and develops action plans for their conservation and enhancement.	Minerals and waste development can have an impact on biodiversity but there may also be opportunities to replace lost habitats and create new areas of habitat. Policies should protect biodiversity interests, require mitigation for essential losses and encourage the creation of suitable new or replacement habitat.	Include objective(s) to minimise impacts on biodiversity and identify opportunities for enhancement.
Ambitious for Wildlife. Position Statement on Biodiversity, Nottingham City Council, 2007	Sets out the City Council's committment to protecting and enhancing biodiversity and the methods that will be used to deliver improvements and monitor their effects. Highlights that all people are dependent on biodiversity for their health and wellbeing.	Policies should reflect the importance of biodiversity on the health and wellbeing of Nottingham's communities.	Implications for SA: Include objective(s) to deliver improvements to biodiversity.
Breathing Space: Revised Strategy for the Management and maintenance of Nottingham's Open and Green Space 2010 – 2020,	Over the next 10 years aims to provide quality open and green spaces; increase public involvement and accessibility to promote physical and mental well being; raise environmental sustainability, promote biodiversity, and support wildlife; develop open	Policies should reflect the importance of maintaining and where possible enhancing open and green spaces.	Include objective(s) to minimise impacts on open space and biodiversity and identify opportunities for enhancement.

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Nottingham City Council	and green space to provide opportunities for mitigation and adaptations for climate change and guide local planning policy.		
Nottinghamshire Heathland Strategy, Sherwood Habitats Forum 2004	Promote the conservation, management and enhancement of all Nottinghamshire heathlands and encourage the creation of new heathlands where appropriate. Increase coverage by a further 400ha, and bring 80% of registered sites into appropriate management by 2010.	Policies should reflect the importance of maintaining and where possible adding to our heathland habitats. Mineral working, especially, has the potential to create new heathland as part of site mitigation and restoration proposals.	Include objective(s) to protect existing heathland and increase heathland coverage where possible.
Sherwood Study: A vision for Sherwood Forest, Sherwood Study Advisory Group, October 2000	Aims to conserve Sherwood Forest area's unique heritage. Amongst wide ranging social and economic objectives, seeks to recreate an extensive mosaic of woodland and heathland habitats and promote sensitive new development.	Policies should aim to protect existing habitat and encourage habitat recreation as part of restoration proposals and/or mitigation where viable.	Include objectives to protect and enhance important habitats
Nottinghamshire Countryside Appraisal, 1997, Nottinghamshire County Council	A landscape appraisal of the Nottinghamshire countryside, which has been used as a basis for defining Mature Landscape Areas and identifying key threats and opportunities across the different landscape areas. This appraisal is being selectively replaced by an ongoing series of landscape character assessments.	Ensure that the location and design of minerals and waste sites takes account of landscape character and minimises the impact of development on existing landscape features (including reference to specific objectives/ actions for each character area at site specific stage). Encourage opportunities to improve or enhance the local landscape where appropriate. Guidance on the Trent Washlands in particular will be important in assessing potential sand and gravel reserves as this is the most significant remaining resource area.	Include objective(s) to minimise the impact on landscape, protect overall landscape character and improve or enhance the local landscape where possible.
Nottinghamshire Landscape Character Assessments 2009/2010, coordinated by Nottinghamshire County Council	Updates and substantially replaces the 1997 Countryside Appraisal. The assessment has been prepared in three separate reports covering the areas of Bassetlaw, Newark and Sherwood and the Greater Nottingham area (including the Trent Washlands). Coverage has been completed for Mansfield which although originally intended to be part of the Greater Nottingham Report has now been published as a separate, standalone report. Important influences on character include landform, ecological characteristics, landform, settlement patterns, woodland cover, field density pattern and visible archaeology. A series of objectives and specific landscape actions have been prepared for each landscape character area. For the Trent Washlands in particular, restoration of mineral workings should ensure a mosaic of local habitat types to maintain variety in the landscape.		
Nottinghamshire County	Defines different landscape types. Does not		

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Council Historic Landscape Characterisation	provide any statutory protection but highlights that features such as medieval field patterns at Laxton are irreplaceable and may be only remaining examples in UK or Europe.		
On-Trent Action Plan 2010 – 2016	Partnership with aims including creation of diverse wetland habitats and improving land/ water management practices along Trent Valley. Intended to benefit local people and natural and cultural heritage and seeks to reverse the decline in biodiversity by securing a better balance between wildlife and agriculture, commercial activity and development.	The Trent Valley is a significant mineral resource for sand and gravel and policies for future extraction will need to take account of the project's specific aims, especially in relation to sustainable mineral extraction and restoration opportunities that could include wetland, open space and recreation schemes.	SA process will help to identify ways to minimise harmful impacts and maximise opportunities to deliver social, environmental, and economic gains.
River Basin Management Plan Humber River Basin District, Environment Agency, 2009	Sets out the pressures facing the water environment in the Humber River Basin and actions that are needed to address them.	Policies should take account of Environment Agency guidance and advice on flooding and other issues affecting river management.	Include objective(s) to maintain river quality and minimise the risk and/or impacts of flooding in relation to minerals and waste development.
Environment Agency Fluvial Trent Strategy.	Considers options to reduce flooding risks in the Trent Catchment area.		
River Trent Catchment Flood Management Plan, January 2009, Environment Agency	The River Trent Catchment Flood Management Plan (CFMP) sets out the Environment Agency's preferred plan for sustainable flood risk management over the next 50–100 years.		
Soar Catchment Abstraction Management Strategy, Environment Agency, 2006	Detail the abstraction licensing strategy in the catchments for the next few years. Sets out whether licenses will be issued and the conditions that will be applied across the board to cope with specific circumstances.	Policies should take account of Environment Agency guidance and strategy on water abstraction and other issues affecting availability of water in the local area.	Include objectives on managing water availability and demand.
Lower Trent and Erewash Catchment Abstraction Management Strategy, Environment Agency, 2008			
Staffordshire Trent Valley Catchment Abstraction Management Strategy, Environment Agency, 2007			
Water Resource Management Plan, Severn Trent, 2010	Sets out how the company intends to meet water supplies over the next 25 years. Also looks at longer time water resource development.	Policies should ensure that development will not prejudice the supply of future water supply.	Include objectives on managing water availability and demand.
Nottingham Surface Water Management Plan, Nottingham City Council	A living document monitoring the work completed in implementing SWMP guidance from DEFRA. Functional tool to enable 'real-time' advice to be given on drainage. Aims to reduce the number of properties at risk from surface water flooding,	Policies will need to take account of flood risk evidence.	Include objective(s) on minimising and managing flood risk.

Document	Key objectives/targets	Implications for MWDF	Implications for SA
	to develop a knowledge base/sharing system and create a framework to assist critical infrastructure planning.		
Nottinghamshire Strategic Flood Risk Assessment report 2011	Identifies all areas of flood risk in the county based on data collected from a range of sources. Highlights compatible and incompatible development and broad areas of constraint.	Policies will need to take account of the findings of the various Strategic Flood Risk Assessments carried out across Nottinghamshire and seek to guide development towards the most suitable locations using the sequential approach set out in PPS25. Mineral working (sand and gravel) is normally acceptable in areas of flood risk but waste treatment or disposal should generally be located away from flood risk areas because of the pollution risk. Built development, plant and storage areas should be designed and located so as not to impede flood flows. Promote the use of sustainable drainage systems where appropriate. Also ensure development is designed to withstand possible future flooding.	Include objective(s) to minimise flood risk and reduce impact of flooding on minerals and waste developments.
Greater Nottingham Strategic Flood Risk Assessment, 2008, Black and Veatch	Covers the areas of Nottingham City, Gedling, Rushcliffe, Broxtowe and Erewash (Derbyshire) and identifies that over 20,000 properties along the urban part of the River Trent are potentially at risk from a 1 in 100 flood event. The main areas affected are Nottingham city centre out to Colwick, Netherfield and Burton Joyce to the east and Dunkirk, Rylands, Attenborough and Long Eaton to the west. Recent flood defence improvements are expected to protect West Bridgford, Wilford and Barton-in-Fabis. Other potential sources of flooding are also identified such as sewer and surface water flooding.		
Ashfield District Council Strategic Flood Risk Assessment, February 2009, Ashfield District Council	Flood risk is relatively low compared to other districts but development within Ashfield could increase risk in Nottingham. River and surface water flooding are the main concerns and are most likely to affect parts of Kirkby-in-Ashfield and surrounding areas, Sutton-in-Ashfield and extensive parts of Hucknall. The risk of ground water flooding is low although the legacy of mine working means there is a potential long term risk of minewater rebound in some areas.		
Bassetlaw District Council Strategic Flood Risk Assessment, July 2009, JBA Consulting	The main risk within Bassetlaw is from fluvial flooding. The urban areas of Worksop and Retford have minimal flood defences. In rural areas, villages along the River Trent or overlying clay based soils are most at risk. Groundwater is not thought to be an issue, although localised problems may occur over time in the vicinity of abandoned mine pumping operations.		
Mansfield District Council Strategic Flood Risk Assessment, June 2008, RPS Group	In general the Mansfield District is considered to be at low risk of flooding although specific parts of Mansfield town centre, Pleasley, Church Warsop, Market Warsop and Meden Vale are		

Document	Key objectives/targets	Implications for MWDF	Implications for SA
	potentially at risk from fluvial flooding. There is considered to be sufficient unaffected land available to be able to avoid development within the identified flood risk areas.		
Newark and Sherwood District Council Strategic Flood Risk Assessment, July 2009, WSP Development and Transportation	The greatest risk is seen as flooding from the River Trent which would affect Newark and many of the outlying villages along the Trent Valley. Other parts of the District, including Ollerton and Boughton, are also at risk of fluvial flooding with possible surface water and sewer flood issues in Lowdham, Southwell and Boughton. The risk for other areas is regarded as minimal. Waste and mineral development within the District should be sensitive to flood risk. Sites should take into consideration the location of flood zones and should not adversely affect flood regimes.		
Greater Nottingham Scoping Water Cycle Study, Scott Wilson, May 2009	Assesses water supply, discharge and treatment issues across Greater Nottingham area. No significant supply issues have been identified at the outset but this is to be kept under review. Highlights potential reductions in water quality arising from additional effluent discharge from proposed future development (housing, employment etc.)	Ensure provision of appropriate waste water treatment infrastructure to meet identified needs. Take account of water supply, treatment and drainage issues when planning the location of new minerals and waste development.	SA process should help to assess likely impacts on water supply/treatment needs. Include objective(s) to ensure adequate provision of appropriate waste management infrastructure.
Greater Nottingham and Ashfield Outline Water Cycle Study, Entec, coordinated by Gedling Borough Council, 2010	Considers the likely water related impacts from the level of development identified in the RSS. Looks at difference scenarios and assesses the impact on clean water, waste water, water resources, water quality and flood risk. Strategic level intervention and mitigation measures are identified.		
Bassetlaw District Water Cycle Study	Identifies possible water supply and treatment constraints on housing and employment growth planned for Bassetlaw up to 2026. It suggests possible constraints with regards to treatment capacity, the clean water network and water resources in Bassetlaw.		

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Mansfield Water Cycle Study	Some of the potential growth areas around Mansfield would require improved water infrastructure but no major supply concerns have been identified. Large scale development around Mansfield and Forest Town could require increased waste water treatment capacity.		
Newark and Sherwood District Water Cycle Study: Detailed Strategy, Sept 2009, JMP Consultants Ltd	Identifies possible waste water treatment capacity issues in some areas but these are not considered an overriding constraint to future development proposals in the district. Development south or south-east of Newark should be carefully planned so as to avoid a negative impact on the existing drainage systems/floodplain.		
Sustainable Developer Guide for Nottinghamshire, July 2004	Aims to signpost better construction and site management practices, energy and water efficiency, and raise awareness of wider sustainability issues. Re-using or adapting old buildings helps retain energy and materials already invested, and reduce demolition waste.	Encourage best practice in the construction and operation of new development to minimise waste, maximise re-use and use natural resources (including minerals, water and energy) efficiently. Promote the re-use of existing buildings wherever possible.	Include objectives on sustainable waste management, the efficient use of natural resources, energy efficiency and the sustainable use of land and buildings.
Nottinghamshire Integrated Municipal Waste Management Strategy 2001	Sets out the County Council's plans to manage municipal waste and meet national recycling targets. Identified a need for additional waste to energy or Mechanical Biological Treatment to meet future needs and increase composting provision.	Policies should help to secure the delivery of appropriate new waste sites needed to help deliver each authority's municipal waste management contracts.	Include objective(s) on sustainable waste management and the provision of appropriate waste management infrastructure.
A Waste-Less Nottingham, Waste Strategy 2010 – 2030, December 2010, Nottingham City Council	Sets out the City's Councils plans to manage municipal waste over the next 20 years and initiatives to help manage other wastes and reduce waste production. Aims to increase re-use and recycling to 55% or higher and is aligned with Nottingham's energy strategy to help meet carbon reduction goals through the use of waste as a source of energy. Includes target to recover 47 million kilowatt hours of energy from waste through the Eastcroft incinerator and a planned anaerobic digestion plant. Also identifies a possible need for a second household waste recycling facility.		
Nottinghamshire County Joint Strategic Needs	Intended to drive the commissioning of health services, Children and Young People's Services	Ensure policies minimise possible impacts of minerals and waste development on health,	Include objective(s) to minimise the impacts of minerals and waste development on

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Assessment, June 2008, Bassetlaw Primary Care Trust, Nottinghamshire Teaching Primary Care Trust, Nottinghamshire County Council	and Adult Social Care in the county. Although the primary focus is on demographic and other trends affecting health needs, this requires a holistic approach to the planning and delivery of a range of universal services across agencies.	including the effects of transport. Contribute to overall health aims by promoting recreation opportunities, through site restoration and/or mitigation, and supporting economic regeneration by providing suitable minerals resources and waste management infrastructure in appropriate locations.	health
Nottingham City Joint Strategic Needs Assessment 2010-2011, Nottingham City Primary Care Trust, City Health Partnership, Nottingham City Council	Sets out the future health and wellbeing needs for the population of Nottingham. Identifies high levels of deprivation and unemployment, low educational attainment and unhealthy lifestyles as having a significant affect on poor health outcomes and a high level of health inequalities.		
Nottinghamshire's Sustainable Community Strategy 2010-2020	Looks at the main social, economic and environmental challenges facing Nottinghamshire and sets out the Nottinghamshire Partnership's vision for the future and the delivery of infrastructure and services. This is spread across six priority areas focusing on the environment, crime, education, health and wellbeing, economic prosperity and stronger communities. Reflects national targets for recycling and reducing landfill.	Ensure that future minerals and waste development does not conflict with the priorities set out in the respective Sustainable Community Strategies and, where possible, helps to support them e.g. support housing growth and economic development with adequate mineral resources for construction and help deliver recycling targets through the provision of suitable waste treatment/disposal infrastructure.	Use the SA process to assess how well plans, policies or proposals meet the priorities set out in the respective Sustainable Community Strategies and identify opportunities to help deliver these priorities.
The Nottingham Plan to 2020: Nottingham City's Sustainable Community Strategy	Sets out the One Nottingham Partnership's long term vision for the City to 2030 focusing on science and innovation, sport and culture; Making every neighbourhood a great place to live; Giving the best start in life to all of our children and young people; Making poverty history. Relevant targets include reducing carbon emissions, reducing congestion and boosting employment. Increase re-use, recycling and recovery of household waste to 50% by 2020.		
Air Quality Action Plans for the Nottinghamshire Districts	Reduce CO_2 and other greenhouse gas emissions in line with Government guidance.	Ensure that the location and design of minerals and waste sites takes account of air quality issues and designated Air Quality Management Areas.	Include objective(s) to minimise impacts on air quality
Greater Nottingham Aligned Core Strategies Option for Consultation February 2010	The councils of Ashfield, Broxtowe, Erewash, Gedling, Nottingham City and Rushcliffe are working with Derbyshire and Nottinghamshire County Councils to prepare an aligned and	Ensure that adequate minerals resources and waste management infrastructure are available, in appropriate locations, to support anticipated growth set out within the Aligned	The SA process should be used to ensure that minerals and waste development policies and proposals do not conflict with existing/proposed development plan

