Cumbria Minerals and Waste Development Framework

Core Strategy
Generic Development Control Policies
Submission Version
SUSTAINABILITY APPRAISAL REPORT
Main Text

Prepared by
Land Use Consultants
February 2008
Cumbria Minerals and Waste Development Framework

Core Strategy
Generic Development Control Policies

Submission Version

SUSTAINABILITY APPRAISAL REPORT

Prepared for
Cumbria County Council
by
Land Use Consultants

February 2008

37 Otago Street
Glasgow G12 8JJ
Tel: 0141 334 9595
Fax: 0141 334 7789
glasgow@landuse.co.uk
# CONTENTS

## NON-TECHNICAL SUMMARY

1. **INTRODUCTION** ................................................................. 1
   BACKGROUND TO THE DEVELOPMENT FRAMEWORK ................. 1
   SUSTAINABILITY APPRAISAL ................................................. 2
   APPRAISAL OF THE CUMBRIA MWDF .................................... 2
   AIM AND STRUCTURE OF THE REPORT .................................... 3
   HOW TO COMMENT ON THE REPORT ...................................... 6

2. **THE CUMBRIA MINERALS AND WASTE DEVELOPMENT FRAMEWORK** ................................................................. 7
   INTRODUCTION ........................................................................... 7
   THE MINERALS AND WASTE DEVELOPMENT FRAMEWORK .......... 7
   THE CORE STRATEGY DEVELOPMENT PLAN DOCUMENT ............. 8
   THE GENERIC DEVELOPMENT CONTROL DEVELOPMENT PLAN DOCUMENT ................................................................. 11

3. **APPRaisal METHODOLOGY** ............................................. 13
   OVERVIEW OF SUSTAINABILITY APPRAISAL AND THE SEA DIRECTIVE ................................................................. 13
   APPRAISAL STAGES AND TASKS ............................................. 14
   STAGE A: SETTING THE CONTEXT AND OBJECTIVES, ESTABLISHING THE BASELINE AND DECIDING ON THE SCOPE ................................................................. 16
   STAGE B: DEVELOPING AND REFINING OPTIONS AND ASSESSING EFFECTS ................................................................. 18
   STAGE C: PREPARING THE SUSTAINABILITY APPRAISAL REPORT ................................................................. 20
   STAGE D: CONSULTATION ON THE SUBMISSION DRAFT DPDS AND THIS SA REPORT ................................................................. 20
   STAGE E: MONITORING IMPLEMENTATION OF THE PLAN ................................................................. 20

4. **SUSTAINABILITY REQUIREMENTS OF RELEVANT PLANS** . 21

5. **CUMBRIA’S SUSTAINABILITY APPRAISAL FRAMEWORK** ..... 23
   INTRODUCTION ........................................................................... 23
   OBJECTIVES AND APPRAISAL CRITERIA FOR THE MWDF ........ 23
   COVERAGE OF SEA TOPICS .................................................... 26

6. **SUSTAINABILITY CONTEXT FOR MINERALS AND WASTE DEVELOPMENT IN CUMBRIA** ................................................................. 29
   SUSTAINABILITY CONTEXT .................................................... 29
   DATA SOURCES AND GAPS .................................................... 29
   CURRENT STATE OF THE ENVIRONMENT AND ITS LIKELY EVOLUTION WITHOUT THE MWDF ................................................................. 30
   KEY SUSTAINABILITY ISSUES FOR THE CUMBRIA MWDF ........ 54
7. REVIEW OF ALTERNATIVES ........................................................ 59
   INTRODUCTION................................................................................................................... 59
   ISSUES AND OPTIONS STAGE ...................................................................................... 59
   PREFERRED OPTIONS STAGE .......................................................................................... 62
   AUDIT TRAIL.................................................................................................................... 67

8. APPRAISAL OF THE SUBMISSION DRAFT CORE STRATEGY AND GENERIC DEVELOPMENT CONTROL POLICIES .......... 69
   INTRODUCTION................................................................................................................... 69
   APPRAISAL OF THE CORE STRATEGY OBJECTIVES...................................................... 69
   APPRAISAL OF THE CORE STRATEGY POLICIES .......................................................... 70

9. CONCLUSIONS AND IMPLEMENTATION ............................................ 83

10. MONITORING ........................................................................................................... 85
    INTRODUCTION................................................................................................................... 85
    PROPOSALS FOR MONITORING....................................................................................... 85
TABLES
Table 1.1 Summary of the requirements of the SEA Directive and where these have been addressed in this SA Report
Table 3.1 Corresponding stages in plan-making and SA
Table 5.1 Sustainability Objectives and appraisal criteria for minerals
Table 5.2 Sustainability Objectives and appraisal criteria for waste
Table 5.3 Coverage of SEA topics by SA Objectives for the MWDF
Table 6.1 Key issues and pressures affecting Cumbria
Table 10.1: SA monitoring recommendations for the Cumbria MWDF

FIGURES
Figure 1: Location of Landfill sites in Cumbria
Figure 2: Location of Sites of Special Scientific Interest in Cumbria
Figure 3: Location of Special Protection Areas in Cumbria
Figure 4: Location of Special Areas of Conservation in Cumbria
Figure 5: Location of Ramsar sites in Cumbria
Figure 6: Location of National and Local Nature Reserves in Cumbria
Figure 7: Important Bird Areas
Figure 8: Location of Areas of Natural Beauty in Cumbria
Figure 9: Cumbria’s Landscape Character Areas
Figure 10: World Heritage & Heritage Coast Sites in

APPENDICES
Appendix 1: Review of relevant plans and programmes
Appendix 2: Attendance at SA stakeholder meeting
Appendix 3: Scenarios and options considered in the Issues and Options SA
Appendix 4: Submission Draft Core Strategy Policies and alternatives considered at previous stages of the SA
Appendix 5: Scoping Report analysis of MWDF Objectives against SA Objectives
Appendix 6: Core Strategy Policy assessments
Appendix 7: Generic Development Control Policy assessments
NON-TECHNICAL SUMMARY

BACKGROUND TO THE DEVELOPMENT FRAMEWORK AND THE PURPOSE OF SUSTAINABILITY APPRAISAL

1. Cumbria County Council is preparing the Cumbria Minerals and Waste Development Framework (MWDF), which will replace the current Minerals and Waste Local Plan (1996-2006) and guide minerals and waste development in Cumbria over the period up to 2020.

2. In preparing the Cumbria MWDF, Cumbria County Council is required by law to carry out a Sustainability Appraisal (SA) and a Strategic Environmental Assessment (SEA) of components of the MWDF. This includes the Core Strategy and Generic Development Control Policy Development Plan Documents (DPDs), which are the subject of this report. The Government recommends that these two requirements are met through one integrated process, which for the purposes of this report has been termed SA, with the aim of achieving the goal of sustainable development.

3. The purpose of the SA is to inform the progression of the MWDF by identifying the key sustainability issues facing the County and to predict what would be the likely effects of the Core Strategy and Generic Development Control Policies on these issues. The aim is to ensure that the Core Strategy has as many positive effects as possible, and that any negative effects are avoided or mitigated where possible when the policies in the Core Strategy are implemented as development on the ground.

THE CORE STRATEGY DEVELOPMENT PLAN DOCUMENT

4. The Core Strategy sets out the long term spatial vision and the strategic direction and objectives of the plan. This includes ten objectives for the delivery of the Vision for minerals and waste development in Cumbria (references of these are in bold):

- By the end of the plan period, the right types of new waste management facilities needed to reduce the amount of Cumbria’s waste going to landfill will have been built on time and in the right places. That everyone in Cumbria will give top priority to minimising waste and take responsibility for regarding it as a resource, not something to be thrown away. In particular, Cumbria will no longer be recorded as having the highest amounts of household waste per head of population.

- Facilities will have been provided to manage the low level radioactive wastes that arise from the Sellafield/Windscale complex.

- With an increasing proportion of re-used and recycled materials, minerals from the County’s own resources will continue to be provided prudently to meet Cumbria’s regeneration, renewal and development needs, together with those minerals proven to be required to meet regional and national needs.

- The carbon footprint of Cumbria’s minerals and waste developments will demonstrate that the potential greenhouse gas emissions and fossil energy
demand savings have been secured. In addition to design matters, this will include keeping road transport miles to a minimum by maintaining a pattern of local facilities that suits the geographic characteristics of the county. It will also take account of the contribution that fuels derived from Cumbria’s waste have made to the energy needs of other industries.

- Cumbria’s **environmental assets** will have been protected, maintained and enhanced by siting developments in appropriate locations, by high standards of design and by working practices that are recognised to be best practice.

- Optimal **local economic benefit** will have been gained from minerals and waste developments including new recycling industries based in Cumbria.

- Cumbria’s **communities and stakeholders** will have been fully engaged in planning for minerals and waste developments.

5. The Core Strategy includes eighteen policies aimed at delivering the overall strategy as follows:

**Overarching Policies**

Core Strategy Policy (CSP) 1: Sustainable location and design;

CSP 2: Economic benefit;

CSP 3: Environmental benefit;

CSP 4: After-use and restoration;

CSP 5: Planning obligations;

CSP 6: Community benefits;

CSP 7: Strategic areas for new developments.

**Waste Core Strategy Policies**

CSP 8: Provision for waste;

CSP 9: Waste capacity;

CSP 10: High and intermediate level radioactive wastes storage;

CSP 11: High and intermediate level radioactive wastes geological disposal;

CSP 12: Low level radioactive waste.

**Minerals Core Strategy Policies**

CSP 13: Supply of minerals;

CSP 14: Minerals safeguarding;

CSP 15: Marine dredged aggregates;
CSP 16: Industrial limestone;
CSP 17: Building stones;
CSP 18: Oil and gas and coal bed methane.

THE GENERIC DEVELOPMENT CONTROL DEVELOPMENT PLAN DOCUMENT

6. The Generic Development Control policies will be used for considering planning applications for minerals and waste developments and focus on putting into practice the Objectives and Vision of the Core Strategy. Generic Development Control policies should guide waste and mineral developments in a manner that reflects national, regional and County objectives for sustainable waste management and mineral extraction.

7. The Submission Version of the Core Strategy is supported by seventeen Generic Development Control Policies:
   • Development Control (DC) 1: Traffic and transport;
   • DC 2: General criteria;
   • DC 3: Cumulative environmental impacts;
   • DC 4: Criteria for waste management facilities;
   • DC 5: Criteria for landfill;
   • DC 6: Criteria for non-energy minerals development;
   • DC 7: Criteria for energy minerals;
   • DC 8: Applications for new conditions;
   • DC 9: Minerals safeguarding;
   • DC 10: Biodiversity and geodiversity;
   • DC 11: Historic environment;
   • DC 12: Landscape;
   • DC 13: Flood risk;
   • DC 14: The water environment;
   • DC 15: Protection of soil resources;
   • DC 16: Afteruse and restoration;
   • DC 17: Planning obligations.
HOW WAS THE SUSTAINABILITY APPRAISAL CARRIED OUT?

8. Preliminary appraisal work was undertaken by Cumbria County Council, including the preparation of the SA Scoping Report\(^1\) by the Council’s Sustainability Team. Land Use Consultants (LUC) were then appointed by the County Council in August 2006 to complete the SA of the Cumbria MWDF.

9. The following sustainability appraisal reports have been prepared by LUC to date:

   Stage 1: Issues and Options (November 2006);
   Stage 2: Preferred Options (February 2007);
   Stage 2.1: Changes to Preferred Options Core Strategy (October 2007).

WHAT ARE THE KEY SUSTAINABILITY ISSUES FACING CUMBRIA?

10. A profile of key issues and pressures relevant to Cumbria’s MWDF was identified by Cumbria’s Sustainability Group (comprising members from the (then) four statutory consultation bodies, the six district councils, the Lake District National Park Authority and Cumbria County Council).

11. Sustainability issues which are particularly relevant to the implementation of the MWDF include:

   • a need for alternative methods of waste management within the County and the necessary investment to secure these;
   • pressure to continue supply of scarce minerals such as skid-resistant roadstone;
   • the need to meet mineral demand by substituting secondary and recycled materials for primary aggregates;
   • difficult access to services and facilities in rural communities;
   • high environmental quality and many designated habitats, species and landscapes throughout the County;
   • unemployment and economic inactivity in West Cumbria and Furness;
   • economic vulnerability due to a decline in manufacturing and uncertainty surrounding the future of the nuclear industry;
   • an increase in relocation of jobs outside the County.

WHAT ARE CUMBRIA’S SUSTAINABILITY OBJECTIVES?

12. Following work undertaken by Cumbria County Council’s Sustainability Team and the Cumbria Sustainability Group to identify key issues and problems for Cumbria as described above, an appraisal framework was developed and tested and is being used as the basis for Sustainability Appraisals across Cumbria. The following Objectives were identified by LUC as those most relevant to the MWDF:

<table>
<thead>
<tr>
<th>Cumbria’s SA Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR4</td>
</tr>
<tr>
<td>To manage mineral resources sustainably and to minimise waste</td>
</tr>
<tr>
<td>SP2</td>
</tr>
<tr>
<td>To improve access to services, facilities, the countryside and open spaces</td>
</tr>
<tr>
<td>SP5</td>
</tr>
<tr>
<td>To improve the health and sense of well being of people</td>
</tr>
<tr>
<td>EN1</td>
</tr>
<tr>
<td>To promote and enhance biodiversity</td>
</tr>
<tr>
<td>EN2</td>
</tr>
<tr>
<td>To preserve, enhance and manage landscape quality and character for future generations</td>
</tr>
<tr>
<td>EN3</td>
</tr>
<tr>
<td>To improve the quality of the built environment</td>
</tr>
<tr>
<td>NR1</td>
</tr>
<tr>
<td>To improve local air quality and reduce greenhouse gas emissions</td>
</tr>
<tr>
<td>NR2</td>
</tr>
<tr>
<td>To improve water quality and resources</td>
</tr>
<tr>
<td>NR3</td>
</tr>
<tr>
<td>To restore and protect land and soil</td>
</tr>
<tr>
<td>EC1</td>
</tr>
<tr>
<td>To retain existing jobs and create new employment opportunities</td>
</tr>
<tr>
<td>EC3</td>
</tr>
<tr>
<td>To diversify and strengthen the local economy</td>
</tr>
</tbody>
</table>

13. Each Objective identified above is supported by a set of more detailed criteria which were used to determine whether the Core Strategy and Generic Development Control policies would contribute to achieving the SA Objectives. The criteria were tailored in order that they would be appropriate to assess policies specific to waste, policies specific to minerals, and those relevant to both policy areas.

HOW DID THE SUSTAINABILITY APPRAISAL INFLUENCE WHAT THE DPDS SAY?

14. The findings from the SA of the Issues and Options were taken into account by the County Council in developing the Preferred Options. For example, considerable emphasis was placed on reducing ‘minerals and waste miles’. In addition, many of the preferred policies attempted to strike a balance between the ‘do minimum’ and ‘do maximum’ approaches tested out in the SA of the Issues and Options to incorporate elements of both which performed well in sustainability terms and provided a ‘best fit’ for Cumbria. The recommendations made in the SA Reports for the Preferred Options were also considered in progressing the Core Strategy and Generic Development Control Policies into the Submission Versions.

WHAT ARE THE SUSTAINABILITY EFFECTS OF THE POLICIES LIKELY TO BE?

15. The table below provides a summary of the likely sustainability effects of implementation of the Core Strategy and Generic Development Control policies. At the outset, it is important to recognise the environmental, social and health benefits of having a robust framework for future minerals and waste planning in place, particularly if, in the absence of this, Cumbria failed to deliver adequate treatment
capacity for increasing waste arisings. It is also assumed that given other regulatory regimes, and planning provisions, mineral and waste sites would be constructed and operated in accordance with environmental and health and safety regulations, although measures are suggested to monitor this (as discussed later).

<table>
<thead>
<tr>
<th>Sustainability Objective</th>
<th>Is the Sustainability Objective likely to be achieved?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NR4</strong>: To manage mineral resources sustainably and to minimise waste</td>
<td>The Core Strategy policies will make an important contribution to achieving Objective NR4. However, this is based on the assumption that sufficient sites can be identified for the necessary developments and will further rely on the effective application of wider regulatory and fiscal measures.</td>
</tr>
<tr>
<td><strong>SP2</strong>: To improve access to services, facilities, the countryside and open spaces</td>
<td>As drafted, the Core Strategy policies will make an important contribution to the achievement of Objective SP2 although this will depend on facilities being appropriately sited.</td>
</tr>
<tr>
<td><strong>SP5</strong>: To improve the health and sense of wellbeing of people</td>
<td>Although education and awareness raising may be required to respond to the fact that waste management facilities may be perceived as ‘bad neighbour’ developments, implementation of the Core Strategy policies in conjunction with the Generic Development Control policies will make an important contribution to the achievement Objective SP5.</td>
</tr>
<tr>
<td><strong>EN1</strong>: To promote and enhance biodiversity</td>
<td>Implementation of the Core Strategy policies in conjunction with the Generic Development Control policies will make an important contribution to achieving Objective EN1. However, the likelihood of potential effects will require further review at the Site Allocation stage, particularly given the value of Cumbria’s ecological assets.</td>
</tr>
<tr>
<td><strong>EN2</strong>: To preserve, enhance and manage landscape quality and character for future generations</td>
<td>Implementation of the Core Strategy policies in conjunction with the Generic Development Control policies will make an important contribution to achieving Objective EN2. However, the likelihood of potential effects will require further review at the Site Allocation stage, particularly given the quality of many of Cumbria’s landscapes.</td>
</tr>
<tr>
<td><strong>EN3</strong>: To improve the quality of the built environment</td>
<td>The Core Strategy policies will make an important contribution to the achievement of SA Objective EN3, particularly by making provision for the materials required to maintain and restore the local distinctiveness of Cumbria’s built environment. However, the likelihood of adverse effects will require further review at the Site Allocation stage.</td>
</tr>
<tr>
<td><strong>NR1</strong>: To improve local air quality and reduce</td>
<td>Whilst the Core Strategy and Generic Development Control policies include measures</td>
</tr>
<tr>
<td><strong>Sustainability Objective</strong></td>
<td><strong>Is the Sustainability Objective likely to be achieved?</strong></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>greenhouse gas emissions</td>
<td>which seek to make a positive contribution towards achieving this Objective, overall the policies would have a mixed/uncertain effect as transport impacts are difficult to mitigate, or even predict prior to completion of the Site Allocation work. Further work would also be required to determine the extent to which the site allocations minimise 'mineral and waste miles' in practice, of considerable importance as this is a key policy provision, and required for the MWDF to perform well against this Objective.</td>
</tr>
<tr>
<td>NR2: To improve water quality and resources</td>
<td>The water environment will be afforded a high level of protection through implementation of the Core Strategy policies and Generic Development Control policies. However, the likelihood of potential effects will require further review at the Site Allocation stage, particularly given the high quality of water within the County, and the value of associated ecological assets.</td>
</tr>
<tr>
<td>NR3: To restore and protect land and soil</td>
<td>Impacts on the soil environment will be minimised through effective implementation of the Generic Development Control policies. However, until the Site Allocation work has been completed, it is difficult to judge the overall effect of implementation of the Core Strategy policies on this Objective.</td>
</tr>
<tr>
<td>EC1: To retain existing jobs and create new employment opportunities</td>
<td>The Core Strategy policies will make an important contribution to achieving SA Objective EC1, assuming that sufficient sites can be identified within Cumbria to deliver the mineral and waste developments required to retain existing jobs and create new employment opportunities. Other key ‘players’ in mineral extraction and waste management also have an important role to play in achieving this.</td>
</tr>
<tr>
<td>EC3: To diversify and strengthen the local economy</td>
<td>As drafted, the Core Strategy policies could make a positive contribution towards achieving this Objective although again, this is based on the assumption that sufficient suitable sites can be made available through the planning system to deliver the developments required to diversify and strengthen the local economy in this way. Significantly, the Core Strategy also states that waste management projects should not be prioritised over other forms of development which could have a strong economic benefit for Cumbria.</td>
</tr>
</tbody>
</table>
WHAT ALTERNATIVES WERE CONSIDERED DURING PREPARATION OF THE CORE STRATEGY DPD?

16. Alternatives for the Core Strategy were mainly considered at the Issues and Options stage of the DPD preparation. The corresponding SA considered a number of combined scenarios which encompassed different levels of mineral extraction and waste management treatment (including ‘do maximum’ and ‘do minimum’ options) and different strategic patterns of development (including continuation of mineral extraction in current locations versus extraction in new locations and a centralised network of waste management facilities versus a decentralised network). Further discrete options were considered, for example in relation to specific minerals (e.g. building stone) and specific waste issues (e.g. thresholds for provision of landfill capacity).

17. The County Council considers that the options selected as the Preferred Options and then developed into the Submission Draft Core Strategy Policies, supported by the Submission Draft Generic Development Control Policies, represent the most sustainable way forward, taking all factors into account.

WHAT COULD BE DONE TO IMPROVE THE DPDS?

18. Implementation of the Core Strategy policies will make a positive contribution towards achieving many of the Sustainability Objectives. However, it is important to note that the Core Strategy policies will not operate in isolation and the Generic Development Control policies will play a vital role in ensuring that potential negative effects on the environment, on people and on the economy are minimised wherever possible. Furthermore, it should be noted that many of the judgements reached will require confirmation through further SA work relating to the Site Allocations DPD.

19. There is also further uncertainty about the deliverability of some of the benefits associated with the policies, particularly with respect to the policy provision for renewable energy/clean carbon technologies and for the minimisation of ‘mineral and waste miles’. Whilst the Council is to be commended for addressing these emerging policy areas, further work may be required in seeking to ensure their deliverability.

HOW WILL THE SUSTAINABILITY EFFECTS OF THE DPDS BE MONITORED?

