Sustainability Appraisal of the Cumbria Minerals and Waste Development Framework

A Stage 2 Report to
Cumbria County Council

by Land Use Consultants

February 2007

Cumbria Minerals and Waste Development Framework

Sustainability Appraisal Stage Two Report: Preferred Options

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1. INTRODUCTION

BACKGROUND TO THE DEVELOPMENT FRAMEWORK

1.1. Cumbria County Council is currently 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. 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 2018.

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

(i) Issues and Options;

(ii) Preferred Options;

(iii) Submission of Draft Plan;

(iv) Examination in Public;

(v) Inspectors Report;

(vi) Adoption.

SUSTAINABILITY APPRAISAL

1.3. 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). Preparation of the MWDF must also be in accordance with the requirements of the European Strategic Environmental Assessment (SEA) Directive (Directive 2001/42/EC).

1.4. Following preliminary work undertaken by Cumbria County Council, including preparation of the SA Scoping Report by the Council's Sustainability Team, Land Use Consultants (LUC) were appointed by the County Council in August 2006 to complete the SA of the Cumbria MWDF. The first phase of the appraisal, in relation to the Issues and Options, was completed in October 2006. Given the iterative nature of the plan preparation and SA processes, appraisal work has now been undertaken in relation to the Preferred Options, namely in relation to the following interrelated policy documents:

(i) The Core Strategy;

(ii) The Site Allocations;

(iii) The Generic Development Control Policies.

1.5. This report outlines the key findings of this Stage Two appraisal. Whilst this draws significantly on the SA of the Issues and Options, and should be read in conjunction with this, further appraisal work has been undertaken where the Preferred Option was not considered as part of Stage One, for example if there were no 'reasonable alternatives' that merited assessment.

REPORT STRUCTURE

1.6. Following this introduction, Chapter Two provides some context to the Stage Two appraisal by briefly summarising the findings of the work undertake for Stage One. Chapter Three provides an overview of the sustainability appraisal findings for the Core Strategy and Chapter Four discusses the ongoing appraisal work in relation to the site allocations, including recommendations for further work. Chapter Five provides an overview of the appraisal findings for the Generic Development Control Policies and Chapter Six outlines the key conclusions, for consideration in progressing to the Draft Plan.

1.7. A number of supporting appendices are also provided. These are identified in the contents page and cross-referred to in the text.

2. CONTEXT FOR THE PREFERRED OPTIONS APPRAISAL

INTRODUCTION

2.1. The Stage One report in relation to the Issues and Options for the MWDF was completed in October 2006.[1] This report:

(i) Describes the key ***stages in the appraisal process***, as outlined in the government's guidance on the Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents.

(ii) Provides the ***baseline information*** which is being used as the basis for predicting and monitoring potential effects. This evidence base is being developed and utilised further as the stages of plan preparation and appraisal progress, and as policy options become more specific and locationally based.

(iii) Sets out the ***SA Framework*** which consists of a series of sustainability objectives against which sustainability effects can be described, analysed and compared.

(iv) Explains the ***scoping process*** whereby Cumbria County Council sought the views of the statutory environmental consultation bodies (Natural England (formerly the Countryside Agency and English Nature), English Heritage and the Environment Agency, and a range of additional relevant parties, on the scope and level of detail of the environmental information to be included in the SA report.

(v) Details the 'scenario' approach adopted to develop options for the appraisal of '***reasonable alternatives'*** including stakeholder involvement in this process. This included both combined options such as Waste Issue / Option 1 which addressed the overall approach to waste management, including the level to be managed, approach to energy from waste, number of sites required and recycling / composting targets, and discrete options such as Minerals Issue / Option 5 which related to the supply of local building stone.

(vi) Explains the approach adopted for ***assessing the effects*** of the options which was based on professional judgement and expressed qualitatively from ++ (very positive) to - - (very negative). Measures to avoid, minimise or mitigate potential adverse impacts and to secure identified benefits were also highlighted, including considerations for progressing draft preferred plan policies/identifying potential sites and requirements for co-ordination with other relevant parties.

(vii) Outlines the ***appraisal assumptions***, both specific to the individual scenarios/options appraised, and more generic assumptions in relation to the proper functioning of the land use planning and regulatory regimes.

(viii) Discusses SA ***reporting requirements***, including the need for the SA Report to form a public consultation document accompanying the draft MWDF and to demonstrate clearly that the SEA Directive's requirements have been met.

[1] http://www.cumbria.gov.uk/planning-environment/policy/minerals_waste/mwdf/susapp.asp

KEY FINDINGS OF THE APPRAISAL OF ISSUES AND OPTIONS

2.2. The Stage One appraisal highlighted a number of 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. These are summarised below.

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

2.3. 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 the MWDF, however, is 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.

2.4. Strategic level decisions also need 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 is 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, a more neutral option that accepts targets but does not seek to actively develop the minerals sector may be appropriate.

Key Issue 2: Strategic locational choices

2.5. 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 has 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.

2.6. Further locational choices need 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. 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.

2.7. 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.

2.8. 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.

2.9. The appraisal highlighted that it will be important to establish 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. 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

2.10. 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.