Document	Key objectives/targets	Implications for MWDF	Implications for SA
	consistent planning strategy for Greater Nottingham. The Local Development Framework consists of a number of documents taking into account the local demands of development and growth, while seeking to protect the environment and the well-being of local communities. The Core Strategy will be the key strategic planning document and will define a spatial vision for each council to 2026, within the context of an overall vision for Greater Nottingham. This will guide the location, scale and types of new development required and outline the infrastructure investment needed and how this will be delivered.	Core Strategy and other emerging LDF documents. This will also need to take account of the aims and objectives and timescales set out for each area. Also need to ensure that minerals and waste policies do not conflict with environmental or other safeguards included in the strategy /documents.	strategies and help to contribute to wider social, economic and environmental goals where possible.
Bassetlaw Local Development Framework Mansfield Local Development Framework Newark and Sherwood Local Development Framework (Core Strategy Adopted March 2011)	The Local Development Frameworks being produced by the remaining Nottinghamshire district and borough councils (i.e. those not involved with the Aligned Core Strategy) are at varying stages of preparation and will replace existing local plans. These will set out key infrastructure requirements and development constraints including the priorities for social and economic improvements in each area as well as environmental protection. They will guide where new housing and employment should be located and the amount of land that is required as well as the protection that will be required for Green Belt, open space and countryside, landscape and biodiversity, cultural heritage and other important assets. Significant new housing and employment is proposed around Newark and at various locations around Nottingham, which are both designated as Growth Points. Land to the south of Mansfield (along the route of the MARR) has received planning permission for a mixed use residential/employment/commercial scheme subject to referral to the Secretary of State on whether to call it in or not. Significant housing and employment proposals in the Bassetlaw Core Strategy are in and around Worksop and to the south of Harworth-Bircotes.		
Ashfield Local Plan Review, November 2002, Ashfield	The saved policies for each of the seven borough and district councils in Nottinghamshire		

Document	Key objectives/targets	Implications for MWDF	Implications for SA
District Council	and Nottingham City Council's saved Local Plan set out the priorities for social and economic improvements in each area as well as environmental protection. They provide detailed guidance on where new housing and employment should be located and the amount of land that is required. There are specific policies to protect the Green Belt, open space and countryside, landscape and biodiversity, cultural heritage and other important assets.		
Bassetlaw Local Plan, October 2001, Bassetlaw District Council			
Broxtowe Local Plan, September 2004, Broxtowe District Council			
Gedling Local Plan, Gedling Borough Council, 2005			
Mansfield District Local Plan, 1998, Mansfield District Council			
Newark and Sherwood Local Plan, March 1999, Newark and Sherwood District Council			
Rushcliffe Borough Local Plan, June 1996 and Non-statutory Replacement Local Plan, Dec 2006, Rushcliffe Borough Council			
Nottingham Local Plan			
Rights of Way Improvement Plan, November 2007, Nottinghamshire County Council	Serves as the focus for the protection and enhancement of countryside access within Nottinghamshire. Aims include to protect, maintain and enhance the network, improve access and awareness (e.g. of health benefits of active lifestyles) and increase community involvement in managing and improving the network.	Minerals and waste development have the potential to adversely affect rights of way. Policies should see to minimise the impact of development on the use and/or enjoyment of existing rights of way and provide appropriate mitigation where necessary. The restoration of minerals sites, especially, could provide an opportunity to provide new or enhanced public access.	Include objective(s) to minimise the impact of development on public access and to enhance provision where appropriate.
Rights of Way improvement Plan, November 2007, Nottingham City Council,	Sets out policy and strategy for maintenance and improvement of the City's rights of way network. Key aims include public safety/addressing anti-social behaviour, transforming neighbourhoods and encouraging public access and wider health improvements.		
Nottinghamshire County Council Strategic Plan 2010-2014	Aims to foster aspiration, independence and personal responsibility; promote the economic prosperity of Nottinghamshire and safeguard our environment; make Nottinghamshire a safer place to live.	Policies should protect the environment and promote sustainable development whilst ensuring an adequate supply of minerals and appropriate waste management infrastructure to support economic growth	The SA process should be used to ensure that minerals and waste development policies and proposals do not conflict with these strategies and help to contribute to wider social, economic and environmental goals where possible.
Nottingham City Council	Committed to delivering the vision of the Local		

Document	Key objectives/targets	Implications for MWDF	Implications for SA
Corporate Plan 2006-2011	Strategic Partnership for a proud, safe, clean and ambitious city and looks to improve the quality of life, grow the City's economy, encourage communities and citizenship and improve public services.		

Appendix 2: Review of Baseline Data

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments
Land Use and Countryside					
Area	208,500 ha	1,563,000 ha	24,087,000 ha	Nottinghamshire is 13% of East Midlands land area	
Roads	2008: 4,850.1 km 2009: 4,832.2 km	2008: 31,223.5 km 2009: 31,288.9 km	2008: 300,966.6 km 2009: 301,187.3 km	Minor reduction at local level, compared with minor increases at regional and national level	
Rights of Way	1992: 3,209 km 2006: 2,611.2 km	1992: 18,763 km	1992: 224,000 km 2008: 188,700 km	Nottinghamshire has 17% of Region's rights of way.	Protect rights of way. Seek mitigation where appropriate and promote increased accessibility where possible.
Rivers		3,530 km	2007: est. 150,000 km (England & Wales)	n/a	Protect surface water quality.
Rural Areas	85%	80%		Nottinghamshire has a slightly higher proportion of rural areas compared to the regional average.	Protect rural areas from inappropriate development.
Urban Areas	1991: 16,940 ha (8%) 2001: 18,490 ha (9%)	1991: 92,300 ha (6%) 2001:100,900 ha (6%)	1991: 1,087,200 ha (5%) 2001: 1,158,900 ha (5%)	No change at national or regional level but figures suggest increasing urbanisation at local level.	Promote re-use of previously developed land and infrastructure.
Agricultural Land	2003: 151,000 ha (72%)	2003: 1,125,000 ha (72%)	2003: 17,230,000 ha (72%)	Local figure in line with regional and national figure.	Protect high quality agricultural land.
Woodland	16,680 ha (8%)	1995-1999: 79,871 ha (5%) 2006: 5%	2009: 1,128,000 ha (5%) 2010: 1,130,000 ha (5%)	Nottinghamshire has a higher than average level of woodland coverage. No significant change at national and regional levels although no more recent local data is available.	Maintain woodland coverage. Seek mitigation for losses/enhancement where appropriate.
Natural Environment and Biodiversity					
International sites	2009: 1 SAC at 272 ha (< 1%)	2009: 9 SAC / 3 SPA	2009: 241 SAC / 84 SPA	No reduction at national,	Maintain favourable status and

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
	2010: 1 SAC at 272 ha (< 1%)	2010: 9 SAC / 3 SPA	2010: 241 SAC / 84 SPA	regional or local level		seek opportunities for enhancement.
National sites	2009: 68 SSSI / 1 NNR (< 1%) 2010: 68 SSSI / 1 NNR (< 1%)	2009: 390 SSSI / 14 NNR 2010: 393 SSSI / 16 NNR	2009: 4,114 SSSI / 222 NNR 2010: 4,117 SSSI / 224 NNR	No change at local level, with minor increased at regional and national level. Trend over time shows poor performance in Nottinghamshire, with room for improvement.		
Local sites	2009: 28 LNR / >1300 SINC (7%) 2010: 52 LNRs / >1300 SINC (7%)	2009: 154 LNR 2010: 163 LNR	2009: >1,400 LNR	Significant increase in the number of LNR sites designated locally.		
Condition of SSSIs: 'favourable or recovering'	2009: 88.7% 2010: 92.4%	2009: 94.8% 2010: 98.08%	2009: 75% 2010: 95.82%	Nottinghamshire is below the national and regional average. The local situation is improving but the national target for 95% of SSSIs to be in 'favourable or 'recovering' condition by 2010 has been missed.		Maintain and enhance SSSI quality.
Ancient woodland	3,387 ha (1.6%)	25,000 ha (1.6%)	2009: 341,000 ha 2010: 341,000 ha	No local or regional trend data available. No change at national level.		Avoid any further losses
Status of key priority species			2005: 10% Increasing/fluctuating – probably increasing 25% Declining (slowly)/fluctuating – probably declining/declining (continuing/accelerating) 2008: 11% Increasing/fluctuating – probably increasing 22% Declining (slowly)/fluctuating – probably declining/declining (continuing/accelerating)	No local or regional data for comparison, but national picture has seen an slight improvement.		

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
Status of key priority habitats			2005: 24% Increasing 41% Declining (slowing)/fluctuating – probably declining/declining (continuing/accelerating) 2008: 19% Increasing/fluctuating – probably increasing 43% Declining (slowing)/fluctuating – probably declining/declining (continuing/accelerating)	No local or regional data for comparison, but the national picture has worsened.	●	
Heathland	1998: 250 ha 2005: 750 ha		2001: 41,000 ha 2006: 58,000 ha	Improvement is being made following huge historic loss across the country. Local status is unsure, but LBAP outlines number of improvement schemes that illustrate an increase in cover over the next couple of years. National increase due in large part to better estimation of resources.	●	
Landscape and Countryside						
Mature Landscape Areas	2009: 9.5%			At current, only local data available and no comparison over time at this level. Require further data for analysis.	●	
Green Belt	2009: 43,010 ha	2008/09: 78,620 ha 2009/10: 78,930 ha	2008/09: 1,638,840 ha 2009/10: 1,639,560 ha	Small increases at national and regional level, but no data to show local trend. Increase in Green Belt land would see greater protection of open countryside in Nottinghamshire.	●	
Historic and Cultural heritage						
Grade I or II* Listed	2009: 344 (5.8%)	2009: 2.844 (4.6%)	2009: 30,776 (3.1%)	Local situation is		Avoid further damage to Listed

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
Buildings (% at risk)	2010: 344 (5.8%)	2010: 2,844 (4.6%)	2010: (3.1%)	considerably worse than elsewhere and shows no change compared to an overall improvement nationally over last 10 years.	●	Buildings within the county.
Grade II Listed Buidlings (% at risk)	2010: 4206	Data is not recorded regionally	Data is not recorded nationally			
Scheduled Ancient Monuments (% at risk)	2009: 2010: 167 (8.4%)	2009: 1,509 (8.6%) 2010: 1,510 (7.7%)	2009: 19,719 (17.9%) 2010: 19,731 (17.2%)	No data to show trends over time.	●	
Conservation Areas (% at risk)	2009: (14.6%) 2010: 171 (9.9%)	2010: 893 (6.2%)	2010: 9,468 (7.4%)	No data to show trends over time.	●	
Parks and Gardens (% at risk)	2010: 26 (7.7%)	2009: 135 (4.4%) 2010: 136 (5.1%)	2009: 1,600 (6.0%) 2010: 1,606 (6.2%)			
Battlefields (% at risk)	2009: 1 2010: 1	2009: 5 (0%) 2010: 5 (0%)	2009: 43 (16.3%) 2010: 43 (14.0%)			
Air						
No. of days 'moderate' or 'higher' air quality (average per site)			2008: 26 days (urban) 45 days (rural) 2009: 10 days (urban) 32 days (rural)	National data suggests improvement but allowance should be made for year on year variations/seasonal impacts so no confirmed trend data available.	●	
Number of LAs with Air Quality Management Areas	2010: 3 LAs (8 AQMAs)	2010: 17 LAs (53 AQMAs)	2010: 203 LAs	No data for comparison over time. Further data required for full analysis.	●	
Co^2 emissions	2007: 5,856.86 kt 2008: 5,698.56 kt	2007: 39,307.06 kt 2008: 38,245.27 kt	2007: 422,483.31 kt 2008: 413,963.26 kt	Data shows a reduction at all levels but further reductions are needed to meet national targets (34% by 2020 and 50% by 2050 against 1990 baseline).	●	Minimise emissions from minerals and waste activities including transport.
Nox/No^2 levels		1999: 168,601 tonnes	1999: 1,358,203 tonnes	No data to compare trends over time or at different geographical levels.	●	Minimise transport impacts
Water						

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
Area within Groundwater Source Protection Zones 1-3	2009: 36%			No comparable or trend data available.	●	
Chemical river quality	2005: 92% good or fair 2006: 95% good or fair	2009: 94% good or fair 2010: 94% good or fair	2009: 94% good or fair 2010: 70% very good or good	Slight improvement at local level compared to a significant fall at national level.	●	Maintain chemical river quality/improve where possible
Biological river quality	2005: 92% good or fair 2006: 92% good or fair	2009: 97% good or fair 2010: 97% good or fair	2009: 95% good or fair 2010: 70% very good or good	No change to figure at local and regional level, with great improvement at national level. Current situation is not bad, but potential for improvement.	●	Maintain biological river quality/improve where possible
Nitrate Vulnerable Zones	100%		55%	All of Nottinghamshire lies within a NVZ. Nitrate levels in groundwater exceed 50mg/1 over a significant area of north Nottinghamshire.	●	Minimise nitrate impacts (where linked to minerals/ waste development)
Soil						
Grade 1, 2 and 3a agricultural land			Previous data: 39% 2009: 42%	National data shows an increase in the proportion of high quality agricultural land but this does show the amount of land lost to other uses.	●	Protect the best and most versatile agricultural land.
Contaminated land			2005: 300,000ha (2%) – England & Wales 2007: 781 sites identified	Only national data available, with no trend comparisons possible due to lack of data.	●	
Climate						
Kyoto greenhouse gas basket (million tonnes Co2 equivalent)			2008:628.3 mt 2009 (provisional): 574.6 mt	Climate Change Act 2008 set a 34% reduction by 2020 and 80% reduction by 2050 (on 1990 figures). Improvement in reducing the level of greenhouse gas emission at national level, but local contribution not	●	

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
				evident due to lack of data.		
Average temperature		2008: 9.7 oC 2009: 9.8 oC	2008: 9.9 oC 2009: 10.0 oC	Regional and national increases at same rate, but no local data for comparison. Lack of clarity as to the implications/causes of temperature changes.	●	
Annual rainfall		2008: 937.4 mm 2009: 780.6 mm	2008: 982.1 mm 2009: 875.0 mm	Regional and national change (decrease) are similar, but no local data for comparison.	●	