20. Monitoring the sustainability effects of the DPDs will focus on:

• any potentially significant sustainability effects that may give rise to irreversible damage (with a view to identifying trends before such damage is caused), and;

• any potentially significant effects where there is uncertainty in the SA and where monitoring would enable preventative or mitigation measures to be taken.

21. This exercise will be conducted as part of the overall approach to monitoring the sustainability effects of the MWDF as a whole, and incorporated within other monitoring requirements for the MWDF (i.e. the Annual Monitoring Report). A table is included within the full SA Report, which summarises the proposed effects to
be monitored for the DPDs and suggested indicators or datasets that may provide an indication of the extent of those effects.

22. A number of the suggested indicators were drawn from the monitoring matrix presented in the Cumbria Minerals and Waste Core Strategy Document. It is appreciated that many datasets presented may not be available for monitoring purposes, thus all of the monitoring proposals in the SA Report are suggestions only. In addition, as stated in the Government’s SA Guidance, the data used for monitoring in many cases will be provided by outside bodies (e.g. the Environment Agency, Natural England, English Heritage, and the minerals supply and waste management industries). It is therefore recommended that the County Council continues to work with statutory environmental consultees and other stakeholders to agree the relevant sustainability effects to be monitored and to obtain information that is appropriate, up-to-date and reliable. It should be noted that the sustainability effects to be monitored may need to be revised at subsequent stages of the MWDF DPD preparation, in response to consultation comments and revisions to the DPD.

WHAT ARE THE NEXT STEPS IN THE PREPARATION OF THE MWDF AND ITS SUSTAINABILITY APPRAISAL?

23. This Sustainability Appraisal Report is being published for an extended consultation period until 30 May 2008 alongside the Submission Version Core Strategy and Generic Development Control Policies.

24. A Public Examination will be held in 2008 to decide if the DPDs are sound. All those respondents seeking a change to the Submission Documents, who responded in the above period, have a right to appear at the Examination. If the Inspector at the Examination decides that the DPDs are sound, the aim is to adopt the documents in 2009.

WHERE CAN I FIND OUT MORE ABOUT THE SUSTAINABILITY APPRAISAL?

25. More information can be found in the SA Report which follows. Alternatively, please contact:

The Environment Unit
County Offices
Kendal
Cumbria
LA9 4RQ

Email: mwdf@cumbriacc.gov.uk
Telephone: 01539 773425 / 01539 773548
1. **INTRODUCTION**

**BACKGROUND TO THE DEVELOPMENT FRAMEWORK**

1.1. Local Development Frameworks were introduced under the Planning and Compulsory Purchase Act 2004 and refer to the suite of local development documents that set out the spatial planning policies for a local planning authority area. Cumbria County Council is preparing the Cumbria Minerals and Waste Development Framework (MWDF), which will comprise the Core Strategy, Site Specific Allocations, Generic Development Control Policies and a Proposals Map (the ‘Development Plan Documents’ (DPDs)). This Framework will replace the current Minerals and Waste Local Plan (1996-2006) and guide minerals and waste development in Cumbria over the period up to 2020.

1.2. The main stages in the preparation of the MWDF DPDs are as follows:

   (i) Issues and Options;
   (ii) Preferred Options;
   (iii) Submission of Draft Plan;
   (iv) Examination in Public;
   (v) Inspectors Report;
   (vi) Adoption.

1.3. Cumbria County Council published the MWDF Issues and Options Discussion Paper in June 2006, with the consultation period extending from June to September 2006. The consultation responses were taken on board by the Council in identifying the Preferred Options which comprised the following interrelated DPDs:

   - The Core Strategy;
   - The Site Allocations;
   - The Generic Development Control Policies.

1.4. The Preferred Options were published for consultation in March 2007. Following modifications to the Preferred Options Core Strategy in September 2007, further consultation on the Core Strategy was undertaken.

1.5. The Submission Versions of the Core Strategy and the Generic Development Control Policies DPDs are now being submitted to the Government Office. The Preferred Options Site Allocations and the maps that will form the basis for the Proposals Map are being progressed further and consultation on these is programmed for late 2008/early 2009.
SUSTAINABILITY APPRAISAL

1.6. The MWDF is subject to a full sustainability appraisal (SA) under the Planning and Compulsory Purchase Act 2004 and national planning policy (Planning Policy Statement 12: Local Development Frameworks). The purpose of SA is to promote sustainable development by integrating sustainability considerations into the preparation and adoption of plans.

1.7. Preparation of the MWDF must also be in accordance with the requirements of the European Strategic Environmental Assessment (SEA) Directive (Directive 2001/42/EC). The objective of Strategic Environmental Assessment, as defined in Article 1 of the SEA Directive, is ‘to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans…with a view to promoting sustainable development’.

1.8. Government guidance on the Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents recommends that SEA be integrated into SA to promote sustainable development through the combined consideration of potential social, economic and environmental effects. The guidance describes how it is possible to satisfy both requirements through a single appraisal process, undertaking a joint SA/SEA (hereafter referred to as SA).

1.9. A key output of the SA process is a Sustainability Appraisal Report which describes what elements of the DPD have been appraised and how, and the likely significant sustainability effects of implementing the DPD.

APPRAISAL OF THE CUMBRIA MWDF

1.10. Preliminary appraisal work was undertaken by Cumbria County Council, including the preparation of the SA Scoping Report by the Council’s Sustainability Team. Land Use Consultants (LUC) were then appointed by the County Council in August 2006 to complete the SA of the Cumbria MWDF. As a consequence of this combined approach, it was hoped that the appraisal would benefit from both the local knowledge of Cumbria County Council personnel and LUC’s experience of undertaking appraisals of a similar nature elsewhere in the UK.

1.11. Prior to commencement of the work, LUC highlighted the following key issues for the SA of the Cumbria MWDF to consider:

- The need to focus on ‘deliverability’ to ensure that the Framework makes an appropriate and effective contribution, through positive land use provision, to ensuring the necessary shift in waste management practices.

- In considering the key strategic choices in progressing the draft Framework, the need to identify clearly any tensions between options/policies/proposals that score most strongly against ‘global’ appraisal criteria in relation to resource use.

---


3 Subsequent references to the Sustainability Appraisal (SA) should be taken as meaning the SA incorporating SEA.

energy and climate change and those that may score most strongly against more 'local' appraisal criteria such as those protecting landscapes/towncapes and local amenity. It was recommended that any potential policy alterations which could minimise this, or improve the 'sustainability' performance of the Framework more widely, should be highlighted.

- The importance of highlighting the ‘positive impacts’ associated with having a robust framework for future minerals and waste planning in place. This includes the economic and social benefits associated with the implementation of more sustainable waste management practices, including employment opportunities and the scope for the development of new industrial and technological growth sectors. Importantly, it was argued that the ‘sustainability’ consequences for Cumbria of failing to deliver adequate treatment capacity for increasing waste arisings should be drawn out.

1.12. The following sustainability appraisal reports have been prepared by LUC to date:

i. Stage 1: Issues and Options (November 2006);

ii. Stage 2: Preferred Options (February 2007);

iii. Stage 2.1: Changes to Preferred Options Core Strategy (October 2007).

AIM AND STRUCTURE OF THE REPORT

1.13. This report constitutes the SA Report for the Submission Version Core Strategy and Generic Development Control Policies (‘Stage 3’). It has been produced alongside the Submission Version Core Strategy and Generic Development Control Policies DPDs and is being published for consultation at the same time to provide the public and statutory environmental bodies with an opportunity to express their opinions on the SA Report and to use it as a reference point in commenting on the Submission Version DPDs.

1.14. The Sustainability Appraisal has been undertaken in line with the Government’s SA guidance, and seeks to meet the requirements of both the Planning and Compulsory Purchase Act 2004 and the SEA Directive (European Directive 2001/42/EC). This SA Report includes the required elements of an ‘Environmental Report’ (the output required by the SEA Directive) and Table 1.1 below sign-posts the relevant sections of the SA Report that are considered to meet the SEA Directive requirements.

1.15. This SA Report takes account of the previous work conducted as part of the SA Scoping Report and the SA Reports corresponding to the Issues and Options and Preferred Options stages. A separate SA Reports will be produced for the Site Allocations DPD.

1.16. This chapter provides the background to the SA. The remainder of this report is structured into the following chapters:

---

5 The statutory environmental bodies that are required to be consulted on the SA are Natural England, English Heritage and the Environment Agency.

Chapter 3: Appraisal Methodology, describes the SA process, the approach used and the specific SA tasks undertaken.

Chapter 4: Sustainability Requirements of Relevant Plans, discusses the MWDF’s relationship with other relevant plans, policy guidance and strategies, and highlights the key sustainability objectives influencing the Core Strategy and Generic Development Control Policies.

Chapter 5: Cumbria’s Sustainability Framework, describes the development of the SA objectives for assessing the MWDF.

Chapter 6: Sustainability Context for Minerals and Waste Development in Cumbria, characterises Cumbria in terms of sustainability issues relating to minerals and waste development, identified from the baseline information gathered.

Chapter 7: Review of Alternatives, provides an overview of the SA work undertaken in relation to reasonable alternatives including the ‘audit trail’ for the alternatives considered, the related Preferred Option/s selected and the progression to the Submission Versions of the policies.

Chapter 8: Appraisal of the Submission Draft Core Strategy and Generic Development Control Policies, sets out the key findings of the appraisal including the extent to which each SA Objective is likely to be achieved.

Chapter 9: Conclusions and Implementation outlines the key conclusions of the appraisal, including linkages with implementation of the DPDs.

Chapter 10: Monitoring, makes recommendations regarding the approach to monitoring the sustainability effects of implementing the DPDs.

Table 1.1 Summary of the requirements of the SEA Directive and where these have been addressed in this SA Report

<table>
<thead>
<tr>
<th>SEA Directive Requirements</th>
<th>Where covered in SA Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. The information to be given is (Art. 5 and Annex I):</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes;</td>
<td></td>
</tr>
<tr>
<td>b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>c) The environmental characteristics of areas likely to be significantly affected;</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>SEA Directive Requirements</td>
<td>Where covered in SA Report</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.</td>
<td></td>
</tr>
<tr>
<td>e) The environmental protection objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation;</td>
<td>Chapter 4, Appendix 5</td>
</tr>
<tr>
<td>f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects);</td>
<td>Chapter 8 Appendix 6 &amp; 7</td>
</tr>
<tr>
<td>g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;</td>
<td>Chapter 8 Appendix 6 &amp; 7</td>
</tr>
<tr>
<td>h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;</td>
<td>Chapter 3 and 7, Appendix 4</td>
</tr>
<tr>
<td>i) A description of measures envisaged concerning monitoring in accordance with Art. 10;</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>j) A non-technical summary of the information provided under the above headings.</td>
<td>Non-technical Summary</td>
</tr>
<tr>
<td>The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Art. 5.2).</td>
<td>Chapters 2, 3, 5 &amp; 7</td>
</tr>
</tbody>
</table>

**Consultation:**
- Authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Art. 5.4); Consultation on Scoping Report (Draft Feb 2006 & Final July 2006 Chapter 13 & Appendix 7)
- Authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Art. 6.1, 6.2); Consultation on I & O SA Report (Nov '06) and on Preferred Options SA Reports (Feb '07 & Oct '07), Consultation on this SA Report
- Other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Art. 7). Not applicable

**Taking the environmental report and the results of the consultations into account in decision-making (Art. 8).** To be addressed at a later date

5
### SEA Directive Requirements

<table>
<thead>
<tr>
<th>Provision of information on the decision:</th>
<th>Where covered in SA Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>When the plan or programme is adopted, the public and any countries consulted under Art. 7 must be informed and the following made available to those so informed:</td>
<td>To be addressed at a later date</td>
</tr>
<tr>
<td>• the plan or programme as adopted;</td>
<td></td>
</tr>
<tr>
<td>• a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report of Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Art. 7 have been taken into account in accordance with Art. 8, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and</td>
<td></td>
</tr>
<tr>
<td>• the measures decided concerning monitoring (Art. 9).</td>
<td></td>
</tr>
</tbody>
</table>

**Monitoring** of the significant environmental effects of the plan's or programme's implementation (Art. 10).

### HOW TO COMMENT ON THE REPORT

1.17. This Sustainability Appraisal Report is being published for an extended consultation period until 30 May 2008 alongside the Submission Version Core Strategy and Generic Development Control Policies. Any comments will need to be made before the 30th May 2008 and should be sent to:

The Environment Unit  
County Offices  
Kendal  
Cumbria  
LA9 4RQ

Email: mwdff@cumbriacc.gov.uk  
Telephone: 01539 773425/ 01539 773548
2. **THE CUMBRIA MINERALS AND WASTE DEVELOPMENT FRAMEWORK**

**INTRODUCTION**

2.1. Cumbria County Council is the Minerals and Waste Planning Authority for those areas of Cumbria which lie outside the boundaries of the Lake District National Park and the Yorkshire Dales National Park in Cumbria. The current Cumbria Minerals and Waste Local Plan was adopted by the County Council in June 2000. It sets out detailed policies for guiding and controlling development relating to the supply of minerals and the management and disposal of waste. The existing Plan's policies will continue to operate until replaced by the new Minerals and Waste Local Development Framework, which will set out the statutory minerals and waste spatial planning strategy for Cumbria, outside the National Parks, until 2020.

**THE MINERALS AND WASTE DEVELOPMENT FRAMEWORK**

2.2. The Minerals and Waste Development Framework for Cumbria comprises the following:

- Development Plan Documents (DPDs) that form part of the statutory Development Plan for Cumbria;

- Supplementary Planning Documents (SPDs), as required, which expand on policies set out in a DPD or provide additional detail;

- The Minerals and Waste Development Scheme, which is a public statement of the County’s programme for production of the DPDs and SPDs;

- The Statement of Community Involvement, which sets out the County’s policy for involving the community in the preparation and revision of the DPDs and SPDs;


2.3. Under the Planning and Compulsory Purchase Act 2004, the statutory Development Plan for Cumbria will consist of the Regional Spatial Strategy (RSS) for the North West of England and the Development Plan Documents (DPDs) prepared by Cumbria County Council, as well as any Development Plan Documents prepared by the District Councils within Cumbria. The MWDF includes three DPDs. The Core Strategy is the first of these and sets out the spatial vision for minerals and waste development in Cumbria, in addition to strategic objectives and policies. The other DPDs comprise the Site Allocation Policies and the Generic Development Control Policies. A Proposals Map is also required. This report relates to the Core Strategy and the Generic Development Control Policies.

---

*The consultation period for the Project Plan for the Partial Review of the North West Plan is 13th February to 26th March 2008.*
THE CORE STRATEGY DEVELOPMENT PLAN DOCUMENT

2.3. The role of the Core Strategy is, firstly, to set out the long term spatial vision and the strategic direction and objectives of the plan. It then has to set out clear and concise strategic policies and proposals to deliver that vision and provide certainty for the future. The Core Strategy must:

(i) cover all significant strategic issues facing Cumbria;

(ii) demonstrate that it accords with national policies and the Regional Spatial Strategy (RSS) and relate these to the context of Cumbria;

(iii) provide a cohesive and comprehensive framework against which the appropriateness and soundness of the subsequent DPDs can be assessed, namely the Site Allocation Policies; Proposals map and the Generic Development Control Policies;

(iv) include a monitoring and implementation framework with clear objectives for achieving delivery.

2.4. The MWDF Issues and Options Discussion Paper was published in June 2006, with the consultation period extending from June to September 2006. The consultation responses were taken on board in identifying the Preferred Options Core Strategy, published for consultation in March 2007. Following modifications to the Preferred Options Core Strategy in September 2007, further consultation was undertaken and this informed preparation of the Submission Version of the Core Strategy.

Core Strategy Spatial Vision

2.5. The long term Spatial Strategy for minerals and waste development in Cumbria is that:

- By the end of the plan period, the right types of new waste management facilities needed to reduce the amount of Cumbria’s waste going to landfill will have been built on time and in the right places. That everyone in Cumbria will give top priority to minimising waste and take responsibility for regarding it as a resource, not something to be thrown away. In particular, Cumbria will no longer be recorded as having the highest amounts of household waste per head of population.

- Facilities will have been provided to manage the low level radioactive wastes that arise from the Sellafield/Windscale complex.

- With an increasing proportion of re-used and recycled materials, minerals from the County’s own resources will continue to be provided prudently to meet Cumbria’s regeneration, renewal and development needs, together with those minerals proven to be required to meet regional and national needs.

- The carbon footprint of Cumbria’s minerals and waste developments will demonstrate that the potential greenhouse gas emissions and fossil energy demand savings have been secured. In addition to design matters, this will include
keeping road transport miles to a minimum by maintaining a pattern of local facilities that suits the geographic characteristics of the county. It will also take account of the contribution that fuels derived from Cumbria’s waste have made to the energy needs of other industries.

- Cumbria’s environmental assets will have been protected, maintained and enhanced by siting developments in appropriate locations, by high standards of design and by working practices that are recognised to be best practice.

- Optimal local economic benefit will have been gained from minerals and waste developments including new recycling industries based in Cumbria.

- Cumbria’s communities and stakeholders will have been fully engaged in planning for minerals and waste developments.

**Objectives of the Core Strategy**

2.6. To implement and deliver the Spatial Vision, the following Strategic Objectives have been identified:

- **Objective 1**: That minerals and waste management developments will take due account of the issues of climate change, in particular through energy use and transport; that any adverse impacts on the environment and the local economy will be minimised and that potential benefits will be maximised.

- **Objective 2**: That effective waste management measures will be adopted and, following these, that waste, including radioactive waste, will be managed at the highest achievable level within the waste hierarchy. In order to secure this, the right type of waste management facilities that Cumbria needs to increase the amounts of its wastes that are re-used, recycled, or composted will be provided in the right places and at the right time in order to minimise the disposal of waste to landfill.

- **Objective 3**: That waste will be managed as near as possible to where it is produced without endangering people’s health and without harming the environment.

- **Objective 4**: That the minerals from Cumbria that are required to meet local, regional and national needs will be supplied from appropriately located and environmentally acceptable sources.

- **Objective 5**: That the need for new mining and quarrying will be minimised by prudent use of resources and by supplies of alternative re-used and recycled materials.

- **Objective 6**: That mineral resources will be identified and safeguarded.

- **Objective 7**: That the local economic benefits of minerals and waste management developments will be optimised without harming the environment.
• **Objective 8:** That the overall quality of Cumbria’s environment will be protected and, where practicable, enhanced by high standards of design and operation in new developments and high standards of restoration once developments have been completed.

• **Objective 9:** That the environmental impacts of minerals and waste management developments, including traffic, will be kept to a minimum by appropriate siting of facilities and sound working practices and that any unavoidable harmful impacts will be mitigated.

• **Objective 10:** That there will be increased community and stakeholder involvement and ownership of initiatives and planning for sustainable minerals and waste developments.

**Core Strategy Policies**

2.7. The Core Strategy includes eighteen policies aimed at delivering the Overall Strategy as follows:

**Overarching Policies**
- Core Strategy Policy (CSP) 1: Sustainable location and design;
- CSP 2: Economic benefit;
- CSP 3: Environmental assets;
- CSP 4: After-use and restoration;
- CSP 5: Planning obligations;
- CSP 6: Community benefits;
- CSP 7: Strategic areas for new developments.

**Waste Core Strategy Policies**
- CSP 8: Provision for waste;
- CSP 9: Waste capacity;
- CSP 10: High and intermediate level radioactive wastes storage;
- CSP 11: High and intermediate level radioactive wastes geological disposal;
- CSP 12: Low level radioactive waste.

**Minerals Core Strategy Policies**
- CSP 13: Supply of minerals;
- CSP 14: Minerals safeguarding;
• CSP 15: Marine dredged aggregates;
• CSP 16: Industrial limestone;
• CSP 17: Building stones;
• CSP 18: Oil and gas and coal bed methane.

THE GENERIC DEVELOPMENT CONTROL DEVELOPMENT PLAN DOCUMENT

2.8. The Generic Development Control Policies will be used for considering planning applications for minerals and waste developments and focus on putting into practice the Objectives and Vision of the Core Strategy. The Generic Development Control Policies should guide waste and mineral developments in a manner that reflects national, regional and County objectives for sustainable waste management and mineral extraction.

2.9. The Preferred Options Generic Development Control Policies were published for consultation in March 2007. The consultation responses informed preparation of the Submission Version of the policies, which are outlined below.

Generic Development Control Policies

2.10. The Submission Version of the Core Strategy is supported by seventeen Generic Development Control policies:

• Development Control (DC) 1: Traffic and transport;
• DC 2: General criteria;
• DC 3: Cumulative environmental impacts;
• DC 4: Criteria for waste management facilities;
• DC 5: Criteria for landfill;
• DC 6: Criteria for non-energy minerals development;
• DC 7: Criteria for energy minerals;
• DC 8: Applications for new conditions;
• DC 9: Minerals safeguarding;
• DC 10: Biodiversity and geodiversity;
• DC 11: Historic environment;
• DC 12: Landscape;
• DC 13: Flood risk;
• DC 14: The water environment;
• DC 15: Protection of soil resources;
• DC 16: Afteruse and restoration;
• DC 17: Planning obligations.
3. APPRAISAL METHODOLOGY

OVERVIEW OF SUSTAINABILITY APPRAISAL AND THE SEA DIRECTIVE

3.1. The purpose of Sustainability Appraisal is to promote sustainable development through contributing to the integration of social, environmental and economic considerations into the preparation and adoption of plans. It should be viewed as an integral part of good plan making involving ongoing iterations to identify and report on the significant effects of the emerging plan and the extent to which sustainable development is likely to be achieved. Under the Planning and Compulsory Purchase Act 2004, Sustainability Appraisal is mandatory for Regional Spatial Strategies (RSSs), Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs).