2.11. 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

2.12. The deliverability of potential plan policies was taken into account to ensure that the conclusions of the Stage One 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

2.13. 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.

ACTION TAKEN IN PROGRESSING THE PREFERRED OPTIONS

2.14. The Core Strategy for the MWDF includes an Overall Strategy that takes account of the sustainability objectives identified for the SA. In addition, the findings from Stage One have been taken into account by the County Council in developing the Preferred Options. For example, considerable emphasis has been placed on reducing 'minerals and waste miles', albeit the implementation of this will require further consideration. In addition, many of the preferred policies attempt to strike a balance between the 'do minimum' and 'do maximum' approaches tested out in the Stage One SA, to incorporate elements of both which perform well in sustainability terms and provide a 'best fit' for Cumbria.

3. THE CORE STRATEGY

INTRODUCTION

3.1. 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 Development Plan Documents (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.

APPROACH TO THE APPRAISAL

3.2. A sustainability appraisal has been undertaken of:

- the Preferred Overall Strategy and Core Strategy Policies CSO 1 – CSO 4;
- the Preferred Waste Strategy and Core Strategy Policies CSW 1 – CSW 7;
- the Preferred Minerals Strategy and Core Strategy Policies CSM 1 – CSM 7;

3.3. A written commentary is provided in relation to the Overall Strategy. The appraisals of the waste and minerals strategies have been 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 (see **Appendix 1).** Further appraisal work has been undertaken for the following policies where the Preferred Option was not considered as part of Stage One as 'reasonable alternatives' that merited assessment were unclear:

- Policy CSW 6: High and Intermediate Level Radioactive Wastes;
- Policy CSW 7: Low Level Radioactive Waste;
- Policy CSM 1: Supply of Minerals (Gypsum) and CSM 6: Gypsum;
- Policy CSM 4: Marine Dredged Aggregates;
- Policy CSM 5: Industrial Limestones.

These assessments are provided as **Appendix 2**.

OVERALL STRATEGY

3.4. The preferred overall strategy for the Cumbria MWDF and the associated implementing policies are firmly grounded in sustainability. This is reflected in the draft Plan Objectives which were tested against the sustainability objectives in the SA scoping report. At 'first glance', they therefore score well against the sustainability appraisal criteria. However, it is important to draw attention to the following:

Striking a Balance

3.5. In a number of policy areas, the appraisal of Issues and Options considered a range of 'extremes' to draw out the sustainability strengths and weaknesses associated with a particular policy emphasis, such as economic growth or environmental protection. In progressing to the Preferred Options, Cumbria County Council is wisely seeking to select components of these options which provide opportunities to maximise the sustainability strengths and to minimise weaknesses. As a consequence of this however, implementation of some policies in isolation (e.g. ***CSO 1: Sustainable Development***) and others in combination (e.g. ***CSO 2: Minimising Road Miles*** and ***CSO 3: Environmental Assets***) may require a careful balance to be struck between competing plan and sustainability objectives such as local economic growth versus protecting environmental assets, or global environmental considerations such as minimising carbon dioxide emissions versus protecting local environmental assets. This balance is also reflected in revisions to the draft Plan objectives, which now seek to 'optimise' as opposed to 'maximise' local economic benefits from minerals and waste developments. This is an issue which will need to be explored further in relation to more detailed policies and the internal compatibility of the plan.

Uncertainty

3.6. A sustainability appraisal should identify areas of uncertainty. The overall strategy for the MWDF and accompanying policies place emphasis on minimising the impacts of minerals and waste developments on climate change. This is a new direction for the plan and reflects emerging national and regional policy on the subject. However, a number of uncertainties exist in relation to both the causes and consequences of climate change and the draft Plan needs to reflect this. For example, as acknowledged in the supporting text for the preferred overall strategy, the relative merits of different minerals and waste management processes and technologies with regard to greenhouse gasses is not clear cut. This means that in making positive land use provision for waste management facilities, sites need to be flexible enough to accommodate a range of facilities.

Deliverability

3.7. Whilst on paper the preferred overall strategy performs well against sustainability objectives, implementation 'on the ground' will be key to delivering this. The site allocation and generic development control policies, as discussed below, will have an important role to play in this. In addition, all opportunities for core strategy policies to be mutually supportive should be reviewed. For example, policy ***CS0 4: Afteruse and Restoration*** can support policies in relation to climate change by encouraging tree planting where appropriate.

3.8. To ensure deliverability, there will also be a need for co-ordination with a range of other organisations, as also addressed below in relation to specific policy areas.

WASTE CORE STRATEGY

3.9. As identified in **Appendix 1** which reviews the preferred policies against their corresponding appraisal at the Issues and Options Stage, policy ***CSW 1: Provision for Waste*** which promotes a net sufficiency model of waste management relates back to consideration of Waste Issue 1. Different levels of provision were assessed as part of the Stage One SA which concluded that whilst providing for more than Cumbria's wastes would score strongly against economic criteria, the option of net self sufficiency would be most appropriate where there is concern about the capacity of the area to absorb the level of development and the associated transport movements that would flow from providing for a higher level of provision.

