Minerals and Waste Joint Plan

Preferred Options

Sustainability Appraisal Update Report

Volume 1: Assessment of Preferred Policies

November 2015

Joint Minerals and Waste Plan

Preferred Options Consultation

Sustainability Appraisal Update Report

Volume I: Assessment of Preferred Policies

Contents

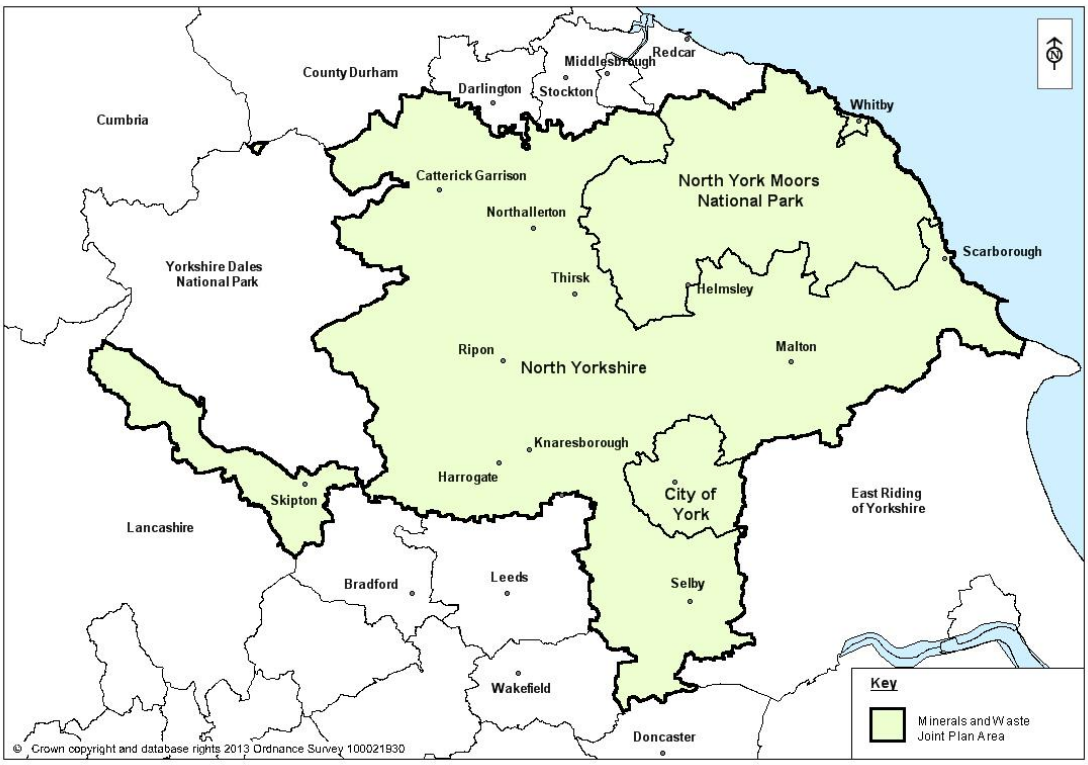
1. Introduction

1.1 The Minerals and Waste Joint Plan

North Yorkshire County Council, City of York Council and the North York Moors National Park Authority are preparing a **Minerals and Waste Joint Plan** (Joint Plan).

Planning Authorities are required to prepare Development Plans setting out policies for the development and use of land in their area. Unitary authorities, National Park Authorities and County Councils are minerals and waste planning authorities, with the former two, along with district and borough councils, also being local planning authorities having responsibility for all other types of development. Thus, in the Joint Plan area, the County Council is the minerals and waste planning authority for the parts of the county located outside of the two National Parks, with the City of York Council and the North York Moors National Park Authority being responsible for minerals and waste planning within their areas. The Development Plans of minerals and waste planning authorities must deal with minerals and waste matters, either as part of wider planning documents or as separate plans. Planning authorities can prepare plans for their own area or they can work jointly with other planning authorities to prepare plans. In North Yorkshire, York and the North York Moors the relevant Planning Authorities have opted to work together to prepare a Minerals and Waste Joint Plan. A map showing the boundaries the Joint Plan area is provided in figure 1 below.

Figure 1: Minerals and Waste Joint Plan Area



The role of the Development Plan is to guide future development of the area. It forms the starting point for decision making on planning applications. Proposed development that accords with an up-to-date plan should be approved and proposed development that conflicts should be refused unless other material considerations indicate otherwise.

Work commenced on the Joint Plan in early 2013. The First Consultation on the Joint Plan was carried out in May/June 2013 in accordance with Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012. This provided an introduction to some of the key information relating to minerals and waste in the area and marked the launch of the preparation of the Joint Plan.

The issues raised through this consultation helped the partner Planning Authorities to prepare an Issues and Options consultation for the Joint Plan, which was launched for consultation in February 2014. This set out a range of policy options which could be followed to help deal with the issues identified and invited views on these and any other options which should be considered.

Having analysed the consultation responses to the different policy options set out at the issues and options stage, the partner Planning Authorities have produced a Preferred Options document. The purpose of the Preferred Options stage is to provide an indication, pending further consultation, of the proposed new policies which the Authorities wish to adopt.

The Minerals and Waste Joint Plan Preferred Options Consultation Document is available to view on the on the North Yorkshire County Council website.

1.2 Sustainability Appraisal of the Minerals and Waste Joint Plan

Sustainability Appraisal (SA) is a systematic process of appraisal which can help shape the Joint Plan. It can help deliver sustainable development through the plan by scrutinising options and policies for their sustainability implications.

Sustainability? What's that?

The word sustainability can be confusing as it is used in so many ways by different people. However, our Sustainability Appraisal has at its heart a very simple idea.

Sustainability starts from the realisation that if we keep doing things in a certain way without thinking about the long term consequences of doing things that way we might find that that it becomes harder for people in the future to carry on doing those things.

So, if we decide that the best thing to do with rubbish is to send it to be buried in the ground and then forget about it we may find that it gets harder to find places to bury that waste in the future as the most suitable sites may have been used already. We may also find that when we buy new products to replace the ones we have thrown away they become more expensive, as the materials used to make those products may become harder to obtain. In hindsight we might decide that some of these problems could have been avoided if only we had chosen to re-use or recycle waste more.

This idea doesn't just apply to waste, but affects lots of different issues. So we might be concerned about whether local wildlife will still be as widespread in the future, or whether our favourite views will be affected by future development. And of course, many people are concerned about whether there will still be jobs close by in the future, and that levels of health will improve.

Sustainability Appraisal is a statutory requirement under the Planning and Compulsory Purchase Act 2004 and Strategic Environmental Assessment is required by European law. The two assessments are being undertaken simultaneously in relation to the Joint Plan under the term Sustainability Appraisal. The Sustainability Appraisal will assess the potential effects of the Plan at each stage in relation to sustainability objectives and inform further development of the Plan. A Sustainability Appraisal scoping report, which sets out the methodology for the Sustainability Appraisal, has been prepared and consulted upon and is available in the Sustainability Appraisal webpage: www.northyorks.gov.uk/mwsustainability.

At Issues and Options stage each option was assessed against each of the sustainability objectives and the results were presented in a sustainability report. This report was consulted on in February 2014 and the findings of this report are available on the Sustainability Appraisal web page.

This sustainability appraisal update report has been prepared to accompany the Preferred Options Draft Plan. The purpose of this report is to assess the likely environmental, social and economic effects of the preferred options set out in the Minerals and Waste Joint Plan Preferred Options Consultation Document. It also outlines the finding of sustainability appraisal work undertaken on proposed allocation sites in the Joint Plan, the detailed assessment of which is outline in a separate volume (Volume II).

Alongside the Sustainability Appraisal Habitats Regulations Assessment, required by European law, is concerned with ensuring that the Plan will not cause harm to the integrity of Special Areas of Conservation, Special Protection Areas and Ramsar sites. An initial test of each draft policy in terms of its likely significant effects has been carried out and can be viewed in the Habitats Regulations Assessment report on the sustainability webpage.

Figure 2 shows key tasks in the sustainability appraisal, derived from the Practical Guide to the Strategic Environmental Assessment Directive[1], with the terminology adjusted so that it is consistent with Sustainability Appraisal. It also shows how the Scoping Report, Issues and Options SA Report and this report have met the requirements for sustainability appraisal set out in Government guidance, as well as the further work that is programmed to be undertaken on the SA.

Table 1: Stages in this Sustainability Appraisal

Stage A: Setting the objectives and developing the baseline (Scoping)	**Completed?**
A1: Identifying relevant policies, plans and programmes	Yes – Scoping Report
A2: Collecting baseline information	Yes – Scoping Report
A3: Identifying the sustainability issues and the appraisal objectives	Yes – Scoping Report
A4: Considering options and alternatives	Yes – Scoping Report
A5: Consulting on the scope of the Sustainability Appraisal	Yes – Scoping Report
Stage B: Developing and refining options and assessing effects	
B1: Testing the plan objectives against the Sustainability	Yes – SA of Issues and

[1] Citation needed

Appraisal objectives	Options and Updated in this report
B2: Develop and refine the strategic options for the plan	Yes – SA of Issues and Options
B3: Predict and appraise the significant effects of the options, including alternatives	Yes – SA of Issues and Options and updated in this report
B4: Evaluate the effects of the plan, including alternatives	Yes – SA of Issues and Options and updated in this report
B5: Consider ways of mitigating adverse effects and maximising beneficial impacts	Yes considered in this report
B6: Propose measures to monitor the significant effects of implementing the plan	Yes considered in this report
Stage C: Preparing the Sustainability Appraisal Report	
C1: Preparing the Sustainability Appraisal report	This report lays the groundwork for what will be considered in Draft Sustainability Appraisal Report
Stage D: Publication and Submission of the Plan: Sustainability Appraisal	
D1: Consulting on the draft plan and the Sustainability Appraisal	Considered in Draft Sustainability Appraisal Report
D2: Assessing significant changes and making decisions	Considered in finalised Sustainability Appraisal Report
D3: The Sustainability Appraisal at submission stage	Considered in finalised Sustainability Appraisal Report
Stage E: Examination of the Plan	
E1: Examination and adoption	Documented in Post Adoption Statement
E2: Monitoring of significant effects	Considered in Post Adoption Statement and later monitoring reports
E3: Responding to adverse effects	Considered in Post Adoption Statement and later monitoring reports

2. Consideration of Sustainability Effects

2.1 The Sustainability Appraisal Framework and its Application to the Preferred Options Consultation

A key outcome of the SA scoping consultation was the creation of a Sustainability Appraisal Framework. This comprises a list of SA objectives, sub objectives and indicators. These objectives, sub objectives and indicators have been compared to each of the options set out in the Issues and Options document and the extent to which each option contributes to or detracts from each objective has been documented. The SA objectives are listed below, however the full SA Framework is presented in the SA Scoping Report and updated version incorporating a proposed revision is also presented in appendix 2 of this report (see also 2.2 below).

The SA objectives are:

1. Protect and enhance biodiversity and geo-diversity and improve habitat connectivity
2. Enhance or maintain water quality and supply and improve efficiency of water use
3. Reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation
4. Protect and improve air quality
5. Use soil and land efficiently and safeguard or enhance their quality
6. Reduce the causes of climate change
7. Respond and adapt to the effects of climate change
8. Minimise the use of resources and encourage their re-use or safeguarding
9. Minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable
10. Conserve and enhance the historic environment, heritage assets and their settings
11. Protect and enhance the quality and character of landscapes and townscapes
12. Achieve sustainable economic growth and create and support jobs
13. Maintain and enhance the viability and vitality of local communities
14. Provide opportunities to enable recreation, leisure and learning
15. Protect and improve the wellbeing, health and safety of local communities
16. Minimise flood risk and reduce the impact of flooding
17. Address the needs of a changing population in a sustainable and inclusive manner

2.2 Proposed change to wording of Sustainability Appraisal Objective 12

As can be seen for the above list of SA objectives objective 12 is worded as follows:

"*Achieve sustainable economic growth and create and support jobs".*

Several stakeholders who have contributed to the on-going assessment of minerals and waste sites (see chapter 5 of this report) have told us that the wording of this objective makes it difficult to distinguish the purpose of the individual objective from the SA framework taken as a whole.