3.2. When preparing DPDs and SPDs, planning authorities must also conduct an environmental assessment in accordance with the SEA Directive. The objective of the Directive is 'to provide for a high level of protection of the environment and contribute to the integration of environmental considerations into the preparation and adoption of plans…with a view to promoting sustainable development'.

3.3. The Government’s approach is to incorporate the requirements of the SEA Directive into the wider SA process that considers economic and social as well as environmental effects. To this end, the ODPM guidance on Sustainability Appraisal sets out a combined Sustainability Appraisal and Strategic Environmental Assessment process, referred to in this document as ‘Sustainability Appraisal’ (SA).

3.4. Whilst there is no single blueprint, a sound SA should reflect the following:

- The process should be iterative and timely so that the results of the appraisal can be fed back into policy formulation.
- It should be evidence based, reflecting relevant baseline information, appropriate to the level of appraisal.
- SA should be inclusive, securing stakeholder involvement and balancing differing perspectives. Transparency is also important.
- The SA should be independent, whilst recognising the need for partnership working with those involved in policy formulation.
- Finally, SA should be useful. Whilst this may appear to be obvious, it can be difficult to employ SA findings to directly influence future action, and deliverability should be a consideration at each stage in the process.

---

APPRAISAL STAGES AND TASKS

3.5. The ODPM's SA Guidance introduces the SA process and explains how to carry out SA as an integral part of the DPD preparation. Table 3.1 below sets out the main stages of the DPD preparation process and shows how these link to the SA process.

Table 3.1 Corresponding stages in plan-making and SA

<table>
<thead>
<tr>
<th>Generic Stages of DPD Preparation</th>
<th>SA Stages and Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DPD Stage 1: Pre-production evidence gathering</strong></td>
<td><strong>Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope</strong></td>
</tr>
<tr>
<td>A1: Identifying other relevant policies, plans and programmes, and sustainability objectives.</td>
<td>SA Scoping Report (July 2006)</td>
</tr>
<tr>
<td></td>
<td>[Updated in] SA Issues and Options (November 2006)</td>
</tr>
<tr>
<td></td>
<td>Updated in] SA Submission Version (February 2008)</td>
</tr>
<tr>
<td>A2: Collecting baseline information.</td>
<td>SA Scoping Report (July 2006)</td>
</tr>
<tr>
<td></td>
<td>[Updated in] SA Issues and Options (November 2006)</td>
</tr>
<tr>
<td></td>
<td>Updated in] SA Submission Version (February 2008)</td>
</tr>
<tr>
<td>A4: Developing the SA Framework.</td>
<td>SA Scoping Report (July 2006)</td>
</tr>
<tr>
<td></td>
<td>[Tailored in] SA Issues and Options (November 2006)</td>
</tr>
<tr>
<td>A5: Consulting on the scope of the SA.</td>
<td>SA Scoping Report (Draft Feb 06 and Final July 2006)</td>
</tr>
<tr>
<td><strong>DPD Stage 2: Production</strong></td>
<td><strong>Stage B: Developing and refining options and assessing effects</strong></td>
</tr>
<tr>
<td>B1: Testing the DPD objectives against the SA Framework.</td>
<td>SA Scoping Report (July 2006)</td>
</tr>
<tr>
<td></td>
<td>Further discussed in the SA Preferred Options (October 2007)</td>
</tr>
<tr>
<td>B2: Developing the DPD options.</td>
<td>SA Issues and Options (November 2006)</td>
</tr>
</tbody>
</table>

10 To be updated as appropriate for the Submission Version Site Allocation Policies and subsequent stages of plan adoption.
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>B3:</td>
<td>Predicting the effects of the DPD.</td>
<td>SA Preferred Options (February and October 2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Issues and Options (November 2006)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Preferred Options (February and October 2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Submission Version (February 2008)</td>
</tr>
<tr>
<td>B4:</td>
<td>Evaluating the effects of the DPD.</td>
<td>SA Issues and Options (November 2006)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Preferred Options (February and October 2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Submission Version (February 2008)</td>
</tr>
<tr>
<td>B5:</td>
<td>Considering ways of mitigating adverse effects and maximising beneficial effects.</td>
<td>SA Issues and Options (November 2006)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Preferred Options (February and October 2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Submission Version (February 2008)</td>
</tr>
<tr>
<td>B6:</td>
<td>Proposing measures to monitor the significant effects of implementing the DPD.</td>
<td>SA Submission Version (February 2008)</td>
</tr>
<tr>
<td>Stage C: Preparing the Sustainability Appraisal Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1:</td>
<td>Preparing the SA Report.</td>
<td>SA Issues and Options (November 2006)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Preferred Options (February and October 2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Submission Version (February 2008)</td>
</tr>
<tr>
<td>Stage D: Consulting on the DPD and SA Report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D1:</td>
<td>Public participation on the DPD and the SA Report.</td>
<td>SA Issues and Options (November 2006)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Preferred Options (February and October 2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SA Submission Version (February 2008)</td>
</tr>
</tbody>
</table>
STAGE A: SETTING THE CONTEXT AND OBJECTIVES, ESTABLISHING THE BASELINE AND DECIDING ON THE SCOPE

Setting the Context and Objectives

3.6. To enable potential synergies to be exploited and any inconsistencies and constraints to be addressed, account must be taken of relationships between the MWDF and other relevant policies, plans, programme and sustainability objectives. To comply with the SEA Directive, this includes environmental protection objectives at international, European or national levels. Other relevant documents include the UK Sustainability Strategy, national planning policy statements (PPSs) and plans and strategies at regional and local levels.

3.7. Chapter 7 of the SA Scoping Report and accompanying appendices outlined the relevant documents considered by the County Council’s Sustainability Team. A review of these by LUC following appointment concluded that overall, the list was both up-to-date and relevant to an SA of a MWDF. However, the documents outlined below were added to the list and reviewed prior to commencing the appraisal of the Issues and Options:

- PPG20: Coastal Planning;
- PPG25: Development and Flood Risk (superceded by PPS25 in November 2006);

3.8. To ensure an up-to-date presentation and evaluation of the current policy context, a further review of relevant policies, plans, programmes was undertaken by LUC during the preparation of this SA Report. The review identified several updates to the
original list and highlighted a number of additional documents relevant to the MWDF. An updated version of the original list supplied in the Scoping Report is provided in Appendix 1.

3.9. The SA Framework consists of a series of Sustainability Objectives against which sustainability effects can be described, analysed and compared. Following work undertaken by the Council’s Sustainability Team and the Cumbria Sustainability Group to identify key issues and problems for Cumbria (see below), an appraisal framework was developed and tested. This framework is being used as the basis for Sustainability Appraisals across Cumbria.

3.10. Chapter 11 of the Scoping Report outlined the proposed appraisal framework for the SA, which included some tailoring to increase its suitability for the task of appraising the MWDF. As the Sustainability Objectives have been agreed through a robust and systematic process following extensive consultation, LUC has not sought to alter these. However, in discussion with the Council’s Sustainability Team, LUC tailored the appraisal criteria further on the basis of previous work that underlined the value of this task as stakeholders often had difficulty in reaching consensus during the appraisal process as a result of the generic objectives which had been applied. The Sustainability Objectives and related appraisal criteria being used in the SA of the MWDF documents are included in Chapter 5.

Establishing the Baseline

3.11. Baseline information provides the basis for predicting and monitoring potential effects. It is a task that has to be approached ‘carefully’ to ensure that information is collected at a level of detail appropriate to the scale of the plan, which will allow potentially significant effects to be identified. From a review of recent practice, it appears that there can sometimes be an overemphasis on data collation, which is unfortunately exacerbated by the relative ease with which this information can now be obtained. The key challenge is to develop an SA baseline which can be clearly linked to the assessment objectives and associated criteria, as opposed to conducting a merely descriptive exercise.

3.12. The collection of baseline information for the Cumbria MWDF is an ongoing process. Following a review of the information already held by the County Council and by the SA consultation bodies, chapter 8 of the SA Scoping Report provided a preliminary overview of the environmental, social and economic baseline conditions for Cumbria. This was drawn upon, and supplemented, by LUC for the purposes of assessing the MWDF Issues and Options, with a focus on the characteristics that relate to the issues to be addressed by the Plan.

3.13. For the purposes of this SA Report, the baseline information collated at the Issues and Options stage has been further updated. Where more recent information was available for employment figures for example, the original figures have been supplemented with the more up-to-date data. Other information which has been updated includes data on health, mineral extraction and waste management.
Identifying Sustainability Issues and Problems

3.14. In 2002, the County Council’s Sustainability Team identified a Profile of Key Issues and Pressures affecting Cumbria. Following the introduction of the SEA Regulations in 2004 and draft government guidance on SA, a sustainability group was established in Cumbria, with membership drawn from the (then) four statutory consultation bodies, the six district councils, the Lake District National Park Authority and Cumbria County Council. The existing set of key issues and pressures was subsequently re-examined by the Group and further widened to include a section on resources so that the profile is relevant to the Cumbria MWDF (Appendix 5 of the SA Scoping Report).

Deciding on the Scope

3.15. To meet the requirements of the SEA Directive, a local planning authority must seek the views of the statutory environmental consultation bodies (Natural England (formerly the Countryside Agency and English Nature), English Heritage and the Environment Agency on the scope and level of detail of the environmental information to be included in the SA Report. Government guidance also recommends that other bodies are consulted as the planning authority considers appropriate, with a balance between social, environmental and economic issues.

3.16. Cumbria County Council issued a draft Scoping Report to a range of relevant parties for comment in December 2005. Comments received are recorded in the final version of the Scoping Report (July 2006) in addition to the response of the County Council’s Sustainability Team including actions taken (Appendix 7). To ensure full compliance with the SEA Directive, the final Scoping Report was resubmitted to the statutory environmental consultation bodies in August 2006. Comments from both rounds of consultation are being taken into account in progressing the subsequent appraisal stages.

STAGE B: DEVELOPING AND REFINING OPTIONS AND ASSESSING EFFECTS

Appraising Alternatives

3.17. The SA Regulations and guidance require that ‘reasonable alternatives’ for each plan are appraised as an integral part of the process, taking account of the objectives and geographical scope of the plan. Options need to be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made. Stakeholder involvement in the development of these alternative options is recommended. An overview of the SA work undertaken in relation to reasonable alternatives is provided in Chapter 7, together with an ‘audit trail’ for the alternatives considered for each policy including the justification for selecting the related Preferred Option/s where relevant, compliance with the SA findings and progression of the Preferred Options to the Submission Versions.
**Assessing Effects**

3.18. Each option/policy (subject to stage of DPD preparation) has been assessed with reference to the baseline situation, with a comparative review of the relative performance of options also undertaken. Assessments have been based on professional judgement and expressed qualitatively from ++ (very positive) to -- (very negative). A clear explanation of the reasoning has been provided and a consistency check undertaken.

3.19. Measures to avoid, minimise or mitigate potential adverse impacts and to secure identified benefits have been highlighted. For example, these include considerations for progressing draft policies/identifying potential sites and requirements for coordination with other relevant parties.

**Appraisal Assumptions**

3.20. A number of assumptions have been made in undertaking the appraisals. Assumptions specific to individual options/policies appraised have been identified clearly at the outset of the corresponding discussion of potential effects. However, there are also a number of more generic assumptions in relation to the proper functioning of the land use planning and regulatory regimes. For example, whilst there is considerable public concern regarding the environmental and health impacts of waste management facilities, this, in large part, reflects historic practices for dealing with waste. In the past for example, inert waste has been dumped in unregulated tips, hazardous and other non-inert solid waste inappropriately handled and managed, quarries insensitively backfilled and organic waste spread on farmland, leading to nutrient enrichment and subsequent impacts on water quality. However, stronger regulation, stricter enforcement and improved technologies have all helped to reduce these risks. For example, it is now common practice to line and cap landfill sites to collect and use methane, to remove a very high proportion of most pollutants from the stack emissions of incinerators, to enclose many sites where waste other than green waste is composted and to install biofilters to intercept bio-aerosols, ammonia and odours. Importantly, research sponsored by Defra into the management of household and similar wastes concludes that “….on the evidence from studies so far, the treatment of municipal solid waste has at most a minor effect on health in this country particularly when compared with other health risks associated with ordinary day to day living. The evidence on environmental effects is limited, but such as there is does not appear to suggest adverse environmental effects of waste management, other than those we know about already and are already addressing, such as methane emissions from landfill”\(^{11}\).

3.21. Whilst the SA seeks to ensure that the nature and magnitude of potentially significant environmental effects associated both with waste management and mineral extraction are identified and addressed fully, the assessment does reflect technological advances and current planning and regulatory regimes.

STAGE C: PREPARING THE SUSTAINABILITY APPRAISAL REPORT

3.22. The SA Report is a key output of the appraisal process. The report forms a public consultation document and needs to be written to meet all the requirements of the SEA Directive for an Environmental Report and the Planning and Compulsory Purchase Act requirement to prepare a report of the findings of the Sustainability Appraisal. The end purpose of the documents, including the intended audience, should be an important consideration from the outset.

3.23. SA Reports have been prepared at a number of stages as outlined in Table 3.1 above.

STAGE D: CONSULTATION ON THE SUBMISSION DRAFT DPDS AND THIS SA REPORT

3.24. Cumbria County Council is inviting representations on the Core Strategy and Generic Development Control Policies DPDS (Submission Version) and this accompanying SA Report for a statutory period in accordance with Regulation 28 of the Planning and Compulsory Purchase Act. An Examination will be held in 2008 to decide if the DPDS are sound. All those respondents seeking a change to the Submission Document, who responded in the six week period, have a right to appear at the Examination. If the Inspector at the examination decides that the DPDS are sound, the aim is to adopt the documents in 2009.

STAGE E: MONITORING IMPLEMENTATION OF THE PLAN

3.25. This SA Report sets out recommendations for monitoring the social, environmental and economic effects of implementing the MWDF Core Strategy and Generic Development Control Policies.
4. SUSTAINABILITY REQUIREMENTS OF RELEVANT PLANS

4.1. Annex 1 of the SEA Directive requires:

(a) “an outline of the…relationship with other relevant plans or programmes”; and

(e) “the environmental protection objectives established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation”.

4.2. To fulfil these requirements in the SEA Directive, those plans considered to be relevant to the MWDF were reviewed to identify the main purpose of the plan, any environmental or sustainability objectives and targets it contains, and to consider how the SA would ensure that they have been taken into account in the preparation of the MWDF. In addition to the international and national level plans and programmes referred to in the SEA Directive, Appendix 5 of the ODPM’s SA Guidance recommend that regional and local plans and strategies are also identified, and these were also included accordingly.

4.3. Chapter seven of the SA Scoping Report (July 2006) and accompanying appendices outlines the relevant documents considered by the County Council’s Sustainability Team. A review of these by LUC prior to commencing the appraisal of the Issues and Options concluded that overall, the list was both up-to-date and relevant to an SA of a MWDF. However, several additional documents were added to the list and reviewed prior to commencing the appraisal. A further review was undertaken prior to commencing the SA of the Submission Draft DPDs to ensure that this information remained up-to-date. The full review of relevant plans is provided in Appendix 1.
5. CUMBRIA’S SUSTAINABILITY APPRAISAL FRAMEWORK

INTRODUCTION

5.1. Development of SEA/SA Objectives is a recognised way in which environmental and sustainability effects can be described, analysed and compared. Following work undertaken by the Council’s Sustainability Team and the Cumbria Sustainability Group to identify key issues and problems for Cumbria, an appraisal framework was developed and tested. This framework is being used as the basis for sustainability appraisals across Cumbria.

5.2. Chapter 11 of the Scoping Report outlined the proposed appraisal framework for the SA, which included some tailoring to increase its suitability for the task of appraising the MWDF. As the Sustainability Objectives have been agreed through a robust and systematic process following extensive consultation, LUC has not sought to alter these. However, in discussion with the Council’s Sustainability Team, LUC has tailored and prioritised the appraisal criteria further on the basis of previous work that underlined the value of this task as stakeholders often had difficulty in reaching consensus during the appraisal process as a result of the generic objectives which had been applied.

OBJECTIVES AND APPRAISAL CRITERIA FOR THE MWDF

5.3. The Sustainability Objectives and related appraisal criteria being used in the SA of the MWDF are shown in Tables 5.1 and 5.2 below for minerals and waste respectively. The labelling of the Objectives reflects that adopted in the overarching appraisal framework for Cumbria. For the purposes of assessing those policies which relate both to minerals and waste, a set of combined minerals and waste appraisal criteria were put together (see the appraisal tables for the Overall Core Strategy Policies 1, 2, 4, 5, 6 and 7 in Appendix 6). Primary Objective SP2 was not included in the appraisal framework for mineral policies as access to services and facilities was only deemed relevant to waste facilities. Likewise, Primary Objective EN3 to improve the quality of the built environment was only included in the appraisal criteria for mineral policies due to the potential contribution that certain minerals in Cumbria can make to the quality of the built environment.

Table 5.1 Sustainability Objectives and appraisal criteria for minerals

<table>
<thead>
<tr>
<th>Sustainability Objective</th>
<th>SA Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Objective</td>
<td></td>
</tr>
<tr>
<td>NR4 To manage mineral resources sustainably and to minimise waste</td>
<td>Does the option/policy seek to provide a steady flow of minerals to meet demand within the area?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy protect mineral resources from sterilisation by development?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy seek to minimise primary extraction in favour of use of secondary / recycled materials?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy support the use of co-products from</td>
</tr>
<tr>
<td>Sustainability Objective</td>
<td>SA Criteria</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>minerals working?</td>
<td>Does the option/policy seek to conserve minerals as far as possible?</td>
</tr>
<tr>
<td>Primary Objectives</td>
<td></td>
</tr>
<tr>
<td>SP5 To improve the health and sense of well being of people</td>
<td>Does the option/policy seek to reduce the potential health impacts of minerals extraction and associated activities – e.g. noise and dust emissions?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy seek to secure safety both on and off site, relating to extraction methods and other issues (e.g. transportation)?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy seek to mitigate impacts on quality of life of the sector?</td>
</tr>
<tr>
<td>EN1 To promote and enhance biodiversity</td>
<td>Does the option/policy seek to avoid adverse impacts on protected environmental sites and species?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy avoid adverse impacts on environmental frameworks and networks?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy actively seek enhancement of natural / ecological resources?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy actively promote restoration of current and past mineral working sites for biodiversity benefits?</td>
</tr>
<tr>
<td>EN2 To preserve, enhance and manage landscape quality and character for future generations</td>
<td>Does the option/policy aim to protect landscape features from inappropriate development – designated and non designated areas?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy recognise the importance of countryside remoteness and tranquillity?</td>
</tr>
<tr>
<td>EN3 To improve the quality of the built environment</td>
<td>Does the option/policy seek to support conservation of the built environment (e.g. locally sourced stone for construction), and to avoid adverse impacts on the built heritage from mineral working</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy seek to avoid inappropriate development in flood risk areas</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy seek to reduce noise, light pollution, dust emissions, etc arising from minerals developments and associated land use?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy aim to enhance the degraded urban and rural environment within the area?</td>
</tr>
<tr>
<td>NR1 To improve local air quality and reduce greenhouse gas emissions</td>
<td>Does the option seek to reduce dust emissions from mineral working?</td>
</tr>
<tr>
<td></td>
<td>Does the option promote sustainable transport of extracted materials as a means of helping to reduce emissions?</td>
</tr>
<tr>
<td></td>
<td>Does the option promote the development and application of clean / carbon efficient technologies?</td>
</tr>
<tr>
<td></td>
<td>Does the option seek to contribute to the use of renewable energy sources?</td>
</tr>
<tr>
<td></td>
<td>Does the option take into account predicted climate change and proactively promote adaptation within the minerals sector</td>
</tr>
<tr>
<td>NR2 To improve water quality and resources</td>
<td>Does the option seek to reduce risk to waterbodies arising from discharges and sedimentation as a result of minerals extraction?</td>
</tr>
<tr>
<td></td>
<td>Does the option seek to prevent stress on the water environment?</td>
</tr>
<tr>
<td>NR3 To restore and protect land and soil</td>
<td>Does the option recognise geological quality and fragility?</td>
</tr>
<tr>
<td></td>
<td>Does the option aim to assist with reducing the amount of</td>
</tr>
<tr>
<td>Sustainability Objective</td>
<td>SA Criteria</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>contaminated land within the area?</td>
</tr>
<tr>
<td></td>
<td>Does the option seek to protect good quality agricultural land and Greenfield sites as far as possible?</td>
</tr>
<tr>
<td></td>
<td>Does the option include measures to avoid soil degradation, pollution and the use of peat?</td>
</tr>
<tr>
<td>EC1 To retain existing jobs and create new employment opportunities</td>
<td>Does the option/policy aim to create more jobs in the minerals sector, to diversify employment or to improve quality of job opportunities?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy aim to create more or better rural employment opportunities?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy aim to support local business development or investment</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy provide support for retaining better educated people?</td>
</tr>
<tr>
<td>EC3 To diversify and strengthen the local economy</td>
<td>Does the option/policy encourage minerals related business growth?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy support improvements to the environmental performance of minerals companies?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy aim to stimulate innovation, entrepreneurship and diversification within the minerals sector?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy stimulate innovation and research relating to the recycling of minerals products and sustainable use of co-products?</td>
</tr>
</tbody>
</table>

Table 5.2 Sustainability Objectives and appraisal criteria for waste

<table>
<thead>
<tr>
<th>Sustainability Objective</th>
<th>SA Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR4 To manage mineral resources sustainably and to minimise waste</td>
<td>Does the option/policy reflect the waste management hierarchy, with the recycling and re-use of waste as a priority?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy make adequate provision for facilities to produce secondary and recycled aggregates?</td>
</tr>
<tr>
<td></td>
<td>Will it promote the use of renewable forms of energy?</td>
</tr>
<tr>
<td>SP2 To improve access to services, facilities, the countryside and open spaces</td>
<td>Will the option/policy improve access to recycling and composting services, where possible within local communities using sustainable transport choices?</td>
</tr>
<tr>
<td>SP5 To improve the health and sense of well being of people</td>
<td>Does the option/policy reflect fully the role of the planning system in minimising potential health impacts associated with waste management facilities?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy reflect fully the role of the planning system in ensuring a healthy and safe working and living environment?</td>
</tr>
<tr>
<td></td>
<td>Will the option/policy impact on the sense of well being of people?</td>
</tr>
<tr>
<td>EN1 To promote and enhance biodiversity</td>
<td>Does the option/policy seek to minimise the impact of waste management facilities on designated and priority habitats?</td>
</tr>
<tr>
<td></td>
<td>Does the option/policy seek to minimise the impact of waste</td>
</tr>
</tbody>
</table>
**Sustainability Objective** | **SA Criteria**
--- | ---
EN2 To preserve, enhance and manage landscape quality and character for future generations | Does the option/policy protect areas of designated landscape and cultural heritage value and acknowledge wider landscape sensitivity to development? Does the option/policy recognise the importance of countryside remoteness and tranquillity and seek to protect this?  