3.10. ***Policy CSW 2: Waste Hierarchy*** promotes the management of waste as high as possible up the waste management hierarchy, for which sufficient sites would need to be identified. Whilst this policy option was not considered *per se* in the Stage One SA, the component parts were however treated under different waste Issues and Options. These provide a useful indication of the considerations associated with actually delivering this policy. The SA concluded that by supporting a reduction of existing landfill thresholds where new consents may be granted (Waste Option 4B), there would possibly be a movement of waste up the hierarchy. However, it was also highlighted that the key question in considering the Preferred Option is whether a reduced threshold would actually lead to a reduction in new/extended landfill sites and / or whether other policy initiatives might be better placed to achieve this, including wider regulatory and fiscal measures. In light of the increasing provision of kerbside separation of recyclables, Waste Issue 3 considered the target for the proportion of household within 5 miles of Household Waste Recycling Centres. The SA concluded that in relation to the key objective relating to the waste management hierarchy, retaining the current proportion of Household Waste Recycling Centres (i.e. option 3B) performed better than a reduced target which is more reliant on kerbside recycling facilities, but that there was little significant difference in the overall sustainability performance of the two appraised options.

3.11. Waste Issue 2 (the centralised versus decentralised model of waste management) also dealt with the waste hierarchy issue. The Stage One SA concluded that whilst both options would generally support the waste hierarchy objectives, the centralised option, by bringing more waste streams together at two larger sites, was expected to present more opportunities for stimulating investment and diversification of the waste sector. Similarly, it was expected that this option would provide positive support for innovation in emerging waste management technologies. Waste Issue 1 also dealt indirectly with the waste management hierarchy issue. The Stage One SA concluded that whilst option 1B which provided for all Cumbria's wastes (the preferred *core strategy policy CSW 1*) generally supported the waste hierarchy, Option A perhaps did this in a more proactive way by providing for a higher level of provision.

3.12. On this basis, it could be concluded that delivering *policy CSW 2*, and its associated sustainability benefits, relies on a number of supporting measures. This includes related plan policies, for example in relation to thresholds for new landfill constraints and the locational pattern and level of provision of other waste management facilities. Wider regulatory and fiscal measures may also be required.

3.13. ***Policy CSW 3: Integrated Network*** relates to the provision of an integrated network of a range of waste management facilities. The supporting text refers to the two related options put forward in the Issues and Options Paper of a decentralised or centralised network of facilities, and to a preference for decentralised network, which does not rule out opportunities for a centralised network and encourages the provision of sites large enough and suitable for co-locating more than one type of waste management facility. The SA addressed this under the appraisal of Waste Issue 2, and concluded that:

(i) it is more likely that a centralised model with fewer but larger sites which could more easily accommodate more than one type of facility would provide more opportunities for stimulating investment, diversification of the waste sector and innovation in emerging waste management technologies;

(ii) that the decentralised option would potentially have more negative effects in environmental terms with a greater number of sites required;

(iii) as many of the impacts of waste management are associated with the transport of waste, further transport modelling would assist in clarifying the relative impacts of these two locational options.

3.14. On the grounds of viability (and therefore deliverability) *Policy CSW 3* is based on a decentralised model. As it still allows for opportunities for more centralised facilities, the policy provides appropriate scope for the sustainability benefits associated with these (see (i) above) to be realised. The policy preference for co-location goes some way to addressing the objective of reducing waste miles (*Policy CSO 2*), and the associated sustainability impacts, although further transport modelling would assist in measuring this. However, as a greater number of sites may be required, the preferred site allocations and generic development control policies are of particular relevance (discussed below).

3.15. ***Policy CSW 4: Waste Capacity*** relates to the identification of sites to deal with a specified level of municipal and commercial and industrial waste, including sites for an additional 2 million cubic metres of landfill. The sustainability implications of different levels of provision were tested at the Issues and Options stage and discussed above in relation to *policy CSW 1*. In relation to site identification, the sustainability appraisal of this policy cannot be completed without consideration of the site allocation policies, which are discussed in the next chapter.

3.16. With specific reference to landfill, the Stage One SA reviewed different thresholds for determining when new landfill consents should be granted (Waste Issue 4) rather than absolute capacities. The SA did however flag up a number of sustainability considerations of relevance to any policy requiring the allocation of further landfill sites, including potential negative impacts on moving waste up the waste hierarchy, albeit that there will always be a need for residual landfill. Other issues identified included:

- a potential negative impact on the sense of well being of people given public concern about the health and amenity impacts associated with landfilling waste, albeit that this in large part, reflects historic practices for dealing with waste, and is not supported by recent research into modern well managed facilities;
- potential negative landscape effects, although the assessment noted that these could be reduced or mitigated at the project design and implementation stage;
- potential effects on countryside remoteness and tranquillity, particularly taking the transport of waste into consideration;
- potential impacts on biodiversity, safeguarding good quality agricultural land and avoiding soil degradation and pollution, although actual impacts will depend on site selection, mitigation and other more detailed considerations;
- a low contribution to the objectives of reusing brownfield sites or economic development/employment generation in the waste management sector;
- scope to support aspirations for renewable energy as it is possible to capture energy from landfill gases and to supply this to the national grid.

3.17. It is also important to note that many negative issues of concern could be addressed at the site level, assisted by effective public communication/participation and through good working practices. Given this, the preferred site allocations and generic development control policies are of particular relevance.