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
	2008-2028: 16% predicted	2008-2028: 17% predicted	2008-2028: 15% predicted	lower than the regional figure. Past trends in the East Midlands show very high growth rates in comparison to the national picture, but no local data for comparison.		
Human health						
Percentage health good or fairly good	2001: 90.2%	2001: 91.0%	2001: 90.9%	Local situation is slighlty worse than the national and regional average. No data for comparison over time.	●	
Percentage health not good	2001: 9.8%	2001: 9.0%	2001: 9.1%	Local situation is slightly worse than the national and regional average. No data for comparison over time.	●	
Average life expectancy at birth: Male	2003-2005: 77 years 2006-2008: 78 years	2005-2007: 77.60 years 2006-2008: 77.84 years	2005-2007: 77.65 years 2006-2008: 77.93 years	Regional average slightly below national level, but both show general increase in expectancy. No local data for comparison	●	
Average life expectancy at birth: Female	2003-2005: 81 years 2006-2008: 82 years	2005-2007: 81.60 years 2006-2008: 81.81 years	2005-2007: 81.81 years 2006-2008: 82.02 years	Regional and local averages are in line with national figure (generally slightly below) and all show improvement over time.	●	
Sustainable Communities and Quality of Life						
Light pollution - increase of 1+ bands 1993-2000	1993-2000: 25%	1993-2000: 37%	1993-2000: 26%	Local situation is far worse than regional and national averages. However, the level of improvement from 1993-2000 was far better at local level than the regional and slightly better than the national. Important to note source of data and lack of recent status of situation for comparison.	●	
Light pollution - % land in worst band (Red 240 - 255)	2000: 11%	2000: 3%	2000: 7%			
Economy and Employment						
Unemployment rate	2009: 3.5%	2009: 4.1%	2009: 4.2%	Recent decrease in		

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
	2010: 2.8%	2010: 3.2%	2010: 3.5%	unemployment following a great increase due to wider economic circumstances. Local averages remained consistently below regional and national figures, however as per wider economic circumstances there is still improvements to be made.	●	
Employment in minerals indsustry	2001: 0.25% 2003: 0.7%	2001: 0.42%	2001: 0.77% 2003: 0.3%	National reduction in percentage, but increase at local level.	●	
Active Businesses	2007: 24,945 2008: 25,170 2009: 25,150	2007: 157,270 2008: 158,000 2009: 158,000	2007: 1,987,590 2008: 2,024,900 2009: 2,040,150	Recent decrease in number of businesses at the local level goes against the national trend (which saw an increase) and regional which was stable.	●	
Business Births	2007: 2,980 2008: 2,645 2009: 2,375	2007: 19,225 2008: 17,000 2009: 15,000	2007: 246,700 2008: 236,345 2009: 209,030	Decreasing number of births at all levels representative of a struggling economy.	●	
Business Deaths	2007: 2,310 2008: 2,355 2009: 2,985	2007: 14,870 2008: 15,000 2009: 19,000	2007: 199,300 2008: 195,185 2009: 248,110	Increasing number of deaths at all levels between 2008-2009 again representative of the state of the economy.	●	
Transport						
Aggregate mineral carried by road			2007: 200,000,000 tonnes (GB) 2008: 180,000,000 tonnes (GB)	Decrease in tonnage carried by road brings benefits in terms of reduced emissions and disturbance to communities. However, when comparing these figures to those of rail and water transport, it would indicate that this reduction is not through use of	●	
Aggregate mineral carried by rail			2007: 15,100,000 tonnes (GB) 2008: 13,000,000 tonnes (GB)			
Aggregate mineral carried by inland			2007: 1,000,000 tonnes (GB)			

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
waterway			2008: 1,000,000 tonnes (GB)	alternative methods of transportation, but due to an overall reduction in tonnage to be transported.		
Average aggregate road delivery distance			2007: 35 km (GB) 2008: 38 km (GB)	Data shows negative trend over time, with increased road distances and reduced rail and water distances. However, data does not show total distance travelled by each method. The lesser distances for rail and water may be a reflection of an increased number of journeys, but over shorter distances.	●	
Average aggregate rail delivery distance			2007: 144 km (GB) 2008: 126 km (GB)			
Average aggregate barge delivery distance			2007: 49 km (GB) 2008: 37 km (GB)			
Land use						
Derelict land	2008: 156 ha (0.07%)	2008: 1,790 ha (0.11%) 2007: 1,888 ha (0.12%)	2007: 16,790 ha (0.07%) 2008: 15,470 ha (0.06%)	Limited local data would indicate that it is line with the national figure and better than the regional average. But lack of data over time means further data is needed for full analysis.	●	
Brownfield land	2008: 196 ha (0.09%)	2008: 1,090 ha (0.07%)	2007: 12,710 ha (0.05%) 2008 12,960 ha (0.05%)	No data for comparison over time at local and regional level. Minor increase nationally.	●	
Energy						
Electricity consumption: domestic	2007: 1,467 GWh 2008: 1,391 GWh	2007: 8,518 GWh 2008: 8,095 GWh	2007: 117,126 GWh 2008: 112,531 GWh	Reduced consumption at local, regional and national level, all with similar percentage decreases. Potential for further improvements.	●	
Gas consumption: domestic	2007 5,731 GWh 2008: 5,495 GWh	2007: 29,878 GWh 2008: 28,750 GWh	2007: 391,441 GWh 2008: 377,473 GWh	Reduced consumption at local, regional and national level, all with similar percentage decreases. Potential for further	●	

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
				improvements.		
Renewable energy consumption (tonnes oil equivalent)	2006: 4,000 tonnes 2007: 5,000 tonnes	2006: 82,000 tonnes 2007: 106,600 tonnes	2006: 601,500 tonnes 2007: 781,600 tonnes	Increased consumption at local, regional and national level, all with similar percentage increases. Potential for further improvements.	●	
Water consumption: average domestic	2007/08: 133 l/person/day 2008/09: 128 l/person/day	2007/08: 133 l/person/day 2008/09: 128 l/person/day	2007/08: 145 l/person/day 2008/09: 143 l/person/day	Reduced consumption at local, regional and national level, all with similar percentage decreases. Potential for further improvements.	●	
Minerals						
CO2 produced per tonne of sand and gravel	No local data	No local data	2007: 3.98kg/CO2 per tonne (GB) 2008: 4.28kg/CO2 per tonne (GB)	National increase in emissions which will have a negative contribution to meeting national carbon emission targets.	●	
Sand and gravel					▪	
Production	2008: 2.37 million tonnes 2009: 1.58 million tonnes	2007: 8.5 million tonnes 2008: 7.5 million tonnes	2007: 67.1 million tonnes 2008: 61.7 million tonnes	Production has decreased at all levels and is well below local apportionment. Local landbank has fallen slightly and is close to the minimum 7 year requirement.	●	Additional reserves are needed to maintain adequate landbank
Landbank	2008: 8.04 years 2009: 7.9 years					
Apportionment	2.65 million tonnes					
Sherwood Sandstone					▪	
Production	2008: 0.45 million tonnes 2009: 0.32 million tonnes			Landbank shows slight reduction but is well above 7 year minimum requirement. Local production remains below the apportionment level.	●	Current reserves are adequate but longer term replacements will be needed during life of next plan. Production levels are low but this is likely to reflect recession.
Landbank	2008: 13.1 years 2009: 13 years					
Apportionment	0.7 million tonnes					
Limestone					▪	
Production	2008: 0.024 million tonnes 2009: 0.015 million tonnes	2007: 22.0 million tonnes 2008: 19.0 million tonnes	2007: 67.4 million tonnes 2008: 60.7 million tonnes	Increase in landbank, but production in decreasing at all levels and at a local level	●	Landbank is getting close to 10 year minimum requirement but low production makes it unclear
Landbank	2008: 12 years					

Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
	2009: 13.1 years			is below the local apportionment.		whether additional reserves will be needed.
Apportionment	0.267 million tonnes					
Building Stone						
Production	No local data	No regional data	2008: 1.1 million tonnes (UK figure)	No target/landbank. Nottinghamshire is a small producer of building stone	●	Future requirements uncertain
Silica Sand					▪	
Production	2008: 0.26 million tonnes 2009: 0.18 million tonnes	2007: 0.1 million tonnes 2008: 0.1 million tonnes	2007: 4.3 million tonnes 2008: 4.2 million tonnes	Decrease in production at all levels, although rate of decrease is greater at local level. Landbank well below 10 year requirement	●	Additional reserves will be required.
Landbank	2008: 6 years 2009: 5 years					
Clay					▪	
Production	2007: 0 million tonnes 2008: 0 million tonnes	2007: 1.8 million tonnes 2008: 1.6 million tonnes	2007: 9.3 million tonnes 2008: 7.7 million tonnes	No production at local level, within decrease in landbank year on year. Landbank well below recommended 25yrs	●	Additional reserves will be required.
Landbank	2009: 13-14 years per brickworks 2010: 12-13 years per brickworks					
Coal						
Coal production	2008/09: 1.9 million tonnes 2009/10: 1.7 million tonnes	2008/09: 1.9 million tonnes 2009/10: 1.7 million tonnes	2008/09: 10.0 million tonnes 2009/10: 8.0 million tonnes	No target/landbank. Decreases in production at all levels.	●	
Oil & Gas						
Oil production	No local data		2008: 1.24 millions tonnes (UK figure)	No target/landbank.	●	
Gas production	N/A					
Recycled Aggregates						
Recycled/ secondary aggregates in GB market			2007: 25% 2008: 25%	National market share has been slowly increasing over the past 20 years. No change between 2007-2008	●	
Gypsum						
Gypsum production	No local data available	No regional data available	2008: 1.7 million tonnes (est)	No target/landbank	●	Additional reserves likely to be required in longer term

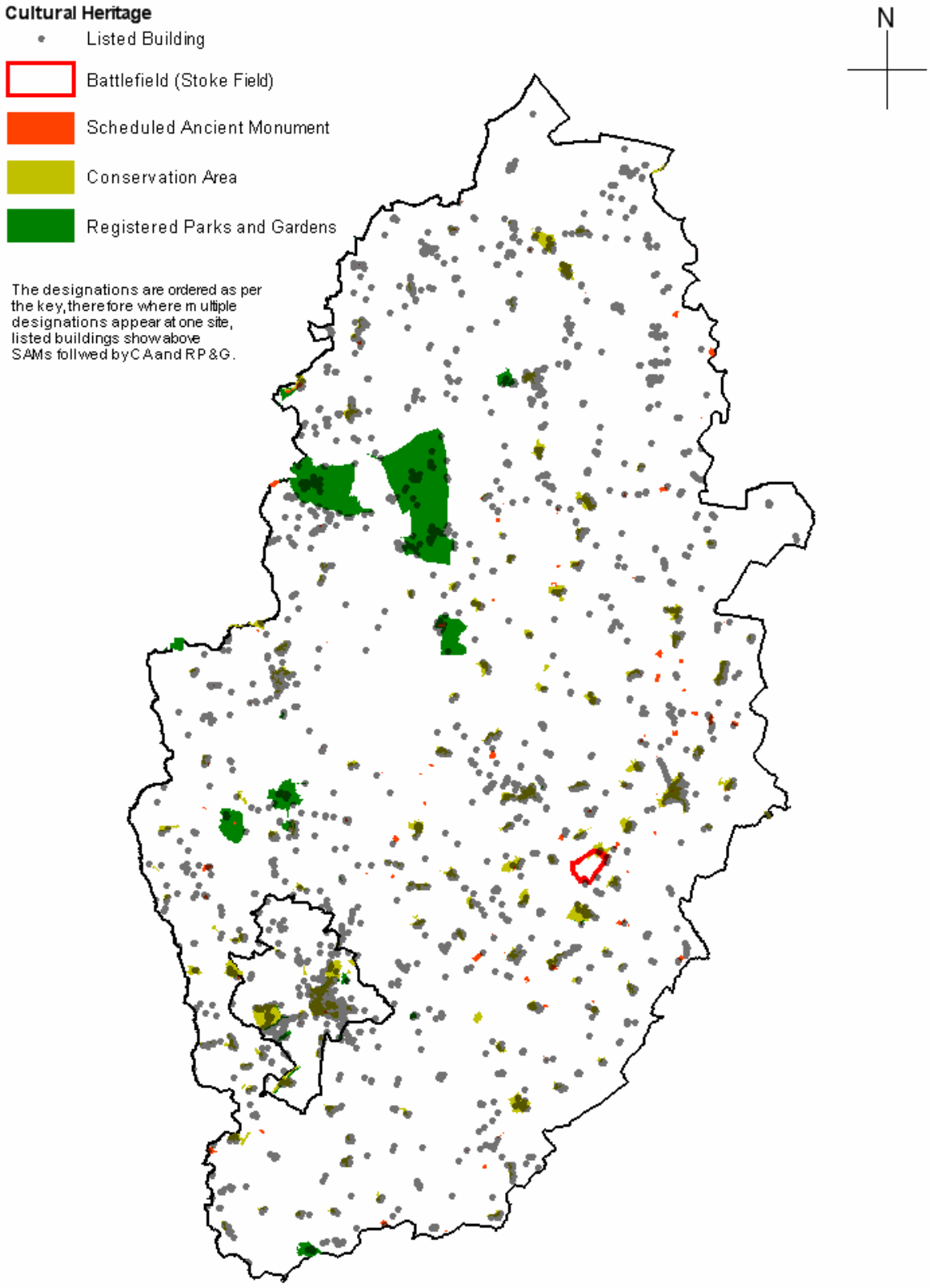
Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
Waste						
Arisings						
MSW	2002/03: 594,000 tonnes 2008/09: 581,258 tonnes 2009/10: 565,753 tonnes	2002/03: 2.44 million tonnes 2008/09: 2.35 million tonnes 2009/10: 2.32 million tonnes	2002/03: 29.4 million tonnes 2008/09: 27.4 million tonnes 2009/10: 26.6 million tonnes	Data shows a reduction at all levels	●	Consider whether any additional provision for municipal waste is required.
C&I *	2002/03: 1,287,450 tonnes 2006: 970,864 tonnes (est.) 2009: no local data	2002/03: 8.1 million tonnes 2006: 6.2 million tonnes (est) 2009: 6.3 million tonnes	2002/03: 67.9 million tonnes 2006: 58.5 million tonnes (est) 2009: 48.0 million tonnes	Available data shows a reduction at all levels	●	Consider whether any additional provision for commercial and industrial waste is required.
C&D	2003: 2.4 million tonnes 2005: no local data	2003: 9.9 million tonnes 2005: 9.8 million tonnes	2003: 90.9 million tonnes 2005: 89.6 million tonnes 2008: 86.9 million tones		●	Consider whether any additional provision for construction and demolition waste is required.
Hazardous	2006: 95,311 tonnes 2007: 88,669 tonnes 2008: 75,500 tonnes 2009: 54,799 tonnes	2006: 353,016 tonnes 2007: 362,710 tonnes 2008: 352,975 tonnes 2009: 226,280 tonnes	2006: 5.9 million tonnes 2007: 6.3 million tonnes 2008: 6.5 million tonnes 2009: 4.1 million tonnes	Data shows a reduction at all levels	●	Consider whether any additional provision for hazardous waste is required.
Power & utilities	1998/99: 1,890,000 tonnes 2002/03: 1,890,000 tonnes (est) 2006: 1,333,949 tonnes (est)	1998/99: 2.1 million tonnes		There has been a reduction in local levels of this waste	●	Consider whether any additional provision is required.
Agricultural	2005: 595,920 tonnes	2005: 6.8 million tonnes			●	
Re-use						
MSW	No local data					
C&I *	No local data	2009: 0.2 million tonnes	2009: 1.3 million tonnes		●	
C&D	No local data	No regional data	2008: 11 million tonnes			
Recycling						
MSW	2008/09: 228,359 tonnes 2009/10: 231,176 tonnes	2008/09: 1.01 million tonnes 2009/10: 1.02 million tonnes	2008/09: 10.1 million tonnes 2009/10: 10.3 million tonnes	UK target to recycle 50% of household waste by 2020. Proportion recycled is increasing locally and on target.	●	Ensure provision of adequate recycling and collection facilities for MSW.
C&I	2002/03: 2009: no local data	2002/03: 2009: 2.9 million tonnes	2002/03: 22.6 million tonnes 2009: 23.6 million tonnes	Rate has increased nationally but no local data for comparison	●	
C&D	2002/03:	2002/03:	2002/03: 2008: 53 million tonnes			