NR1 To improve local air quality and reduce greenhouse gas emissions | Does the option/policy seek to control adequately dust emissions associated with the management of waste? Does the option/policy promote the movement of waste by rail where feasible including the safeguarding of railway sidings? Will the option/policy stimulate the development and application of clean / carbon efficient technologies? Does the option/policy support energy from waste facilities?  

NR2 To improve water quality and resources | Does the option/policy provide adequate protection for waterbodies and the marine environment and promote the efficient use of water?  

NR3 To restore and protect land and soil | Does the option/policy encourage the siting of waste management facilities on brownfield land? Does the option/policy seek to protect good quality agricultural land and Greenfield sites as far as possible? Does the option/policy include measures to avoid soil degradation and pollution?  

EC1 To retain existing jobs and create new employment opportunities | Will the option/policy encourage the retention of existing jobs in the waste management sector and stimulate further employment creation? Will the option/policy stimulate private sector investment – generally and within the waste management sector? Will the option/policy stimulate diversification within the waste management sector? Will the option/policy stimulate innovation and research relating to emerging waste management technologies?  

---

**COVERAGE OF SEA TOPICS**

5.4. The SEA Directive requires in Annex I (f) that information is provided on the likely significant effects on a number of environmental topics. **Table 5.3** sets out the ‘SEA topics’ and shows that they are all covered by at least one of the SA Objectives for the MWDF. Coverage of the SEA topics by the SA Objectives ensures that each of the topics will be addressed in the SA.

**Table 5.3 Coverage of SEA topics by SA Objectives for the MWDF**

<table>
<thead>
<tr>
<th>SEA topic</th>
<th>Covered by SA Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodiversity</td>
<td>EN1</td>
</tr>
<tr>
<td>Population</td>
<td>SP2 and SP5</td>
</tr>
<tr>
<td>Human Health</td>
<td>SP5</td>
</tr>
<tr>
<td>Fauna</td>
<td>EN1</td>
</tr>
<tr>
<td>Flora</td>
<td>EN1</td>
</tr>
<tr>
<td>Soil</td>
<td>NR3</td>
</tr>
<tr>
<td>SEA topic</td>
<td>Covered by SA Objective</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Water</td>
<td>NR2</td>
</tr>
<tr>
<td>Air</td>
<td>NR1</td>
</tr>
<tr>
<td>Climatic Factors</td>
<td>NR1</td>
</tr>
<tr>
<td>Material Assets</td>
<td>EN3, EC1 and EC3</td>
</tr>
<tr>
<td>Cultural Heritage</td>
<td>EN2 and EN3</td>
</tr>
<tr>
<td>Landscape</td>
<td>EN2</td>
</tr>
</tbody>
</table>
6. SUSTAINABILITY CONTEXT FOR MINERALS AND WASTE DEVELOPMENT IN CUMBRIA

6.1. Annex 1 of the SEA Directive requires information to be required on:

(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan;

(c) the environmental characteristics of areas likely to be significantly affected;

(d) any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC [the ‘Birds Directive’] and 92/43/EEC [the ‘Habitats Directive’].

6.2. As part of undertaking a joint SA/SEA, the requirement for ‘baseline information’ has been extended from just addressing the environmental baseline, to also include the relevant aspects of the social and economic ‘current state’, likely evolution, characteristics and problems in Cumbria. Whilst the requirements of Annex 1 (b)-(d) overlap somewhat, the baseline information section included below seeks to address all of these.

SUSTAINABILITY CONTEXT

6.3. The requirement to identify the environmental and sustainability characteristics of the areas likely to be significantly affected by the Core Strategy and Generic Development Control Documents (encompassing requirement (c) in Annex 1 of the SEA Directive) is discussed below. Information for Cumbria has been discussed under the headings of the Sustainability Objectives, although it is recognised that many issues are cross-cutting and do not fit neatly into just one topic area. The aim is not to present all issues relevant to the character of Cumbria, but to draw out those that are particularly significant and relevant to the preparation of the MWDF and the accompanying SA process.

6.4. To fulfil requirement (b) in Annex 1 of the SEA Directive, each section below begins by stating which SA Objective is being addressed. Requirement (d) in Annex 1 (i.e. to identify existing environmental problems) is addressed within the text under each SA Objective, and where any environmental, social or economic problems of particular importance exist, in the summary table of key sustainability issues (Table 6.1).

DATA SOURCES AND GAPS

6.5. Much of the baseline information collected has been taken from Cumbria County Council’s website and publications. Where other sources have been used, they are referred to in the text.

6.6. Collection of baseline data can often be problematic, and where difficulty was experienced this has been noted in the following sections.
6.7. Following a review of the information already held by the County Council and by the SA consultation bodies, chapter 8 of the SA Scoping Report provided a preliminary overview of the environmental, social and economic baseline conditions for Cumbria. This was drawn upon, and supplemented, by LUC for the purposes of assessing the MWDF Issues and Options, and again for assessing the Submission Versions, with a focus on the characteristics that relate to the issues to be addressed by the MWDF. It should also be noted that baseline information sources briefly described below were revisited during the appraisals to check for more detailed information against which the effects of the Core Strategy and the Generic Development Control Policies were predicted and assessed.

**CURRENT STATE OF THE ENVIRONMENT AND ITS LIKELY EVOLUTION WITHOUT THE MWDF**

**General overview of the Cumbria Minerals and Waste Development Framework Area**

6.8. Cumbria is the second largest county in England. The Cumbria Minerals and Waste Development Framework area covers the whole County with the exception of the Lake District and Yorkshire Dales National Parks. Cumbria’s main towns are widely dispersed around the edges of the County with the mountains and lakes of the Lake District National Park at its centre. Transport links to the north and south along the M6 motorway and the west coast main railway line are good but east-west communications are more difficult with limited rail infrastructure and congested roads.

6.9. Many sites within Cumbria are designated for their biodiversity and landscape value and the County contains the highest number of nationally and internationally important wildlife sites of any County in England.

6.10. The County’s economy and employment rely on stable, traditional low value sectors such as hotels, construction and defence however within the County there are significant contrasts in the distribution of sectors. There is more manufacturing in west and south-west Cumbria, more tourism and hotels in rural central and east Cumbria, and more transport, warehousing and distribution in Carlisle.

**Key objective NR4: To manage mineral resources sustainably and to minimise waste**

**Cumbria’s Mineral Resources**

6.11. Cumbria is an important source for a range of minerals and many sites within the County are currently worked commercially. It is also largely self-sufficient in terms of minerals supply. The main extraction activity is for crushed rock aggregates and there are fourteen active quarries within the County; 3,996,000 tonnes of crushed rock were extracted in 2006, accounting for approximately 3% of total extraction in Britain\(^\text{12}\).

6.12. The principle source of crushed rock is limestone although hornfels, andesitic tuff and gritstone are also worked. The properties of the scarcer andesitic tuff and gritstone make them suitable for high quality roadstone. Hornfels is worked at Shap mainly for rail ballast and the production of concrete products. A significant proportion of the extracted crushed rock is exported to Scotland, the North East, Lancashire and Greater Manchester.

6.13. Crushed rock reserves at the end of 2005 represented a landbank of over 38 years at the apportionment level or over 41 years at the recent sales level, significantly over the longstanding 15 year policy of the County Council and the 10 years recommended by national policy. National policy suggests that action should be taken to reduce landbanks as large as those in Cumbria for crushed rock, albeit that revoking planning permissions is not always a practicable option.

6.14. Although deemed to be a component of crushed rock for which the landbank figures are very large, high skid resistance road stones are considered separately from aggregates for general use. At the end of 2005, the reserves of high skid resistant road stones was equivalent to around 13 years at annual sales of 740,000 tonnes. However, the County Council has resolved to grant a planning permission at Roan Edge quarry which would double the permitted reserves figures; this means that the landbank will not fall below fifteen years until 2018 assuming sales remain stable.

6.15. Sand and gravel is also an important resource in Cumbria although sales have been reducing in recent years. Reserves at the end of 2005 represented a landbank of just over 13 years at the apportionment level or 11.5 years at recent sales levels. It has been Cumbria County Council’s policy to retain a sand and gravel landbank of at least seven years which is also in accordance with national policy. However, the existing landbank is likely to fall below seven years within the next three to four year and consequently, planning permission has been granted for an extension to the existing ‘High House Quarry’ in order to maintain supplies.

6.16. Marine dredged aggregates are another source of sand and licensed extraction is currently carried out in the Morecambe Bay area of the County. During 2005, 20,200 tonnes of the 669,000 tonnes of marine dredged sand landed in the North West region were landed in Cumbria. Total landings from the authorised area were 716,000 tonnes, compared to the authorised limit of 1.38 million tonnes per year.

6.17. Gypsum and brickmaking mudstones are also extracted within Cumbria although both are due to run out by the end of the existing plan period if provision is not extended.

6.18. Within Cumbria there are currently around seven processing plants which are producing aggregates from recycled or reused materials. Whilst no data is available on the production levels of such materials at a regional or local level, the North West Regional Aggregates Working Party Annual Report estimates that in 2005 just over 683,000 tonnes of secondary aggregates were reused within the region and that total reserves were around 12.9 million tonnes.
**Likely evolution of the environment without the MWDF**

The existing Cumbria Minerals and Waste Local Plan comprises minerals policies which are more specific and therefore less strategic than those proposed for inclusion in the MWDF. Whilst high level policies are included which refer to the need to safeguard mineral resources from sterilisation and planning considerations for mineral extraction proposals, the majority of the policies are more focused on particular sites and/or types of mineral.

The existing Plan promotes the conservation of minerals and recommends extraction in new or extended quarries only where there is national or regional need or where local communities or the environment would benefit significantly and as such, is broadly similar to the MWDF. Overall, continuation with the existing Plan would be expected to have broadly similar environmental implications to that of the MWDF.

The text of the existing Plan encourages the use of secondary and recycled aggregates but, unlike the draft MWDF DPDs, does not include a specific target in any of its policies. Consequently, continuation with the existing Plan may contribute less to resource conservation than is likely from implementation of the MWDF.

---

**Cumbria’s Waste**

6.19. There are difficulties associated with assessing waste arisings and current management practices within Cumbria as much of the published data is for the North West Region as a whole and is not specific to the County. However, there are reliable figures available for municipal waste as these figures are reported by the individual waste disposal and collection authorities. In 2006/2007, 345,697 tonnes of municipal waste were generated in Cumbria which comprised 297,547 tonnes of household waste and 48,150 tonnes of other waste. Approximately 32% of household waste was recycled or composted during 2006/2007, greatly exceeding the statutory target for 2007/2008 of 21%.

6.20. Waste which is not recycled or composted is sent to one of the five landfill sites currently used to dispose of Cumbria’s waste. Four of these are within the County itself (Hespin Wood, Distington, Flusco and Bennett Bank) and the other is in Lancashire (shown in Figure 1).

6.21. The amount of waste generated within the County has until recently, increased every year with a 25% increase between 1999 and 2006. There has now been a slight reversal in this trend and the County Council has committed to reducing municipal waste production by 1% per year for three years from 2007/2008.

6.22. West Cumbria has the largest concentration of nuclear facilities in the UK; the Sellafield complex comprises over 200 nuclear facilities and covers over 4 square kilometres. The Sellafield site has an excellent safety record and actions over the last
30 years have reduced radiation levels to a small fraction of that associated with natural background radiation\textsuperscript{13}.

6.23. High Level liquid waste mostly from reprocessing is stored to cool at Sellafield and undergoes a process of vitrification. Sellafield is also the destination for much of the UK’s Intermediate Level waste where it is transferred into passive storage.

6.24. In addition to storing High and Intermediate level radioactive waste, Cumbria is also home to the Nuclear Decommissioning Authority’s Repository for Low Level waste. The site near Drigg in West Cumbria receives a large proportion of the UK’s Low Level radioactive waste material, particularly from nuclear power stations and Ministry of Defence sites.

6.25. The present facility at Drigg, Vault 8, is likely to be full by the end of 2008. Temporary planning permission, until the end of 2019, was granted in January 2008 for an additional Vault 9. It is estimated that this vault will provide capacity until 2016.

**Likely evolution of the environment without the MWDF**

In line with national policy, the existing Cumbria Minerals and Waste Local Plan aims to deliver the waste hierarchy by including policies which prioritise the reduction, re-use and recovery of waste. Specific policies are also included which relate to the development of certain types of waste management sites such as scrapyards, MRFs, construction and demolition waste recycling facilities, civic amenity sites, landfill sites and Energy from Waste sites.

The existing Cumbria Minerals and Waste Local Plan does not contain any policies relating to the management of radioactive waste; it is stated that any proposals relating to this issue would be considered against Structure Plan Policy.

Whilst perhaps less strategic in approach than policies set out in the Submitted Version Core Strategy, policies in the existing Plan are none the less comprehensive. In addition, it is stated that one of the guiding principles in their formulation is that ‘waste developments should not have significant adverse effects on local communities or the environment’. However, as the draft MWDF DPDs make positive provision for waste management facilities through the site allocation policies, continuation with the waste policies in the existing Plan may, relatively, contribute less to resource conservation.

---

Figure 1: Location of Landfill sites in Cumbria
Primary objective SP2: To improve access to services, facilities, the countryside and open spaces

6.26. Access to open space and the countryside is valuable for sport and recreation, amenity, education, conservation and health and well being. The Lake District National Park is at the heart of Cumbria and over 40,000 people live within the park boundaries, providing excellent opportunity for access to the outdoors.¹⁴

6.27. In terms of accessing facilities for recycling and composting, there are currently 13 household waste recycling centres and over 400 recycling points in the area. Furthermore, at least 7 out of 10 households in Cumbria have access to kerbside recycling schemes.

Likely evolution of the environment without the MWDF

The existing Plan states that ‘where appropriate, the opportunities to enhance the landscape, create wildlife habitats and provide greater public access should be maximised’. In addition, the Plan also contains two specific policies relating directly to the issue of access. Policy 20 states that the County Council will aim to provide ‘public access including new public rights of way within restoration schemes’ and policy 19 states that minerals and waste developments potentially having a negative effect on public rights of way will only be permitted where ‘users of the route can be adequately protected for the adverse effects of the development’ and that should the route be lost, ‘a satisfactory alternative can be established or can be shown to be unnecessary’. No significant negative effects on access to the countryside and open spaces are therefore predicted as a result of continuation with the existing Plan. Furthermore, where restoration schemes allow, the County Council state that they will seek to ‘improve public access for the benefit of local communities’.

The existing Plan also makes reference to the provision of recycling facilities at civic amenity sites within 5 miles of the County’s population which contributes towards achieving this Objective.

Primary objective SP5: To improve the health and sense of well being of people

6.28. According to census data, the total population for Cumbria in 2001 was 487,607. Population density across the County remains low at approximately 0.7 per hectare, compared to an average of 3.4 people per hectare nationally. A relatively high proportion of people are aged over 50, and a disproportionately low number of people are in the 15-34 age ranges, particularly the 20-24 age group. In Cumbria, the mean average age is 40.9 years, compared to the national average for England and Wales of 38.6 years.

6.29. Life expectancy varies across Cumbria; levels are highest in Eden, where both men (78.4 years) and women (81.5 years) live longer than the national average (males, 76.6 years; females 80.9 years). Conversely, in Allerdale (80.2 years), Carlisle (80.7 years) and Copeland (79.5 years), women live below the national average. In Carlisle (75.7

¹⁴ www.lake-district.gov.uk
years), Copeland (75.8 years) and Allerdale (76.5), average life expectancy for males is below the national average\textsuperscript{15}.

6.30. Recent health trends indicate that there has been a significant increase in levels of mortality for coronary heart disease in both men and women, with premature mortality in those under 75 years of age also significantly raised. The commonest causes of premature death in Cumbria are coronary heart disease, lung cancer and respiratory disease.

6.31. Figures for 2006 show a rise in the number of people who died in collisions on Cumbria’s roads (59) when compared with data from 2005 (45). Overall however, the number of people killed or seriously injured in road traffic accidents has fallen each year from 490 in 2000 to 345 in 2006\textsuperscript{16}.

<table>
<thead>
<tr>
<th>Likely evolution of the environment without the MWDF</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the policies in the existing Cumbria Minerals and Waste Local Plan specifically refer to improving, or avoiding impacts on, the health and sense of wellbeing of Cumbria’s community. However, Policy 1 states that any minerals or waste proposals likely to generate road traffic will only be permitted where ‘the increase in traffic would not have an unacceptable impact on local communities by reason of visual intrusion, fumes, dust, noise and vibration’. Policies relating to noise, blasting from mineral workings, and dust and odour from mineral/waste sites, stipulate that surrounding land uses should be protected from impacts. As such, it is likely that heath and sense of wellbeing would be promoted even without implementation of the MWDF.</td>
</tr>
</tbody>
</table>

Primary objective EN1: To promote and enhance biodiversity

6.32. Cumbria has more nationally and internationally important wildlife sites than any other county. This includes a range of internationally protected sites, including 278 Sites of Special Scientific Interest (SSSIs), five Special Protection Areas (SPAs), eighteen Special Areas of Conservation (SACs) and five RAMSAR sites. The locations of these sites, many of which are cross border, are shown on Figures 2, 3, 4 and 5.

6.33. At national level, there are 25 National Nature Reserves (NNRs), covering over 11,562 hectares. These areas are designated to protect the most important areas of wildlife habitat and geological formations in Britain. The County also contains five Local Nature Reserves (LNRs) that cover over 4.24 ha. These are places of wildlife or geological interest that are of special interest locally. The location of these NNRs and LNRs are shown on Figure 6.

6.34. Cumbria is also home to a significant number of UK BAP species including Red Squirrels and Great Crested Newts, as well as several UK BAP listed habitats

\textsuperscript{15} North Cumbria Public Health annual report, 2005-2006.
\textsuperscript{16} Cumbria Road Safety Partnership: Annual Road Safety Statement 2007
including Blanket bog and reedbeds. These habitats and species are either UK BAP Priority Species or Habitats or they are of importance in North West England.

6.35. At a local level, there are also around 700 county wildlife sites identified because of their local conservation importance. These include ancient woodlands, species rich grasslands and meadows, uplands, wetlands and mires. In April 2006, Cumbria Wildlife Trust was awarded funding to identify and designate new sites.

6.36. All of the habitats discussed have some importance for birds including many BAP species. Figure 7 shows the areas of Cumbria identified by the RSPB as most important for birds.

**Likely evolution of the environment without the MWDF**

There are a number of existing policies which aim to protect sites and species designated for their biodiversity importance. Specifically, the policies aim to prevent the development of minerals and waste sites on sites of nature conservation importance unless ‘there is no alternative solution and there are imperative reasons of overriding public interest for development’. Sites of Special Scientific Interest, National Nature Reserves and Wildlife sites are similarly protected by individual policies. As such, it is likely that the protection and enhancement of biodiversity would be promoted even without implementation of the MWDF, albeit that the existing Plan places less emphasis on specific site allocations which arguably makes the prediction of likely effects less certain.
Figure 2: Location of Sites of Special Scientific Interest in Cumbria
Figure 3: Location of Special Protection Areas in Cumbria
Figure 4: Location of Special Areas of Conservation in Cumbria
Figure 5: Location of Ramsar sites in Cumbria
Figure 6: Location of National and Local Nature Reserves in Cumbria
Figure 7: Important Bird Areas (Source: RSPB)
Primary objective EN2: To preserve, enhance and manage landscape quality and character for future generations

6.37. The Cumbrian landscape is often regarded as unique and special. This has been recognised through the designation of the central core of Cumbria, which lies outwith the Plan area, as a National Park. Part of the County also includes the Yorkshire Dales National Park.

6.38. Other landscapes within the Plan area have also been acknowledged nationally to be landscapes of the highest quality. These include the North Pennines, Solway Coast and Arnside/Silverdale, which have been designated as Areas of Outstanding Natural Beauty (AONB). The location of these areas can be seen on Figure 8. In recognition of the uniqueness and rarity of limestone pavements, 41 areas in the County outside the National Parks have also been covered by Limestone Pavement Orders, designed to protect this unique habitat and landscape feature.

6.39. During the mid 1990s, Cumbria County Council carried out a detailed landscape character assessment to identify the distinctive elements and features of Cumbria. This did not include land in the National Parks. The work resulted in the production of the Cumbrian Landscape Classification (CLC, 1995), and this information is now contained in the Cumbria and Lake District Joint Structure Plan 2001-2016 Technical Paper No 5. The main landscape character types that have been identified for Cumbria are shown on Figure 9.