3.18. ***Policy CSW 5: Waste Sites*** sets out the preferred waste core strategy in terms of the number of different types of waste management sites required. Again, in terms of the sustainability appraisal, this needs to be considered alongside the site allocations and generic development control policies. Notwithstanding this, the Stage One appraisal did consider potential impacts associated with waste management sites at the more strategic level. The Stage One SA 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 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 SA 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. The appraisal concluded that as many of the impacts of waste management are associated with the transport of waste, 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. This remains an important consideration in progressing the draft Plan.

3.19. To reflect emerging national policy, ***Policy CSW 6: High and Intermediate Level Radioactive Wastes*** sets out stringent criteria for responding to proposals for storing such waste in Cumbria. The policy performs positively against economic criteria and nuclear technology is considered to be a carbon efficient technology with no associated carbon emissions. However, whilst compliance with national standards and best practice for environment, safety and security is assumed, it is important to note the following:

- There are a number of potential 'global' and 'local' environmental and social impacts associated with the transportation of this waste. A better understanding of the 'waste miles' (road and rail) associated with the transport of high and intermediate level radioactive waste would assist in assessing this.

- The policy may still impact on the sense of well being of people living close to the facility, given public concerns about radioactive waste. This could be reduced to a minimum through the community involvement already included in the policy.

- Some impacts are difficult to determine in the absence of more detailed proposals, such as impacts on agricultural land or protected species. However, the policy does state that all possible measures should be taken to minimise the adverse effects of development.

- There will always be some risk of other environmental impacts such as water or soil pollution, however low. It is important to acknowledge this.

3.20. ***Policy CSW 7: Low Level Radioactive Waste*** performs similarly to *policy CSW 6*, albeit that for low level radioactive waste, levels of public concern and the risks of significant environmental impacts are lower. Importantly, given that the Preferred Option does not make provision for a national repository, the potential 'global' and 'local' environmental and social impacts associated with the transportation of this waste will be reduced, within Cumbria at least.

MINERALS CORE STRATEGY

3.21. ***Policy CSM 1: Supply of Minerals*** relates back to the appraisal of the following Stage One Issues and Options:

- *Minerals 1*: Regional Aggregates Working Party (RAWP) sub apportionment, recycling/secondary materials targets and sites required;

- *Minerals 4*: Ghyll Scaur quarry;

- *Minerals 6*: brick making mudstone.

3.22. With respect to the overall supply of crushed rock and sand/gravel (Minerals 1), the Stage One SA considered three options:

- *Option 1A*: exceed RAWP sub apportionment figures, and, to reflect this sustainable economic development driven scenario, also exceed target for aggregates from recycled / secondary sources.

- *Option 1B:* provide for the apportionment and increase production levels for recycled / secondary aggregates to meet national target and RAWP targets.

- *Option 1C:* reduce the apportionment figure on the grounds of practicality and environmental acceptability as allowed by MPG6 and aim to argue for a reduced target for recycled / secondary aggregates in Cumbria on the same grounds, particularly practicality, given relatively low levels of construction and demolition.

3.23. *Policy CSM 1* corresponds with Option B. Whilst the Stage One SA considered that this level of production could be insufficient if economic development of Cumbria's mineral resource was considered to be a fundamental imperative, Option B provided a greater balance of economic, social and environmental considerations.

3.24. *Policy CSM 1* also recognises high skid resistance roadstone quarries as a national resource, implying a presumption in favour of future extraction. The Stage One SA specifically considered acknowledging Ghyll Scaur Quarry as a nationally significant resource as it supplies *very* high skid resistance roadstone, acknowledging that this could result in a potential decline in extraction at other sites, within Cumbria and beyond its boundaries. Whilst site specific assessment work would need to be undertaken, the Stage One SA concluded that extraction at any site could result in impacts on amenity and wellbeing, and on aspects of the environment such as landscape character and biodiversity, and that these would be more likely with a presumption in favour of extensions and future consents, in the national interest. These impacts, would however, be partly resolved by appropriate mitigation at the site level, and would need to be balanced with the potential minor benefits for employment and economic development that were also predicted with this policy stance.

3.25. *Policy CSM 1* also recognises the High Greenscoe brick making mudstone quarry as a regional/national resource. Again, this is interpreted as a presumption in favour of extraction and therefore of an extension of the current quarry. Assuming that national policy to deliver a continuing supply of brick making mudstone is adhered to, the Stage One SA considered two options:

- Minerals Option 6A**:** active encouragement of new sources of brick making mudstone away from High Greenscoe Quarry, in recognition of the specific environmental constraints of the site, assuming these are available.

- Minerals Option 6B: allow extension of High Greenscoe Quarry, subject to appropriate provision of mitigation and compensation/enhancement measures by the minerals operator.

3.26. It was assumed that encouraging new sources *and* allowing an extension of High Greenscoe Quarry was not a reasonable option for consideration and appraisal.