The difficulty lies in how 'sustainable economic growth' is defined. In our SA framework, because we had considered a range of individual social, economic and environmental objectives to define what 'sustainable development' means in relation to minerals and waste development, stakeholders have pointed out to us that the SA objectives taken as whole would, in effect, help deliver *sustainable economic growth,* which at least in UK policy terms is seen as closely related to sustainable development[2].

This would accord with the views of many commentators, such as the World Bank, who have stated that "*Economic growth inevitably depends on its natural and social / human conditions. To be sustainable it must rely on a certain amount of natural resources and services provided by nature, such as pollution absorption and resource regeneration. Moreover, economic growth must be constantly nourished by the fruits of human development*'. Many of the conditions for sustainable economic growth are thus promoted by the other SA objectives in our SA Framework and not just the 'sustainable economic growth' SA objective.

Indeed, the sustainable economic growth SA objective, through its sub objectives and indicators, offers only a very narrow view of what sustainable economic growth might look like. In effect, the objective merely requires assessors to check whether a policy or site is likely to support the growth of the economy based on a few sub objectives such as 'to capture value from waste streams….' or 'to increase the level and range of employment opportunities…' Stakeholders have suggested that this simply provides an indication that a particular development would promote economic growth rather than sustainable economic growth, and while they recognise that sustainable economic growth would be more likely if sites or policies perform favourably against all the SA objectives, all that can really be said in relation to the sustainable economic growth objective is that economic growth would be more likely if a positive score is achieved. It has therefore been suggested that we remove the word sustainable from the objective and instead make it clear in the Sustainability Report that the findings of the SA objectives as a whole will help us determine whether the policies and sites in the plan will achieve sustainable economic growth, and if not, what can be done to ensure that policies or sites do not deliver unsustainable economic growth.

The proposed revised SA objective 12 is thus:

"*Achieve economic growth and create and support jobs".*

No changes to sub objectives or indicators are proposed. As this change is proposed purely to give a more accurate summary of what the objective is in fact measuring we believe that this will not change the way in which we assess sites or policies in any material way. We have, however, included a consultation question below, so that a wider range of views can be obtained.

A revised SA Framework containing this revision to objective 12 is presented at Appendix 1.

[2] See for example UK Government, 2013. Policy Paper 2010 to 2015 Government Policy: Sustainable Development [URL: https://www.gov.uk/government/publications/2010-to-2015-government-policy-sustainable-development/2010-to-2015-government-policy-sustainable-development] which most recently defined sustainable development as *"making the necessary decisions now to realise our vision of stimulating economic growth and tackling the deficit, maximising wellbeing and protecting our environment, without affecting the ability of future generations to do the same".* The post May 2015 Government has yet to publish a specific new sustainable development policy or strategy.

Question SA1: We are proposing to adjust the wording of sustainability appraisal objective 12 to *"Achieve economic growth and create and support jobs"*. While we have removed the reference to sustainable economic growth, we believe that this revised objective considered together with the other SA objectives will more clearly indicate whether sustainable economic growth is likely to be achieved. Do you agree that we should alter SA objective 12 in this way?

2.3 Recording the Sustainability Effects of Preferred Options and Sites

When reviewing the results of our sustainability appraisal of both the preferred options and sites it has been necessary to consider the significance of effects that might occur.

It is clear that in relation to any given SA objective effects can occur in a variety of ways, for instance there might be long lasting effects or there might be effects which are short in duration. The SEA Directive requires that a range of different types of effects should be considered in a Strategic Environmental Assessment (and thus must also be incorporated into any Sustainability Appraisal[3]).

Article 5 (1) of the SEA Directive requires the consideration of '*the likely significant effects on the environment of implementing the plan or programme'* taking account of Annex I of the Directive, which states that likely significant effects should include "*secondary, cumulative, synergistic, short, medium and long term, permanent and temporary, positive and negative effects".*[4]

Before considering the assessment of sites and preferred policies it is helpful to define these effects in further detail. In relation to preferred policy options we have assessed each preferred policy only on the basis of the information provided in the policy and supporting text. This may include specific references to other policies in the plan, which have been taken into account in our scoring of significant effects.

In relation to site assessments (see chapter 5 below), we have adopted a similar approach where we have assessed effects purely on the basis of the information provided. The effects that we record are thus the effects likely to be observed if no mitigation other than that referred to in the site description is implemented.

For both policies and sites recommendations are then made to address significant effects. This can be through making better links to other proposed policies, or through revising the content of policies or the format of sites or, if negative effects are of sufficient significance, that alternatives are pursued (see also section 2 .4 'consideration of alternatives').

[3] The assessment of sites in relation to the Minerals and Waste Joint Plan (the 'Joint Plan') has integrated consideration of planning requirements in relation to sites, as well as the requirement to subject them to Sustainability Appraisal incorporating the requirements of the Strategic Environmental Assessment Directive. In particular, step 3 of the Site Assessment Methodology describes a process by which likely significant environmental, social and economic effects will be evaluated by determining the contribution they make to a series of 17 SA objectives.

[4] ODPM, 2005. A Practical Guide to the SEA Directive [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf]

Table 2 shows how we have interpreted these effects and how they are considered in the assessment tables.

Table 2: Consideration of Likely Significant Effects

Type of effect	How the effect is defined in relation to sites and policies.	How is this considered in the assessment?
Direct effects	These are effects that are a direct result of a policy or allowing development at a site or retaining / safeguarding existing facilities. For example, if an allocation would allow surface quarrying at a site, it might be expected that the vegetation, soils and water bodies that overlay the mineral to be extracted would be directly disturbed / lost.	Direct effects are described in the text that supports the scoring for each assessment. In addition, if direct effects are observed, the column at the right hand side of the assessment table marked 'D' will be ticked.
Secondary or 'indirect' effects	These are effects that do not directly result from a policy or the allocation of a site. For instance, where the direct effect of allocating a site might include the diversion of a stream, an indirect effect might be that, as a result of that diversion flood risk increases in a new location.	Indirect effects are described in the text that supports the scoring for each assessment. In addition, if indirect effects are observed, the column at the right hand side of the assessment table marked 'I' will be ticked.
Cumulative effects	Cumulative effects are effects that may not in themselves be significant, but when taken together with other developments, become significant. So if one site were allocated which caused the loss of 20 per cent of a woodland, that effect might be considered to be of minor significance on its own. However, if some years later an additional site is extended resulting in the loss of a further 30 per cent of the woodland, the cumulative effect would be that 50 per cent of a woodland may be lost, resulting in a more significant net effect. Cumulative effects can also arise when earlier or later phases of a single development are considered. So while an earlier phase of a development might have been of low significance, further effects in the present allocation or in a subsequent phase might add to an effect to bring it over the significance threshold. So while a section of land may have been lost due to earlier quarrying at a site, if a later phase also removes an additional section of land the	Cumulative effects are noted in the text that supports the scoring for each assessment.

	overall impact may accumulate to a significant level[5]. Cumulative effects may also occur where 2 or more policies lead to combined effects.	
Synergistic effects	This is where two or more effects interact to create an effect that is greater than the sum of those effects. For example, an air pollutant in the presence of other pollutants may have a different effect than an air pollutant on its own. The creation of a new habitat on its own might result in an isolated patch of habitat with relatively poor species diversity, whereas if two or more sites are restored to similar habitats in close proximity to one another species are more likely to move between them resulting in greater species diversity than a single site.	Synergistic effects are noted in the text that supports the scoring for each assessment
Short term effects Medium term effects Long term effects	SEA guidance typically does not define short term, medium term or long term effects other than stating that it is necessary to consider the timescale of effects. In this assessment we have recorded the time periods in which effects are most likely to occur, starting from the point at which development commences. The time periods we use are 'the short term' (0 to 5 years from development commencing / the policy taking effect), 'the medium term' (6 to 15 years from development commencing / the policy taking effect) and 'the long term' (16 years and beyond).	The time period in which effects occur is indicated by the placement of a score in columns at the side of the assessment table marked 'S' (short term), 'M' (medium term) and 'L' (long term).
Permanent effects Temporary effects	Again, there is little guidance on what constitutes permanent or temporary effects for SEA. However, the 'Design Manual for Roads and Bridges', while not directly applicable to the Joint Plan, does offer a limited definition, that is: *"the impact may be long term or irreversible and hence permanent"* while *"temporary effects are considered to be short term or medium term"*[6]. Temporary and permanent effects can occur in the short, medium or long term. So a short term effect might be indicated as occurring in	Permanent and temporary effects are described in the text that supports the scoring for each assessment. In addition, the time periods in which permanent or temporary effects occur is indicated via the placement of effects scores in the relevant time slots (see short, medium and long term

[5] A good definition of cumulative effects is offered by the European Commission in relation to Environmental Impact Assessment, which states that cumulative impacts are 'impacts that result from incremental changes by other past, present or reasonably foreseeable actions together with the project' (European Commission, 1999. Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions' [URL: http://ec.europa.eu/environment/archives/eia/eia-studies-and-reports/pdf/guidel.pdf]

[6] Highways Agency, 2008. Design Manual for Roads and Bridges: Volume II Environmental Assessment [URL: standardsforhighways.co.uk/ha/standards/ghost/dmrb/vol11/section2/ha20508.pdf]

	the medium and long term, while permanent effects might also be indicated as occurring within these time periods. However, permanent effects will be shown to continue indefinitely from the point at which they first occur. So a permanent effect first occurring in the short term will continue to exhibit effects in the medium and long term. Effects may be reversible or irreversible however, though irreversible effects are always permanent. If a permanent effect is irreversible we will indicate this in the supporting text. Similarly, reversible effects will be indicated so that this can inform mitigation.	effects above). Where permanent and / or temporary effects are noted columns on the full SA and Site Assessment SA tables show a tick in the relevant 'P' (permanent) column, or ''T' (temporary) column.
Positive effects	These are effects that support the achievement of an SA objective – so a site might, through a restoration scheme, positively contribute to the objective 'to protect and enhance the quality and character of landscapes and townscapes' or some other objective. Any of the categories of effects listed above can be positive, for example a temporary positive synergistic effect may occur.	These can range from minor to major positive, indicated by a + or ++ in the SML columns. More than one score may be indicated if effects diverge.
Negative effects	These are effects that detract from the achievement of an SA objective, e.g. a site or policy might detract from the 'protect and enhance water quality objective' if it is likely to expose the water table to a pollution risk. As with positive effects any of the categories of effects listed above can be negative.	These can range from minor to major negative, indicated by a - or -- in the SML columns. More than one score may be indicated if effects diverge.
Neutral / insignificant and uncertain effects	In some cases no effect or an insignificant effect on the SA objective will be observed. In other cases there may be some uncertainty associated with an effect.	Neutral / insignificant or uncertain effects are indicated by a '0' or '?' in the SML columns. More than one score may be indicated if effects diverge.

2.4 Recording the Effects

As the policy assessment and site assessment processes employ slightly different formats for recording environmental effects further details of where effects are recorded in assessment tables are included in the relevant chapters for evaluating the preferred options (chapter 4) and evaluating the preferred sites (chapter 5). A simplified assessment process has been used for the assessment of plan's vision and objectives, which is explained in chapter 3 below.