6.40. Cumbria has two major heritage designations. These are Hadrians Wall, which is designated as a World Heritage Site, and St Bees Head, a 22.8km² stretch of coastline designated as Heritage Coast. The locations of these two major heritage designations can be seen on Figure 10. In addition, the County Sites and Monuments Record currently lists about 18,500 historic sites, and there are also about 1000 Scheduled Ancient Monuments.

Likely evolution of the environment without the MWDF

The existing Cumbria Minerals and Waste Local Plan recognises that within Cumbria, mineral resources may lie within areas of ‘special landscape, nature conservation, historical or recreational importance’. One of the guiding principles of the Plan is the protection and enhancement of Cumbria’s ‘fine landscapes’ which should be ‘protected and enhanced for the benefit of present and future generations’. There are several high level policies included in the Plan which aim to protect landscape and visual amenity from the potential negative effects of mineral and waste developments. The Plan also promotes the restoration of any landscapes affected by such developments.

As a consequence of the comprehensive protection afforded to landscape and visual amenity, it is likely that the preservation and enhancement of landscape quality and character would be promoted even without implementation of the MWDF, albeit that the draft MWDF documents propose strengthened support for the use of secondary and recycled aggregates, potentially reducing the need for primary
extraction. As the draft MWDF documents also propose a greater shift in waste management practices away from landfill, it is possible that the likely distribution of potential effects would be different with continuation of the existing Plan.
Figure 8: Location of Areas of Natural Beauty in Cumbria
Figure 9: Cumbria’s Landscape Character Areas
Figure 10: World Heritage & Heritage Coast Sites in Cumbria
(Source: Cumbria County Council)
Primary objective EN3: To improve the quality of the built environment

6.41. Preservation of local distinctiveness and character is particularly important in Cumbria and the historic buildings and features are considered to be one of the key environmental assets of the County. It is therefore important that local building stone is used for any repairs or improvements needed to these structures in order that the original features are preserved. Furthermore, any new developments should be constructed with locally sourced materials in order to ensure they are in character with the existing features.

6.42. In the past, small quarries provided the stone for a particular area; there are eighteen known building and roofing stone quarries within the county and some of the aggregate quarries also supply small quantities of building stone.

Likely evolution of the environment without the MWDF

The existing Plan gives consideration to the use of locally sourced building stone and is supportive of their use in terms of employment, safeguarding traditional skills and in enhancing the quality of the built environment. Policy 48 states that proposals for new building stone quarries would only be permitted ‘where it can be demonstrated that the material cannot be adequately supplied from existing sources’. Therefore it is likely that continuation with the existing Cumbria Minerals and Waste Local Plan would have broadly similar effects on the environment and other sustainability objectives as implementation of the MWDF.

Primary objective NR1: To improve local air quality and reduce greenhouse gas emissions

6.43. Poor air quality affects wildlife, soil and vegetation, and is a problem for both urban and rural areas in Cumbria due to the prevailing wind. Cumbria has major areas of industry which cause air pollution, which in turn contribute to acidification in the uplands of the Pennines and Lake District.

6.44. Within Cumbria, there are currently Air Quality Management Areas (AQMAs) set up in South Lakeland and Carlisle. AQMAs allow Local Authorities in carrying out their statutory duty to work towards meeting national air quality objectives.

6.45. There are currently 21 companies in Cumbria monitored by the Environment Agency for pollutant emissions. Eleven of these companies are currently releasing nitrogen oxides (NOx), 3 are releasing sulphur dioxide (SO2) and 2 are releasing PM10s. All are operating within the limits set. All 4 Cumbrian monitoring sites for sulphur dioxide show a steady decline in SO2 levels around the County. Emissions of NOx have increased by 20% over the last 20 years, largely due to increases in traffic. All air quality samples taken in recent years have been well within EU and UK limits.

Likely evolution of the environment without the MWDF

The Cumbria Minerals and Waste Local Plan contains brief references to reducing
methane emissions by the collection of landfill gas and incineration of waste, as well as a policy relating to the need to safeguard surrounding land uses from emissions caused by composting sites. However, the most significant contributor of greenhouse gas emissions and potential impacts on air quality associated with minerals and waste activities is transport. Policy 1 of the existing Plan relates to road traffic generated by minerals and waste developments and does not mention air quality or greenhouse gas emissions but only refers to the impact of ‘fumes’ on local communities. This reflects national policy priorities and understanding of issues relating to greenhouse gas emissions at the time of drafting.

Assuming that the MWDF’s emphasis on reducing ‘minerals and waste miles’ is deliverable in practice, continuation with the existing Plan could have a more adverse effect on air quality and reducing greenhouse emissions than the draft MWDF documents.

Primary objective NR2: To improve water quality and resources

6.46. Cumbria contains some of the largest water resources in England. Much of this stems from the high levels of precipitation in Cumbria, a direct result of moisture laden clouds from the Atlantic being forced up over the mountains. The landscape has also been extensively moulded by glaciers, which have created many large inland lakes. Nearly all of these lakes and reservoirs, including the largest natural lake in England, Lake Windermere, are entirely within the Lake District National Park.

6.47. The largest river in Cumbria is the River Eden which rises in the high limestone fells near the North Yorkshire border and crosses northwards for over 90 miles across Cumbria before reaching the Solway Firth. Other significant rivers which flow through the Plan area include the River Ehen, which flows along the boundary of the National Park and joins the River Calder at Sellafield, the River Petteril, the River Caldew and the River Irthing.

6.48. Many areas of Cumbria are at risk of flooding due to high precipitation levels and the rapid runoff rates of many rivers which flow across the county. In addition, the majority of Cumbria’s coastal zone is low lying and vulnerable to coastal storms. In January 2005, many towns and villages across Cumbria were badly flooded when the River Eden and several of its tributaries burst their banks. The worst flooding occurred in Carlisle, where the equivalent of one month’s rain fell in under 24 hours and over 3,000 properties were flooded. Increased precipitation and rising sea levels as a result of climate change will put Cumbria’s key service centres at risk of extreme flooding events.

6.49. Water quality for Cumbria is generally very high, and this is reflected in the number of species that are found in Cumbria’s rivers, lakes and reservoirs, most of which are protected by international or national nature conservation status. According to the North West General Water Quality Assessment (GQA) 2003, 98.59% of rivers in Cumbria have good to fair biological quality, compared to only 87.69% for England as a whole. For chemical quality, 98.19% of Cumbria’s rivers are of good to fair quality, compared to 93.43% for England.
Likely evolution of the environment without the MWDF

The existing Cumbria Minerals and Waste Local Plan contains two policies which relate to protecting water resources and water quality. The Plan does not permit mineral extraction from watercourses or beaches (Policy 6), and states that ‘proposals for minerals and waste development will only be permitted where any change in surface and groundwater levels and flows will not have an unacceptable impact on water abstraction or the future use of the water resource’ (Policy 6). The prevention of water pollution is referenced within the text of the plan with respect to the development of large scale composting sites and landspreading of organic wastes for agriculture. It is also noted that the Plan takes the Council’s environmental policy into account and that one of these objectives is ‘to seek to minimise and mitigate water, land and air pollution’.

Assuming the operation of mineral and waste developments in accordance with existing regulations, it is likely that the improvement of water quality and resources would be promoted even without implementation of the MWDF. However, as the draft MWDF documents propose a greater shift in waste management practices away from landfill, it is possible that continuation of the existing Plan could lead to greater risks to groundwater protection.

Primary objective NR3: To restore and protect land and soil

6.50. The underlying geology of Cumbria and the Lake District National Park is very varied and reflects changes that have taken place over hundreds and millions of years. The oldest rocks in Cumbria, the Skiddaw Slates, were formed around 500 million years ago during the Ordovician Period, as mud settled in the relatively deep water that covered the area. There have been a number of phases of mountain building interspersed with periods of marine subsidence and the intense glacial activity of the Quaternary period which gave the landscape its present form. This glaciation was of considerable importance in shaping the landscape and ecology of Cumbria, spreading vast sheets of glacial drift over much of the county. During the period which followed, alluvial deposits accumulated in valley and estuaries, including Morecambe Bay and the Solway, and blanket peat developed on the Pennines and raised bog peat on the coastal flats.

6.51. Soil erosion can be a problem in Cumbria due to increases in the number and density of livestock, particularly on steep land and in fields adjacent to watercourses. The effects include phosphorus-limited eutrophication as well as damage to the in-stream habitat of freshwater fish and invertebrates.

6.52. There are far fewer sites of contaminated land in Cumbria than in most other parts of England. However, the Environment Agency has identified one designated Special Site at the Albright and Wilson Works on the coast at Whitehaven.

Likely evolution of environment without the MWDF

Many of the policies contained within the existing Cumbria Minerals and Waste Local Plan make provision for protecting ‘surrounding land use’ from the effects of...
dust, noise, odour, and other potential negative effects arising as a consequence of minerals or waste developments. The Plan also includes a policy specifically related to the protection of agricultural land, stating that development will only be approved where the site can be ‘restored to a condition equivalent to at least the original quality of the agricultural land within five years from the completion of the restoration’ (Policy11).

Areas of geological importance are also afforded some protection by way of the policies relating to the protection of conservation interests of national importance.

On the basis of the above, it is likely that land and soil would be afforded protection without implementation of the MWDF. However, as the draft MWDF documents provide greater policy support for restoration and protection of the soil resource, it is possible that continued implementation of the existing Plan polices would afford less protection to the soil resource.

**Primary objective EC1: To retain existing jobs and create new employment opportunities**

6.53. According to the 2001 census, the proportion of people in full time employment is relatively low (36.9% compared to 40.4% nationally). These figures are particularly low in Barrow (35.5%), Eden (35.7%) and South Lakeland (35.9%). Conversely, the proportion of people in part time employment is above the national average (13.6% compared to 11.6% nationally). The highest levels of part-time employment are in Barrow (14.1%) and Carlisle (14.6%), although these are the most urbanised districts of Cumbria and may offer proportionally greater work opportunities in sectors such as retail.

6.54. The unemployment rate in Cumbria remains consistently below the national average. In November 2007, the number of people out of work and claiming unemployment benefit in Cumbria was 1.5% compared to 2.1% nationally. However, the unemployment rate in Barrow in Furness (2.4%) and Copeland (2.3) is slightly higher than the national figure. In total, 4,586 people (1.5%) were registered as unemployed during November 2007.

6.55. There are 281 primary schools in Cumbria, with a total of 36,768 pupils (2006 figures). In addition, there are 42 secondary schools in Cumbria, with a total of 35,682 pupils (2006 figures).

6.56. The University of Cumbria was formed on 1st August 2007 following an amalgamation of St Martin’s College, Cumbria Institute of the Arts and the Cumbrian campuses of the University of Central Lancashire. The University has strong links with the four Further Education colleges in Cumbria (Lakes Colleges, Furness College, Carlisle College and Kendal College). The formation of the University of Cumbria may result in more local young people remaining within the area to continue their education instead of moving elsewhere.

6.57. Analysing educational attainment within the population is difficult because of the range of qualifications and the data collection systems used. However, the 2001
Census reveals the number of people aged 16-74 years educated to degree level or higher (16%) is below the national average (19.8%) for all of Cumbria, except Eden where it is 20.2%. The number of 16-74 year old people with no qualifications in Cumbria (32.6%) was significantly above the national average (29.1%). In 2005, according to government figures, 56.8% of 15 year olds achieved five or more GCSEs at Grades A to C.\(^{17}\)

**Likely evolution of environment without the MWDF**

The Cumbria Minerals and Waste Local Plan contains a policy which aims to ensure that minerals and waste developments meet the social needs of the County through provision of jobs and by providing opportunities for skills development. The important role that both the minerals and waste sectors play in terms of local employment is also recognised.

The existing Plan seeks to strike a balance between potentially competing economic, social and environmental objectives. However, as the draft MWDF documents propose a greater shift in waste management practices away from landfill, and, to a lesser extent, a potential shift in the locational provisions for mineral extraction, it is possible that the likely type and distribution of potential employment opportunities would be different with continuation of the existing Plan.

**Primary objective EC3: To diversify and strengthen the local economy**

6.58. Data from 2006 indicates that in terms of gross employment, the main sector in Cumbria is retail with over 39,360 employees. Cumbria has a significant tourism industry and many of these jobs, as well as those in hotels and restaurants (over 24,500), rely on the continued input of this source of income to the local area. Manufacturing also plays a significant role in Cumbria employing around 35,900 people, with much of this work focused at Sellafield and the Barrow shipyards. The difficulties associated with maintaining manufacturing employment in the UK implies potential employment vulnerability in the future. Health and social work is the third largest area of employment with over 26,000 employees.

6.59. Agriculture also plays an important role within the economy of Cumbria, directly employing around 3,000 people. Furthermore, its indirect contribution to other sectors, particularly tourism, is also of fundamental economic importance. However, agriculture within Cumbria has recently been under considerable pressure as a result of vulnerability to negative impacts on animal health, supermarket competition on prices and changing subsidy regimes. Commercial mineral activity provides a number of jobs to the people of Cumbria, employing 1242 people in 2003\(^{18}\).

6.60. Analysis shows that Cumbria does not have a significant presence in the financial and business services sectors which have predominantly been the main economic drivers of growth across the UK. Eleven percent of employees work in this field in Cumbria compared with 21.2% in the UK as a whole.


6.61. Figures on average earnings in Cumbria exist at ward level and range from £17,507 to £39,308. In recent years, gross weekly earnings have been lower in Cumbria when compared to both the North West Region and the UK. However, in 2005 gross weekly pay for all full time workers in Cumbria exceeded the North West average by 3.0% and all full time workers in Cumbria earned 97.3% of the national average gross weekly wage. Males in Cumbria also earned £128.30 per week more than full-time women. The average income for Cumbria is £24,963. The district with the highest average income is South Lakeland with £27,580, whilst Barrow has the lowest with £22,378.

**Likely evolution of the environment without the MWDF**

As the draft MWDF documents contain stronger policy support for a range of waste management techniques, it is possible that economic diversification would be less likely with the continued implementation of the existing Plan policies.

**KEY SUSTAINABILITY ISSUES FOR THE CUMBRIA MWDF**

6.62. In 2002, the County Council’s Sustainability Team identified a Profile of Key Issues and Pressures affecting Cumbria. Following the introduction of the SEA Regulations in 2004 and draft government guidance on SA, a sustainability group was established in Cumbria, with membership drawn from the four statutory consultation bodies, the six district councils, the Lake District National Park Authority and Cumbria County Council. The existing set of key issues and pressures was re-examined by the group and further widened to include a section on resources so that the profile further assisted in establishing the sustainability context for the appraisal of the Cumbria MWDF.

6.63. The Profile of Key Issues and Pressures affecting Cumbria, as presented in Appendix 5 of the SA Scoping Report, is summarised in Table 6.1 below, with implications for the Minerals and Waste Development Framework. Issues considered to be most relevant to the MWDF are highlighted in bold.

**Table 6.1 Key issues and pressures affecting Cumbria**

<table>
<thead>
<tr>
<th>Sustainability Issue/Pressure</th>
<th>Implications for the MWDF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social</strong></td>
<td></td>
</tr>
<tr>
<td>• Pressure for housing pushing prices up – implications for housing to meet local needs and affordability of housing (S. Lakeland, Eden &amp; LDNP);</td>
<td>The MWDF must take into account the dispersed nature of the population and settlements within Cumbria and ensure that waste management sites are appropriately sited to facilitate community access.</td>
</tr>
<tr>
<td>• Second homes/holiday lets and inward migration by retired people adds to this pressure (S. Lakeland, Eden &amp; LDNP);</td>
<td></td>
</tr>
<tr>
<td>• Run-down and vacant properties not utilised fully (Barrow &amp; West Coast);</td>
<td></td>
</tr>
<tr>
<td>• <strong>Access to services and facilities problematic in rural communities</strong>;</td>
<td>This is addressed in Core Strategy Policy 9 which seeks to provide an integrated</td>
</tr>
<tr>
<td>Sustainability Issue/Pressure</td>
<td>Implications for the MWDF</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>• Public transport network inadequate in rural areas;</td>
<td>network of ‘appropriate and necessary waste management facilities’ as well as provide ‘innovative solutions or alternative sites’ for small communities.</td>
</tr>
<tr>
<td>• Comparatively safe communities overall but fear of crime disproportionately high in isolated rural areas;</td>
<td></td>
</tr>
<tr>
<td>• Some alcohol-fuelled anti social behaviour linked to the night-time economy (Carlisle and Barrow) and a comparatively high number of race related incidents;</td>
<td></td>
</tr>
<tr>
<td>• ‘Tourist’ shops, for example in LDNP, may reduce the number of shops and services providing for local needs;</td>
<td></td>
</tr>
<tr>
<td>• Established out of town shopping affecting the viability of smaller town centres;</td>
<td></td>
</tr>
<tr>
<td>• Traffic congestion at peak times (Carlisle, Kendal) and also seasonal congestion (LDNP);</td>
<td></td>
</tr>
<tr>
<td>• Lack of cycle networks within towns and cities;</td>
<td></td>
</tr>
<tr>
<td>• Lack of Cumbrian university;</td>
<td></td>
</tr>
<tr>
<td>• Loss of young people, particularly graduates and a reluctance of young people to continue family farming traditions.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Unemployment with higher levels of economic inactivity in West Cumbria and Furness partly linked to large number of incapacity benefit claimants;</td>
</tr>
<tr>
<td>• Low unemployment and skills shortage in Eden and South Lakes;</td>
</tr>
<tr>
<td>• Economic vulnerability due to decline of manufacturing &amp; uncertain future of nuclear industry (West Coast &amp; Barrow);</td>
</tr>
<tr>
<td>• Increasingly frequent relocation of jobs outside the county (and the country);</td>
</tr>
<tr>
<td>• Low wage economy particularly tourism related jobs;</td>
</tr>
<tr>
<td>• Below average share of growth sectors in local economy;</td>
</tr>
<tr>
<td>• Limited research and development facilities;</td>
</tr>
</tbody>
</table>
### Sustainability Issue/Pressure | Implications for the MWDF
---|---
- Pressure from mobile phone and internet companies/users to improve telecommunications in Cumbria;  
- **Lots of derelict/contaminated (brown field) land in some areas due to decline in industry.** | economy and secure jobs.

### Environmental
- Loss of tranquillity and impact of lights on dark skies;  
- Vulnerability of the landscape to recreational, leisure and sporting activities;  
- **High proportion of species identified for national conservation priority;**  
- Large tracts of upland and coastal habitat remain but elsewhere there are declines in extent (fragmentation) and quality of wildlife habitats and populations for some species;  
- High proportion of nutrient rich lakes supporting a wide range of aquatic plants, invertebrates and breeding and wintering wildfowl;  
- Vulnerability of nutrient rich lakes and nutrient poor lakes (and their resident species) to additional enrichment from farming fertilizer run off and sewage;  
- **Significant pressure on rivers, lakes and tarns from diffuse sources of pollution (agricultural wastes, fertilizers and run off from drains and road surfaces, coupled with some air pollution);**  
- Unknown impact of climate change possibly leading to outward migration of some species and inward migration of other as average temperatures rise;  
- **Unsympathetic alterations to old buildings and bland new developments altering historic character and damaging archaeology in some areas;**  
- National renewable energy targets likely to lead to pressures for more development of wind farms which could affect landscape character and quality;  

The MWDF must ensure that adequate protection is afforded to the high quality environment present within Cumbria. New waste management facilities must be carefully located and both waste management and mineral extraction facilities must be managed to avoid adverse impacts on the environment. Best practice must be employed in all aspects of waste and mineral operations to ensure no negative environmental effects.

This is addressed in many of the Core Strategy policies which state that any developments would have to 'demonstrate that their environmental impacts are acceptable' and is further supported by the Generic Development Control Policies.
<table>
<thead>
<tr>
<th>Sustainability Issue/Pressure</th>
<th>Implications for the MWDF</th>
</tr>
</thead>
</table>
| • Air quality problems in urban areas;  
• Need to reduce the risk to people and property from flooding (Carlisle, Kendal and Keswick). | |

<table>
<thead>
<tr>
<th>Resources</th>
<th></th>
</tr>
</thead>
</table>
| • Pressure responding to regulations preventing biodegradable waste going to landfill;  
• The need to develop alternative waste management methods and secure the necessary level of investment in additional facilities;  
• Problems of disposal and storage of radioactive wastes;  
• Pressure to continue to supply scarce mineral resources to meet national demand (gypsum and skid resistant roadstone);  
• The need to meet mineral demand by substituting secondary and recycled material for primary aggregates. | These sustainability issues are key to the MWDF and have been addressed through both the Core Strategy and Generic Development Control Policies. |
7. REVIEW OF ALTERNATIVES

INTRODUCTION

7.1. The SA Regulations and guidance require that ‘reasonable alternatives’ for each plan are appraised as an integral part of the process, taking account of the objectives and geographical scope of the plan. Options need to be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made. Stakeholder involvement in the development of these alternative options is recommended.

7.2. This chapter provides an overview of the SA work undertaken in relation to reasonable alternatives and refers to the ‘audit trail’ for the alternatives considered for each policy, including the justification for selecting the related Preferred Option/s where relevant, compliance with the SA findings and progression of the Preferred Options to the Submission Versions.

ISSUES AND OPTIONS STAGE

7.3. The MWDF Issues and Options Consultation Paper (June 2006) set out the key challenges for waste and minerals planning policy in Cumbria. Following a review of these in discussion with Cumbria County Council, the appraisal team defined a series of options for exploration through the SA process. Whilst this included a number of issues identified in the Issues and Options Consultation Paper, some were excluded from the SA of the Issues and Options as it was felt that these would have little influence on the overall tone and scope of the plan.