3.27. The SA considered the relative impacts of continuing extraction at High Greenscoe Quarry or shifting mudstone extraction away from the existing site at High Greenscoe Quarry to other locations, and concluded that the latter would have the potential to generate wider impacts on amenity and the environment, with the exception of the identified woodland resource at Greenscoe Quarry. The Stage One SA recommended that subject to more detailed exploration of alternative sites, the extension of High Greenscoe Quarry could be the Preferred Option overall, provided that adequate mitigation/compensation can be identified for the potential woodland loss.

3.28. Finally, *policy CSM 1* also recognises the gypsum mine as a regional or national resource. Gypsum is discussed further under *policy CSM 6*.

3.29. ***Policy CSM 2: Crushed Rock Supply*** relates to the overall provision for crushed rock over the plan period and the related issue of the crushed rock landbank, stating that opportunities will be pursued for reducing the size of the crushed rock landbank where practicable. The Stage One SA explored two options: Option 2A which maintained the current landbank for crushed rock for at least 15 years without seeking to reduce over time (maintain status quo); and Option 2B which sought actively to reduce the current landbank for crushed rock to 10 years by exploring the scope to revoke consents which could collectively have the greatest environmental impacts, assuming that reducing the landbank for crushed rock could lead to a consequent reduction in the overall levels of hard rock extraction. The Stage One SA concluded that in the absence of a site-specific review of consented landbank reserves, no significant adverse impacts were flagged up with Option M2A that would justify a policy presumption in favour of the reduction of landbanks, given the difficulties and potential financial costs that could arise in its implementation. This conclusion is in line with Policy CSM 2 which states that opportunities for reducing the size of the crushed rock landbank will only be pursued where practicable.

3.30. ***Policy CSM 3: Sand and Gravel Supply*** relates to the length of the sand and gravel landbank and also states that the landbank will be refined to relate to local supply patterns and the need to minimise minerals miles. At present, although there are adequate minerals reserves with planning permission to fulfil requirements to supply sand and gravel, these permissions will expire before 2015, and to accept the RSS's Cumbria apportionment will therefore require the identification of new sites for extraction. In addition to the overall level of provision, (Minerals Issue 1) and landbanks (Minerals Issue 2), the Stage One SA also considered the strategic location of minerals sites (Minerals Issue 3), namely the active redistribution of quarrying away from problem areas against no redistribution of sites.

3.31. *Policy CSM 3* reflects the findings of the Stage One SA in that the option of providing the RSS's apportionment of 700,000 tonnes of sand and gravel per annum performed better against the sustainability objectives than exceeding the apportionment and was preferred unless economic development of Cumbria's mineral resources was considered to be an overriding imperative. In terms of the locational choices for new mineral extraction, the SA highlighted that as limited resource availability can lead to operations, and related impacts, being clustered in geologically appropriate areas and there have also been particular concerns about transport related impacts associated with some quarries in the past, there is a 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 where extraction generates impacts, by maintaining the existing distribution of quarries through extensions to existing consents and more limited numbers of new sites for primary extraction. In considering potential sites for further minerals extraction, information on cumulative impacts, environmental capacity/thresholds and the ability of environmental resources to accommodate change may therefore need to be considered alongside the policy intention to minimise 'minerals miles'.

3.32. There are a number of additional minerals specific policies which were not considered in the Issues and Options appraisal and have been addressed at this stage (see **Appendix 2**):

- ***Policy CSM 4: Marine Dredged Aggregates***;
- ***Policy CSM 5: Industrial Limestones***;
- ***Policy CSM 6: Gypsum***.

3.33. All of these preferred policies score well against the key sustainability objective in that they provide policy support for the continued extraction of these minerals provided that there is a demonstrable need and no suitable alternatives. In relation to the environmental objectives, whilst *policies CSM 4* and *CSM 5* make specific reference to environmental impacts, which would require further consideration at the site-specific stage, the generic development control policies would also apply. Notwithstanding this, the global and local environmental and amenity impacts associated with the transportation of these minerals are harder to mitigate and also need to be considered in light of the overall strategy and preferred *policy CSO 2: Minimising Road Miles.* There are also additional considerations associated with *policy CSM 4* given higher uncertainty about marine habitats/species and predicted sea level rises.

3.34. Regarding economic objectives, all three preferred policies provide longer term security to the respective mineral sectors and to related industries both within and outside Cumbria, such as plaster board, steel and paper making. This is particularly important in relation to *policy CSM 6* as British Gypsum is an important local employer and has recently invested heavily in plaster manufacturing at Kirby Thore.

3.35. ***Policy CSM 7: Brickmaking Mudstones*** states that provision will be made to safeguard potential areas for extending High Greenscoe Quarry. The sustainability implications of this are discussed under *Policy CSM 1* which recognises the High Greenscoe brick making mudstone quarry as a regional/national resource.

3.36. A number of other minerals are covered in the supporting text. In relation to *coal, oil and gas*, Preferred Option policies are included in a combined Energy Minerals Policy in the Generic Development Control Policies (*DCM 2*). Proposals for new *building stone* quarries will also be considered under the Generic Development Control Policies (*DCM 1*). It is assumed that the same will also apply for *coal bed methane*. There is not considered to be a need to identify additional sites for *peat* extraction within the plan period, particularly given its associated nature conservation interest.