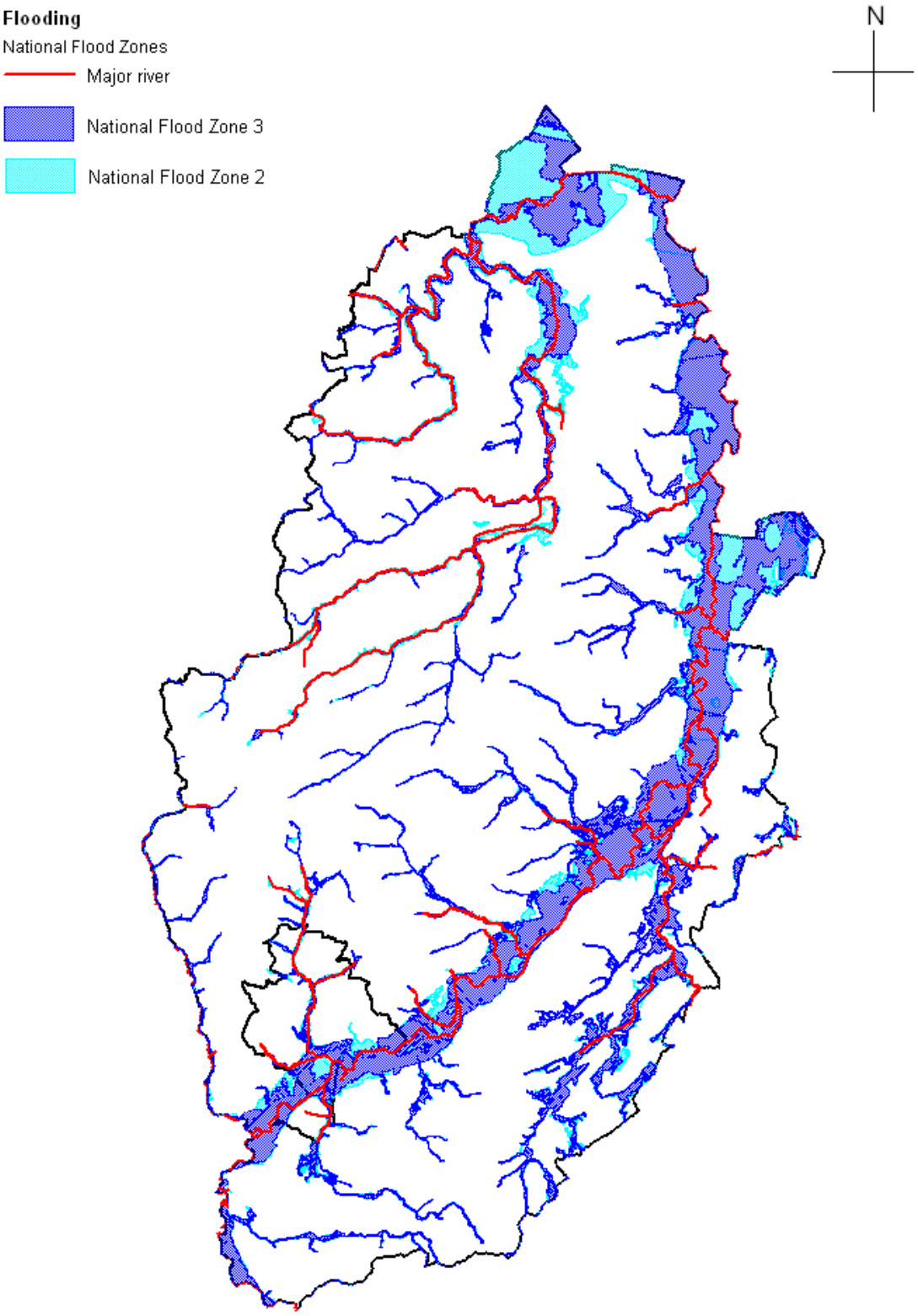
Indicator	Nottinghamshire	East Midlands	England	Target/Comparison	Status and Comments	
Recovery						
MSW	2008/09: 134,334 tonnes 2009/10: 119,123 tonnes	2008/09: 161,000 tonnes 2009/10: 152,000 tonnes	2008/09: 3.2 million tonnes 2009/10: 3.6 million tonnes	Local rates have fallen in contrast to national trend (N.B. main facility was undergoing refurbishment at this time)		
C&I	2002/03: 2009:	2002/03: 2009:	2002/03: 2.1 million tonnes 2009:			
C&D	N/A	N/A	N/A			
Landfill						
MSW	2008: 220,264 tonnes 2009: 215,162 tonnes	2008: 1.2 million tonnes 2009: 1.1 million tonnes	2008: 13.8 million tonnes 2009: 12.5 million tonnes	EU target to reduce biodegradable landfill to 35% of that produced in 1995 by 2020. Progress is ahead of this target	●	MSW landfill rates are declining. Policies will need to promote further reductions in line with waste hierarchy.
C&I	2002/03: 2009:	2002/03: 2009: 1.9 million tonnes	2002/03: 30.0 million tonnes 2009: 11.3 million tonnes			C&I landfill rates are declining. Policies will need to promote further reductions in line with waste hierarchy.
C&D	2008: 180,000 tonnes 2009: 137,000 tonnes	2008: 1.9 million tonnes 2009: 1.4 million tonnes	2008: 22 million tonnes 2009:	Rates have fallen locally	●	
Landfill Capacity						
Non-hazardous	2008: 4.9 million m^3 2009: 2.9 million m^3	2008: 46.1 million m^3 2009: 39.8 million m^3	2008: 473.1 million m^3 2009: 410.6 million m^3	Capacity is declining at all levels.	●	There is a serious shortage of disposal capacity to meet expected needs
Inert	2008: 1.7 million m^3 2009: 2.2 million m^3	2008: 19.5 million m^3 2009: 24.3 million m^3	2008: 109.1 million m^3 2009: 123.7 million m^3	There has been an increase in capacity at all levels	●	Overall local capacity is adequate in terms of volume but this is almost all concentrated at one site meaning poor distribution of disposal capacity.
Restricted user	2008: 3.4 million m^3 2009: 3.2 million m^3	2008: 3.9 million m^3 2009: 3.5 million m^3	2008: 31.1 million m^3 2009: 41.3 million m^3		●	Recent permission mean there is adequate local capacity at present but longer term capacity may be required.

* excludes arisings from power stations/collieries

- indicator is on target/shows improvement where no target recorded
- indicator is slightly below target or is slightly below national/regional average
- indicator is significantly below target/has got worse
- insufficient data to assess/no issue identified

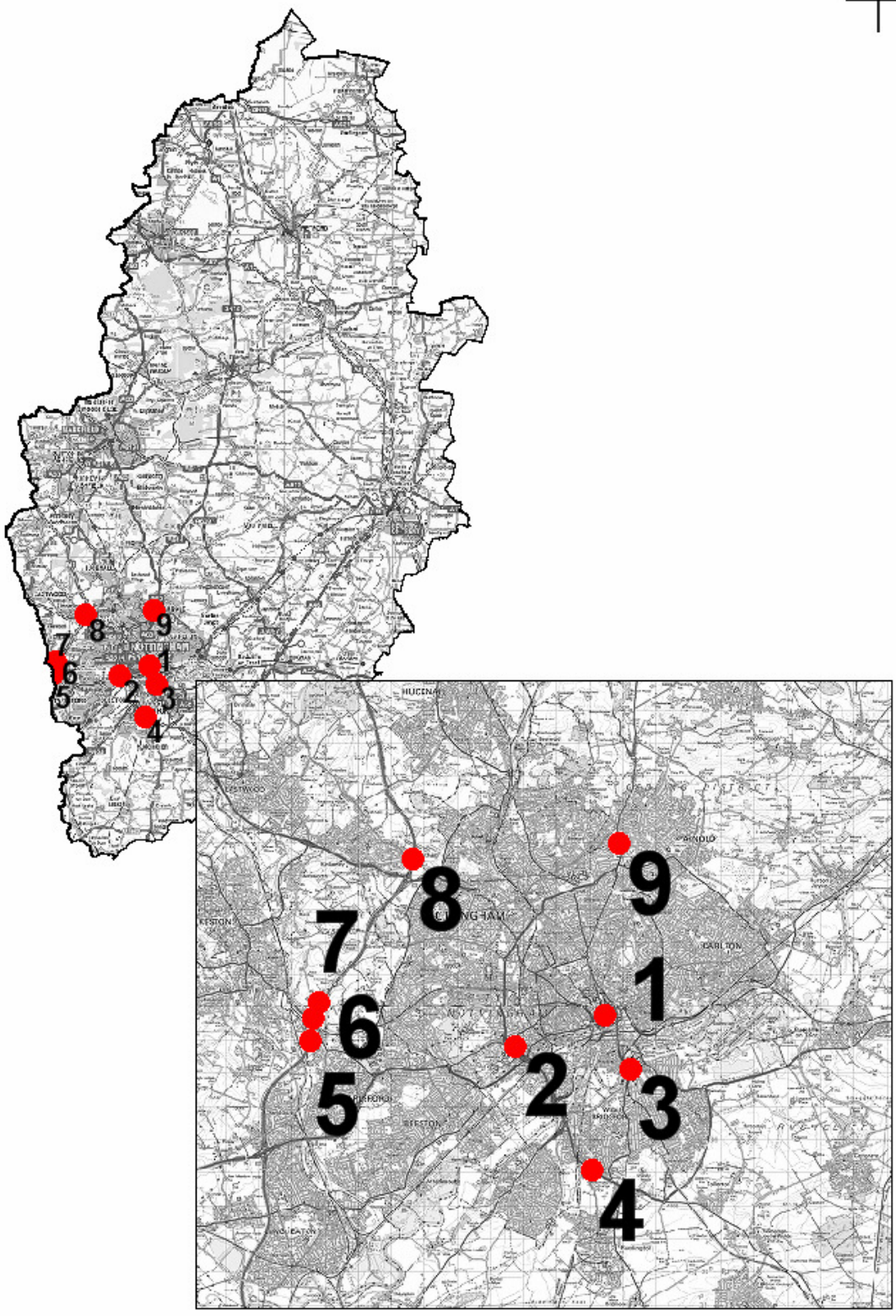
Appendix 3: Contextual data mapping

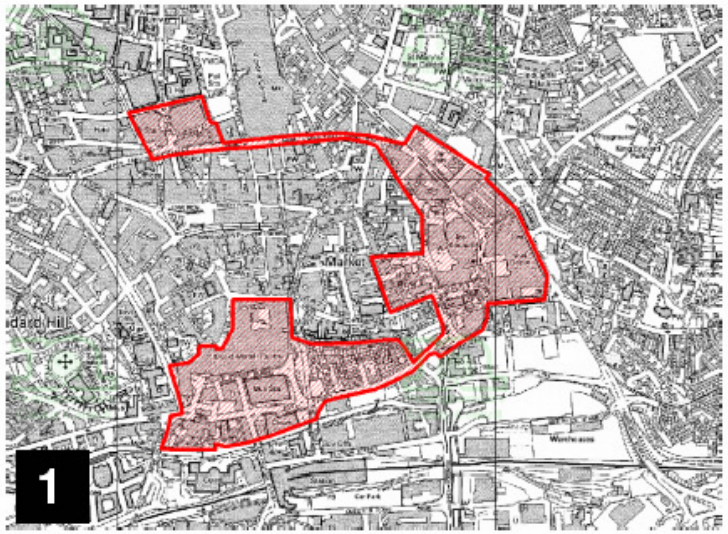




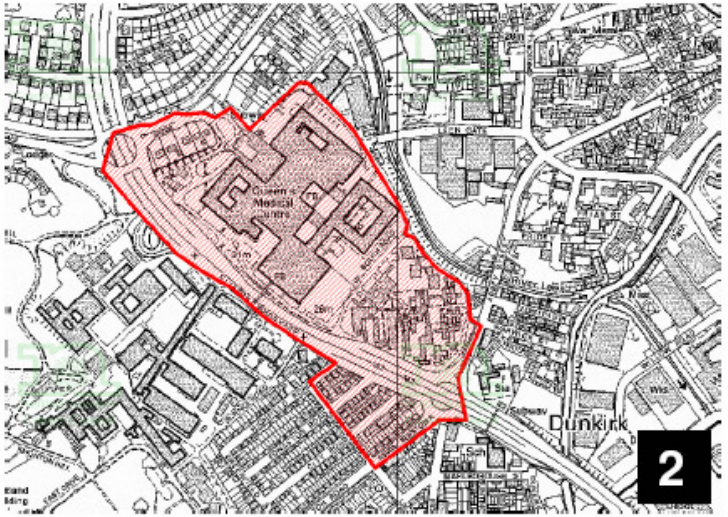
Nottinghamshire's Air Quality Management Areas

See separate maps for boundaries

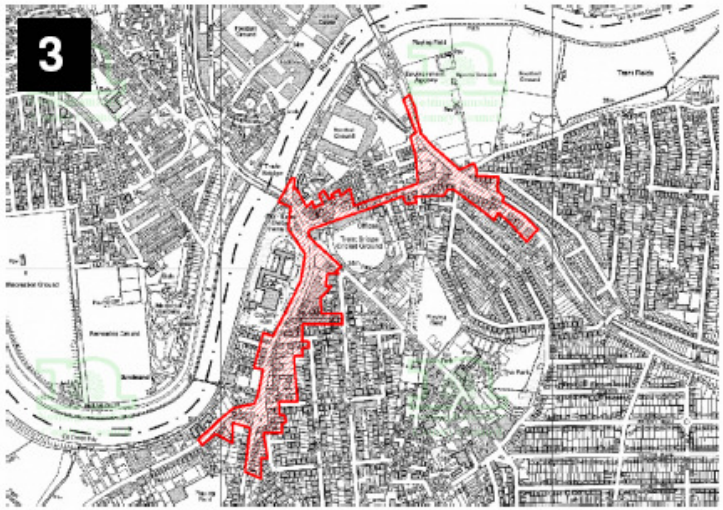




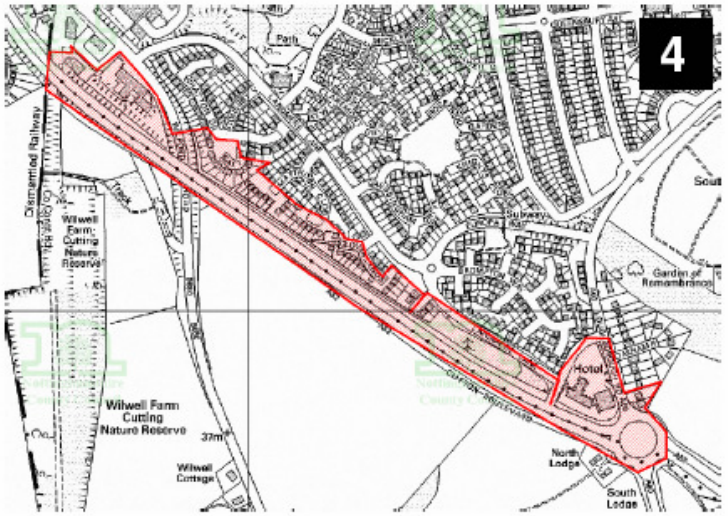
Nottingham AQMA No.2
Nitrogen dioxide (NO_2)
A horseshoe shaped area from Broadmarsh to the bus depot and along the A6008 to Upper Parliament Street