The full assessments in the appendices and volume 2 include the following symbols and abbreviations:

P – Denotes a permanent effect

T – Denotes a temporary effect

D – Denotes a direct effect

I – Denotes an indirect effect

S – Denotes a short term effect (0 to 5 years)

M – Denotes a medium term effect (6 to 15 years)

L – Denotes a long term effect (16 years and beyond)

3. Appraising the Vision and Objectives

3.1 Approach to Appraising the Vision

Assessment of the Plan's objectives is required under stage B1 of the key Sustainability Appraisal tasks[7]. The Plan's vision and objectives will set the overall direction of the Plan and the framework for the policies in the Plan and it is therefore important that these are assessed at the outset of Plan production to ensure that any sustainability effects can be identified and addressed at the strategic level.

When we consulted on a sustainability appraisal at the Issues and Options stage of plan preparation we carried out an initial assessment of the draft vision and objectives. This has been updated following consultation on the SA findings and further revised to present an up to date appraisal of the latest iteration of vision and objectives.

The vision has been assessed as a whole against the SA framework, taking into account the fact that the vision is high-level and would not be expected to contain the level of detail that may be expected within options or policies. The assessment has been undertaken using the matrix in the Scoping Report. However, due to the high level nature of the vision we have simply recorded if the vision is likely to have broadly positive or negative effects. While we have considered direct and indirect effects where relevant, we have not considered other types of effects (e.g. cumulative effects, the temporal nature of effects etc.).

3.2 Vision Appraisal

The Vision and Priorities as presented at the Preferred Option Stage of Joint Plan development is as follows:

Over the period to 2030 the Joint Plan area will move towards the more sustainable provision of minerals and waste infrastructure and services, maintaining a careful balance between meeting future needs whilst protecting and enhancing the Joint Plan area's environment, protecting and supporting its communities and strengthening its economy.

The following interconnected priorities underpin the vision and objectives:

- Delivering sustainable waste management
- Achieving the efficient use of minerals resources
- Optimising the spatial distribution of minerals and waste development
- Protecting and enhancing the environment, supporting communities and businesses and mitigating and adapting to climate change.

Delivering Sustainable Waste Management

i. Less waste will be being generated and the Joint Plan area will have moved substantially closer to a zero waste economy, with more waste being used as a resource and disposal of

[7] See 'figure 1: Stages in this Sustainability Appraisal' in section 1 of this report

waste arising in the Joint Plan area only taking place as a last resort. National and local targets for recycling and diversion of waste will, as a minimum, have been met and, where practicable, exceeded. Important waste management infrastructure will have been safeguarded for the future and the Joint Plan area will have delivered sufficient waste management capacity to meet needs equivalent to waste arising in North Yorkshire and the City of York, with waste only being exported out of the Joint Plan area where necessary or more sustainable.

Achieving the Efficient Use of Minerals Resources

ii. *Whilst maximising the use of alternatives to primary minerals, the provision of an adequate and steady supply of minerals will have been maintained, recognising the important role the Joint Plan area has in the supply of a range of minerals and in particular recognising the area's role in aggregates provision in the Yorkshire and Humber area and the adjacent North East region. Provision will have also reflected the importance of using local minerals to help maintain and improve the quality of the area's built environment. Important minerals resources and minerals supply infrastructure will have been safeguarded effectively for the future.*

Optimising the Spatial Distribution of Minerals and Waste Development

iii. *Where geological and infrastructure considerations allow, opportunities to ensure a good match between locations of minerals supply and demand will have been taken, and appropriately located mineral workings will also be playing a role as locations for the re-use and/or recycling of construction and demolition and excavation waste.*

iv. *For both minerals and waste development, an adequate network of suitably scaled and sustainably located facilities will have been delivered in order to meet requirements identified in the Plan and the distribution of these will have had regard to the availability of adequate transportation networks, any opportunities for modal shift and the benefits of minimising the overall distance waste and minerals are transported.*

v. *Waste arising in both urban and rural areas will be being managed as near to where it arises as practicable, appropriate to the waste stream and scale of arisings, in order to provide a network of facilities accessible to local communities and businesses. New waste facilities in both urban and rural locations will, where practicable, have been co-located with complementary industries, businesses and producers or users of waste, in order to maximise the overall efficiency of waste management and the delivery of wider benefits to local businesses and the economy, including from the generation of heat and power through the recovery of waste.*

vi. *In identifying appropriate locations for the delivery of both minerals and waste development the distinguished natural, historic and cultural environment and unique and special landscapes of the Joint Plan area will have been protected, with particular protection afforded to the North York Moors National Park, the Areas of Outstanding Natural Beauty and the historic City of York.*

Protecting and Enhancing the Environment, Supporting Communities and Businesses and Mitigating and Adapting to Climate Change

vii. *Minerals and waste development will be taking place in accordance with the highest practicable standards of design, operation and mitigation throughout the life of the development in order to ensure that the amenity of local communities, the sustainability of local businesses and the high quality environment of the Joint Plan area are given robust protection. Liaison between developers and local communities, businesses, regulators and landowners will have been key in delivering this.*

viii. *Improved efficiency in energy and resource use, including increased use of alternatives to primary minerals and appropriate design and mitigation to address effects on, and from, climate change, including reducing the carbon footprint associated with minerals and waste and reducing flooding will have occurred, and a high standard of reclamation and afteruse of minerals and waste sites will be being delivered, providing a range of benefits for local communities and the environment of the area, including connecting habitats and enhancing biodiversity as well as protecting and restoring agricultural land.*

The results, shown in Table 4 below, contain an explanation for the scoring, and include recommendations where relevant for modifications to the vision or for factors to be taken on board when developing detailed policies. Table 3 explains the scoring.

Table 3: Key

Score	Significance
++	There is predicted to be a major positive effect on the baseline and the achievement of the SA objective
+	There is predicted to be a minor positive effect on the baseline and the achievement of the SA objective
0	There will be no effect on the baseline and the achievement of the SA objective
-	There is predicted to be a minor negative effect on the baseline and the achievement of the SA objective
--	There is predicted to be a major negative effect on the baseline and the achievement of the SA objective
?	The effects on the baseline and the achievement of the SA objective are uncertain

Table 3: Sustainability Appraisal of the Draft Vision

SA Objective	Impact[8]	Comments / Mitigation
1. Protect and enhance biodiversity and geodiversity and improve habitat connectivity	++	Whilst lacking specific reference to biodiversity, geodiversity and habitats, paragraph vii does state that *'the environment of the Joint Plan area will be given robust protection'* and paragraph vi states that the natural environment will be protected when identifying appropriate locations for minerals and waste developments. In addition, paragraph viii mentions '*providing a range of benefits for local communities and the environment of the area, including connecting habitats and enhancing biodiversity…*' when considering

[8] Within this appraisal of the vision, specific direct impacts cannot be identified and so the use of the word impact is intended to communicate that the vision will direct Plan development in a way which positively or negatively contributes to the SA objective.

SA Objective	Impact[13]	Comments / Mitigation
		site reclamation and aftercare The vision will therefore have a strong positive impact against this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. However, the policies of the Plan should ensure that protection is given to biodiversity and geodiversity and support habitat connectivity. **Has the recommendation been incorporated? / any further recommendations:** No changes to the vision were necessary though the suggestion that habitat connectivity be mentioned in policies has now also been incorporated (D07: Biodiversity). No further changes are necessary.
2. Enhance or maintain water quality and supply and improve efficiency of water use	+	Whilst lacking specific reference to water quality and supply, paragraph vii does state that *'the environment of the Joint Plan area will be given robust protection'* and paragraph vi states that the natural environment will be protected when identifying appropriate locations for minerals and waste developments. The vision will therefore have a positive impact against this objective. **Recommendations:** No changes to the vision are recommended in relation to this objective. However, the policies of the Plan should ensure that protection is given to water quality and supply. **Has the recommendation been incorporated? / any further recommendations:** No changes were necessary. However, a Development Management Policy D:09 'Water Environment' has been included as a preferred option. No further changes are necessary.
3. Reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	++	Paragraph iv specifically aims for new minerals and waste development to have regard to '*an adequate network of suitably scaled and sustainably located facilities ……and the distribution of these will have had regard to the availability of adequate transportation networks, any opportunities for modal shift and the benefits of minimising the overall distance waste and minerals are transported'.* The vision will therefore have a strong, direct positive impact against this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. **Has the recommendation been incorporated? / any further recommendations:** No changes were necessary.
4. Protect and improve air quality	+	Whilst lacking specific reference to air quality, paragraph vii does state that the environment of the Joint Plan area will be given *'robust protection'* and paragraph vi states that the natural environment will be protected when identifying appropriate locations for minerals and waste developments. The vision will

SA Objective	Impact[13]	Comments / Mitigation
		therefore have a positive impact against this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. However, the policies of the Plan should ensure that protection is given to air quality. **Has the recommendation been incorporated? / any further recommendations:** No changes were necessary. However, a preferred policy D02 'Local Amenity and Community Impacts' covers air quality issues. No further changes are necessary.
5. Use soil and land efficiently and safeguard or enhance their quality	+	Positive to strong positive effect. Paragraph vii refers to protecting and restoring agricultural land though reclamation and aftercare. In addition, the vision refers to maximising the use of alternatives to primary minerals, co-location of waste facilities with complementary uses, and safeguarding infrastructure (which may all indirectly result in less land take). Further, references to protecting the environment may also afford protection to the quality of land and soils. The vision will therefore have an indirect positive impact against this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. However, the policies of the Plan should ensure that protection is given to the most valuable land and soils. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary. However, a preferred policy D12 'Protection of agricultural land and soils' has been incorporated. No further changes are necessary.
	++	
6. Reduce the causes of climate change	++	Paragraph viii makes specific reference to improving efficiency in energy and resource use and mitigating effects on climate change. Other parts of the vision may have indirect positive effects such as the aim to co-locate developments and minimise the overall distance waste and minerals are transported which would minimise transport emissions. The vision will therefore have direct and indirect positive effects against this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. However, the policies of the Plan should contain further detail about what assets should be protected and how. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary. However, further work through the site assessment process has revealed further opportunities to protect assets that may play a key role in protecting assets such as freight hubs that may play a role in

SA Objective	Impact[3]	Comments / Mitigation
		combating climate change, while policy S04: 'Transport Infrastructure Safeguarding' sets out a means for protecting rail and water infrastructure. No further changes are necessary.
7. Respond and adapt to the effects of climate change	++	Paragraph viii refers to addressing the effects from climate change and therefore has a strong, direct positive effect against this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary at Issues and Options and that is still the case.
8. Minimise the use of resources and encourage their re-use and safeguarding	++	Minimisation of use of resources, re-use of resources and safeguarding are all explicitly referred to within the vision. Paragraph i refers to waste being used as a resource and paragraph ii refers to maximising the use of alternatives to primary minerals and safeguarding minerals resources. Paragraph viii refers to efficiency in resource use in design of new development. The vision therefore has a strong direct positive impact on this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary at Issues and Options and that is still the case.
9. Minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	++	Paragraph i refers to less waste being generated, more waste being used as a resource and disposal of waste only taking place as a last resort, and the vision will therefore have a strong, direct positive effect on this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary at Issues and Options and that is still the case.
10. Conserve and enhance the historic environment, heritage assets and their settings	+	Paragraph vi states that the historic environment will be protected when identifying appropriate locations for minerals and waste developments. Whilst lacking specific reference to the historic environment elsewhere in the vision (for instance during restoration), paragraph vii does state that *'the environment of the Joint Plan area will be given robust protection'.* The vision will