7.4. At the outset of the SA of the Issues and Options, a number of scenarios were developed comprising issues that are, or can be, mutually interdependent, and can therefore benefit from being assessed collectively. This ‘scenario’ approach is being viewed increasingly as good practice in the SA of Issues and Options. It allows for several issues to be assessed in combination, for example, options for the level of waste to be managed and the number of sites required and the approach to Energy from Waste were considered together, as each issue can have an impact on decisions made in relation to the others. This is more effective for the purposes of SA, as it allows the influence of one policy on the others to be explicitly assessed and therefore better understood. SA can produce misleading results if every policy within a plan or programme is considered in isolation, as all policies cannot realistically always address all aspects of sustainability, and policies are designed to be applied in combination with others.

7.5. Following a stakeholder meeting held on 26 September 2006 (see Appendix 2 for list of attendance) it was concluded that some of the key issues required further exploration individually, by considering relatively discrete options. The final approach therefore comprised a combination of combined scenarios and discrete options. These are outlined in Appendix 3. The appropriateness of continuing with existing waste and minerals policies was not explored as specific options in their own right.
Instead, many of the options incorporated existing policies, and were identified as such within the assessment for the purposes of clarity.

7.6. The SA of the Issues and Options Report (November 2006) highlighted the following potentially significant issues in relation to the relative merits or otherwise of pursuing different options, for consideration in progressing to the selection of the Preferred Options for the Cumbria MWDF:

**Key Issue 1: Deriving benefits from development of the waste and minerals sectors in a sustainable way**

7.7. The SA of Issues and Options helped to identify positive policy impacts as well as means of seeking to avoid negative impacts. In terms of the overall policy relating to waste management, the appraisal showed that potential environmental or community impacts should be considered alongside possible economic benefits. If the local economy is viewed as a key political policy driver, it is important to recognise that Cumbria could derive employment, business development, training and investment from the active promotion of a vibrant waste management sector that ‘champions’ sustainable technology. The land use planning system can support this by actively pursuing the fulfilment of higher targets for waste management in the area, and by positively providing sufficient sites to accommodate development requirements. This would also contribute positively to wider goals relating to the waste hierarchy and energy from waste. A key question for progression of the MWDF, however, was how far these benefits can be used to justify environmental and social impacts at the site level, albeit that these can often be reduced significantly. If there is sufficient concern about the capacity of the area to absorb the level of development and, importantly, the associated transport movements that would flow from such a positive approach, a more muted response may be required.

7.8. Strategic level decisions also needed to be made to steer the overall approach to minerals extraction in the area. Option M1 discussed the fundamental, and interrelated, issues of RAWP apportionment, targets for recycled and secondary materials, and consequently the number of sites to be provided by the planning system. As with the overall thinking on waste management, the key question to be addressed in selecting the Preferred Option was whether the economic benefits of undertaking a high level of extraction, and exporting materials, would be justifiable in relation to its higher environmental effects. If there are already concerns about the impacts of the mineral sector in Cumbria, it was argued that a more neutral option that accepts targets but does not seek to actively develop the minerals sector could be appropriate.

**Key Issue 2: Strategic locational choices**

7.9. The SA of the Issues and Options was undertaken on the basis of several explicit assumptions, including an acceptance that many potential effects would be managed and mitigated at the site level. Whilst waste management facilities and quarries can often be perceived as ‘bad neighbours’ by the general public, in practice many safeguards and working practices are in place to ensure that their impacts are minimised. As a result, the analysis of both waste and minerals issues focused on
reviewing potential impacts that are relatively difficult to mitigate, and these are largely transport related or linked with perceptions and awareness of the sector.

7.10. The SA identified that further locational choices needed to be made at a strategic level, in relation to both waste facilities and minerals extraction. In terms of waste facilities, the SA concluded that a centralised approach to providing waste management facilities could benefit the development of the sector itself, but could also have mixed impacts by concentrating social and environmental impacts at the local level. It was suggested that the locational choices made in relation to this option would therefore benefit from more detailed review. The alternative, of a decentralised approach to provision of waste management facilities, would also have impacts that could potentially be distributed more widely throughout the area.

7.11. Locational choices for minerals extraction are relatively constrained. The SA suggested that the key question is whether concentration of extraction, largely where it is already taking place, would be preferable to a policy emphasis on greater dispersal. In light of ongoing concerns about the impacts of the sector on some communities, the SA suggested that further consideration of cumulative impacts, thresholds and environmental capacity would be beneficial to provide a clearer set of conclusions.

7.12. Some of the more specific minerals issues were also relatively difficult to draw conclusions on at a strategic level, including options relating to brick making mudstone at High Greenscoe Quarry. In the absence of major strategic impacts arising from the options, the SA concluded that further site-specific analysis, that also takes into account the relative merits of alternative sites, was recommended.

7.13. The appraisal highlighted the importance of established a clearer spatial view on whether appropriate sites for both minerals extraction and waste management can be identified in Cumbria to fulfil the preferred scenarios in a low impact way. It also suggested that it would also be useful to understand more fully the transport repercussions of the proposed approaches. It was suggested that further baseline information and analysis could assist with this, together with more detailed modelling of the respective options.

Key Issue 3: The influence of other policy drivers

7.14. There was found to be relatively little difference in the potential impacts of some of the waste and minerals options. For example:

- the issue of targets for Household Waste Recycling Centres is an important consideration that highlights the relationship between the MWDF and the area’s Municipal Waste Strategy. However, the SA concluded that all options considered would be generally positive;

- although reducing landbanks might be beneficial in terms of sustainability, not reducing them would have insufficient impacts to justify the potential costs and legal issues that would arise should steps be taken to actively reduce current landbanks;
• supplies of local building stone could either be generally supported or strongly supported, with there being little significant difference in the impact of the options;

• recognising or not recognising Ghyll Scaur Quarry as a national resource would result in relatively few positive or negative significant impacts in planning terms.

7.15. It was therefore suggested that in these cases further consideration was given to the relative weighting of key policy drivers, to help define the most appropriate way forward. Decisions on how economic productivity is balanced against environmental and social impacts could therefore be made in a transparent way, as part of the Preferred Option selection process.

**Key Issue 4: Deliverability**

7.16. The deliverability of potential policies was taken into account to ensure that the conclusions of the SA were as realistic as possible. For example, although the option to reduce landfill thresholds could provide benefits, the SA also noted that this option may, in practice, be very difficult to deliver, as a result of the timescales associated with the land use planning system. If the option cannot be delivered, this would raise questions about the ability of Cumbria to meet its overall requirements for waste management capacity, and could ultimately result in a breach of more significant sustainability criteria in the longer term.

**Key Issue 5: Options to be avoided in the interest of sustainability**

7.17. As well as providing a commentary on potential Preferred Options, the SA concluded that the following options could effectively be excluded from further analysis on the basis of their potentially adverse impact:

(i) seeking to export substantial amounts of waste materials to other parts of the region, as this could have significant impacts on health and well-being, and some aspects of the environment;

(ii) arguing for a reduced aggregates apportionment figure on the grounds of practicality and environmental acceptability as this would mean that key sustainability objectives for minerals could not be met;

(iii) setting a reduced target for recycled / secondary aggregates, as this would also undermine the contribution of the MWDF to primary objectives of sustainable waste management.

**PREFERRED OPTIONS STAGE**

7.18. The findings from the SA of the Issues and Options were taken into account by the County Council in developing the Preferred Options. For example, considerable emphasis was placed on reducing ‘minerals and waste miles’, albeit the implementation of this will require further consideration. In addition, many of the preferred policies attempted to strike a balance between the ‘do minimum’ and ‘do maximum’ approaches tested out in the SA of the Issues and Options to incorporate elements of both which performed well in sustainability terms and provided a ‘best fit’ for Cumbria. The SA of the Preferred Options was undertaken in February 2007 and encompassed the Core Strategy, the Site Allocations and the Generic
Development Control Policies. Changes to the Preferred Options Core Strategy were then appraised in a subsequent SA report (October 2007). A second stakeholder meeting took place on 30 May 2007 before the changes to the Preferred Options Core Strategy were confirmed. Attendance was similar to the first stakeholder meeting, and the main purpose of the meeting was to inform attendees of the findings of both the Issues and Options and original Preferred Options SA work and to invite comments regarding these.

7.19. With respect to the Core Strategy, a written commentary was provided in relation to the Overall Strategy. The appraisals of the waste and minerals core strategies were undertaken by reviewing the strategies and their related policies against the corresponding appraisal at the Issues and Options Stage and then providing a commentary on the sustainability implications of the Preferred Option selected. Further appraisal work was undertaken for policies where the Preferred Option was not considered as part of the Issues and Options SA as ‘reasonable alternatives’ that merited assessment were unclear.

7.20. The Findings of the Preferred Options SA Report demonstrated how the key issues identified at the Issues and Options stage as being of importance for consideration in progressing to the selection of the Preferred Options were taken into account.

7.21. In relation to the need to deliver benefits from the development of the minerals and waste sectors in a sustainable manner (Key Issue 1), Overall Strategy Policies CS0 1: Sustainable Development, CS0 2: Minimising Road Miles and CS0 3: Environmental Assets were drafted to ensure that opportunities were provided to maximise sustainability strengths and to minimise weaknesses. Provisions within Waste Policy (CSW 1) and Supply of Minerals Policy (CSM 1) reflected Cumbria County Council’s intention to strike a balance between the ‘do maximum’ and ‘do minimum’ extreme options considered at the Issues and Options stage, to address Key Issue 1. The self sufficiency model for waste management in Cumbria and providing for meeting national targets and regional RAWP targets for minerals were therefore selected as the preferred policy options.

7.22. Policies CSW 3: Integrated Network, CSW 4: Waste Capacity and CSW 5: Waste Sites related to strategic locational choices identified as Key Issue 2 at the Issues and Options Stage. These preferred waste option policies provided for a decentralised waste management network of facilities without ruling out opportunities for a centralised network and encouraging the provision of large enough and suitable sites for co-locating more than one type of waste management facility. Sustainability benefits associated with the preferred policy options included the potential benefits of accommodating more than one type of facility, providing opportunities for stimulating investment, for diversification of the waste sector and for innovation in emerging waste management technologies (e.g. Mechanical and Biological Treatment and Energy from Waste presented as part of CSW 5). The policy preference for co-location reflected the objective of reducing waste miles. It was also highlighted, however, that as a greater number of sites would be required with the proposed decentralised model, the Preferred Site Allocations and Generic Development Control Policies would be of particular relevance. As most of the highlighted potential adverse effects associated with the waste management facilities
required were associated with the transport of waste, it was recommended that it would be beneficial to understand more fully the transport repercussions of different locational approaches, particularly given the relative importance of reducing waste miles as a policy driver.

7.23. With respect to strategic locational choices for minerals, these were treated in preferred minerals policy CSM 1: Supply of Minerals, under provisions relating to the recognition of very high skid resistance roadstone (Ghyll Scaur Quarry) and brick making mudstones (High Greenscoe Quarry) as national and regional resources, in policy CSM 7: Brickmaking Mudstones, and in policy CSM 3: Sand and Gravel. Policies demonstrated a preference for the continued extraction of very high skid resistance roadstones and brick making mudstones at their current extraction locations. The findings of the SA highlighted that although there would potentially be more impacts associated with the continued extraction of these nationally or regionally recognised resources, subject to their specific site assessment, these impacts could be resolved by appropriate mitigation at the site level and that this would in part, be balanced with the potential benefits for employment and economic development. Specific mitigation for the potential woodland loss at High Greenscoe Quarry was also identified as being a significant issue.

7.24. Policy CSM 3: Sand and Gravel, provided for the identification of new sites to meet the Regional Spatial Strategy requirements for sand and gravel. In terms of the locational choices for these, although the policy did not indicate preferred locational areas for these, the SA highlighted the need for careful consideration of whether the plan should be seeking to ‘disperse’ potential impacts of quarrying away from areas where problems already exist, or whether there may be scope to reduce the number of communities potentially affected by extraction by maintaining the existing distribution of quarries.

7.25. Policy CSW 2: Waste Hierarchy and CSW 4: Waste Capacity reflected the influence of other policy drivers (Key Issue 3) for their deliverability (Key Issue 4) and implementation. Whilst policy CSW 2 promoted the management of waste as high as possible up the waste management hierarchy, the findings of the SA highlighted that its delivery and its associated sustainability benefits, would rely on other related plan policies, for example in relation to thresholds for new landfill constraints and the locational pattern and level for provision of other waste management facilities. This applied equally to Policy CSM 2: Crushed Rock Supply, which highlighted that opportunities for land bank reduction would be pursued where practicable. Although associated sustainability benefits were identified when assessing this option, it was concluded that the implementation of a policy providing for landbank reduction could prove difficult and financially expensive. Core Strategy Policy CS 4: Afteruse and Restoration was also put in place at the Preferred Options stage to ensure appropriate implementation of the policies on the ground to contribute to the delivery of potential sustainability benefits identified in the assessments.

7.26. The options which the Issues and Options SA recommended did not merit further consideration were not included as Preferred Option policies (Key Issue 5). However, further policy options which had not been considered previously were included at the Preferred Options stage. These included policies relating to radioactive wastes (CSW 6: High and Intermediate Level Radioactive Wastes and
CSW 7: Low Level Radioactive Waste) and policies relating to the extraction of specific minerals (CSM 4: Marine Dredged Aggregates, CSM 5: Industrial Limestones, and CSM 6: Gypsum).

7.27. As with other waste types, potential global and local environmental and social impacts were identified in association with the transportation of radioactive waste. In addition, impacts on the sense of well being of people living close to the facilities and the risk of other environmental impacts such as water or soil pollution were identified as potential negative consequences of the implementation of the radioactive waste policies.

7.28. In relation to the mineral policies, all scored well against the key sustainability objective in that they provided policy support for the continued extraction of these minerals. It was considered that with regards to environmental objectives, the global and local environmental and amenity impacts associated with the transportation of minerals would need to be considered in light of the overall strategy and preferred policy CSO 2: Minimising Road Miles. There were also additional considerations associated with policy CSM 4 given higher uncertainty about marine habitats/species and predicted sea level rises. Regarding economic objectives, it was concluded that the additional minerals policy coverage provided longer term security to the respective mineral sectors and to related industries both within, and outside, Cumbria.

7.29. Generic Development Control Policies were also assessed at the Preferred Options Stage. Findings of this assessment concluded that these policies would have a key role to play in delivering the sustainability intentions of the Preferred Strategy. When reviewed against the SA criteria, a close correlation was shown between the Preferred Generic Development Control Policies and the SA criteria. Policies relating to legal agreements and planning obligations were also included which would form important implementing mechanisms for delivering other policies in line with their underlying Sustainability Objectives. Importantly, the Preferred Generic Development Control Policies also addressed cumulative impacts which were highlighted as an important issue for review in progressing to the draft Plan and more detailed consideration of potential impacts at the site level.

7.30. Further Changes to the Preferred Options Core Strategy were proposed in October 2007. These included changes to the Preferred Core Strategy Objectives, Strategies and Policies, all of which were reported in the SA Preferred Options (October 2007) Report together with the sustainability implications of these proposed changes. No changes to the Generic Development Control Policies were proposed. The appraisal was undertaken by reviewing the Strategies and their related policies against the corresponding appraisal of the Preferred Options (February 2007). Further appraisal work was undertaken for the new policies which were not appraised at the Preferred Options (February 2007) or Issues and Options (November 2006). The key findings of the appraisal of the proposed changes are summarised below.

7.31. A significant number of the Plan objectives and policies remained unchanged (e.g. Objective 3 and 5 and Core strategy Policy 10 and 20) and the wording of a number of additional policies was amended slightly to improve their clarity (e.g. Core Strategy Policy 3 and 12), in these cases the findings of the previous SA work was considered
to remain valid. However, a number of issues were highlighted for consideration in progressing the MWDF to the next stages, these are outlined below:

**Responding To Climate Change**

7.32. The Preferred Objectives and Policies were revised to reflect the increasing emphasis on the climate change agenda (e.g. Objective 1, Core Strategy Policies 1, 8) with specific reference to the climate change issues which are significant for minerals and waste management developments, including their ‘carbon footprints’. Performance against SA Objectives in relation to climate change was therefore strengthened.

**Strengthening of Individual Policies**

7.33. Core Strategy Policies 2: *Environmental Assets* and 4: *Local Economic Benefit*, were strengthened and performed very strongly against the environmental and economic SA Objectives respectively. In addition, the Preferred Minerals Strategy was slightly modified to make more explicit reference to making provision for a steady and adequate supply of minerals and to the need for environmental protection. It was highlighted, however, that the need to strike a balance between potentially competing plan (and also SA) objectives (**Key Issue 1**) may become increasingly difficult to deliver when individual policies are strengthened further. For example, the mitigation of all significant environmental impacts may not be possible in practice (Core Strategy Policy 2) if the economic objectives are to be fully realised. Both the Site Allocation and the Generic Development Control Policies will have a key role to play in efforts to deliver this balance in line with the Long Term Spatial Vision for the plan period.

7.34. Other policies were amended to reflect **Key Issue 2**: Strategic Locational Choices. One of the key findings of the SA Preferred Options (February 2007) Report was the need to establish a clearer spatial view on whether appropriate sites for both minerals extraction and waste management could be identified in Cumbria. Core Strategy Policy 7: *Strategic Areas for New Developments* was newly introduced and represented an important step forward in this regard. Core Strategy Policy 17: *Supply of Minerals*, was expanded at this stage to also take into account locational and spatial considerations for quarries and crushed rock and sand and gravel landbanks supply.

7.35. A *Community Benefits* policy was also newly introduced to offset and compensate for potential impacts on communities derived from hosting national or regional facilities scoring positively under the SA Objective “to improve the health and sense of wellbeing of the people”.

7.36. The majority of the mineral policies remained unchanged. However, Core Strategy Policy 19: *Minerals Safeguarding* was newly introduced to safeguard mineral resources. It however combined policy provisions from the previous SA Preferred Options (February 2007) Report and therefore the SA findings were considered to be the same. Two other mineral policies were newly introduced, 21: *Building Stones* and 22 *Coal Bed Methane* to provide policy provisions for all minerals which may be extracted in Cumbria. Again, effective implementation of the Generic Development Control policies was identified as being key to ensuring that the potential negative effects of the implementation of these policies are kept to a minimum.
**Waste Management Capacity**

7.37. Core Strategy Policy 9 Waste Capacity was modified to reflect higher maximum figures for managing municipal and commercial and industrial waste by the end of the plan period in accordance with regional figures for waste management and Core Strategy Policy 11 Reducing Landfill was therefore introduced to reflect targets for reducing household and municipal waste to landfill and for increased recycling.

7.38. As the upper end of the range of capacity figures for managing municipal and commercial and industrial waste by the end of the plan period had increased significantly, it was considered that both the related positive and negative SA impacts could be greater than the ones predicted in the SA Preferred Options (February 2007) Report. In relation to Core Strategy Policy 11, mixed positive and negative impacts were identified with this policy and it was highlighted that potential associated impacts could be relatively difficult to mitigate, for example those related to transport or linked with perceptions and awareness of the sector. Again, 'successful' implementation of the Site Allocation and the Generic Development Control Policies was identified as being key in delivering both the related Plan Objectives and Waste Management Capacity.

**The Planning Remit**

7.39. ‘Waste minimisation measures’ related to Objective 2 and the ‘geological disposal’ of radioactive waste linked to Core Strategy Policy 15 were identified as policy areas requiring further clarification in relation to the planning system’s role in supporting and or delivering wider sustainable waste management.

**AUDIT TRAIL**

7.40. Taking each Submission Draft Core Strategy Policy in turn, Appendix 4 endeavours to provide an ‘audit trail’ for the SA work undertaken in relation to the alternatives considered for each policy, including the justification for selecting the related Preferred Option/s where relevant, discussions on compliance with the SA findings and on progression of the Preferred Options to the Submission Versions. This is complicated somewhat by the fact that the grouping of the policy topics has inevitably evolved from the Issues and Options to Preferred Options to Submission Draft Policies, meaning that the linkages are not always clear cut.
8. APPRAISAL OF THE SUBMISSION DRAFT CORE STRATEGY AND GENERIC DEVELOPMENT CONTROL POLICIES

INTRODUCTION

8.1. The Cumbria Minerals and Waste Development Framework Core Strategy DPD has been appraised against the SA Objectives and Criteria outlined in Chapter 5. The appraisal of the Core Strategy Objectives against the SA Objectives was undertaken and presented in the Scoping Report prepared by Cumbria County Council (July 2006).

APPRAISAL OF THE CORE STRATEGY OBJECTIVES

8.2. At the scoping stage of the SA, the draft Core Strategy Objectives were assessed against the Sustainability Objectives to determine the level of compatibility between the two sets of objectives. A summary of the synergies and tensions identified is provided below. The appraisal table from the Scoping Report is included as Appendix 5.

8.3. Whilst the wording of the draft Core Strategy Objectives (1 to 9) has been updated since the scoping stage of the SA, the principles underlying the objectives remain unchanged. An additional Objective has also been added to the original list (Objective 10) in relation to increasing community and stakeholder involvement and ownership of initiatives and planning for sustainable minerals and waste developments. An appraisal of the sustainability implications of the Proposed Changes to the Preferred Core Strategy Objectives was undertaken and reported in the SA of the Preferred Options (October 2007). The Core Strategy Objectives have not been modified since this stage.

Synergies

• The majority of the draft Plan Objectives were identified as being compatible with the Key SA Objective NR4, to manage mineral resources sustainably and to minimise waste. In particular, this relates to the draft Core Strategy Objectives which aim to minimise the impact of mineral and waste developments on climate change, promote the waste hierarchy and the re-use and recycling of minerals, and which encourage site and materials management with minimal environmental impacts.

• The appraisal identified that the Plan Objectives were generally compatible with SA Objective SP2 relating to access.