Nottingham AQMA No.3
Nitrogen dioxide (NO_2)
An area around and including the Queen's Medical Centre and the A52(T) between its junctions with the A6200 and A6005



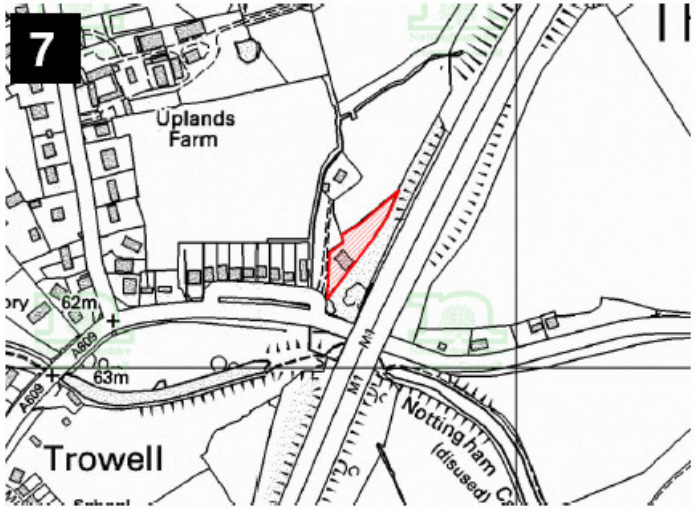
Rushcliffe AQMA No.1
Nitrogen dioxide (NO_2)
An area encompassing the Lady Bay Bridge/Radcliffe Road junction, the Trent Bridge/Loughborough Road/Radcliffe Road junction and the Wilford lane/Loughborough Road/Melton Road junction in West



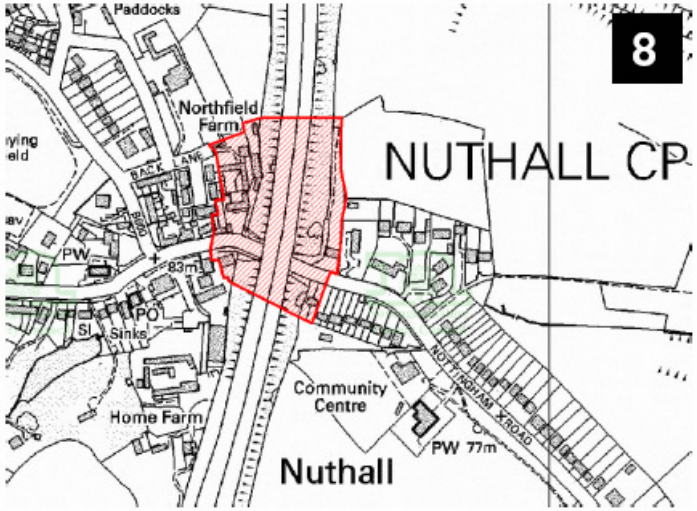
Rushcliffe AQMA No.2
Nitrogen dioxide (NO_2)
An area encompassing the A52 southern ring road between the Borough boundary and the eastern side of Nottingham Knight Roundabout

Broxtowe AQMA No.1
Nitrogen dioxide (NO_2)
An area encompassing twenty properties on parts of Iona Drive and Tiree Close next to the M1 motorway in Trowell

Broxtowe AQMA No.2
Nitrogen dioxide (NO_2)
An area encompassing two properties on Derbyshire Avenue next to the M1 motorway in Trowell

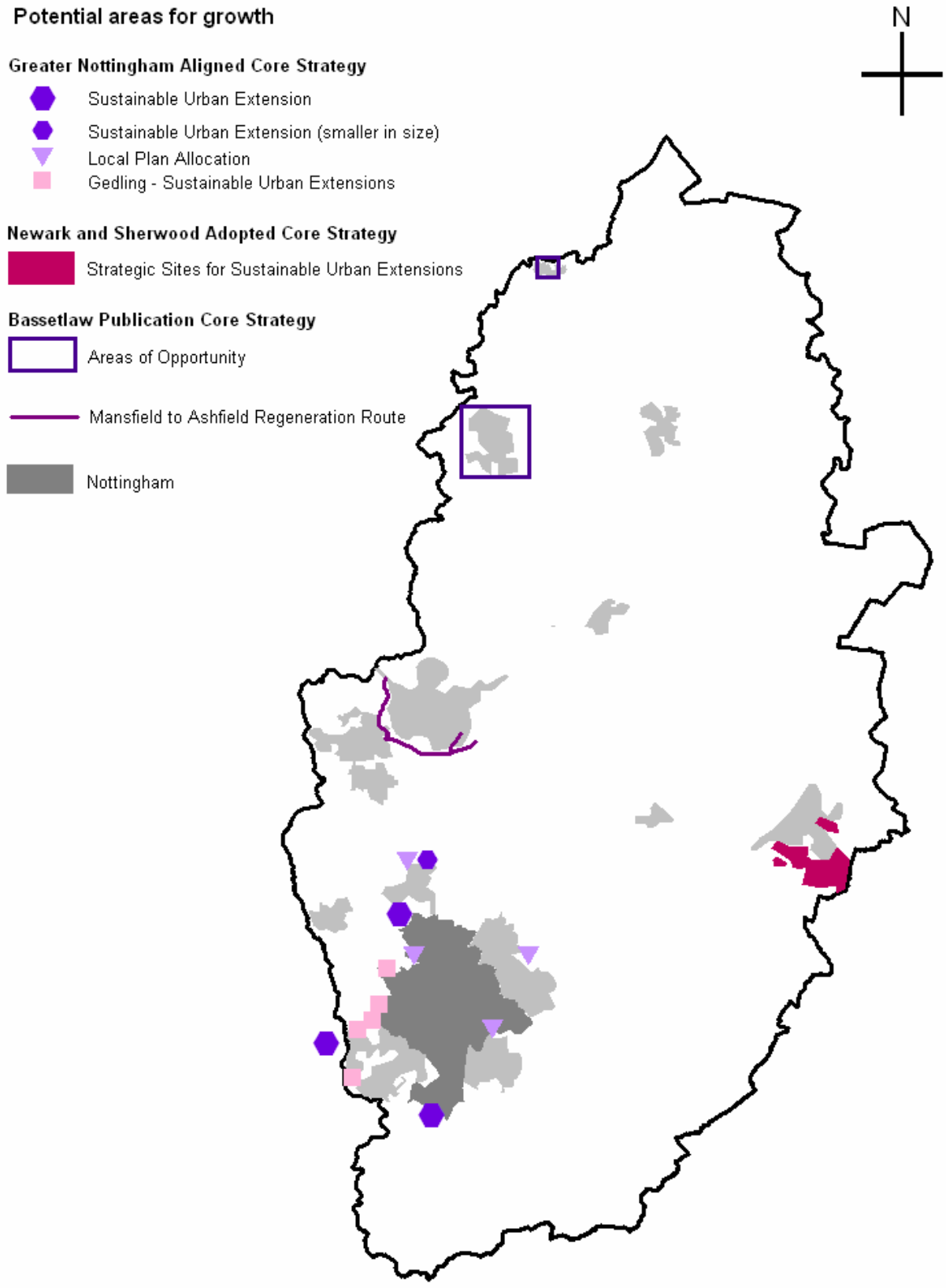


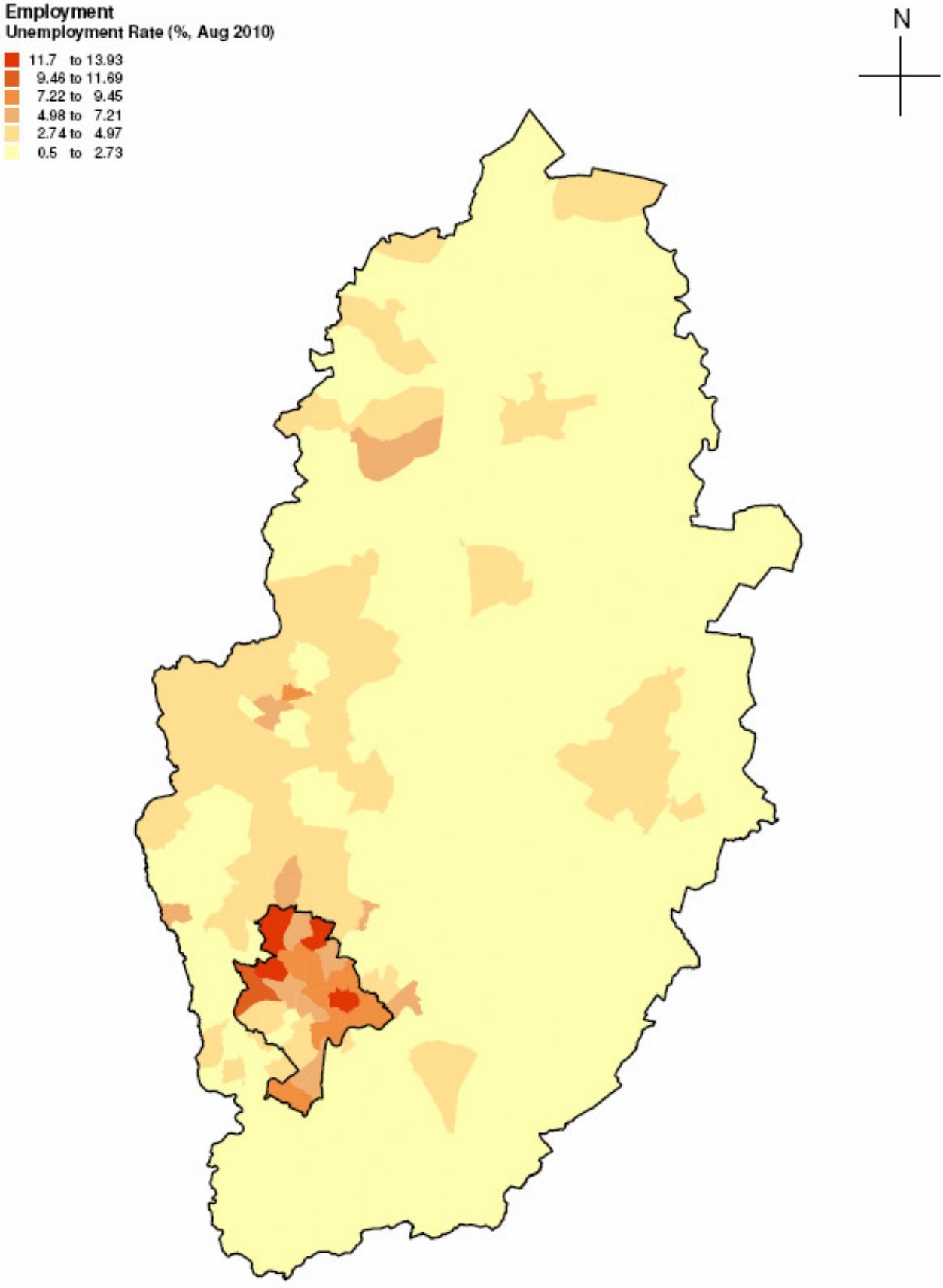
Broxtowe AQMA No.3
Nitrogen dioxide (NO_2)
An area encompassing a single property on Nottingham Road next to the M1 motorway in Trowell

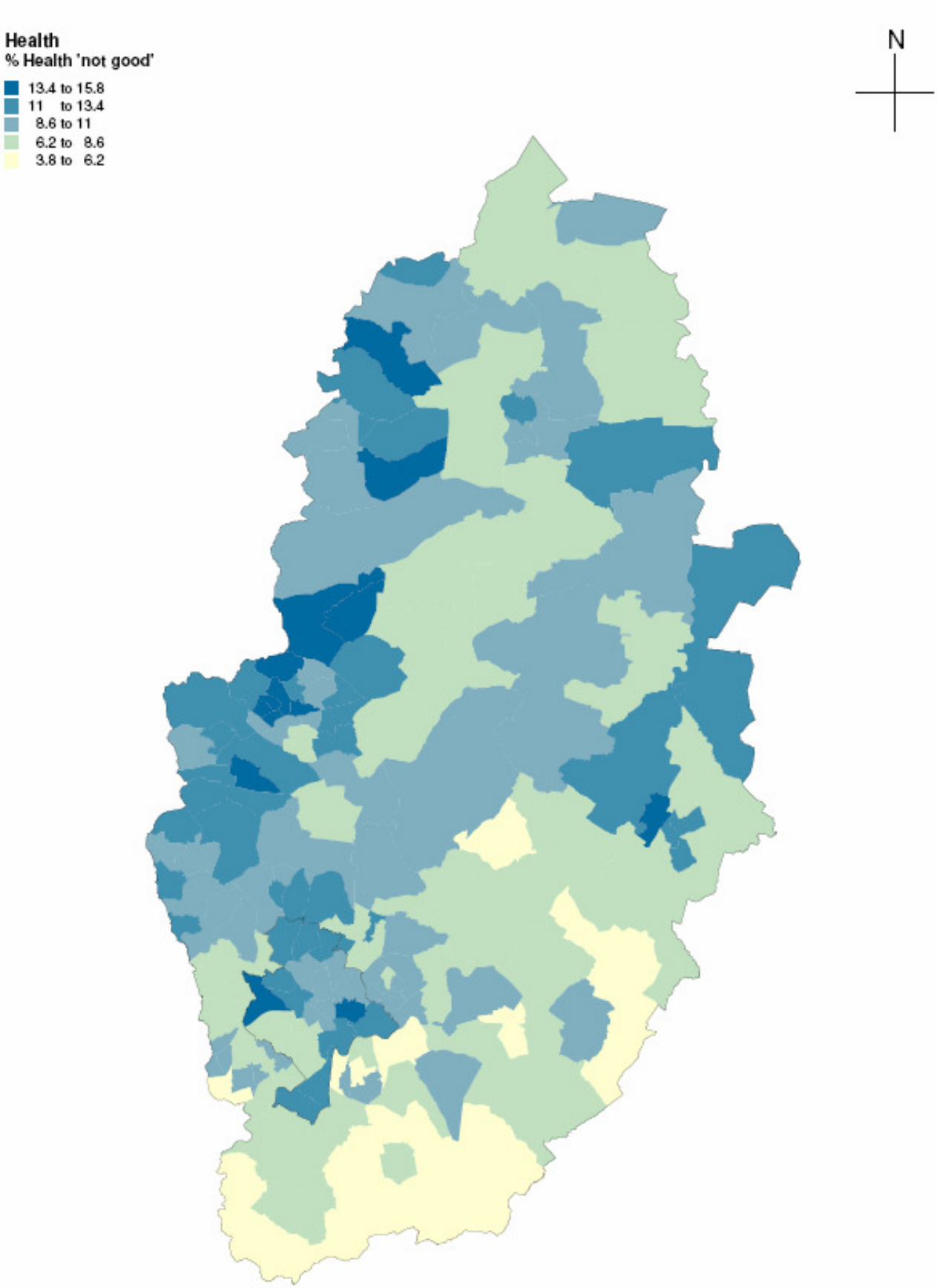


Boxtowe AQMA No.4
Nitrogen dioxide (NO_2)
An area encompassing fourteen properties on parts of Nottingham Road, Nottingham,and Nottingham Road and Back Lane, Nuthall next to the M1 motorway in Trowell