SA Objective	Impact[3]	Comments / Mitigation
		therefore have positive effects on this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. However, the policies of the Plan should ensure that protection is given to the historic environment. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary. However, a preferred policy D08 'Historic Environment' has been incorporated. No further changes are necessary.
11. Protect and enhance the quality and character of landscapes and townscapes	+	Paragraph vi states that the natural, historic and cultural environment (which are all components of the landscape and townscapes) and unique and special landscapes will be protected when identifying appropriate locations for minerals and waste developments. Paragraph vii states that *'the environment of the Joint Plan area will be given robust protection'* which would include landscape. The vision will therefore have direct positive effects on this objective. The addition of further reference to connecting habitats and restoring agricultural land through restoration is also likely to have indirect benefits. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. However, the policies of the Plan should ensure that consideration is given to impacts on all landscapes. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary. However, a preferred policy D06 'Historic Environment' has been incorporated. No further changes are necessary.
12. Achieve economic growth and create and support jobs	++	The vision supports the economy of the Plan Area through supporting an adequate and steady supply of minerals, safeguarding minerals for the future and referring to more waste being used as a resource. Paragraph vii also refers to the sustainability of local businesses. **Recommendations at Issues and Options:** No changes to the vision are required in relation to this objective. However, job support and creation should specifically be identified in the policies. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary. While support for jobs has not been specifically referenced in a policy, the policies as a whole do many things to support jobs –e.g. policies around safeguarding, landbanks and policies that protect the environment and communities which should

SA Objective	Impact[13]	Comments / Mitigation
		also benefit tourism. No further changes are necessary.
13. Maintain and enhance the viability and vitality of local communities	+	Paragraph vii refers to protecting the sustainability of local businesses and the amenity of local communities which will have a positive contribution towards protecting the viability and vitality of local communities (e.g. could boost tourism). Paragraph viii states that '*a high standard of reclamation and after use……will be being delivered, providing a range of benefits for local communities….*' Paragraph vii also refers to liaison with local communities and businesses. **Recommendations at Issues and Options:** No changes to the vision are required in relation to this objective. However, supporting communities and local businesses should specifically be identified in the policies. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary. However other policies in the plan indirectly benefit communities and local businesses (e.g. DO2 Local Amenity and Cumulative Impacts, DO3 Transport of Minerals and Waste and Associated Traffic Impacts etc.). No further changes are necessary.
14. Provide opportunities to enable recreation, leisure and learning	+	Whilst protection is afforded to some of the key recreation assets in the Plan area (notably the National Park and also the AONBs) the vision does not specifically contain reference to protecting opportunities for recreation, leisure and learning. Protection of local amenity in paragraph vii may however also indirectly help to protect recreation and leisure assets, particularly through liaison with local communities. Similarly, paragraph viii's reference to a high standard of reclamation and after-use providing benefits for local communities and the environment including enhancing biodiversity is likely to have indirect benefits on recreation. The vision will therefore have direct and indirect positive impacts on this objective. **Recommendations at Issues and Options:** No changes to the vision are required in relation to this objective. However, protection and enhancement / creation of opportunities for recreation, leisure and learning should be identified in the policies. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary. However, other policies such as D10 Reclamation and Afteruse and DO2 Local Amenity and Cumulative Impacts do provide benefits. No further changes are necessary.
15. Protect and improve wellbeing, health and safety of	+	Paragraph vii refers to new development *'having the highest practicable standards of design, operation and mitigation throughout the life of the development in*

SA Objective	Impact[3]	Comments / Mitigation
local communities		*order to ensure that the amenity of local communities...are given robust protection'*. The vision will therefore have a positive impact on this objective, provided that 'amenity' is considered to include health, safety and wellbeing in this strategic context. While amenity is protected by the vision, there is also reference to "*a high standard of reclamation and afteruse of minerals and waste sites will be being delivered, providing a range of benefits for local communities."* This is considered to allow an opportunity for new areas to be made available to the community which could benefit local wellbeing and health in particular. A minor positive effect is recorded as although the vision includes statements that allow support for wellbeing, health and safety, it is felt that a more specific reference to the achievement of health, safety and wellbeing would have been possible and would have raised the profile of these issues in minerals and waste planning. **Recommendations at Issues and Options:** Whilst the vision performs positively against this objective, it is considered that protection should be given specifically to the health, safety and wellbeing of local communities through detailed policies covering amenity. **Has the recommendation been incorporated? / Any further recommendations:** Yes, policy D02 Local Amenity and Cumulative Impacts has been included. This specifically guards against unacceptable impacts to a range of specific impacts that may affect local amenity / health / wellbeing. <u>No further changes are necessary.</u>
16. Minimise flood risk and reduce the impact of flooding	++	Paragraph viii refers to addressing the effects from climate change, and specifically refers to addressing effects on and from flooding. The vision will therefore have a strong, direct positive impact on this objective. **Recommendations at Issues and Options:** No changes to the vision are recommended in relation to this objective. **Has the recommendation been incorporated? / Any further recommendations:** <u>No changes were necessary at Issues and Options and that is still the case.</u>
17. Address the needs of a changing population in a sustainable and inclusive manner	++	The vision refers to providing an adequate and steady supply of minerals as well as protecting the area's important assets. The vision also refers to liaison with local communities in delivering the Plan. The vision will therefore have a strong, direct positive impact on this objective. **Recommendations at Issues and Options:** No

SA Objective	Impact[8]	Comments / Mitigation
		changes to the vision are recommended in relation to this objective. **Has the recommendation been incorporated? / Any further recommendations:** No changes were necessary at Issues and Options and that is still the case.

To summarise, the vision has been assessed as contributing to beneficial impacts on the environment, economy and communities in the Plan area. Potential positive impacts have been identified in relation to the natural and historic environment objectives, landscape, climate change, the economy and protecting communities and their health and wellbeing. In addition, potentially strong positive impacts are identified in relation to minimising the use of resources, transport, soils and land, biodiversity and geo-diversity, managing waste more sustainably, mitigating and adapting to climate change and enabling the supply of minerals to support the needs of the population. No negative impacts have been identified, primarily due to the vision being an overarching set of aspirations for the Plan.

Question SA2: Do you agree with the assessment of the revised vision? Have we missed anything?

3.2 Approach to Appraising the Objectives

The objectives of the Plan, which are a reflection of the vision and set out the aims that the Plan should follow to meet the vision, must also be tested against the SA framework in order to ascertain any potential synergies and inconsistencies[9]. This can be helpful in identifying the potential for sustainability effects as the plan develops.

The Plan Objectives are:

- Objective 1 – Encouraging the management of waste further up the waste hierarchy
- Objective 2 – Making adequate provision for the waste management capacity needed to manage waste arising in the sub-region
- Objective 3 – Safeguarding important minerals resources and minerals infrastructure for the future
- Objective 4 – Prioritising the long term conservation of minerals through facilitating provision of sustainable alternatives to primary land won minerals extraction, including increasing the re-use and recycling of minerals and the use of secondary and marine aggregates
- Objective 5 – Planning for the steady and adequate supply of the minerals needed to contribute to local and wider economic growth, development, quality of life, local distinctiveness and energy requirements, within the principles of sustainable development

[9] Further information on testing plan or programme objectives is available in ODPM, 2005. A Practical Guide to the Strategic Environmental Assessment Directive.

- Objective 6 – Identifying suitable locations for the extraction and recycling of minerals, the production of secondary aggregate, key minerals supply and transport infrastructure and the management of waste
- Objective 7 – Seeking a good match between locations for waste management infrastructure and the places where waste arises, and between locations for mineral working and minerals supply infrastructure and the places where minerals and mineral products are used, in order to minimise the overall need for transport
- Objective 8 – Promoting the use of alternatives to road transport and ensuring that new development is served by suitable transport networks
- Objective 9 – Protecting the natural and historic environment, landscapes and tranquil areas of the Joint Plan area
- Objective 10 – Protecting local communities, businesses and visitors from the impacts of minerals and waste development, including transport
- Objective 11 – Addressing the causes and effects of climate change relating to minerals and waste development activity, including using opportunities arising from minerals and waste development and reclamation activity to mitigate and adapt to climate change
- Objective 12 – Delivering benefits for biodiversity, recreation opportunities and climate change adaptation through reclamation of minerals workings

In order to check the consistency between the Plan's objectives themselves, an initial check of the extent to which the Plan Objectives complement or run counter to one another was made. This can be viewed in volume I of the Issues and Options Sustainability Appraisal Update Report. As no significant changes have been made to the objectives since the Issues and Options Consultation this compatibility check has not changed since that earlier consultation we have not repeated that exercise in this report. Interested readers are encouraged to view the result of the compatibility on the Sustainability Appraisal web page.

The compatibility check exercise did however observe a number of inconsistencies between objectives however in all cases the assessment considered that potentially incompatible objectives remained important for the plan and did not consider that there should be any amendments that could be made which would remove this uncertainty, therefore any potential issues should be addressed through the detailed policies in the Plan.

After assessing the Plan Objectives against themselves, the Plan Objectives were assessed against the objectives contained in the SA framework using a simplified scoring technique, as summarised below.

+	Objectives are compatible
-	Objectives are incompatible
0	No direct relationship
?	Uncertain / potentially incompatible

As the Plan objectives have not significantly changed the results of this assessment have not significantly changed since Issues and Options other than through changes that were suggested through consultation. A full summary of the consultation comments is available on the Sustainability Appraisal website. However, we have reproduced the results of the

assessment of the Plan objectives against the SA objectives (including changes made through consultation) in figure 1 below.

Figure 1: Assessment of Plan Objectives against Sustainability Objectives

	Sustainability Objectives																
Joint Plan Objective	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
1	+	+ ?	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+
2	?	?	+	+ ?	?	?	0	+	+	?	?	+	?	?	?	?	+
3	0	0	0	0	0	0	0	+	+	+	0	+	+	0	0	0	+
4	+	+ ?	?	?	+	+	+	+	+	+	+	+	+	0	+	+	+
5	-	-	?	?	-	-	- +	-	+	?	?	+	?	?	?	- +	+
6	?	?	?	?	?	?	?	0	0	?	?	+	?	?	?	?	+
7	0	0	+	+	0	+	+	0	0	0	0	+	+	0	0	0	0
8	0	0	+	0	0	+	0	0	0	0	0	0	0	0	+	0	0
9	+	+	+	+	+	+	+	+	?	+	+	+ ?	+	+	+	+	?
10	0	+	+	+	0	0	+	+	?	+	+	?	+	+	+	+	?
11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
12	+	0	0	0	0	0	+	0	0	0	0	0	0	+	0	+	0

To summarise, the objectives of the Plan are considered to have a potentially positive relationship on many of the environmental, economic and community Sustainability Appraisal objectives. The Plan Objectives which seek to protect the environment and address climate change (9, 11 and 12) score particularly positively in relation to the SA objectives. A number of uncertainties have been identified, however, in terms of the relationship between Plan and SA objectives, particularly for Plan Objectives 2, 5 and 6. On their own these objectives may ultimately result in a range of potential impacts on the environment and communities in the Plan area, and so exhibit an uncertain relationship with the relevant SA objectives. Plan Objectives 5 and 2 in particular may impact negatively on the achievement of the biodiversity, landscape, the historic environment and community wellbeing SA objectives, with objective 5 showing outright negative effects in these areas.

It should be noted that all objectives will operate in combination with each other and that a positive score has been recorded at least once in relation to each sustainability objective, meaning that the Plan will contribute in some way towards each SA objective.

A number of areas of uncertainty were identified in the assessment at Issues and Options and various recommendations were proposed for addressing these uncertainties. Table 5 summarises the recommendations made and whether this has been addressed at the Preferred Options stage of Plan development.

Table 5: Progress from Issues and Options Towards Addressing Uncertainty Associated with Plan Options.