3.37. In relation to zinc extraction, the Issues and Options Discussion Paper noted that although there is unlikely to be interest in reviving this industry, it is important that the plan considers what response would be taken if it was. As a result, it suggests that exceptional circumstances and public need could be defined, whereby the extraction of known reserves within the North Pennine Moors AONB might be permitted. On this basis, the Stage One SA considered the strategic implications of adopting such a policy. The SA highlighted potential negative impacts associated with zinc extraction in the AONB, including potential impacts on the landscape quality of

the AONB, whilst the area also includes a site of European importance for bird populations, and potential water pollution would also be an important consideration, particularly given the high quality of many of Cumbria's watercourses. On this basis, the SA suggested that it may be beneficial to provide a clear policy setting out the overriding circumstances where extraction might be permitted. However, it is reasonable to assume that the Preferred Option of reliance on existing national policies relating to major developments in the AONB will provide adequate policy protection, particularly as at present, it seems that applications will be unlikely.

4. THE SITE ALLOCATIONS

INTRODUCTION

4.1. Positive land use provision is essential if sustainability objectives in relation to mineral extraction and waste management are to be implemented on the ground. Site allocations will play a key role in delivering the policy intentions of the MWDF and may also be the cause of most debate.

4.2. To inform the development of the Site Allocations Preferred Options, LUC provided the County Council with comments on the site selection process in November '06. The purpose of this was two-fold:

(i) to ensure that the SA continues in an iterative and timely manner and that appraisal findings can be fed back into policy formulation;

(ii) where possible, to minimise the need for individual site appraisals by undertaking an earlier review of the site identification methodology.

LEVEL OF PROVISION

4.3. Preferred ***Policy SAO 1*** states that the plan will seek to identify more than the minimum number of sites where waste management facilities can be provided. It also makes reference to specific areas of search in relation to minerals extraction.

4.4. With respect to the level of provision for waste management facilities, application of the SA criteria, of the policy presumptions in the core strategy and of the generic development control policies could mean that some sites are found to be unsuitable. At the very least, some sites are likely to 'perform better' than others. On this basis, the decision to identify more than the minimum number of sites for waste management facilities is supported.

SITE IDENTIFICATION PROCESS

4.5. Paragraphs 2.1-2.8 of the Site Allocations Preferred Options outline the identification process adopted by the County Council for waste management sites. A review of the factors taken into account during this process against the agreed sustainability appraisal criteria has revealed the following:

(i) Some factors considered in the site identification process match the SA criteria quite closely, for example in relation to greenfield and previously developed (brownfield) land.

(ii) Some sustainability appraisal criteria relate to a number of the plan considerations where the latter are driven by the same sustainability concerns. For example, the plan considerations in relation to accessibility, co-location and the proximity principle all reflect the desire to reduce 'waste miles', particularly road miles. For the sustainability appraisal, this is expressed in criteria addressing the role of the planning system in ensuring a healthy and safe working and living environment and in minimising potential health impacts associated with waste management facilities.

(iii) Some plan considerations have no direct correlation with the sustainability criteria, including the appropriateness of current Local Plan land allocations. However, these are implementation considerations driven, at least in part, by sustainability concerns.

(iv) The key sustainability objective in relation to waste management (NR4) is not mentioned explicitly in the plan considerations. However, the underlying intention of the site allocations is to encourage the 'movement' of waste up the waste management hierarchy through positive land use provision.

(v) Other sustainability criteria are not reflected explicitly in the plan considerations, for example EN3: To improve the quality of the built environment and NR2: To improve water quality and resources. However, these are addressed by other preferred policies for the MWDF.

4.6. In LUC's comments on the proposed methodology for identifying preferred site allocations (November '06) it was also suggested that in the interests of robustness and transparency, a short explanation should be provided of the justification for each factor taken into consideration. For example, these could reflect the locational criteria in Planning Policy Statement (PPS)10, Structure Plan policies in relation to environmental protection or the County's priorities for waste management.

SPECIFIC SITES

4.7. Preferred ***Policies SAW 1- SAW 4*** *and* ***SAM 1- SAM 3*** identify preferred sites for waste management and preferred areas of search for mineral extraction respectively. Identification of these has been an ongoing process which has taken account of the SA objectives. However, more detailed appraisal of the sites named, and of any 'reasonable alternatives' has not been possible in the time available for completion of the Preferred Options document and it is recognised that this will be a key issue in progressing to the draft Plan.

4.8. With this in mind, it is recommended that stakeholder sessions are held to review the preferred sites and areas of search. As far as is possible, attendance should be selected to ensure combined coverage of the range of social, environmental and economic SA criteria and to ensure that the appraisal benefits fully from local knowledge.

5. THE GENERIC DEVELOPMENT CONTROL POLICIES

5.1. The County Council's Preferred Options for Generic Development Control policies would be used for considering planning applications for minerals and waste developments. The policies focus on putting into practice the objectives and vision of the Preferred Options Core Strategy and should be read in conjunction with the Preferred Options Site Allocations Policies.

APPROACH TO THE APPRAISAL

5.2. In combination, 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. Whilst it would be 'unreasonable' to assess each preferred policy in isolation against the full range of SA objectives, it is useful to understand how the suite of development control policies performs against the SA criteria. This comparison is provided in **Appendix 3** with the key findings outlined below.