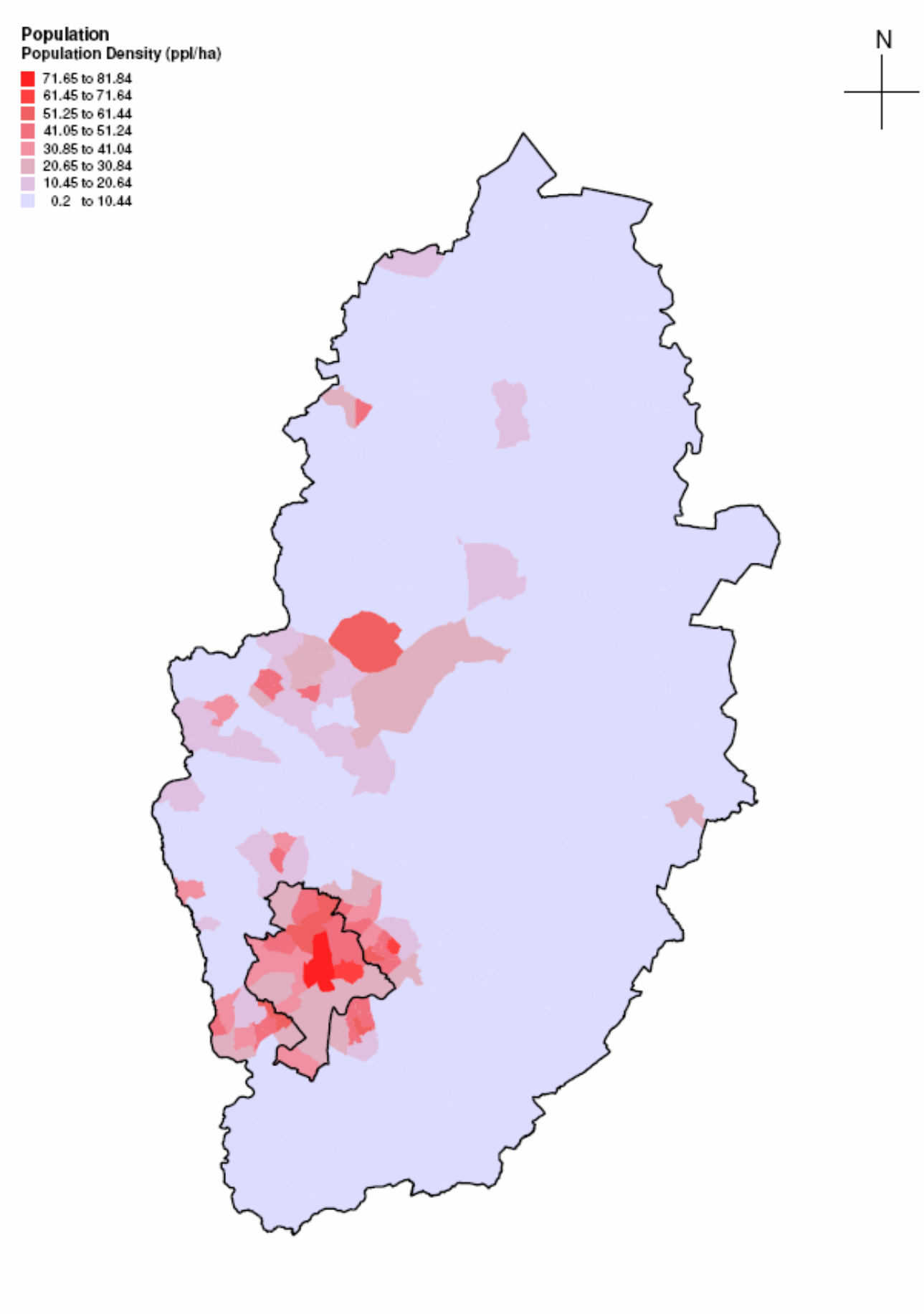
Gedling AQMA No.1
Nitrogen dioxide (NO_2)
An area encompassing the A60 as it passes through Daybrook, including its junction with the A6004.