Issue Identified	Recommendation Made at Issues and Options	Extent to which addressed at Preferred Options and further recommendations
Uncertainty has been recorded between Plan Objective 1 and SA Objective 2 as whether or not there are any positive or negative impacts depends upon whether the processes of reusing and recycling materials would use more water than extraction and processing, which cannot be ascertained at this strategic level.	As Plan Objective 9 refers to protecting the natural environment, which would include water quality and supply, it is not considered necessary to amend Plan Objective 1, but water usage should be considered when considering site allocations and when developing the detailed policies of the Plan.	The Preferred Options document includes a development management policy DO9: 'Water Environment' which includes consideration of surface and groundwater quality and surface or groundwater supplies and flows. The Site Assessment Methodology included an objective to consider water quality and quantity in relation to site allocations where relevant. The SA also includes a water objective which has been applied to all policy options.
Under Plan Objective 2 potential impacts on biodiversity, water quality and supply, air quality, mitigating climate change, historic environment, landscape, recreation and communities are possible, so the relationship with the relevant SA objectives is uncertain as much would depend upon the location and type of development	As Plan Objective 9 refers to protecting the natural and historic environment, landscapes and tranquil areas it is not considered necessary to make any amendments to Plan Objective 2.	No further action was required. However, all the issues identified are considered in the SA objectives which have been applied to all policy options. Similarly, an assessment methodology based on the SA objectives has been applied to all submitted sites.
Uncertainty has been recorded between Plan Objective 4 and SA objective 2 as whether or not there are any potential effects depends upon whether the processes	As Plan Objective 9 refers to protecting the natural environment, which would include water quality and supply, it is not considered necessary to amend Plan	All policy options and submitted sites have been assessed against an SA objective relating to water quality and efficiency of use. In addition, the preferred

of reusing and recycling materials would use more water than extraction and processing, which cannot be ascertained at this strategic level. The level of compatibility between these objectives is therefore uncertain.	Objective 4, but water usage should be considered when considering site allocations and when developing the detailed policies of the Plan	options in the Joint Plan include a development management policy that deals with water quality and supply – D09: Water Environment.
Uncertainty has been recorded between Plan Objective 4 and SA objectives 3 and 4 as potential effects on transport and air quality would depend upon the resultant transportation requirements of alternatives to primary land won minerals. The level of compatibility between these objectives is therefore uncertain.	As Plan Objectives 8 and 9 seek to promote sustainable transportation and protect the natural environment it is not considered necessary to amend Plan Objective 4.	Both the transport and air quality effects of all policy options have been considered via the SA objectives for transport and air quality. In addition, the Site Assessment Methodology included objectives to consider transport and air quality in relation to site allocations where relevant. The Plan's preferred options also include development management policies about transport (D03) and amenity impacts (D02) which includes air quality.
Under Plan Objective 5 there may be negative or uncertain effects on a number of SA objectives related to protecting the environment and communities, depending on the location of minerals extraction and the level of compatibility between these objectives is therefore uncertain.	As Plan Objectives 9 and 10 seek to protect the environment and communities it is not considered necessary to amend Plan Objective 5.	All policy options and submitted sites have been assessed against a number of SA objectives relevant to the environment and communities.
Plan Objective 6 may lead to negative or uncertain effects on a number of SA objectives related to protecting the environment and communities, depending on the location of minerals extraction. The level of compatibility between these objectives is therefore uncertain.	As Plan Objectives 9 and 10 seek to protect the environment and communities it is not considered necessary to amend Plan Objective 5.	All policy options and submitted sites have been assessed against a number of SA objectives relevant to the environment and communities.
Uncertainty has been recorded between Plan Objective 9 and SA Objectives 9, 12 and 17 in	As the Plan contains a number of objectives which support minerals supply and the provision of waste	The SA has considered the effects of all policy options and submitted sites against economy, waste

relation to the economy, minerals supply and provision of waste management infrastructure should it restrict the amount of minerals extraction and waste management development coming forward. The level of compatibility is therefore uncertain.	management facilities it is not considered necessary to amend Plan Objective 9.	management and population needs (including minerals supply) SA objectives.
Whilst Plan Objective 9 scores positively in relation to SA Objective 1 and they are therefore broadly compatible, it is considered that a stronger positive could be achieved by amending the Plan Objective to also refer to enhancing the environment	Amend Plan Objective 9 to state 'Protecting and enhancing the natural and historic environment, landscapes and tranquil areas of the Joint Plan area'.	**Not taken forward.** However, the supporting text to the objective refers to enhancing the environment while development management policies such as 'D08: Historic Environment' and 'D07 Biodiversity and Geo-diversity' refer to enhancement or net gain.
Uncertainty has been recorded between Plan Objective 10 and SA Objectives 9, 12 and 17 in relation to the economy, minerals supply and provision of waste management infrastructure should it restrict the amount of minerals extraction and waste management development coming forward.	As the Plan contains a number of objectives which support minerals supply and the provision of waste management facilities it is not considered necessary to amend Plan Objective 10.	The SA has considered the effects of all policy options and submitted sites against economy, waste management and population needs (including minerals supply) SA objectives.

Question SA3: Do you agree with the assessment of the plan objectives? Have we missed anything?

4. Assessing the Preferred Options

4.1 Introduction

Following consideration of a range of possible policy options at the Issues and Options stage of Joint Plan development, as well as the consultation responses received and the findings of earlier SA work, a series of preferred draft policies has been put forward for minerals and waste. These cover the following areas:

- Minerals policies
- Waste policies
- Minerals and waste transport and other infrastructure
- Minerals and waste safeguarding policies
- Development Management Policies

This chapter follows the categories of policy used in the Joint Plan and summarises the findings of the Sustainability Appraisal process. The full results of the SA can be found in Appendix 2 (separate volume) and follow the methodology outline in the scoping report, with effects described in detail, as outlined in chapter 2 of this report.

An audit trail of policy evolution is also provided with each assessment. Here we have tried to provide a succinct summary of earlier assessment findings at the Issues and Options phase. Readers should note that for reasons of brevity policies assessed are not referred to in full and are simply summarised in terms of their key features in parentheses. While SA recommendations are recorded it should also be recognised that many policies have evolved significantly since the Issues and Options consultation, and that while the SA may recommend one option or another, individual options often contained a range of positive and negative aspects. So while in some cases assessment recommendations may differ from options taken forward, often preferred options are formed from the better aspects of earlier options or have been written to work alongside other policies, such as the development management policies. This can result in markedly different assessments as policies evolve.

For details of earlier assessment work readers should refer to the SA web page.

4.2 Sustainability Effects of Minerals Policies

Policy M01- Broad geographical approach to supply of aggregates

The Joint Plan area outside the North York Moors National Park, the Areas of Outstanding Natural Beauty and the City of York will be the main focus for extraction of aggregate (sand and gravel and crushed rock). Exceptions to this principle will be made for:

1) In the National Park and Areas of Outstanding Natural Beauty, the extraction of crushed rock aggregate where it is incidental to building stone extraction as the primary activity, and where the removal of crushed rock from the site will not compromise the high quality reclamation and afteruse of the site.

2) In the Areas of Outstanding Natural Beauty, the extension of time for the extraction of remaining permitted reserves at existing quarries and/or, subject where necessary to the major development test, the limited lateral extension or deepening of existing quarries where necessary to help ensure continued operation of the site during the plan period. Any proposals in these areas will need to demonstrate a particularly high standard of mitigation of any environmental impacts including, where practical, enhancement of mitigation and quality of site reclamation compared with that required by the existing permission/s.

3) In the City of York area, the small scale extraction of sand and gravel where the development will comply with the development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ - ?	- ?	+	+ ?	0 -	+	0	0	0	+ - ?	+ -	+	+	+ - ?	?	0	+
M	+ - ?	- ?	+	+ - ?	0 -	+	0	0	0	+ - ?	+ -	+	+	+ - ?	?	0	+
L	+ - ?	- ?	+	+ - ?	0 -	+	0	0	0	+ - ?	+ -	+	+	+ ?	?	0	+

Summary of Sustainability Appraisal Findings

This preferred option exhibits a range of different effects. In the main the sustainability objectives recorded minor positive effects for the protected landscapes in the plan area.

However, some minor negative effects associated with crushed rock extraction shifted location away from protected areas and into the remaining plan area.

Recommendations

No recommendations are made.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options with a further 6 alternative options assessed that were suggested by consultees. The preferred approach is a combination of Options 1 *(aggregates only from outside the National Park / AONBs / City of York) and 2 (aggregates from NYCC area plus City of York)* with elements of additional options 3 *(only source from National Park / AONBs where demand can't be met from areas outside)* and 8 *(which is option 1 or 2 with the addition of support for use of excess crushed rock from building stone sites in National Park / AONBs)*.

The SA recommended that a combination of options 1, 2 and 3 be progressed, whereby the policy is clear that extraction should take place outside of the National Park and the AONBs as a first priority but within the rest of the NYCC area and the City of York area. Option 8 should also be supported as a further means of enabling aggregates extraction with minimal environmental effects.

SA options assessments can be viewed in the Updated Issues and Options Sustainability Appraisal Update.

Policy M02: Provision of sand and gravel

Total provision for sand and gravel over the 16 year period 1st January 2015 to 31st December 2030 will be made in the range of 41.3 to 42.8 million tonnes, at an equivalent annual rate between 2.58 and 2.68 million tonnes.

Additional provision shall be made, through a mid-term review of provision in the Plan, if necessary in order to maintain a 7 year landbank of sand and gravel at 31 December 2030 based on an annual rate of provision to be determined through the review.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	? -	? -	? -	? -	? -	--	?	--	- ?	? -	? -	++	?	0 ?	?	+	+
M	? -	? -	? -	? -	? -	--	?	--	- ?	? -	? -	++	?	0 ?	?	+	+
L	? -	? -	? -	? -	? -	--	?	--	- ?	? -	? -	++	?	+ ?	?	+	+

Summary of Sustainability Appraisal Findings

This preferred policy's effects are in the main uncertain as no indication of where provision would be obtained from is presented. However, clearly extracting a substantial volume of sand and gravel will have at least some environmental effects, though the magnitude of these effects is dependent on location. There are a small number of exceptions to this. For instance, it requires energy to extract and to transport minerals which, assuming continued reliance on fossil energy, would generate significant CO2 and other greenhouse gases, with strongly works against the climate change objective. Similarly, the 'minimising resource use' use objective displays strong negative effects, as this policy will allow for the consumption of up to 42.8 Mt of primary minerals. There are also some positive effects noted, for instance the recreation objective receives indirect positive support, as further extraction would ultimately lead to further restoration in line with other policies in the plan, while the economic development, flooding and changing population objectives would also be supported.

Recommendations

While much is uncertain in relation to this objective, it is recognised that this is the nature of policies such as this. To some extent this policy is mitigated by policy M11 which encourages alternatives to land won primary aggregate, though it is acknowledged that many secondary and recycled aggregates are not direct substitutes for sand and gravel. Further consideration of the potential contribution made by recycled and secondary

aggregate is recommended when this policy is considered at the mid-term review, depending on the availability of reliable data.

Alternatives Considered and SA Recommendation at Issues and Options

6 options were assessed at Issues and Options with a further 4 alternative options assessed that were suggested by consultees. The preferred approach represents an alternative option not specifically considered at Issues and Options stage.

The SA recommended that Option 6 (*projecting forward 10 year annual sales to calculate provision but factor in reduction for other alternative sources of supply*) performs the most positively in terms of the sustainability appraisal. However, this option did present some uncertainty in terms of meeting demand for sand and gravel. This might be addressed by allowing greater flexibility to increase supply in a similar way to option 4 *(includes a review of provision in 2019 with ability to increase supply by 10%)* and Option 10 (*includes a review of provision in 2019 with ability to increase supply by 10% but also considering provision from outside of the Plan area)*.

The SA Team felt that as option 6 took account of the potential for other alternative sources of supply, final consideration of this option should also include consideration of the alternatives presented under ID14 (The preferred option for this is M11: 'Supply of Alternatives to Land won Primary Aggregate').

SA options assessments can be viewed in the Updated Issues and Options Sustainability Appraisal Update.