APPRAISAL FINDINGS

5.3. The Preferred Generic Development Control policies are set out in three separate, but interrelated categories:

- protecting and enhancing the environment and communities;
- supporting the economy;
- implementing the planning process.

5.4. *Development Control Policies DCE 1* to *11* relate to protecting and enhancing Cumbria's environment and communities, and derive from the Overall Strategy's *Policy CS0 1 Sustainable Development.* These policies, in combination, would seek to put sustainability into practice and to optimise local economic benefits while minimising adverse impacts on the environment and communities.

5.5. Whilst Preferred Development Control Policy ***DCE 1: Traffic and Transport*** would seek to implement core strategy *CSO 2: Minimising Road Miles*, policies ***DCE 2*** to ***9*** would help put into practice core strategy *CSO 3: Environmental Assets.* Development Control Policies ***DCE 10*** and ***11*** would help to implement core strategy policy *CSO 4: After Use and Restoration.*

5.6. Development Control Policies ***DCE 1*** to ***7*** closely reflect the Sustainability Objectives, which were taken into account in drafting the Preferred Options. For example, policy ***DCE 1: Traffic and Transport*** would help achieve Sustainability Objective NR1 to improve local air quality and reduce greenhouse gas emissions by encouraging proposals which have the potential to be strategically linked to sustainable means of transport (e.g. rail). Policy ***DCE 4: Historic Environment*** would also help achieve sustainability objective EN3 to improve the quality of the built environment by restricting mineral or waste proposals which adversely affect features of cultural heritage interest.

5.7. Development Control Policy ***DCE 6: Flood Risk*** aims to steer mineral and waste development to areas with the lowest probability of flooding and in combination with policy ***DCE 7: The Water Environment*** would ultimately guide development towards the achievement of sustainability objective NR2: to improve water quality and resources, by establishing stringent criteria for the determination of developments likely to affect the water environment.

5.8. Policies ***DCE 8*** and ***9*** derive from the Core Strategy Preferred Vision of optimising local economic benefit while minimising adverse impacts on the environment and communities and assist the implementation of *CSO 1* and *CSO 3*.

5.9. Policy ***DCE 8: Cumulative Environmental Impacts*** is an overarching policy which relates to the assessment of cumulative impacts on all potential environmental receptors. As it also refers to local communities and the wider economy and regeneration, this policy relates to almost all the sustainability objectives. As cumulative impacts benefit from strategic and co-ordinated consideration, this is an important policy for consideration in progressing to the draft Plan and more detailed consideration of potential impacts at the site level.

5.10. Development Control Policy ***DCE 9: General Criteria*** suggests the criteria to be applied to planning applications for minerals or waste development and establishes that nuisance (e.g. blast noise) and dust emissions should fall within acceptable limits. The policy would therefore assist in achieving objectives SP5 to improve the health and sense of well being of people and NR1 to improve local air quality and reduce greenhouse gas emissions.

5.11. Development Control *Policies* ***DCE 10*** and ***11*** establish that appropriate after-uses for minerals and temporary waste sites and restoration schemes should be in place to return the proposed sites to an appropriate land use. These relate to the fulfillment of a number of sustainability objectives including SP5: to improve the health and sense of well being of people; EN1: to promote and enhance biodiversity and EN2: to preserve, enhance and manage landscape quality and character for future generations.

5.12. Development Control Policies ***DCW 1*** to ***3*** derive from the Waste Core Strategy and policies ***DCM 1*** to ***4*** from the Minerals Core Strategy. Again, these policies aim to guide development towards striking an appropriate balance between the promotion of the waste and minerals sector and the conservation, and where possible, enhancement of Cumbria's environmental assets and communities.

5.13. The three Development Control Policies relating to waste will help achieve economic objectives EC1 and EC3 whilst also assisting to achieve sustainability objectives relating to health and sense of well being, biodiversity, local air and water quality (SP5, EN1, NR1 and NR2 respectively).

5.14. There is an additional link between the key sustainability objective in relation to waste management (NR4) and ***DCW 2: Landfill*** as the latter favours proposals which incorporate comprehensive landfill gas management systems including electricity generation.

5.15. The Development Control Policies for minerals aim to make positive provision for mineral extraction whilst helping to steer development towards an appropriate balance of economic, social and environmental considerations. For example, ***DCM 2: Energy Minerals*** and ***DCM 3: Minerals Consultation Areas*** would help achieve economic objectives EC1 and EC3 by providing for appropriate extraction where this can be achieved without prejudicing local and community benefits. Importantly, the three policies all contribute towards the key sustainability objective in relation to managing mineral resources sustainably, by protecting areas of extraction from sterilisation and encouraging proposals which will assist in meeting the level of supply

5.16. Finally, Development Control Policies ***DCI 1: Legal Agreements*** and ***DCI 2: Planning Obligations*** are important implementing mechanisms for delivering the policies in line with their underlying sustainability objectives.

6. KEY CONCLUSIONS

INTRODUCTION

6.1. This final section of the report brings together the key findings of the Stage Two SA of the Preferred Options, including key considerations for progression to the draft Plan.