• SA Objective SP5 was also identified as being positively supported by several of the draft Core Strategy Objectives, although a recommendation was made relating to increasing stakeholder involvement in the planning process. This has been addressed through the inclusion of Objective 10 as detailed above.
The majority of the draft Core Strategy Objectives were deemed to be compatible with the economic SA Objective EC3 although it was highlighted that the Plan Objectives were too broad to determine how the local economy would be affected.

Tensions

- Very few of the draft Core Strategy Objectives were identified as conflicting with the SA Objectives. However, possible tensions were identified in relation to the draft Core Strategy Objective on environmental protection and its predicted effect on the water and soil environments (SA Objectives NR2 and NR3). This was felt to be due to the narrow focus of the objective on site restoration. This has been addressed in the updated wording of Core Strategy Objective 8.

- The assessment also identified a lack of objectives relating to the protection of the natural environment including biodiversity and landscape (SA Objectives EN1 and EN2).

- Reduced primary extraction and more efficient use of minerals was assessed as potentially conflicting with SA Objective EC1, as increased employment as a result of greater recycling and alternative methods of waste management could be offset by a reduction in employment in the minerals sector.

APPRAISAL OF THE CORE STRATEGY POLICIES

8.4. The Core Strategy Policies (Overall Core Strategy Policies 1 to 7, Waste Core Strategy Policies 8 to 12 and Minerals Core Strategy Policies 13 to 18) were appraised against the SA Objectives to determine the likely significant effects of implementing these policies. The assessment tables for the eighteen policies comprising the Core Strategy are included as Appendix 6. The seventeen Generic Development Control Policies have also been assessed and the relevant assessment table included as Appendix 7. The assumptions taken into account in undertaking the appraisals are discussed in Chapter 3.

8.5. A summary of the findings of the appraisals is provided below, considering each of the SA headline objectives in turn. A final commentary is then provided on whether the implementation of the Core Strategy and Generic Development Control Policies is likely to contribute to the achievement of the SA Headline Objectives.

SA Objective NR4: To manage mineral resources sustainably and to minimise waste

8.6. The findings of the SA of the Overall Core Strategy Policies highlighted that both policies 1 and 7 would contribute strongly to the achievement of key Objective NR4 to manage mineral resources sustainably and to minimise waste. The remaining Overall Core Strategy Policies (2-6) scored neutrally against this Objective.

8.7. Core Strategy Policy 1 Sustainable Location and Design seeks to identify sustainable locations for the siting of waste management facilities and mineral extraction sites taking into account minerals and waste road miles minimisation. It closely relates to
the renewable energy, waste production and primary aggregates minimisation criteria associated with Objective NR4. The policy advocates the provision of 10% of energy supplies from decentralised renewable or low carbon energy supplies for any waste management developments over 1000 square metres. Despite this positive score, it is important to note that any benefits will be subject to this being a deliverable target.

8.8. Core Strategy Policy 7 Strategic Areas for New Developments identifies appropriate locations for the required waste management facilities and specific mineral supplies. In relation to waste, the identification of potential locations for the required waste management facilities will allow for wastes to be treated in accordance with the waste hierarchy, including recovery/recycling or Energy from Waste. With regards to minerals, the policy would help to provide a steady flow of minerals to meet identified requirements, including national demand where appropriate.

8.9. It is predicted that waste arisings generated in Cumbria will increase by the end of the plan period. To this end, it is proposed that an integrated network of recycling, composting and Energy from Waste facilities is developed to deal with the waste generated (CSP 9 Waste Capacity). This accounts for the strong positive score that CSP 9 achieves in relation to Key Objective NR4, particularly in relation to the waste hierarchy and renewable energy criteria.

8.10. In relation to waste specifically, Core Strategy Policy 8 Provision for Waste aims to secure a network of waste management facilities which make provision for the management of all of the waste generated within the County (net self sufficiency). Whilst this is in line with the ‘proximity principle’ and the overarching aim of sustainable development, there still remains potential for waste to be imported to Cumbria which could have an adverse effect on the Key Objective. Overall however, it is considered unlikely if the progress the County has made in respect to recycling since 2006 continues and any imported waste is managed in accordance with the waste hierarchy, utilising the integrated network of facilities described above.

8.11. Policies CSP 10, CSP 11 and CSP 12 all score slightly negatively against Key Objective NR4. These policies all relate to the management of radioactive waste which due to its nature cannot be re-used or recycled and as such, can only be influenced by the waste hierarchy in a limited manner. However, it is important to note that policies CSP 10 High and Intermediate Level Radioactive Wastes Storage and CSP 11 High and Intermediate Level Radioactive Wastes Geological Disposal are included in the light of uncertainties about national policy for managing high and intermediate level radioactive wastes. Much of the UK’s low level nuclear waste is currently stored at the Repository in Drigg and planning permission has recently been granted for an additional vault which will provide capacity until 2016. Again, it is important to acknowledge that policy CSP12 Low Level Radioactive Waste has been included to recognise that, with its reduced role in terms of the types of waste, the Repository will continue to be an integral component of the UK’s waste management capability, in accordance with Government policy. The Nuclear Decommissioning Authority (NDA) has given assurances that any further capacity would be used only for those wastes that need such an engineered facility and details provided of the measures that are being taken in connection with the waste hierarchy to minimise wastes.
8.12. The remaining waste and general core strategy policies were assessed as having a limited or neutral effect on SA Key Objective NR4.

8.13. In relation to minerals, Core Strategy Policies 13 Supply of Minerals and 14 Minerals Safeguarding scored very positively against Key Objective NR4. These policies in combination would seek to ensure that the adequate level of mineral supplies as established by national and regional policy requirements was met and that mineral resources are protected from sterilisation from development.

8.14. The remaining Mineral Core Strategy Policies, namely 15, 16, 17 and 18, also make a contribution to the achievement of Objective NR4. Because they deal with minerals which are used for specific purposes (e.g. local building stones), provisions are in place to ensure demand within the County Council is met, scoring positively against NR4. The need for minerals conservation has also been taken into consideration as far as reasonably possible, for example:

- Although Core Strategy Policy 15 Marine Dredged Aggregates does not explicitly encourage the use of secondary/recycled materials or co-products from minerals working, the policy is seeking to conserve land won sources of sand and gravel, which is thought to be necessary as most of the existing planning permissions for sand and gravel quarries run out by 2011;

- Core Strategy Policy 16 Industrial Limestones provides for the extraction of high purity limestone only if it is primarily for non-aggregate uses, and national or regional need has been demonstrated.

8.15. In relation to Core Strategy Policy 17 Building Stones, whilst the policy potentially scores negatively against minimising primary extraction in favour of the use of secondary/recycled materials, it is important to highlight that substitutes are limited, particularly as this policy is seeking to help maintain Cumbria’s local built distinctiveness. With respect to Minerals Core Strategy Policy 18, the extraction of coal bed methane for power generation could also, to a limited extent, offset the use of other more traditional energy minerals. The methane quality is such that it has the potential to be fed directly into the gas distribution network.

Is SA Objective NR4 likely to be achieved?

8.16. As drafted, the Core Strategy Policies will make an important contribution to the achievement of SA Objective NR4. However, it is important to note that:

- This assumes that sufficient suitable sites in Cumbria can be made available through the planning system to deliver the mineral supply requirements identified and the waste treatment capacity required. The Site Allocations DPD will play a key role in this respect.

- The effective application of wider regulatory and fiscal mechanisms will be important in supporting the measures included in the MWDF to achieve this objective, particularly in relation to minerals conservation, waste minimisation, and the delivery of an integrated network of waste management facilities.
‘Special circumstances’ apply to radioactive wastes as these cannot be re-used or recycled. However, the fact that these wastes are therefore difficult to manage in accordance with the waste hierarchy is an important consideration given the ongoing debates regarding national energy policy.

**SA Objective SP2: To improve access to services, facilities, the countryside and open spaces**

8.17. Submission Draft policies of relevance to SA Objective SP2 are the Overall Core Strategy Policies and the waste related Core Strategy Policies. The minerals related Core Strategy policies have not been assessed against this SA criterion as, with the exception of site-specific considerations in relation to public access which will be considered at a later stage, there is no strong linkage between this SA Objective and the minerals related Core Strategy policies.

8.18. In relation to the Overall Core Strategy policies, the Planning Obligations policy makes some contribution as the proposed community facilities included in this policy may include recycling and composting services. Some uncertainty has been identified in relation to Core Strategy Policy 7 Strategic Areas for New Developments as it is unclear if the proposed waste management facilities would include facilities which could be easily accessed by local communities.

8.19. The Waste Core Strategy policies are likely to have a limited but positive effect on improving access to recycling and composting services with two policies (CSP 8 and CSP 9) scoring positively in relation to Objective SP2. CSP 8 Provision for waste advocates that each community should take responsibility for managing their own waste which implies the creation of local, accessible facilities and CSP 9 Waste Capacity seeks to identify sites and waste management solutions suitable for smaller communities.

*Is SA Objective SP2 likely to be achieved?*

8.20. As drafted, the planning provision for new waste management facilities proposed in the Core Strategy Policies will make an important contribution to the achievement of SA Objective SP2. However, it is important to note that the Site Allocations DPD will play a key role in identifying appropriate sites for community facilities, which do not comprise public rights of way or access to open space. In addition, the appropriate Waste Management Strategies will be required to work alongside the MWDF to ensure delivery of these facilities.

**SA Objective SP5: To improve the health and sense of wellbeing of people**

8.21. The assessment identified a range of potentially positive and negative effects on the health and sense of wellbeing of people associated with the implementation of the General, Waste and Mineral Core Strategy Policies.

8.22. At the outset, it is important to recognise the social and health benefits of having a robust framework for future minerals and waste planning in place, particularly if, in the absence of this, Cumbria failed to deliver adequate treatment capacity for
increasing waste arisings. As discussed previously, it was also assumed that given other regulatory regimes, mineral and waste sites would be constructed and operated in accordance with environmental and health and safety regulations.

8.23. Notwithstanding this, the potential for negative effects on health and sense of wellbeing still arise because waste management facilities and quarries can still be perceived as ‘bad neighbours’ by the general public, even when safeguards and working practices are in place to ensure that their impacts are minimised. This is particularly the case with radioactive waste, which is acknowledged in Core Strategy Policy 3 which seeks to provide Cumbria with packages of community benefits which offset the impacts associated with housing radioactive waste management sites. In addition, CSP 4 Environmental Assets aims to protect, maintain and enhance overall quality of life and CSP 5 Afteruse and Restoration seeks appropriate restoration and aftercare of waste management sites, both of which will contribute to mitigating potential negative effects of waste management sites and practices on health and wellbeing.

8.24. Implemented in isolation, Core Strategy Policy 9 Waste capacity could have the potential for negative effects against SA Objective SP5 as the policy will result in the creation of a number of new waste management facilities. However, Generic Development Control policies DC 2 and DC 4 should assist in keeping these to a minimum as they set out criteria to ensure that suitable locations are chosen for facilities and that the effects of operations on close receptors are prevented or minimised where possible. In this respect, the Site Allocations DPD will also be key. This is also true for Core Strategy Policies 13 and 14 in relation to Supply of Minerals and Minerals Safeguarding as it was highlighted that the performance of both these policies against this Objective will require further review through the appraisal of the site allocations when new sites for aggregates extraction will be identified.

8.25. The SA also highlighted that transport related impacts on health and sense of wellbeing are relatively difficult to mitigate, and may be experienced by people in close proximity to both existing sites which are extended and new sites. Appropriate implementation of both CSP 1 in relation to minimising ‘mineral and waste miles’ and the Generic Development Control Policies, especially Traffic and Transport, would contribute to the minimisation of these potential adverse effects.

Is SA Objective SP5 likely to be achieved?

8.26. As drafted, the Core Strategy Policies will make an important contribution to the achievement of SA Objective SP5, when implemented in conjunction with the Generic Development Control Policies and subject to the findings of the SA of the Site Allocations DPD. Notwithstanding this, in some circumstances, waste management facilities are still likely to be perceived as ‘bad neighbour’ developments by the general public, and education and awareness raising may be required to respond to this. This would require co-ordination with other waste management ‘players’. Further work would also be required to determine the extent to which the site allocations minimised mineral and waste miles in practice.
SA Objective EN1: To promote and enhance biodiversity

8.27. At the outset, it is important to recognise the implications for biodiversity if a robust framework for future minerals supply, and particularly waste management, is not in place. Notwithstanding this, as Cumbria has more nationally and internationally important wildlife sites than any other county, performance of the draft DPDs against this SA Objective is key.

8.28. A number of general Core Strategy Policies acknowledge the value of Cumbria’s ecological resources. In particular, CSP 4 Environmental Assets promotes protection and enhancement of the natural environment including protected and non-protected environmental assets. CSP 5 Afteruse and Restoration will also have a positive effect as it requires the careful restoration of waste management sites and of current and past mineral working sites for biodiversity benefits. However, the SA highlighted that the Core Strategy Policy in relation to Planning Obligations could be stronger if the policy referred to “protection” and not “management” of environmental assets.

8.29. The SA did identify the potential for negative effects on biodiversity. The provisions for further waste and mineral development locations provided within overall Core Strategy Policy 7 could imply potential negative impacts on biodiversity, especially when the impact of this provision is considered cumulatively. In addition, further consideration will need to be given to the proposed waste facility in the south (Barrow in Furness) and the proposed extraction areas for mudstone (High Greenscohe Quarry for Askam in Furness) and very high specification roadstone (Ghyll Scaur) to the south-west due to their proximity to sites designated for their international natural heritage value (e.g. Morecambe Bay SPA, SAC and RAMSAR site). It is also known that proposed extensions to High Greenscohe quarry could impact on important areas of woodland. Whilst the siting of these facilities within these designated sites is unlikely given their planning policy protection, the potential for indirect effects should also be considered, including those related to the transport of waste and minerals.

8.30. The assessment of Core Strategy Policy 13 Supply of Minerals and Policy 14 Minerals Safeguarding also highlighted that performance against this SA Objective will require further review through the appraisal of the site allocations when new sites for aggregates extraction will be identified. Some uncertainty was also highlighted in relation to the potential effects of Core Strategy Policy 15 Marine Dredged Aggregates where a relative increase in marine dredged extraction and potential decrease in land won extraction would result in a locational shift in potential impacts. Whilst the policy may result in less impacts on protected (land based) environmental sites and species, there is greater uncertainty about marine species and this should be taken into account at the site-specific level.

8.31. Given the value of Cumbria’s ecological resources, the effective implementation of Generic Development Control Policies DC 3 Cumulative Impacts, DC 10 Biodiversity and Geodiversity and DC 16 Afteruse and Restoration will be important to minimise adverse effects on biodiversity as a result of waste management and mineral working, and to actively seek enhancement of ecological resources. Performance against this Objective will require further review through the appraisal of the site allocations.
Is SA Objective EN1 likely to be achieved?

8.32. The Core Strategy Policies will make an important contribution to the achievement of SA Objective EN1, when implemented in conjunction with the Generic Development Control Policies and subject to the findings of the SA of the Site Allocations DPD.

SA Objective EN2: To preserve, enhance and manage landscape quality and character for future generations

8.33. Waste transportation and continued mineral working and transportation will inevitably have potential adverse effects on landscape quality and on countryside remoteness and tranquillity. This is of particular relevance to the identification of sites for future mineral working as provided for in Overall Core Strategy Policy 7 Strategic Areas for New Development and minerals related Core Strategy Policies 13 and 14, which will need to be worked in new sites and by opencast methods, and to the extension of High Greenscoe quarry, where proposed extensions could impact on important areas of woodland.

8.34. In relation to Core Strategy Policies 13 Supply of Minerals and 14 Minerals Safeguarding, the SA highlighted that performance against this Objective will require further review through the appraisal of the site allocations when new sites for aggregates extraction will be identified. Again a relative increase in marine dredged extraction and potential decrease in land won extraction could result in a locational shift in potential impacts. Whilst inland landscapes may ‘benefit’ from this, the policy may result in greater impacts on coastal landscapes/ ’seascapes’.

8.35. In relation to Core Strategy Policy 17 Building Stones, it was highlighted that although mineral working will almost inevitably have an impact on landscape quality and its transportation will impact upon countryside remoteness and tranquillity, the use of local building stone to restore and maintain historic buildings can contribute to the protection of landscape features. Performance against this Objective will require further review through the appraisal of the site allocations.

8.36. Additional protection of landscape quality will be conferred through the implementation of General Core Strategy Policy 4 Environmental Assets which aims to protect, maintain and enhance the distinctive features that contribute to the environment of Cumbria and to the character of its landscapes; as such there is a strong positive score for CSP 4 against Objective EN2. Generic Development Control Policies DC 12 Landscape, DC 16 Afteruse and Restoration and DC 1 Traffic and Transport will also help ensure that potential negative impacts on landscape quality as a consequence of the implementation of the waste and minerals related Core Strategy Policies are kept to a minimum and that the potential for landscape enhancement is also achieved.

Is SA Objective EN2 likely to be achieved?

8.37. The Core Strategy Policies will make an important contribution to the achievement of SA Objective EN2, when implemented in conjunction with the Generic Development Control Policies and subject to the findings of the SA of the Site Allocations DPD.
SA Objective EN3: To improve the quality of the built environment

8.38. Submission Draft Policies considered against SA Objective EN3 are the Overall Core Strategy Policies and the minerals related Core Strategy Policies. The waste related Core Strategy policies have not been assessed against this SA criterion as, with the exception of site-specific considerations which will be considered at a later stage, there is no strong linkage between this SA Objective and the waste related Core Strategy Policies.

8.39. With respect to the Overall Core Strategy Policies considered, CSP 5 Afteruse and Restoration was highlighted as having a positive effect on the quality of the built environment in that it promotes restoration and aftercare for mineral working and, particularly, waste management sites.

8.40. Regarding the minerals related Core Strategy Policies, the SA highlighted that the majority of the policies would contribute in some manner to the conservation of the built environment. The Core Strategy Policies in relation to Supply of Minerals (CSP 13) and Building Stones (CSP 17) scored strongly positively in that they make provision for building materials such as gypsum, brick making mudstone and locally sourced stone for construction. Demand for gypsum has increased recently due to requirements for better thermal and acoustic performance in houses. Whilst potential adverse effects were highlighted under the criterion to reduce noise, light pollution and dust emissions from minerals development, the extent of these will depend largely on the routing of vehicles.

8.41. Core Strategy Policy 15 Marine Dredged Aggregates also scored slightly positive against the conservation and enhancement of the urban environment criterion as it may be particularly appropriate for marine dredged materials to be used for regeneration schemes in coastal towns. However, some uncertainty was highlighted in the assessment of this policy with regards to development in floodrisk areas. More information would be required to address this issue adequately.

8.42. Effective implementation of the Generic Development Control Policies 11, 13 and 16 Historic Environment, Flood Risk and Afteruse and Restoration will be essential to maximise benefits and minimise adverse effects.

Is SA Objective EN3 likely to be achieved?

8.43. The Core Strategy Policies will make an important contribution to the achievement of SA Objective EN3, particularly by making positive provision for the materials required to maintain and restore the local distinctiveness of Cumbria’s built environment. However, effective implementation of the Generic Development Control Policies and further consideration of this SA Objective at the site allocations stage will be required to minimise potential impacts of mineral extraction and waste management on the built environment.

SA Objective NR1: To improve local air quality and reduce greenhouse gas emissions

8.44. Whilst it is assumed that mineral and waste sites would be constructed and operated in accordance with environmental and health and safety regulations, the local (air
quality) and global (greenhouse emission) effects associated with the transport of these material are harder to avoid or mitigate. In relation to the overall Core Strategy Policies, the first policy Sustainable Location and Design would potentially have a strong positive impact on objective NR1. The policy states that minerals and waste developments would need to demonstrate that they form part of an integrated process for reducing greenhouse gas emissions or for carbon-offsetting measures. Policy provisions to achieve this include ‘minerals and waste miles’ minimisation and the development of renewable energy/clean carbon technologies as part of development proposals with useful floor space of over 1000 square metres. Deliverability of this policy on the ground will however be key to ensuring this positive contribution.

8.45. The assessment identified the potential for mixed and/or uncertain effects on Objective NR1 as a result of the implementation of the specific Waste and Minerals Core Strategy Policies. In relation to the Waste Core Strategy Policies, policies CSP 8 to CSP 12 could all result in the creation of new waste management facilities and an associated change in the transportation of waste from the current situation. Further work would however be required to clarify the implications of this for minimising waste ‘miles’.

8.46. This applies equally to Mineral Core Strategy Policies, which have all been identified as negatively contributing to the emissions reducing criterion due to the emissions derived from minerals transport. A generality in the Supply of Minerals, Industrial Limestones and Building Stones policies (CSP 13, CSP 16 and CSP 17) is the absence of a reference to sustainable ways of transport, albeit it is accepted that alternatives are likely to be limited. In relation to CSP 15 Marine Dredged Aggregates, it has been highlighted that this policy could be improved by promoting the transport of these minerals by sea. It is considered, however, that policy provisions relating to sustainable means of transport where possible are covered by the Overall Core Strategy Policy 1 on Sustainable Location and Design in relation to the minimisation of mineral miles. Therefore appropriate implementation of these policies in combination, together with Generic Development Control Policy DC 1 which promotes the use of sustainable forms of transport including sea and rail where possible, would be crucial for achieving SA Objective NR1.

8.47. Whilst Core Strategy Policy 18 Oil and Gas and Coal Bed Methane would support the diversification of energy generating sources, there is still potential for the policy to contribute to greenhouse gas emissions/deterioration of local air quality through the combustion of the energy minerals/methane for power generation. There is also some uncertainty related to this policy and the nature/extent of post-extraction transportation and associated potential impacts.