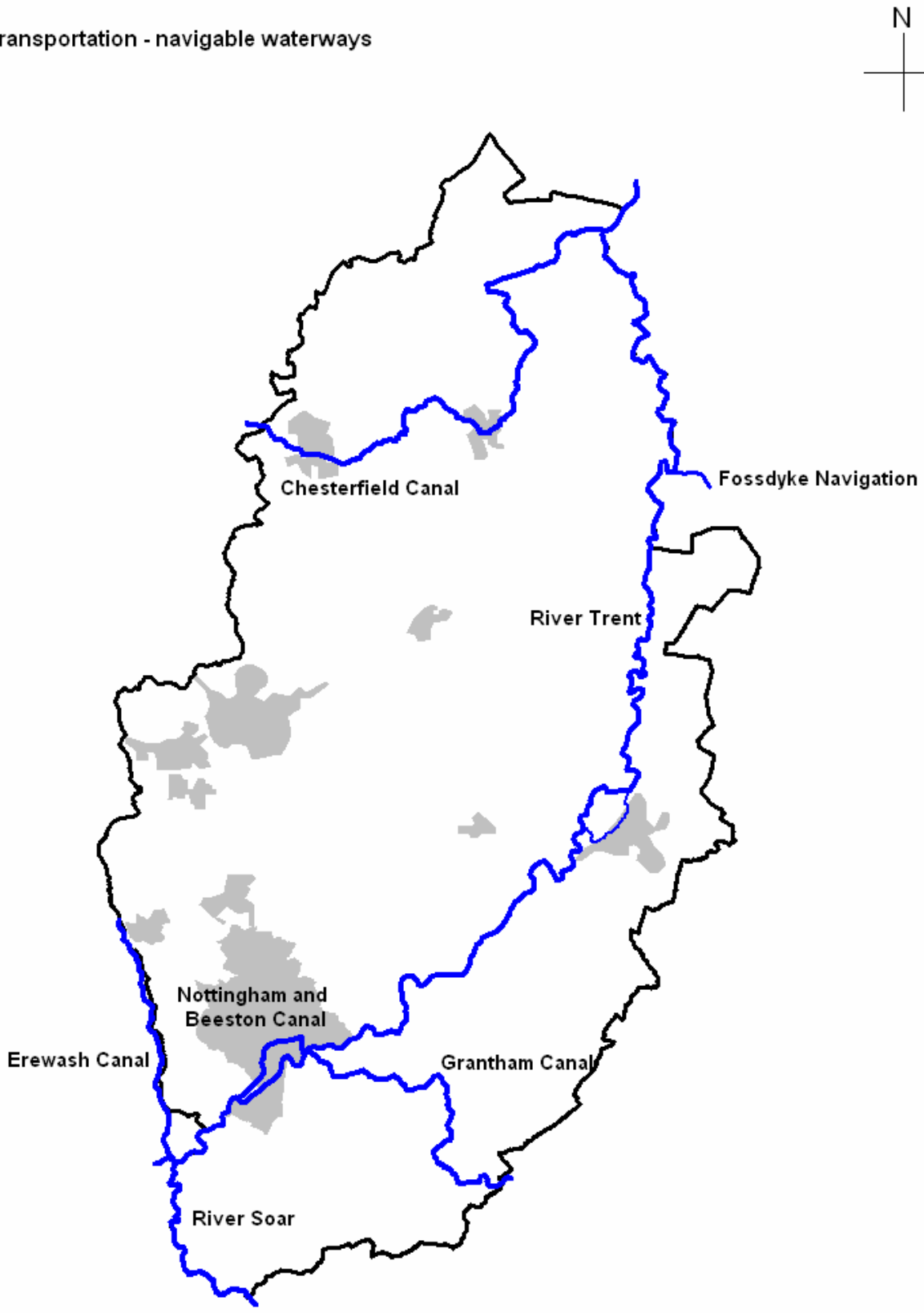


2001 Census data

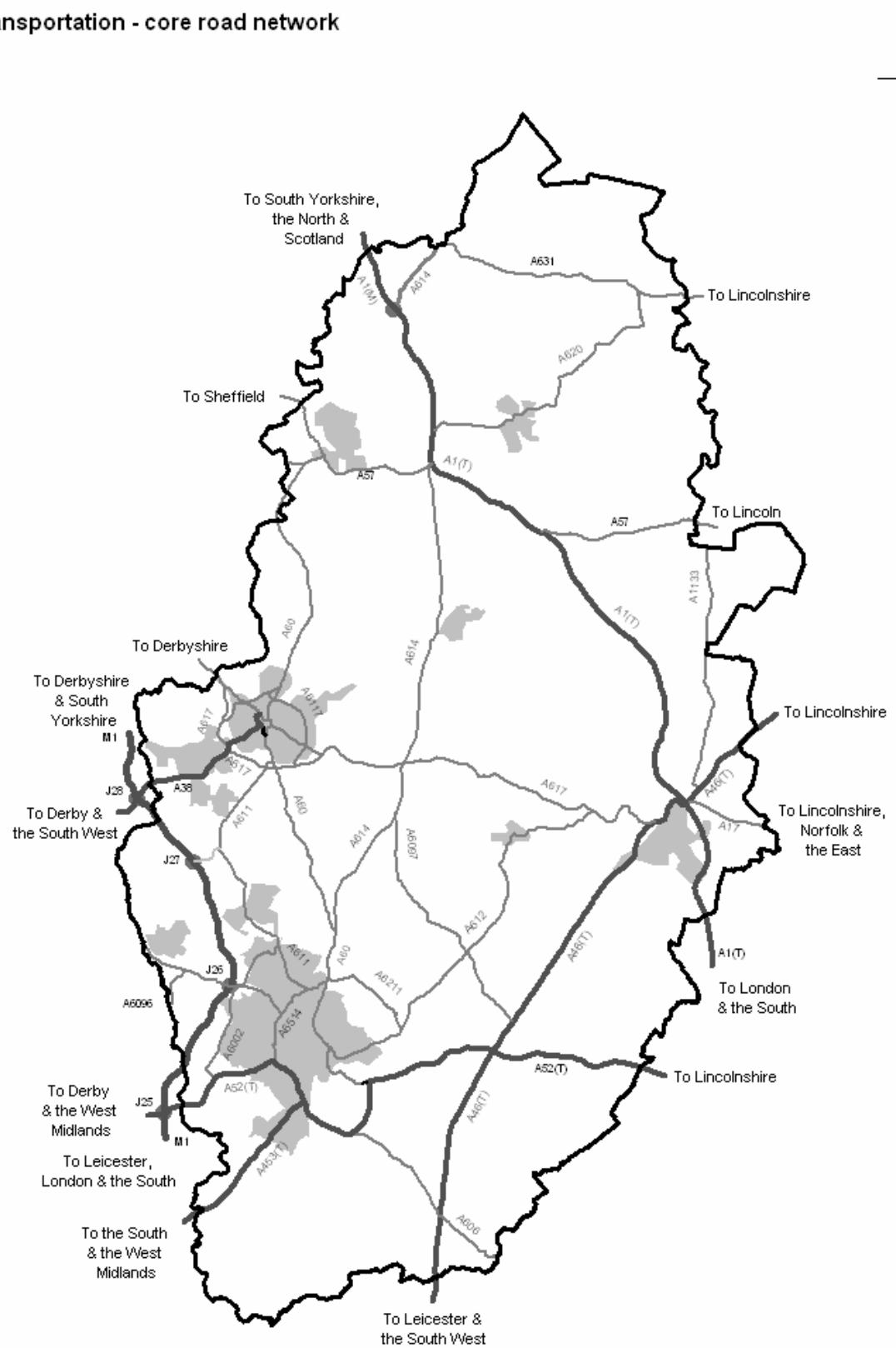


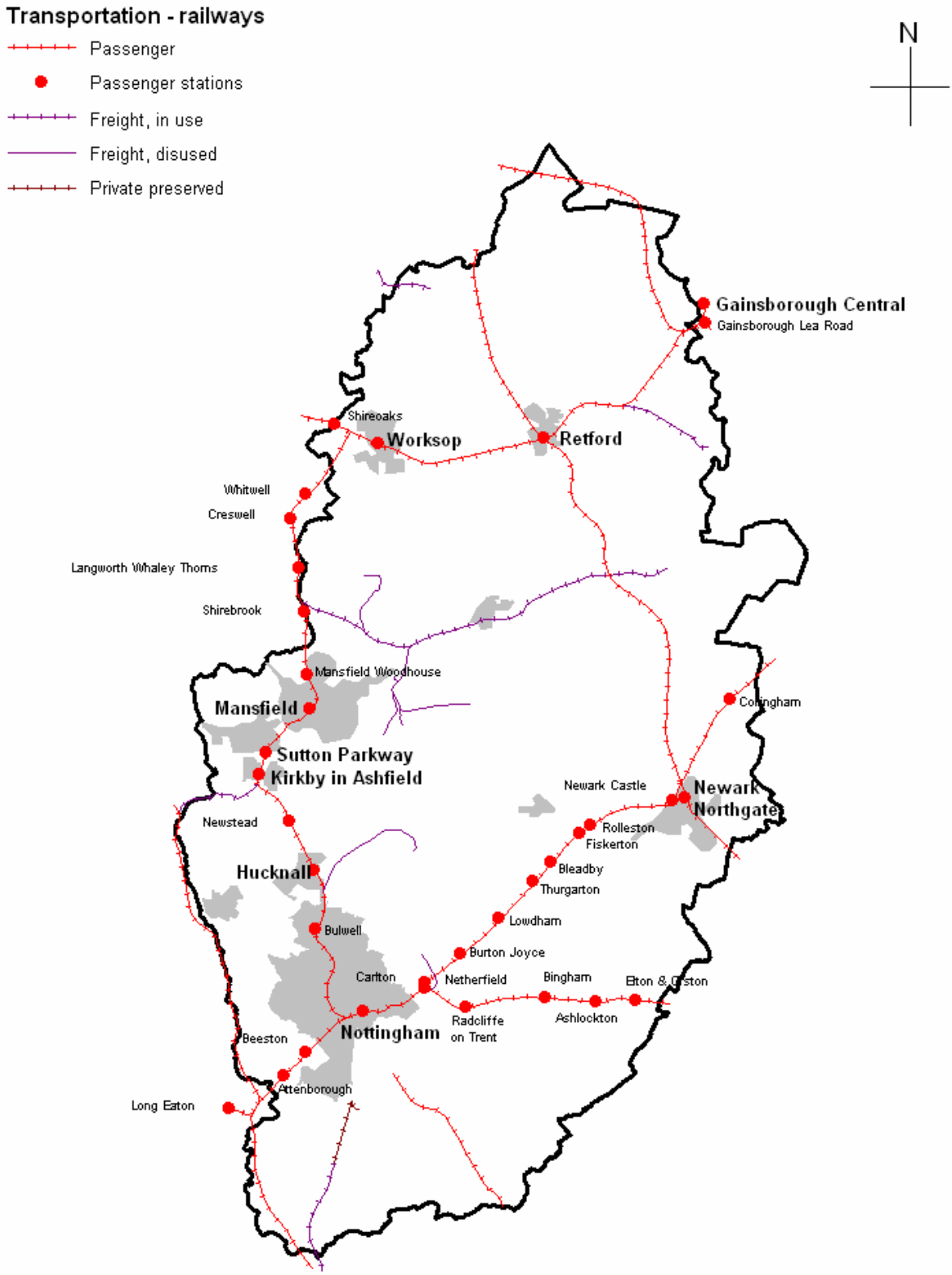
2001 Census data

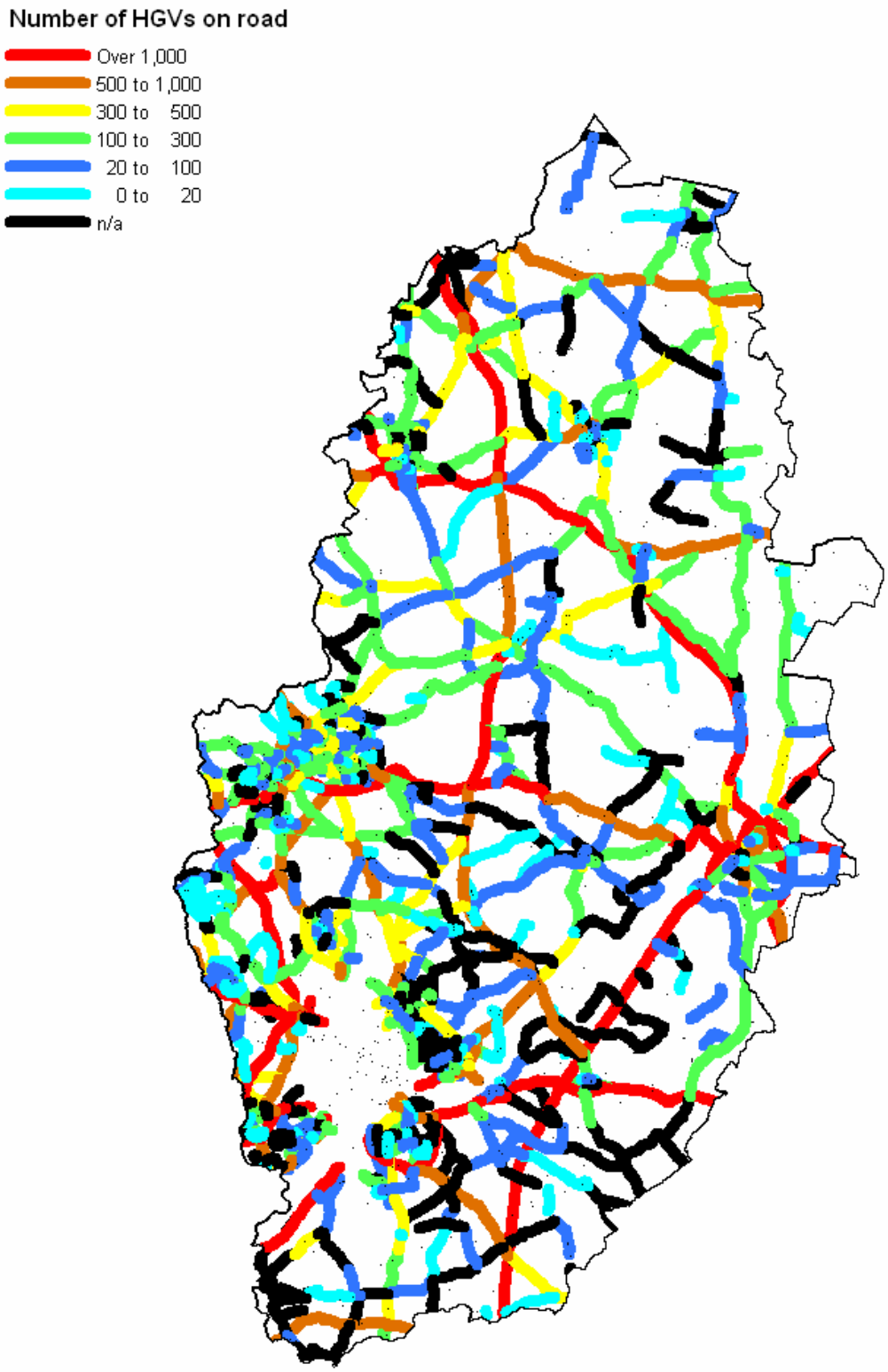
Transportation - navigable waterways

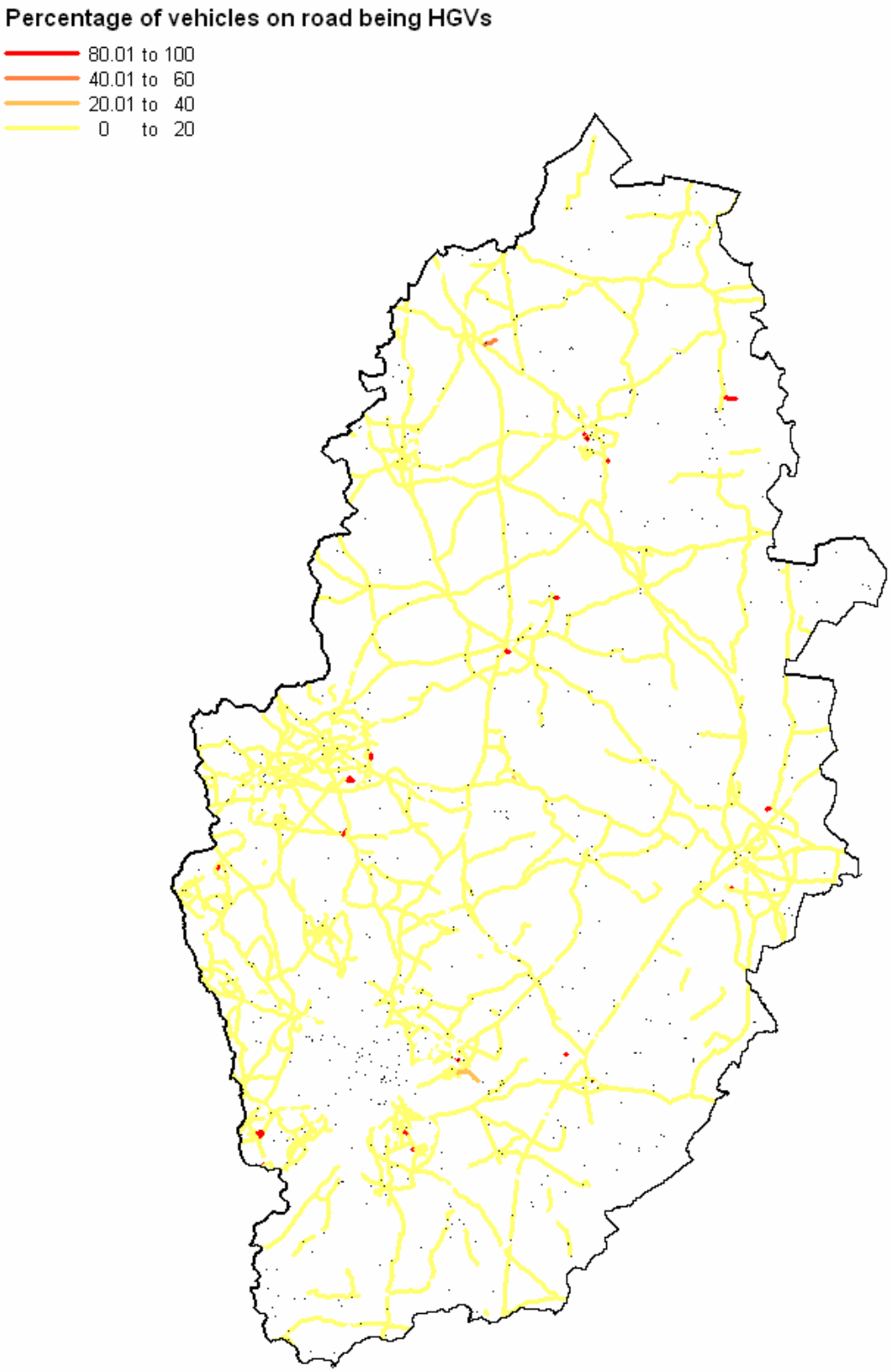


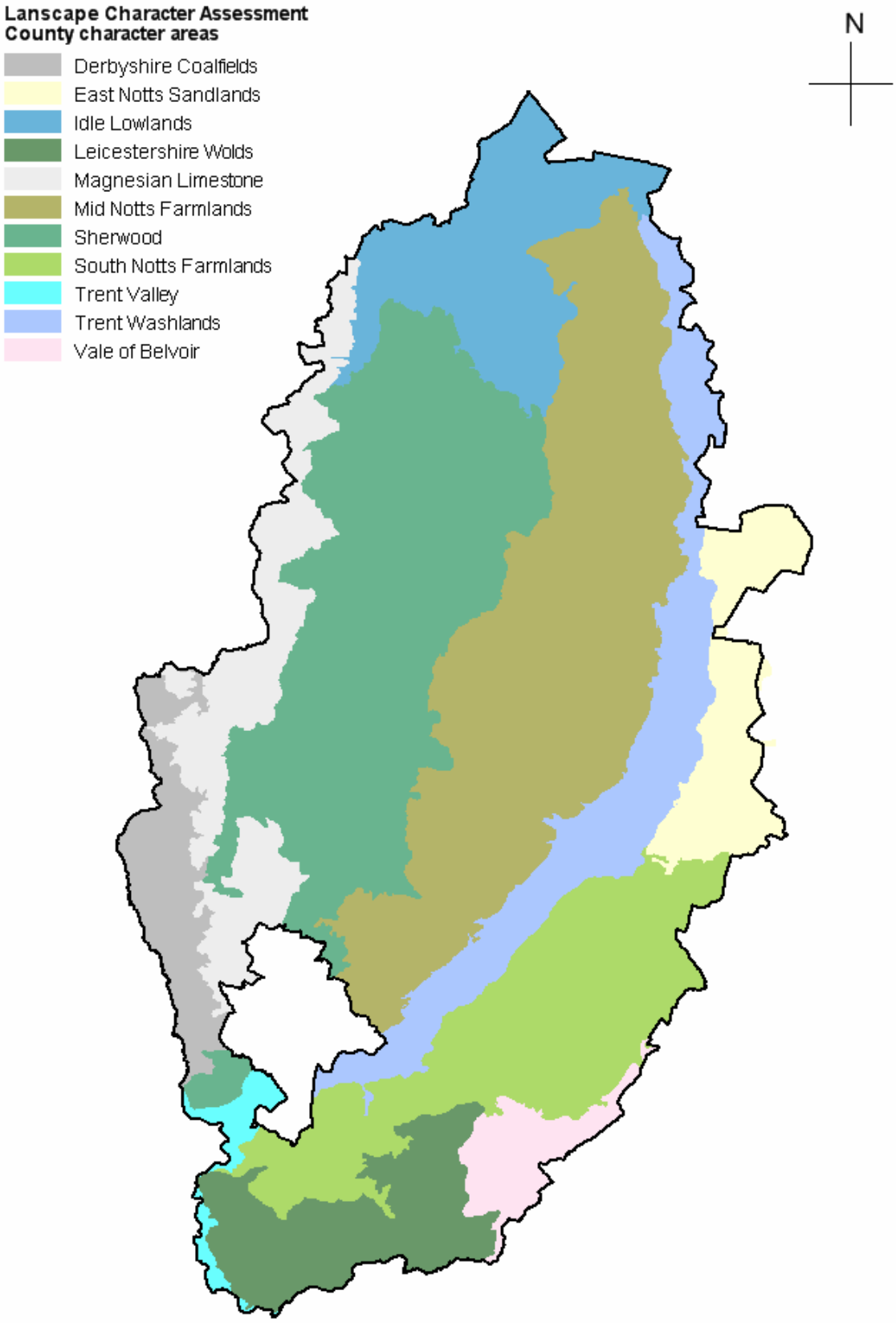
Transportation - core road network

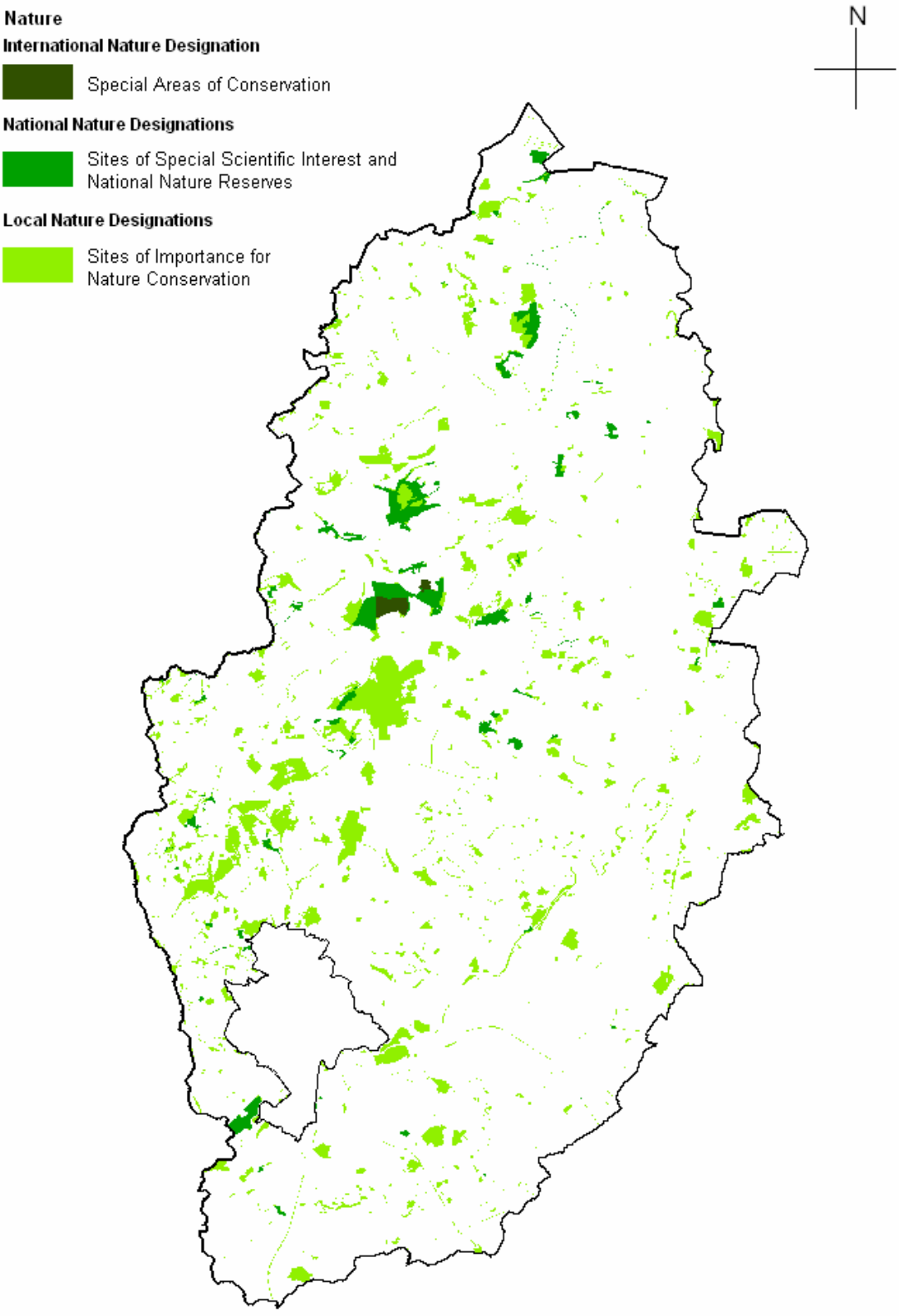


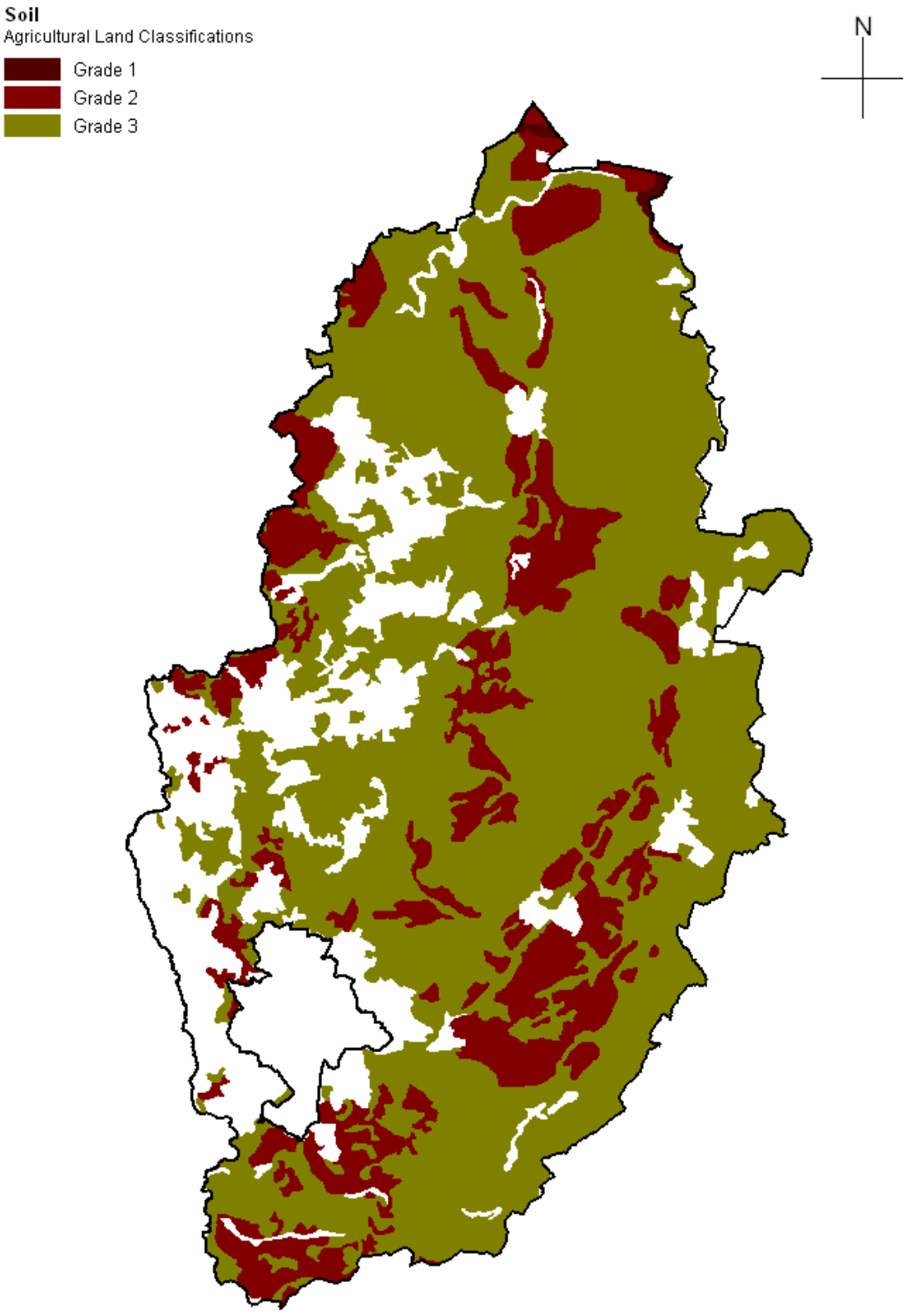


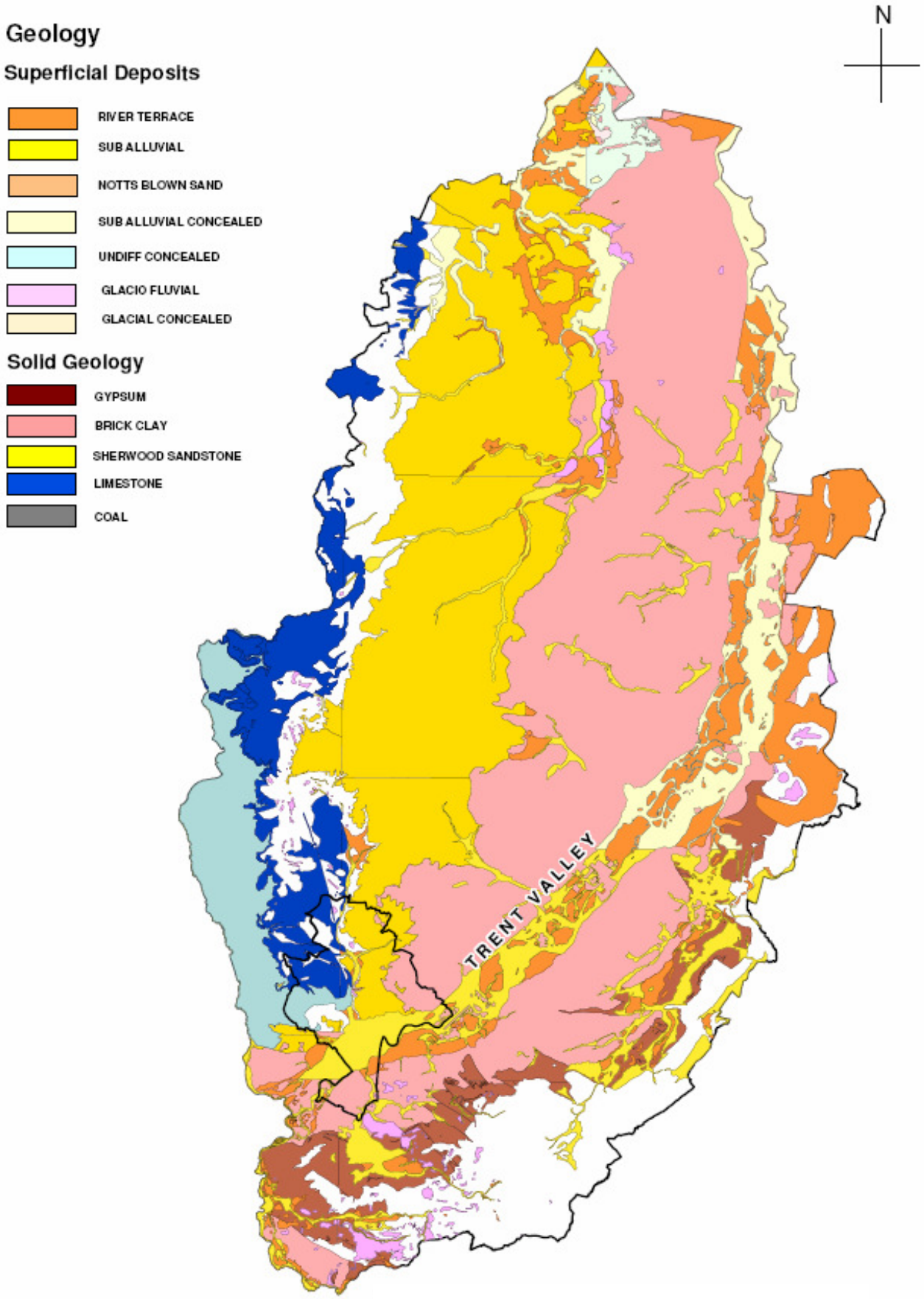












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Glossary of Terms and Abbreviations

Appropriate Assessment (AA): The process required by EU Directive 92/43/EEC (the Habitats Directive) for formal assessment of plans to ensure protection of integrity of Natura 2000 sites.
Annual Monitoring Report (AMR): A report which is produced annually to establish what is happening now and what may happen in the future and compare trends against existing LDF policies to determine if changes need to be made.
Air Quality Management Area (AQMA): If National Air Quality Objectives are not likely to be achieved in a specific area, a local authority must declare an AQMA and develop and Air Quality Action Plan to improve quality.
Biodiversity: The range of life forms that constitute the living world, from microscopic organisms to the largest tree or animal, and the habitat and ecosystem in which they live.
Brownfield Land: A general term used to define land which has been previously developed.
Conservation Area: An area designated by Local Planning Authority under Section 69 of the Planning (Listed Buildings and Conservation Areas) Act, 1990, regarded as being an area of special architectural or historic interest, the character or appearance of which is desirable to preserve or enhance.
Core strategy: Should set out the key elements of the planning framework for the area. It should comprise: a spatial vision and strategic objectives for the area; a spatial strategy; core policies; and a monitoring and implementation framework with clear objectives for achieving delivery.
Development Plan: The statutory framework for planning decisions, comprising the Regional Spatial Strategy and the Development Plan Documents prepared by local planning authorities (including the County Council and District Councils)
Development Plan Document (DPD): A Spatial planning document which is part of the Local Development Framework, subject to extensive consultation and independent examination.
Green Belt: An area of land surrounding a City having five distinct purposes: To check the unrestricted sprawl of large built up areas; to prevent neighbouring towns from merging into one another; to assist in safeguarding the countryside from encroachment; to preserve the setting and special character of historic towns, and; to assist in urban regeneration by encouraging the recycling of derelict and other urban land. (As set out in PPG2 'Green Belts', ODPM, January 1995).
Ha/ha (Hectare): An area 10,000 sq. metres or 2.471 acres.
Listed Buildings: A building or structure of special architectural or historic interest included on a list prepared by the Secretary of State for Culture, Media and Sport under Section 1 of the Planning (Listed Buildings and Conservation Areas) Act, 1990. Consent is normally required for its demolition in whole or part, and for any works of alteration or extension (both internal and external) which would affect its special interest.
Local Biodiversity Action Plan (LBAP): A local plan that identifies local biodiversity priorities and determines the contribution they can make to the delivery of the national Species and Habitat Action Plan targets. Often, but not always, LBAPs conform to county boundaries.

Local Development Document (LDD): A Document that forms part of the Local Development Framework and can be either a Development Plan Document or a Supplementary Planning Document.
Local Development Framework (LDF): A portfolio of Local Development Documents which set out the spatial strategy for the development of the District.
Local Nature Reserve (LNR): Established by a Local Authority under the powers of the National Parks and Access to the Countryside Act 1949.