CORE STRATEGY

6.2. The Core Strategy for the Cumbria MWDF and the associated implementing policies are firmly grounded in sustainability. The Overall Strategy takes account of the sustainability objectives identified for the SA, and the draft Plan Objectives were tested against the sustainability objectives in the SA scoping report. The findings from the Stage One SA have also been taken into account by the County Council in developing the Preferred Options. For example, considerable emphasis has been placed on reducing 'minerals and waste miles', which corresponds to a number of social and (global and local) environmental objectives. However, with respect to this, the appraisal has highlighted that it will be important to establish a clearer spatial view on whether appropriate sites for both minerals extraction and waste management can be identified in Cumbria to comply with this policy emphasis, which will require a fuller understanding of the transport repercussions of the preferred policies.

6.3. A sustainability appraisal should identify areas of uncertainty. The Preferred Overall Strategy for the MWDF and accompanying policies place emphasis on minimising the impacts of minerals and waste developments on climate change. This is a new direction for the plan and reflects emerging national and regional policy on the subject. However, a number of uncertainties exist in relation to both the causes and consequences of climate change and the draft Plan needs to reflect this. For example, as acknowledged in the supporting text for the Preferred Overall Strategy, the relative merits of different minerals and waste management processes and technologies with regard to greenhouse gasses is not clear cut. This means that in making positive land use provision for waste management facilities, sites need to be flexible enough to accommodate a range of facilities.

6.4. Importantly, the Preferred Policies comply with the key sustainability objective in relation to managing mineral resources sustainably and minimising waste (NR4). Positive provision is made for continued aggregates extraction in line with the RSS apportionment and for the extraction of other minerals where there is demonstrable need and no suitable alternatives. The Preferred Policies also seek to make positive provision for the range of waste management facilities required to 'move' waste up the hierarchy.

6.5. Whilst failure to provide for these would mean that the Preferred Policies would not comply with the key sustainability objective in relation to minerals and waste, the policies could alternatively seek to exceed extraction and waste management targets set at the national and regional level. The sustainability implications of both the 'do minimum' and 'do maximum' options were tested out in the Stage One SA.

6.6. Cumbria County Council is wisely seeking to select components of these 'extreme' options which provide opportunities to maximise sustainability strengths and to minimise weaknesses. As a consequence of this however, implementation of some policies in isolation and others in combination may require a careful balance to be struck between competing plan and sustainability objectives such as local economic growth versus protecting environmental assets, or global environmental considerations such as minimising carbon dioxide emissions versus protecting local environmental assets. This balance is also reflected in revisions to the draft Plan objectives, which now seek to 'optimise' as opposed to 'maximise' local economic benefits from minerals and waste developments. In striking this balance, both positive land use provision through the Site Allocations and the Generic Development Control Policies will have a key role to play.

SITE ALLOCATIONS

6.7. To ensure that the SA continues in an iterative and timely manner and that appraisal findings can be fed back into policy formulation, LUC provided the County Council with comments on the process for identifying the Site Allocations Preferred Options in November '06. A review of the factors taken into account during this process against the SA criteria revealed the following:

(i) some factors considered in the site identification process match the SA criteria quite closely;

(ii) some SA criteria relate to a number of the site allocation considerations where the latter are driven by a single sustainability concern such as the desire to reduce 'waste miles';

(iii) whilst some plan considerations have no direct correlation with the SA criteria, these are implementation considerations driven, at least in part, by sustainability concerns;

(iv) whilst the key sustainability objective in relation to waste management (NR4) is not mentioned explicitly in the site allocation considerations, the underlying intention of the site allocations is to encourage the 'movement' of waste up the waste management hierarchy through positive land use provision;

(vi) although several SA criteria are not reflected explicitly in the site allocation considerations, these are addressed by other preferred policies for the MWDF.

6.8. Preferred policies are included which identify preferred sites for waste management and preferred areas of search for mineral extraction respectively. Identification of these has been an ongoing process which has taken account of the SA objectives. However, more detailed appraisal of the sites named, and of any 'reasonable alternatives' has not been possible in the time available for completion of the Preferred Options document. It is recognised that this will be a key issue in progressing the draft Plan as whilst on paper, the Preferred Overall Strategy performs well against sustainability objectives, implementation 'on the ground' will be key to delivering this.

6.9. With this in mind, it is recommended that stakeholder sessions are held to review the preferred sites and areas of search. As far as is possible, attendance should be selected to ensure combined coverage of the range of social, environmental and economic SA criteria and to ensure that the appraisal benefits fully from local knowledge.

GENERIC DEVELOPMENT CONTROL

6.10. The generic development control policies will also have a key role to play in delivering the sustainability intentions of the Preferred Strategy. Again, when reviewed against the SA criteria, there is a close correlation between the Preferred Generic Development Control Policies and the SA criteria, with all of the latter addressed in at least one preferred policy. Many of the development control policies are wide-ranging, and, as a consequence, relate to a number of the SA criteria. Policies relating to legal agreements and planning obligations are important implementing mechanisms for delivering other policies in line with their underlying sustainability objectives.

6.11. Importantly, the Preferred Generic Development Control policies also address cumulative impacts. As potential cumulative impacts benefit from strategic and co-ordinated consideration, this is an important issue for review in progressing to the draft Plan and more detailed consideration of potential impacts at the site level.