Policy M03: Overall distribution of sand and gravel provision

Overall provision of sand and gravel will be allocated in the following proportions:
Southwards distribution area: 50%
Northwards distribution area: 45%
Building sand: 5%

If it is not practicable to make overall provision, through grant of permission on allocated sites in accordance with this ratio, then provision for concreting sand and gravel shall be made across both areas in combination.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	? -	? -	+	+	? -	+	0	0	0	? -	? -	+	0	? -	+ - ?	0	0
M	? -	? -	++	+	? -	++	0	0	0	? -	? -	++	- +	? -	+ - ?	0	+
L	+ -	? -	++	+	? -	++	0	0	0	? -	? - +	++	- +	? +	+ - ?	+	+

Summary of Sustainability Appraisal Findings

There are a range of effects that arise from this preferred policy and all effects are tentative with significant uncertainty at this scale. For instance, the biodiversity, water, soils, historic environment and recreation objectives all show a negative relationship with this preferred policy, largely because the balance of development proposed favours areas that are richer in terms of the environmental assets associated with those SA objectives.

More positive contributions towards objectives are reported for the traffic, air quality and climate change objectives because, as the policy seeks to fit with the distribution of markets and demand, the length of minerals freight journeys will be slightly less on balance. This will also keep costs down and benefit the economy SA objective. Other objectives are either neutral or report more mixed effects. For instance, while journeys may be shorter, because the southern plan area is closer to centres of population, there may be a greater probability that traffic will affect communities.

Recommendations

No recommendations are made.

Alternatives Considered and SA Recommendation at Issues and Options

4 options were assessed at Issues and Options with a further 1 alternative options assessed that was suggested by consultees. The preferred approach is based on option 1 *(northwards sand and gravel – southward sand and gravel – building sand provision split at a ratio of 50:45:50).*

The SA recommended that option 1 was associated with a clear economic, and a number of outright environmental, benefits and was seen to perform best in relation to the SA Framework. It was considered that Option 1 should be combined with Option 5 (*an option that looked across the plan area to meet shortfalls)* in order to ensure that demand can be met and to strengthen the economic benefits.

SA options assessments can be viewed in the Updated Issues and Options Sustainability Appraisal Update.

Policy M04: Landbanks for sand and gravel

A minimum 7 year landbank of concreting sand and gravel will be maintained throughout the plan period for each of the northwards and southwards distribution areas identified on the key diagram.

A separate minimum 7 year landbank will be maintained throughout the plan period for building sand.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	0	0	0	0	0	0	--	--	0	0	++	0	0	0	0	0
M	0 -	0 -	0 -	0 -	0 -	-	0	--	--	0 -	0 -	++	+ -	0 -	0 -	0	+
L	-	-	0	0	--	-	0	--	--	-	-	++	+ -	-	0	0	+

Summary of Sustainability Appraisal Findings

Impacts in relation to this policy are largely neutral in the short term with minor negative impacts occurring in the medium to long term. This is because in the longer term separate northwards and southwards distribution area landbanks could mean that there is increased pressure to maintain the landbank in defined (and therefore finite) areas, which may put additional pressure to approve sites in areas where cumulative effects on are already starting to build. Major negative impacts have been recorded in relation to minimising resource use and prioritising management of waste as high up the waste hierarchy as practicable as maintaining a landbank is likely to reduce incentive to work towards these objectives. Positive impacts have been identified in relation to the economy and meeting the needs of a changing population as this policy would ensure that adequate resources are available to support growth.

Recommendations

No mitigation is proposed as maintaining a landbank is government policy.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options. No further alternative options suggested by consultees were assessed. The preferred approach is based on option 1 (7 year land banks for both the southwards and northwards distribution areas and for building sand).

The SA recommended that option 3 *(allowing time extensions to allow full extraction)* combined with one of the first two options *(which both suggested different ways of delivering a 7 year landbank)* would be the most sustainable option.

Policy M05: Provision of crushed rock	
Total provision for crushed rock over the 16 year period 1st January 2015 to 31st December 2030 shall be 60 million tonnes, at an equivalent annual rate of 3.75 million tonnes, within which specific provision for a total of 22.2 million tonnes at an equivalent annual rate of 1.39 million tonnes per annum shall be for Magnesian Limestone. Additional provision shall be made, through a midterm review of provision in the Plan, if necessary in order to maintain a 10 year landbank of crushed rock, including a separate 10 year landbank for Magnesian Limestone, at 31 December 2030 based on an annual rate of provision to be determined through the review.	
Main responsibility for implementation of policy: NYCC, CYC, NYMNPA and Minerals Industry	
Key links to other relevant policies and objectives	
M01, M06, M09, M10, M11, S01	*Objective 5*
Monitoring: Monitoring indicator 5 (see Appendix 3)	

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	? -	? -	? -	? -	? -	--	?	--	? -	? -	? -	++	?	0 ?	?	? +	+
M	? -	? -	? -	? -	? -	--	?	--	? -	? -	? -	++	?	0 ?	?	? +	+
L	? -	? -	? -	? -	? -	--	?	--	? -	? -	? -	++	?	+ ?	?	? +	+

Summary of Sustainability Appraisal Findings

This preferred policy's effects are in the main uncertain as no indication of where provision would be obtained from is presented. However, clearly extracting a substantial volume of crushed rock will have at least some environmental effects, though the magnitude of these effects is dependent on location. There are a small number of exceptions to this. For instance, it requires energy to extract and to transport minerals which, assuming continued reliance on fossil energy, would generate significant CO2 and other greenhouse gases, which strongly works against the climate change objective. Similarly, the 'minimising resource use' use objective displays strong negative effects, as this policy will allow for the consumption of up to 60 Mt of primary minerals. There are also some positive effects noted, for instance the recreation objective receives indirect positive support, as further extraction would ultimately lead to further restoration in line with other policies in the plan, while the economic development, flooding and changing population objectives would also be supported.

Recommendations

While much is uncertain in relation to this objective, it is recognised that this is the nature of policies such as this. No recommendations are made.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options with a further 3 alternative options assessed that were suggested by consultees. The preferred approach represents an alternative option not specifically considered at Issues and Options stage.

Of the previous options considered, the SA recommended that Option 3 *(increased use of secondary and recycled materials alongside provision of 65 mt of crushed rock)* be pursued, as this would enable sufficient provision of Magnesian limestone whilst limiting negative effects and encouraging of use of secondary and recycled aggregates.

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Policy M06: Maintenance of landbanks for crushed rock

A minimum overall landbank of 10 years will be maintained for crushed rock throughout the plan period. A separate 10 year landbank will be monitored and provided for Magnesian Limestone crushed rock.

Where new reserves of crushed rock are required in order to maintain the overall landbank above the 10 year minimum period these will be sourced from outside the National Park and Areas of Outstanding Natural Beauty.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	0	0	0	0	0	0	--	--	0	0	0	0	0	0	0	++
M	0	0	0	0	0	0	0	--	--	0	0	0	0	0	0	0	++
L	- ++ ?	--	0 -	- +	--	- +	+	--	--	-- + ?	-- ++ ?	++	-- ++	- ++ ?	- + ?	+	++

Summary of Sustainability Appraisal Findings

This policy could have negative effects on the environment, including biodiversity / geodiversity, air and water quality, landscape, resource use, minimising waste and the historic environment, and communities of the Plan area should these landbanks result in the need to release more land for extraction than is currently permitted. The policy would however, enable a level of minerals supply to meet demand for development and therefore would result in major positive impacts in relation to the economy and meeting the needs of a changing population. By requiring new reserves of crushed rock to be sourced from outside the National Park and AONBs, this policy would result in some positive effects for these designated areas particularly relating to landscape, recreation and tourism, cultural heritage and amenity. Some negative impacts may occur in these designated landscapes as there would be a decrease in local job opportunities.

Recommendations

No mitigation is proposed.

Alternatives Considered and SA Recommendation at Issues and Options

4 options were assessed at Issues and Options with no further alternative options assessed that were suggested by consultees (as no further realistic options were proposed). The preferred approach is based on a combination of Option 2 *(separate land banks for*

Magnesian limestone and other crushed rock) and 3 *(maintenance of land banks outside of the National Parks and AONBs).*

The SA recommended that provided sufficient safeguards exist in the Development Management policies, no further mitigation would be necessary under options 1 *(10 year land bank of crushed rock)* and 2. Option 3 should be followed (in combination with 1 or 2) to avoid any of the uncertainty presented by option 4 *(reliance on national policy).*

Policy M07: Meeting concreting sand and gravel requirements

Requirements for concreting sand and gravel will be met through existing permissions and the grant of permission on sites allocated in the Plan for working.

Part 1 Sand and gravel (northwards distribution) allocations:

1) Allocations required in order to meet requirements during the plan period:

   Land at Killerby (MJP21)
   Land at Home Farm, Kirkby Fleetham (MJP33)

2) Allocations potentially required to contribute to maintenance of an adequate landbank at 2030. Permission will not be granted for development of these allocations prior to 2025, unless there is a shortfall in the sand and gravel landbank in the northwards distribution area:

   Land South of Catterick (MJP17)
   Land West of Scruton (MJP43)

Part 2 Sand and gravel (southwards distribution) allocations:

1) Allocations required in order to meet requirements during the plan period:

   Land at Langwith Hall Farm (MJP06)
   Land at Oaklands (MJP07)
   Land at Pennycrofts and Thorneyfields and Manor Farm, Ripon (MJP14)
   Land at Great Givendale, Ripon (MJP51)

2) Allocations potentially required to contribute to maintenance of an adequate landbank at 2030. Permission will not be granted for development of these allocations prior to 2025, unless there is a shortfall in the sand and gravel landbank in the southwards distribution area and, for site MJP35 a satisfactory outcome to a project-specific Appropriate Assessment:

   Land at Aram Grange, Asenby (MJP04)
   Land at Ruddings Farm, Walshford (MJP35)

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S M L	Extraction of sand and gravel from the sites specified in this policy may result in a range of impacts in relation to the Sustainability Appraisal objectives. Each site has been individually assessed as part of the site assessment methodology and the results are presented in the Site Sustainability Appraisal Report.																

Summary of Sustainability Appraisal Findings

A wide range of impacts will result from extraction of sand and gravel at the sites specified in this policy. These are outlined in the Site Sustainability Appraisal Report. As many of the site allocations lie in close proximity to other existing or allocated sites, cumulative impacts will be of particular importance.

As this policy includes support for MJP35 (Land at Ruddings Farm) the Habitats Regulations Assessment 'Likely Significant Effects' report has highlighted that this policy should be further assessed in an Appropriate Assessment.

Recommendations

Appropriate mitigation should be incorporated at each allocation site in line with recommendations in the Site Sustainability Appraisal findings for each site and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options with 1 further alternative option assessed that was suggested by consultees. The preferred approach is based on is based on Option 1 *(focus on specific site allocations for sand and gravel delivery).*

The SA recommended that Option 1 be considered the most sustainable option.

Policy M08: Meeting building sand requirements

Requirements for building sand will be met through existing permissions and the grant of permission on sites allocated in the Plan for working.

Building sand allocations:

Land at Hensall Quarry (MJP22)
Land at West Heslerton Quarry (MJP30)
Land adjacent to Plasmor blockworks, great Heck (MJP44)
Land at Mill Balk Quarry, Great Heck (MJP54)

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S M L	Extraction of sand from the sites specified in this policy may result in a range of impacts in relation to the Sustainability Appraisal objectives. Each site has been individually assessed as part of the site assessment methodology and the results are presented in the Site Sustainability Appraisal Report.																

Summary of Sustainability Appraisal Findings

A wide range of impacts will result from extraction of sand at the sites specified in this policy. These are outlined in the Site Sustainability Appraisal Report. As many of the site allocations lie in close proximity to other existing or allocated sites, cumulative impacts will be of particular importance.

Recommendations

Appropriate mitigation should be incorporated at each allocation site in line with recommendations in the Site Sustainability Appraisal findings for each site and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with 1 further alternative option assessed that was suggested by consultees. The preferred approach is based on is based on Option 1(*focus on specific site allocations and criteria for building sand delivery*).