Local Plan: Comprises a Written Statement and a Proposals Map. The Written Statement includes the Authority's detailed policies and proposals for the development and use of land together with reasoned justification for these proposals.
Mature Landscape Areas: Areas identified by the County Council as being of landscape importance on the basis that they represent those areas least affected by intensive arable production, mineral extraction, commercial forestry, housing, industry, roads etc.
Minerals and Waste Development Framework (MWDF): The portfolio of documents containing the County Councils policy framework for minerals and waste planning, comprising a range of Local Development Documents together with a Minerals and Waste Development Scheme and Annual Monitoring Reports.
Minerals and Waste Development Scheme (MWDS): A document within the MWDF setting out a range of LDDs that will be prepared, together with the timetable for their preparation.
Minerals Policy Guidance/Statement (PPG/PPS): Published by the Office of the Deputy Prime minister to provide concise and practical guidance specifically relating to minerals extraction.
Open Space: Any un-built land within the boundary of a village, town or city which provides, or has the potential to provide, environmental, social and/or economic benefits to communities, whether direct or indirect.
Planning and Compulsory Purchase Act 2004: Government legislation which sets out the changes to the planning system.
Planning Policy Guidance/Statement (PPG/PPS): Published by the Office of the Deputy Prime Minister to provide concise and practical guidance. These are produced for a variety of specific topics and can be found at www.communities.gov.uk.
Previously Developed Land: Land which has in the past been a developed site (see Brownfield land)
Regional Spatial Strategy (RSS): Strategic planning guidance for the Region that Development Plan Documents have to be in general conformity with.
Regional Transport Strategy (RTS): aims to integrate land-use planning and transport planning to steer new development into more sustainable locations, reduce the need to travel and enable journeys to be made by more sustainable modes of transport.
Renewable Energy: The term 'renewable energy' covers those resources which occur and recur naturally in the environment. Such resources include heat from the earth or sun, power from the wind and from water and energy from plant material and from the recycling of domestic, industrial or agricultural waste, and from recovering energy from domestic, industrial or agricultural waste.

Saved Policies: Policies in the current Local Plan which have been safeguarded and then reused in other documents.
Scheduled Ancient Monument (SAM): 'Scheduling' is shorthand for the process through which nationally important sites and monuments are given legal protection by being placed on a list, or 'schedule'. English Heritage takes the lead in identifying sites in England which should be placed on the schedule by the Secretary of State for Culture, Media and Sport.
Site of Importance for Nature Conservation (SINC): Site of local importance for nature conservation or geology identified by the Nottinghamshire Wildlife Audit Steering Group.
Site of Special Scientific Interest (SSSI): The designation under Section 28 of the Wildlife and Countryside Act, 1981, of an area of land of special interest by reason of its flora, fauna, geological or physiological features.
Special Area of Conservation (SAC): areas which have been given special protection under the European Union's Habitats Directive. They provide increased protection to a variety of wild animals, plants and habitats and are a vital part of global efforts to conserve the world's biodiversity.
Strategic Flood Risk Assessment (SFRA): Local planning authorities are required to prepare this assessment in consultation with the Environment Agency. The SFRA will be used to refine information on the areas that may flood and will provide the basis for a sequential approach to development allocation and control.
Supplementary Planning Document (SPD): Provide supplementary information in respect of the policies in Development Plan Documents. They do not form part of the Development Plan and are not subject to independent examination.