8.48. Potentially positive effects of implementation of the Waste Core Strategy Policies were identified with respect to the criteria relating to carbon efficient technologies and Energy from Waste facilities. CSP9 Waste Capacity in particular would have a positive effect due to the provision it makes for the development of alternative forms of waste management including Energy from Waste facilities and Mechanical and Biological Treatment plants. Indirectly, the Core Strategy policies relating to
radioactive waste management also score slightly positively against these criteria as nuclear energy is essentially a carbon efficient method of energy production.

8.49. The efficient implementation of several other Generic Development Control Policies including DC 3 Cumulative Environmental Impacts, DC 4 Criteria for Waste Management Facilities and DC 8 Applications for New Conditions policies would all be required to ensure that potential negative effects on this objective are kept to a minimum. These would minimise the effects of dust and emissions on nearby receptors by setting stringent criteria to which waste management developments must adhere.

**Is SA Objective NR1 likely to be achieved?**

8.50. The draft policies do include measures which seek to contribute positively towards the achievement of this Objective. Overall however, the Core Strategy Policies would have mixed/uncertain effects, largely because the transport related impacts are difficult to mitigate or even to predict, particularly prior to the completion of the site allocation work. Notwithstanding this, effective implementation of the Generic Development Control Policies will be key to minimising both local and global adverse effects on this objective.

**SA Objective NR2: To improve water quality and resources**

8.51. Water quality within Cumbria is generally very good; the County has a significantly higher percentage of rivers, lakes and reservoirs which are of good to fair quality when compared with the rest of England. Whilst it is assumed that mineral and waste sites would be constructed and operated in accordance with environmental and health and safety regulations, the chances of a water pollution incident due to waste or minerals related activities and transport cannot be completely eliminated. The significance of this would depend on the sensitivity of the receiving water environment which will require further review in progression of the Site Allocation DPD. As a consequence, the Waste and Minerals Core Strategy Policies score slightly negatively against Objective NR2. No significant positive or negative effects derived from the implementation of the Overall Core Strategy Policies have been identified.

8.52. Effective implementation of The Water Environment and Floodrisk Generic Development Control Policies would contribute to keeping potential adverse effects on the water environment to a minimum.

**Is SA Objective NR2 likely to be achieved?**

8.53. Whilst the water environment receives strong policy protection in the Submission Draft Core Strategy, the MWDF will only perform strongly against this Objective if this is reflected in the Site Allocation DPD and through effective implementation of the Generic Development Control Policies. This is particular important in Cumbria given the high biological and chemical quality of water within the County, and the value of associated ecological assets.
SA Objective NR3: To restore and protect land and soil

8.54. The Overall, Waste and Mineral Core Strategy Policies have been assessed as having potential mixed effects on Objective NR3. Some potential negative impacts could derive, for example, from the implementation of Core Strategy Policy 7 Strategic Areas for New Developments as a consequence of the development of new waste management facilities, particularly given the lack of brownfield land within the County Council area, and continued mineral extraction and extraction in previously non worked areas (e.g. gypsum). However, other Overall Core Strategy (e.g. CSP 5 Afteruse and Restoration) and Generic Development Control Policies (e.g. DC 10 Biodiversity and Geodiversity, DC 15 Protection of Soil Resources, DC 16 Afteruse and Restoration) have been put in place to seek balance between potentially competing Plan objectives and to ensure that full advantage is taken of the potential of these policies to help deliver this SA Objective.

8.55. The SA identified that Core Strategy Policy 4 Environmental Assets would also contribute indirectly to this Objective given the link between natural heritage and the commonly acknowledged ‘functions’ of soil. The policy, however, could be strengthened further if soil was considered explicitly as an ‘environmental asset’. 

8.56. In specific relation to the Waste Core Strategy Policies, these have been assessed as having a predominantly neutral but potentially slightly negative impact on Objective NR3. This is based on the assumption that there will always be a slight risk to the soil environment through the development and operation of waste management facilities, even if environmental standards are high and best practice measures are in place.

8.57. It is not clear at this stage if new facilities would be located on brownfield/previously developed land or if good quality agricultural land would be required. As such, this will require further assessment through the appraisal of the site allocations. Effective implementation of the Generic Development Control Policy 5 Criteria for Landfill, which establishes criteria for the location of new landfill capacity identified in CSP 9 and advocates the use of derelict land where possible, would also be key to achieving this Objective.

8.58. With respect to minerals, Core Strategy Policies 13 and 14 could impact on geological quality and fragility through both continued and new extraction. If a relative increase in marine dredged extraction and potential decrease in land won extraction arose as a consequence of the Marine Dredged Aggregates policy, this could result in a locational shift in potential impacts. If so, good quality agricultural land, greenfield sites and soil quality could all benefit from this. Potential impacts on geological quality and fragility would have to be assessed on a site specific basis.

Is SA Objective NR3 likely to be achieved?

8.59. Whilst several of the Waste Core Strategy Policies provide positively for the creation of new waste management facilities, and most of the Minerals Core Strategy Policies for continued mineral extraction, the Generic Development Control Policies seek to minimise negative impacts on the soil resource. However, as previously mentioned, it is difficult to provide a judgement of the overall effect of the MWDF DPDs on the soil environment until the site allocation work has been completed.
SA Objective EC1: To retain existing jobs and create new employment opportunities

8.60. Implementation of the Core Strategy Policies will have an overall positive effect on Objective EC1. Strong positive scores were identified in relation to several of the General Core Strategy Policies. In particular, CSP 2 Economic Benefit would help to achieve the Objective as it aims to ensure that new proposals for waste and minerals management facilities can demonstrate their economic potential through employment creation. CSP 7 Strategic Areas for New Developments was also assessed as having a strong positive score as new waste and minerals management facilities in the identified areas would boost local employment; this would be particularly beneficial in Barrow and Furness where unemployment is higher than the national average.

8.61. The Waste Core Strategy policies also score positively; in particular, CSP 9 Waste Capacity was assessed as having a strong positive score as the development of new waste management facilities will lead to the creation of more jobs within the waste management sector. Similarly, the remaining Waste Core Strategy Policies score positively as they all imply the creation of new facilities or the continued use of existing sites for waste.

8.62. In relation to the Minerals Core Strategy Policies, it was identified that all would contribute to the maintenance of employment in the minerals sector. Core Strategy Policies 13 Supply of Minerals and 14 Minerals Safeguarding would provide longer term security to a number of mineral sectors and to related industries within, and outside, Cumbria. This is particularly important for gypsum, as British Gypsum is an important local employer, and for brick making mudstone and local building stone. The geographical distribution of employment, however, may change if the pattern of extraction alters.

Is SA Objective EC1 likely to be achieved?

8.63. As drafted, the Core Strategy Policies will make an important contribution to the achievement of SA Objective EC1. However, it is important to note that this assumes that with the other plan policies in place, particularly those in relation to the protection of the environment and of local amenity, sufficient suitable sites in Cumbria can be made available through the planning system to deliver the mineral and waste developments required to retain existing jobs and create new employment opportunities. Other key ‘players’ in mineral extraction and waste management also have a key role to play in achieving this.

SA Objective EC3: To diversify and strengthen the local economy

8.64. Implementation of a number of the Core Strategy Policies will have an overall positive effect on Objective EC3. Overall Core Strategy Policy 2 Economic Benefit scored highly against the criteria relating to industry diversification as the policy focus on supporting other industries and development would strongly contribute to diversifying and strengthening the local economy. The policy aims to ensure that waste management projects are not prioritised over other forms of development which could have a strong economic benefit to the County. CSP 7 also scores highly as it advocates diversification into a range of waste management techniques including
gasification and Mechanical Biological Treatment plants and this may also result in increased investment and innovation and research into the sector as a whole. Core Strategy Policy 5 Afteruse and Restoration could also help contribute to diversifying and strengthening the local economy (e.g. agriculture, renewable energy schemes etc.) depending on the proposed use of the previously worked mineral or waste areas.

8.65. Overall, the Waste Core Strategy Policies score positively against Objective EC3. CSP 9 Waste Capacity was assessed as having a particularly strong positive score against the criteria as the policy advocates diversification into alternative methods of waste management including gasification and Mechanical Biological Treatment. However, the draft Waste Core Strategy Policies do acknowledge the problems associated with the high concentration of nuclear activity in the area, including the over-reliance on one industry and the effect that the negative perception of that industry has on other investment. As a consequence, the three policies in relation to radioactive waste score both positively and negatively against this Objective.

8.66. The minerals related Core Strategy Policies are likely to have a more limited positive effect on the Objective to diversify and strengthen the local economy as they are likely to largely maintain the current contribution of the minerals sector to the local economy, albeit they could all, potentially, encourage further business growth. Core Strategy Policies 13 and 14 may stimulate research relating to the recycling of minerals products and the sustainable use of co-products by supporting at least one quarter of the aggregates used within Cumbria to be met by secondary or recycled aggregates. Core Strategy Policy 15 in relation to Marine Dredged Aggregates may contribute to diversifying the economy by providing a stronger policy commitment to marine dredging.

Is SA Objective EC3 likely to be achieved?

8.67. As drafted, the Core Strategy Policies, particularly those in relation to waste, will make a contribution to the achievement of SA Objective EC3. However, as above, it is important to note that this assumes that with the other plan policies in place, particularly those in relation to the protection of the environment and of local amenity, sufficient suitable sites in Cumbria can be made available through the planning system to deliver the developments required to diversify and strengthen the local economy in this way. Again, other key ‘players’ in waste management also have an important role to play in achieving this. The draft Waste Core Strategy Policies do acknowledge the problems associated with the potential over-reliance on the nuclear industry, which could frustrate other efforts to achieve this Objective, both within and beyond the MWDF.
9. CONCLUSIONS AND IMPLEMENTATION

9.1. Given ‘expectations’ in relation to the MWDF, including the national and regional policy context for minerals supply and waste management, it is important to note at the outset that the Core Strategy Policies will make an important contribution to the achievement of the key SA Objective To manage mineral resources sustainably and to minimise waste (NR4). However, it is important to note that this assumes that sufficient suitable sites in Cumbria can be made available through the planning system to deliver the mineral supply requirements identified and the waste treatment capacity required. The effective application of wider regulatory and fiscal mechanisms will also be important in supporting the measures included in the MWDF to achieve this Objective, particularly in relation to minerals conservation, waste minimisation, and the delivery of an integrated network of waste management facilities. ‘Special circumstances’ apply to radioactive wastes as these cannot be re-used or recycled. However, the fact that these wastes are therefore difficult to manage in accordance with the waste hierarchy is an important consideration given the ongoing debates regarding national energy policy.

9.2. In relation to the environmental and social SA Objectives, which are often interlinked, it is important to recognise the social and health benefits of having a robust framework for future minerals and waste planning in place, particularly if, in the absence of this, Cumbria failed to deliver adequate treatment capacity for increasing waste arisings. The SA has also assumed that given other regulatory regimes, and planning provisions, mineral and waste sites would be constructed and operated in accordance with environmental and health and safety regulations. However, with respect to the SA Objective in relation to health and sense of wellbeing (SP5), in some circumstances, waste management facilities are still likely to be perceived as ‘bad neighbour’ developments by the general public, and education and awareness raising may be required to respond to this. This would require co-ordination with other waste management ‘players’.

9.3. In addition, transport related impacts are difficult to mitigate or even to predict at this stage, particularly prior to the completion of the site allocation work. Further work would also be required to determine the extent to which the site allocations minimised ‘mineral and waste miles’ in practice, of considerable importance as this is a key policy provision, and required for the MWDF to perform well against the SA Objective to improve local air quality and reduce greenhouse gas emissions. This ‘deliverability’ point applies equally to the policy provision for renewable energy/clean carbon technologies as part of development proposals over a certain size.

9.4. SA Objectives in relation to landscape quality and character, biodiversity, the water environment and land and soil are particularly important given the recognised and recorded value of Cumbria’s environment. These environmental assets receive strong policy protection in the Submission Draft Core Strategy. However, for the MWDF to perform strongly against these Objectives, this must be reflected in the Site Allocation document and through effective implementation of the Generic Development Control Policies. Importantly, the latter make reference to the need to consider cumulative environmental effects, albeit this can be difficult in practice.
9.5. With specific reference to the quality of the built environment (SA Objective EN3), as drafted, the Core Strategy Policies will make an important contribution to this by making positive provision for the materials required to maintain and restore the local distinctiveness of Cumbria's built environment. However, effective implementation of the Generic Development Control Policies and further consideration at the Site Allocations stage will be required to minimise potential impacts of mineral extraction and waste management on the built environment.

9.6. Mineral extraction and waste management make important contributions to Cumbria’s economy and this is recognised in the Submission Draft policies. As a consequence, the draft policies will make an important contribution to the achievement of the economic SA Objectives (EC1 and EC3). However, it is important to note that this assumes that with the other plan policies in place, particularly those in relation to the protection of the environment and of local amenity, sufficient suitable sites in Cumbria can be made available through the planning system to deliver the mineral and waste developments required to retain existing jobs and create new employment and investment opportunities. Other key ‘players’ in mineral extraction and waste management also have an important role to play in achieving this. Significantly, the Plan also states that waste management projects should not be prioritised over other forms of development which could have a strong economic benefit for Cumbria, with further specific reference made in this context to the management of radioactive waste and a potential over-reliance on the nuclear industry.
10. MONITORING

INTRODUCTION

10.1. The SEA Directive requires that “member states shall monitor the significant environmental effects of the implementation of plans or programmes... in order, inter alia, to identify at an early stage, unforeseen adverse effects, and be able to undertake appropriate remedial action” (Article 10.1) and that the environmental report should provide information on “a description of the measures envisaged concerning monitoring” (Annex I (i)). The ODPM’s SA Guidance states that monitoring proposals should be designed to provide information that can be used to highlight specific issues and significant effects, and which could help decision-making. This represents Task E1 in the ODPM’s SA Guidance.

10.2. The ODPM’s SA Guidance states that it is not necessary to monitor everything. Instead, monitoring should be focussed on the significant sustainability effects that may give rise to irreversible damage (with a view to identifying trends before such damage is caused) and the significant effects where there is uncertainty in the SA and where monitoring would enable preventative or mitigation measures to be taken. The monitoring measures proposed in this SA Report therefore focus on the predicted significant effects only.

PROPOSALS FOR MONITORING

10.3. Whilst the SA has not identified many potentially significant adverse effects, this is on the basis of the following:

(i) that given other regulatory regimes, and planning provisions, mineral and waste sites would be constructed and operated in accordance with environmental and health and safety regulations;

(ii) that the Submission Draft Generic Development Policies will be replicated in the adopted Plan and implemented accordingly;

(iii) that a number of the appraisal findings cannot be confirmed until the Site Allocation work has been completed.

10.4. Given both this, and adherence to the precautionary principle, it is suggested that the following potentially adverse effects, including cumulative effects, should be monitored:

- effects on health and well being, particularly associated with the transport of minerals and waste, and with concerns about perceived ‘bad neighbour developments’;

- effects on air quality and on greenhouse gas emission levels, particularly associated with ‘mineral and waste miles’;

- effects on biodiversity and sites designated for their species or habitat value;
• effects on landscape quality and character and on cultural heritage features and sites;
• effects on the water environment including water quality and water resources;
• effects on land and soil quality;
• effects on the built environment including flood risk;
• effects on investment and economic diversification as a consequence of further development of the waste management sector.

10.5. Equally, where potentially significant beneficial effects have been identified, this is on the basis of further assumptions which, importantly, in some cases require action from other key minerals supply and waste management ‘players’. Given this, it is suggested that the following should also be monitored:

• the proportion of waste being managed in accordance with the waste hierarchy, following the development of appropriate new waste management facilities;
• the extent to which mineral resources are being managed sustainably and conserved, including the proposed end use of primary minerals and the production of secondary and recycled aggregates;
• the availability of locally sourced stone for the construction/repair of distinctive local buildings;
• the economic benefits associated with the development of new waste management facilities including employment, investment, research and innovation.

Monitoring Provisions in the Draft MWDF

10.6. The Vision, Objectives and Policies of the Core Strategy DPD will be delivered in the context of the MWDF as a whole, and the wider policy framework which sits alongside the planning system. This means that implementation of the Core Strategy will be influenced by how well it is reflected in the other DPDs forming part of the MWDF, including the Generic Development Control Policies and Site Allocations, as discussed, and by the degree to which these are successfully implemented. For this reason, monitoring the sustainability effects of implementing the Core Strategy DPD should be conducted as part of an overall approach to monitoring the sustainability effects of the whole MWDF, as well as taking account of broader social, economic and environmental trends. This approach is based on the (then) ODPM’s Good Practice Guidance on Monitoring Local Development Frameworks19.

10.7. Under the Planning and Compulsory Purchase Act 2004, Cumbria County Council is required to prepare an Annual Monitoring Report (AMR) to assess the extent to which policies in each DPD are being implemented. In accordance with the ODPM’s

Good Practice Guidance, the following Core Output Indicators are considered relevant for AMRs of Minerals and Waste Development Frameworks:

5a: Production of primary land won aggregates.

5b: Production of secondary and recycled aggregates.

6a: Capacity of new waste management facilities by type.

6b: Amount of municipal waste arising and managed, by management type and the percentage each management type represents of the waste managed.

7: Number of planning permissions granted contrary to the advice of the Environment Agency on either flood defence or water quality grounds.

8: Changes in areas and populations of biodiversity importance, including:
   (i) change in priority habitats and species (by type); and
   (ii) change in areas designated for their intrinsic environmental value, including sites of international, national, regional, sub-regional or local significance.

9: Renewable energy capacity installed, by type.

10.8. The Core Strategy DPD identifies some further targets and draft indicators that will be used to monitor the policies of the Core Strategy.

10.9. Table 10.1 below sets out suggested measures for monitoring the potentially significant sustainability effects of implementing the MWDF Core Strategy DPD, as listed above. Several of the indicators have been extracted from the monitoring matrix presented in the Core Strategy DPD and these are shown in bold in Table 10.1. It is important to note that the indicators proposed in Table 10.1 are included as suggestions at this stage, as it is recognised that many datasets may not be available for monitoring some of the sustainability effects of the Core Strategy DPD. In addition, as stated in the SA Guidance, the data used for monitoring will, in many cases, be provided by outside bodies. Information collected by other organisations, such as the Environment Agency can also be used as a source of indicators. It is therefore recommended that the County Council continues the dialogue with statutory environmental consultees and other stakeholders commenced as part of the SA process and MWDF preparation, and works with them to agree the relevant sustainability effects to be monitored and to obtain information that is appropriate, up-to-date and reliable. It should also be noted that the sustainability effects to be monitored may need to be revised at subsequent stages of the MWDF DPD preparation, in response to consultation comments and revisions to the DPDs.

Table 10.1: SA monitoring recommendations for the Cumbria MWDF

<table>
<thead>
<tr>
<th>What needs to be monitored?</th>
<th>Suggested indicators (or sources for indicators)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rates of waste re-use, recovery or recycling</td>
<td>% household waste recycled or composted</td>
</tr>
<tr>
<td>Impact Area</td>
<td>Indicator</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Proportion of household, municipal, construction, demolition and extraction waste sent to landfill | Use of recycled or secondary aggregates % of aggregates used in construction which are recycled or from secondary sources  
Production of secondary/recycled aggregates (Data may be obtainable from WRAP\(^{20}\) or ESA\(^ {21}\)) |
|                                               | Impacts on biodiversity including designated sites (SPAs, SACs, Ramsar sites and SSSIs) Contribution to BAP targets Condition of SSSIs and other designated sites (Data may be obtained from Natural England)  
Number of waste/minerals planning permissions granted contrary to local designation policy. |
|                                               | Impacts on landscape character and quality Condition of areas designated for their landscape value  
Number of waste/minerals planning permissions granted contrary to Natural England and/or Officer advice on landscape grounds  
Countryside Quality Counts\(^ {22}\) indicators (These indicators relate to Joint Character Areas, and should help to provide further background trends for understanding how cultural heritage, landscape and countryside is improving or declining within Cumbria, but would not necessarily relate directly to impacts from the MWDF) |
|                                               | Impacts on cultural heritage Heritage buildings ‘at risk’ (Data may be obtained from English Heritage)  
Countryside Quality Counts indicators (as above) |
|                                               | Impacts on air quality and greenhouse gas emission levels Amount of energy generated by Energy from Waste facilities  
The success of carbon reduction strategies including reducing road |

\(^{20}\) Waste & Resources Action Programme: www.wrap.org.uk

\(^{21}\) Environmental Services Association: www.esauk.org.uk. The ESA represents the UK’s waste management and secondary resources industry.

\(^{22}\) http://www.cqc.org.uk/results.html. Countryside Quality Counts focuses on the Joint Character Areas (JCAs) of England. The study has determined whether the scale and direction of change suggests that their character has been maintained or enhanced, or alternatively whether current changes suggest that an area remains neglected, or is continuing to transform.
## CO₂ emissions within Cumbria

| Impacts on water quality | The percentage of river length assessed as:  
| | a) good biological quality; and  
| | b) good chemical quality.  
| | *(Data may be obtainable from the Environment Agency and may help to provide further background trends for water quality in Cumbria)*  
| | Number of pollution incidents recorded by the Environment Agency in relation to licensed waste and minerals sites. *(Data should be obtainable from Environment Agency)*  
| Impacts on soil quality | Number of land pollution/contamination incidents related to minerals and waste management facilities  
| | *(Data may be obtainable from Cumbria CC, District Councils and the Environment Agency)*  
| Impacts on recreation or countryside | Countryside Quality Counts indicators *(as above)*  
| Economic benefits of waste management | Number of employees in waste industries  
| | Contribution of waste industries to economic sectors  
| | *(Data may be obtainable from CIWM²³ or the Environmental Services Association)*

²³ Chartered Institute of Wastes Management: [www.ciwm.org.uk](http://www.ciwm.org.uk)