The SA recommended that Option 1 performed significantly more strongly against the sustainability appraisal objectives than the other options (i.e. Option 2's focus on areas of search and Option 3's focus on site allocations, criteria and areas of search).

Policy M09: Meeting crushed rock requirements

Requirements for Magnesian Limestone over the plan period will be met through existing permissions and the grant of permission on sites allocated in the Plan for working.

Magnesian Limestone allocations:

1) Allocations required in order to meet requirements during the plan period:

   Land at Jackdaw Crag South, Stutton (MJP23)
   Land at Barnsdale Bar Quarry (MJP28)
   Land at Went Edge Quarry, Kirk Smeaton (MJP29)

2) Allocations potentially required to contribute to maintaining an adequate landbank at 2030:

   Land at Gebdykes Quarry (MJP11)

Maintenance of supply of crushed rock is also supported through the identification of allocated sites at:

   Land at Scarborough Field, Forcett (MJP03) (Carboniferous Limestone)
   Land at Settrington Quarry (MJP08) (Jurassic Limestone)
   land at Whitewall Quarry (MJP12) (Jurassic Limestone)
   Land at Darrington Quarry (MJP24) (retention of processing plant site and haul road)

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S M L	Extraction of crushed rock from the sites specified in this policy may result in a range of impacts in relation to the Sustainability Appraisal objectives. Each site has been individually assessed as part of the site assessment methodology and the results are presented in the Site Sustainability Appraisal Report.																

Summary of Sustainability Appraisal Findings

A wide range of impacts will result from extraction of crushed rock at the sites specified in this policy. These are outlined in the Site Sustainability Appraisal Report. As many of the site allocations lie in close proximity to other existing or allocated sites, cumulative impacts will be of particular importance.

Recommendations

Appropriate mitigation should be incorporated at each allocation site in line with recommendations in the Site Sustainability Appraisal findings for each site and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options. No realistic alternatives were put forward by consultees. The preferred approach is based on is based on Option 1 (*which focused on specific site allocations and criteria for Magnesian limestone).*

The SA recommended that Option 1 performed significantly more strongly against the sustainability appraisal objectives. (*Option 2 focussed on preferred areas and areas of search.)*

Policy M10: Unallocated extensions to existing quarries

Proposals for extensions to minerals extraction sites on land not allocated for working in the Plan will be supported subject to the following criteria;

i) Where necessary in the National Park and AONBs, a satisfactory outcome in respect of the requirements for major development as set out in Policy D04;
ii) Where the development would not compromise overall delivery of the strategy for the sustainable supply and use of minerals, including encouragement of the use of alternatives to primary minerals;
iii) Where the development would be consistent with the development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ?	+ - ?	+ - ?	+ - ?	+ - ?	- ?	0	-	0	+ - ?	+ ?	++	+	+ -	- ?	0	+
M	+ - ?	+ - ?	+ - ?	+ - ?	+ - ?	- ?	- ?	-	0	+ - ?	+ ?	++	+	+ - ?	- ?	-	+
L	+ - ?	+ - ?	+ - ?	+ - ?	+ - ?	- ?	- ?	-	0	+ - ?	+ ?	++ ?	+	+ - ?	- ?	-	+

Summary of Sustainability Appraisal Findings

For most SA objectives this preferred policy results in mixed positive and negative effects when compared to the SA objective. This is because the option allows unallocated extensions to sites, which would ordinarily result in a range of negative environmental and social effects (largely because it will either extend or increase issues that affected areas surrounding quarries during the lifetime of the quarry). However, the preferred policy does include a number of safeguards against this that should lessen effects and make sites more sustainable, not least the major development test and the reference to consistency with development control policies. The policy would also offset the need for some new sites to be developed.

Some objectives vary from this pattern slightly. For instance, for climate change the extended negative traffic impacts at sites are seen as outweighing the benefits of making use of existing infrastructure at site (though there is considerable uncertainty here), while the soils objective notes the loss of land / soils that is potentially allowed by this policy. Similarly,

although this option might reduce the need for new sites elsewhere to some degree, there will be jobs and revenue / viability benefits from allowing site extensions, as well as benefits to tourism that will result from the protections afforded to protected landscapes in the policy. This leads to strongly positive effects on the economy objective. Other objectives where positives outweigh the negative, or are positive in their own right are the landscape and changing population needs objectives.

Recommendations

This policy is largely already mitigated for by the Development Management Policies. No further mitigation is proposed.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with 5 further alternative options assessed that were suggested by consultees. The preferred approach is based on is based on Option 1 (*support the principle of extensions on unallocated sites consistent with the overall aggregates supply strategy, or meet another demonstrable need for aggregates consistent with Joint Plan, without undermining alternatives to primary aggregate)* but extended to apply to all forms of mineral working.

The SA recommended that either Option 2 *(supports principle of unallocated extensions only where necessary to maintain a land bank)* or 3 *(would not support principle of extensions on unallocated sites)* would be the most sustainable to follow, although Option 3 is possibly a little inflexible and could lead to negative effects should insufficient land banks be maintained and /or new unallocated sites come forward. The chosen option should be combined with the element of Option 1 which requires consideration to be given to implications for increasing the contribution that secondary and recycled aggregates make to aggregates supply. There may also be some merit in considering a *preference* for extending existing sites rather than developing new sites, though it as yet unclear how this could work outside of the allocations process, and the issues of prolonged local effects resulting from extensions to permission for working at a site would need strong mitigation.

SA options assessments can be viewed in the Updated Issues and Options Sustainability Appraisal Update.

Policy M11: Supply of alternatives to land won primary aggregates

Proposals which would facilitate the use of secondary and recycled aggregate as an alternative to primary aggregate will be supported including:

1) The development of appropriately scaled new ancillary infrastructure, including ancillary manufacturing facilities, utilising secondary aggregate as the primary raw material, at sites where secondary aggregates are produced;
2) The supply of secondary aggregate from waste disposal sites provided it would not involve disturbance to restored ground or landscaped features;
3) The separation of materials with potential for use as aggregate during waste management activity and the maximum recovery of recycled aggregate during demolition activity;
4) The use of appropriately located aggregates mineral extraction sites as locations for the ancillary reception, processing and onward sale of recycled aggregate during the associated period of minerals extraction at the site;
5) The use of appropriately located sites for the transport of minerals as locations for the ancillary reception, processing and onward sale of recycled aggregate during the associated period of minerals transport activity at the site.

Proposals will need to demonstrate consistency with relevant development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ?	+ -	+	?	+	+	0	++	++	+ ?	+ ?	0	0 - ?	0	0 - ?	?	+
M	++ ?	+ -	+	?	+	++	0	++	++	+ ?	+ ?	0	0 - ?	0	0 - ?	?	+
L	++ ?	+ -	+ ?	?	+ ?	++ ?	0	++ ?	++	+ ?	+ ?	0	0 - ?	0	0 - ?	?	+ ?

Summary of Sustainability Appraisal Findings

For most of the SA objectives positive effects arise because supporting the use of secondary and recycled aggregates would offset the need to extract primary aggregates (and the negative effects associated with this). Some SA objectives report neutral effects as impacts associated with primary extraction are simply shifted to new locations. However, the health and wellbeing and community vitality objectives note some additional negative effects

associated with the dusty nature of some secondary aggregates, while the water objective recognises the potential for water pollution from the storage and processing of some secondary aggregates (which would be dealt with via the environmental permitting regime). There are also uncertainties associated with the supply of secondary aggregates such as colliery spoil (particularly if sources of colliery spoil close down).

Some uncertainty is noted as the Habitats Regulations Assessment of this preferred policy as the policy does not make an explicit link to the biodiversity and geo-diversity development management policy and could, in theory allow development in any location across the plan area, provided it is consistent with the requirements of the policy.

Recommendations

This policy is largely mitigated by other policies in the plan (particularly D02 Local Amenity and Cumulative Impacts) as well as the environmental permitting / pollution control regime. However, monitoring of the supply of secondary and recycled aggregates is recommended due to uncertainties over supply. To address concerns raised through the Habitats Regulations Assessment process, policy wording could be altered to state that any development would need to be compliant with development management policies in the Plan, and by including policy DO7 (biodiversity) and D09 (water) in the key links.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with 2 further alternative options assessed that were suggested by consultees. The preferred approach is based on a combination of Options 1 *(supports new infrastructure where secondary aggregates produced, supports limited re-working of secondary aggregate, and supports a policy for the sustainable use of materials in design and construction of development)* and 2 *(sets out a range of measures to support recycled aggregates)* .

The SA recommends that all options have merits and elements of each could be pursued (including elements of option 3 which supports use of colliery spoil provided it is not from restored tips, and option 4 (which prefers using supplies of secondary aggregate direct from source rather than extracting from tip sites).

Policy M12: Continuity of supply of silica sand

1) Proposals for the continuing extraction of silica sand at Burythorpe Quarry, including proposals for lateral extensions or deepening, will be supported in principle where necessary in order to maintain reserves during the period to 2030 and a minimum 10 year landbank for the site.

Compliance with relevant Development Management policies in the Plan will need to be demonstrated.

2) Proposals for development of silica sand resources at Blubberhouses Quarry, including proposals for the extension of time to complete existing permitted development, lateral extensions or deepening, will only be supported subject to the satisfactory outcome of assessment in relation to the major development test set out in national policy, the satisfactory outcome of Appropriate Assessment under the Habitats Regulations and where it can be demonstrated that compliance with other relevant Development Management policies in the Plan can be achieved.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- ?	0 -	0 -	0	-	-- ?	- +	-	?	- ?	- ?	++	+	- ?	-	0	0
M	- ?	0 -	0 -	0	-	-- ?	- +	-	?	- ?	- ?	++	+	- ?	-	0	0
L	- ?	0 -	0 -	0	-	-- ?	- +	-	?	- ?	- ?	++	+	- ?	-	0	0

Summary of Sustainability Appraisal Findings

Supporting these two sites and the deepening of or extension of them could lead to a range of negative effects. These are outlined in the site sustainability report. Major positive effects are also identified for the economy objective, as silica sand is a nationally significant mineral resource.

While the development management policies should help moderate many of the effects noted, particular issues that would need satisfactory resolution include the Blubberhouses site's potential impact on peat and possibly deep peat as well as any issues that might be identified through appropriate assessment of the effects of the Blubberhouses site on the blanket bog habitats and species associated with the North Pennine Moors SAC / SPA.

Recommendations

Appropriate mitigation should be incorporated at each allocation site in line with the Site Sustainability Appraisal findings (where relevant) and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, but no realistic alternatives were put forward by consultees. The preferred approach is based on a combination of options 2 *(support production / lateral extensions and / or deepening at Burythorpe only to maintain 10 year landbank)* and 3 *(identify a range of criteria for silica sand proposals).*

The SA recommended that while option 3 performed comparatively better than other options, the SA considered that the effects of options 1 *(support the principle of continued production at the Blubberhouses and Burythorpe sites, including the principle of lateral extensions and/or deepening to maintain land banks)* and 2 are largely the results of potential and uncertain effects on local receptors. Because of the major negative economic effects of option 3, consideration should be also given to more fully exploring the potential for mitigating the local effects of options 1 and 2 through the allocations process so that if one or more sites proves sustainable a criteria based approach could potentially support one or more allocations.

Policy M13: Continuity of supply of clay

The provision of sufficient permitted reserves of clay in order to provide a 25 year supply for existing manufacturing operations at Alne Brickworks and Plasmor Blockworks, Great Heck, is supported.

Additional reserves to help meet this requirement are provided through a site allocation for:

1) Allocations required in order to meet requirements during the plan period:

Land to north of Hemingbrough clay pit (MJP45)

Proposals for development of this site will be supported subject to compliance with the development management policies in the Plan.

2) Allocations potentially required to contribute to maintaining longer term supply for Plasmor Blockworks:

A Preferred Area on land adjacent to former Escrick brickworks (MJP55)

Proposals for development within this site will be supported only where it can be demonstrated that additional reserves are required in order to maintain an adequate longer term supply of clay to the Plasmor blockworks site and subject to compliance with the development management policies in the Plan.

Maintenance of supply of clay is also supported through the identification of an allocated site for engineering clay at:

Land north of Duttons Farm, Upper Poppleton (MJP52)

Working of unallocated brick clay resources will be supported where it can be demonstrated that the mineral is needed in order to maintain an adequate supply to existing manufacturing facilities in line with national policy, where sufficient mineral cannot be provided from sites allocated in the Plan and subject to compliance with relevant development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ?	+ -	- ?	0 - ?	- ?	-	0	-	0	+ ?	- ?	++	++	+ - ?	0 - ?	0	++
M	+ ?	+ -	- ?	0 -	- ?	-	0	-	0	+ ?	- ?	++	++	+ -	0 -	0	++

				?										?	?		
L	+ ?	+ -	- ?	0 - ?	- ?	-	+ 0	-	0	+ ?	- ?	++	++	+ ?	0 - ?	+ ?	++

Summary of Sustainability Appraisal Findings

A wide range of impacts will result from extraction of sand and gravel at the sites specified in this policy. These are outlined in the Site Sustainability Appraisal Report. As many of the site allocations lie in close proximity to other existing or allocated sites, cumulative impacts will be of particular importance.

In terms of unallocated sites, a range of minor positive and negative effects are recorded for most SA objectives as such sites will need to comply with development management policies, which will either control effects or may leave some minor residual effects when they are applied to clay development (such as on soils / land, water and landscape) or may result in minor positive effects (e.g. through mitigation providing a net gain or a high level of protection – as is the case for biodiversity and the historic environment). Strong positive effects are observed in relation the economy, community vitality and population change as ultimately clay extraction supports the brick industry and the wider construction industry and the jobs associated with those industries.

Recommendations

Appropriate mitigation should be incorporated at each allocation site in line with recommendations in the Site Sustainability Appraisal findings for each site and with other policies in the Plan. Cumulative impacts should be given particular regard through the planning application process.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with 1 further alternative option assessed that was suggested by consultees. The preferred approach is based on option 1 *(support 25 year land bank at Alne and Hemingborough / support the longer term requirements for Plasmor Brick Works from Escrick / identify areas of search for clay)* combined with elements of option 2 (*support new sites to maintain supply at existing or new manufacturing sites)* to provide flexibility.

The SA recommended that assuming that any proposals would also be subject to alternative policies within the plan; it is considered that option 1 in relation to supporting existing production should be pursued. The long term restoration benefits of option 4 *(support clay extraction where restoration would contribute to habitat connectivity)* could also be captured by incorporating it into other policies, particularly option 1.

Policy M14: Incidental working of clay in association with other minerals

The incidental working of clay in association with production of other minerals will be supported, where the incidental extraction of clay would help secure the most sustainable use of resources and would not significantly increase any adverse environmental or amenity impacts associated with the primary working, or the subsequent reclamation and afteruse of the site.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0 ?	0 ?	- ?	0 ?	+	0 ?	0	++	++	0 ?	0 ?	+	0 ?	0 ?	0 ?	0 ?	++
M	0 ?	0 ?	- ?	0 ?	+	0 ?	0	++	++	0 ?	0 ?	+	0 ?	0 ?	0 ?	0 ?	++
L	0 ?	0 ?	- ?	0 ?	+	0 ?	0	++	++	0 ?	0 ?	+	0 ?	0 ?	0 ?	0 ?	++

Summary of Sustainability Appraisal Findings

The impacts associated with this policy are predominantly neutral to uncertain. The policy would support incidental clay extraction where overall sustainability and environmental / amenity impacts would not be significantly increased. However, there is some uncertainty as to the scope of impacts that will be considered and also the stringency in relation to environmental impacts resulting from the primary working is unknown (i.e. there is uncertainty as to what 'not significantly increase any adverse environmental or amenity impacts' might mean in practice).

Some positive impacts would result from this policy as it would increase productivity from mineral extraction, minimising the generation of clay waste, providing a valuable building material and providing positive benefits for the economy.

Recommendations

No mitigation is proposed.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further alternative options suggested by consultees. The preferred approach is based on Option 1 *(support the*

incidental working of clay in association with production of other minerals). Option 2 *'would not expressly support the incidental working of clay in association with production of other minerals'*.

The SA considered that option 1 should be pursued.

SA options assessments can be viewed in the Updated Issues and Options Sustainability Appraisal Update.

Policy M15: Continuity of supply of building stone

In order to secure an adequate supply of building stone, proposals will, where consistent with other policies in the Plan, be supported for:-
(i)the extension of time for completion of extraction at permitted building stone extraction sites;
(ii)the lateral extension and/or deepening of workings at permitted building stone extraction sites;
(iii)the re-opening of former building stone quarries in appropriate locations;
(iv)the opening of new sites for building stone extraction in appropriate locations, including the small scale extraction of building stone at new sites adjacent to existing historic buildings or structures where the use is specifically for their repair;
(v)the incidental production of building stone in association with the working of crushed rock;
(vi)the grant of permission on sites allocated in the Plan for working of building stone.

Where development is proposed in the National Park and AONBs under criteria i to iv above and where the development comprises major development due to its scale and the nature, proposals will need to meet the requirements for major development set out in Policy D04.

Proposals for the supply of building stone should be supported by evidence to demonstrate the contribution that the stone proposed to be worked would make to the quality of the built and/or historic environment in the Plan area and/or to the meeting of important requirements for building stone outside the area and the scale of the proposal should be consistent with the identified needs for the stone.

For proposals for supply of building stone from locations within the National Park or AONBs, it will need to be demonstrated that the stone is required primarily to meet requirements arising from new build or repair work within the National Park and/or AONBs or is for the repair of important designated or undesignated buildings or structures which rely on the proposed source of stone as the original source of supply, or can provide a directly equivalent product which can no longer be provided from the original source quarry.

Additional reserves to help maintain supply of building stone are also provided through a site allocation for:

Land at Brows Quarry (MJP63).

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	-	-	-	-	-	-	0	--	- --	++ -	- ++	+	+ -	-	-	0	++
M	-	-	-	-	-	-	0	--	- --	++ -	- ++	+	+ -	-	-	0	++

L	- +	-	-	-	-	-	+	--	- --	++ -	- ++	+	+ -	- +	-	+	++

Summary of Sustainability Appraisal Findings

It is considered that this policy would provide an adequate supply and range of building stone to market and therefore positive impacts have been recorded in relation to the economy, community viability and vitality and meeting the needs of a changing population. The policy would enable building stone to be extracted in close proximity to historic assets or from former quarries where required in order that the correct type of stone can be sourced, conserving the historic environment of an area and the character of its heritage assets. This would result in minor to major positive impacts in relation to the historic environment and landscape objectives.

Although building stone extraction tends to be a relatively small scale operation, negative impacts have been identified in relation to a number of the environmental objectives as this policy is likely to result in an increase in active building stone sites with associated biodiversity, water, air quality, recreation, landscape and amenity impacts.

Recommendations

None

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with 2 further alternative options assessed that were suggested by consultees for the 'Continuity and Supply of Building Stone' group of options (ID20). The preferred approach takes forward option 2 *(support the building stone at new sites / extensions to existing sites).*

Additionally this preferred policy incorporates option 2 (*support extraction of building stone for use only within the Joint Plan area unless for repair of designated or undesignated structures elsewhere which rely on this stone)* of the previous 'Use of Building Stone' group of options (ID21) (for which 4 options were assessed at Issues and Options and a further 2 additional options proposed by consultees and subsequently assessed).

The SA recommended that Option 3 *(identify a range of criteria for development of building stone resources additional to development management policies)* of ID20 would enable new sites to come forward where required whilst having minimal detrimental effects on the environment. As a number of positive effects were also recorded in relation to Option 4 (*in addition to other options support the sourcing and provision of building stone from sites which are primarily extracting crushed rock*), it was considered that Option 3 should be adopted alongside Option 4 recognising that in most cases extracting building stone from an existing crushed rock quarry is likely to have a lower order impact than developing a new quarry.

Further, for ID21, the SA recommended that a combination of Options 1 (*which supports extraction of building stone from within the National Park and AONBs only where the stone would be used within the designated area it is extracted from, unless for repair of important designated or undesignated structures elsewhere which rely on this stone while elsewhere in*

the Joint Plan area there would be no restriction placed on the use of the stone extracted) and 4 *(which supports limited extraction of stone for use in building projects on the same site)* with appropriate development management to control negative effects, would be the most sustainable approach.

Policy M16: Overall spatial policy for hydrocarbon development

Proposals for development of unconventional hydrocarbons, including proposals involving hydraulic fracturing, will not be supported where they are located within the National Park, AONBs, Heritage Coast, Protected Groundwater Source Areas and World Heritage Sites, Scheduled Monuments, Registered Historic Battlefields, Grade I and II* Registered Parks and Gardens, Special Areas of Conservation, Special Protection Areas, Ramsar sites and sites of Special Scientific Interest

For conventional hydrocarbons development within and lateral hydraulic fracturing underneath designated areas identified above, applicants will need to demonstrate that all options for undertaking the development in other, non-designated, areas licenced to the applicant by DECC have been fully considered before bringing forward proposals in designated areas. Where such proposals are for appraisal or production and are located in, or in the case of hydraulic fracturing underneath, the National Park or AONBs these will be considered to comprise major development and will be refused except in exceptional circumstances in accordance with Policy D04.

Where proposals are within or in close proximity to the National Park and AONBs special care must be taken to avoid harming the setting and/or special qualities of these designated areas. Hydrocarbons development which comprise 'straddling applications' will be assessed in accordance with Policy D04.

Proposals for conventional and unconventional hydrocarbons development across the rest of the Plan area will be supported where it can be demonstrated that there would be no unacceptable impacts, taking into account proposed mitigation measures, on the environment or on local amenity or on the setting of heritage assets including the historic City of York and where they are consistent with other relevant policies in the Plan. Particular regard will be had to protecting designated Green Belt from harm resulting from hydrocarbons development.

In determining proposals, consideration will be given to any cumulative impacts arising from other hydrocarbon development activity in proximity to the proposed development, including any impacts arising from successive hydrocarbons development taking place over substantial periods of time. Proposals will be supported where there would be no unacceptable cumulative impacts.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	-	-	+	0	-	+	+	--	0	+	++	+	+	+	+	0	0

	?	?			?	-	?			- ?	- ?			-	- ?		
M	- ?	- ?	+	0	- ?	+ -	+ ?	--	0	+ - ?	++ - ?	+	+	+ -	+ - ?	0	-
L	- ?	- ?	+	0	- ?	+ -	+ ?	--	0	+ - ?	++ - ?	+	+	+ -	+ - ?	0	-

Summary of Sustainability Appraisal Findings

This preferred option exhibits a range of mostly minor effects, some positive and some negative. Most positive effects occur because the preferred policy steers development away from a broad range of protected areas such as National Parks / AONBs and other nationally or internationally protected environmental designations, either by not supporting it in such areas or requiring proposals for conventional hydrocarbons in National Parks / AONBs to meet the requirements for major development set out in Policy D04. Negative effects tend to occur because development may concentrate in other areas that are not afforded protection by the policy, though unacceptable effects will still be avoided, with particular regard given to the Green Belt.

Recommendations

Some uncertainty in relation to impacts on soils and land take could be removed by including a reference to policy D12 in the 'key links to other relevant policies and objectives'.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with 3 further alternative options assessed that were suggested by consultees. The preferred approach takes forward option 1.

The policy approach for Coal Mine Methane is considered to be identical to that of other unconventional oil and gas resources and therefore it was considered appropriate to merge this policy with the other hydrocarbon policies.

The SA advised that *"It is acknowledged that whilst Option 1* [*direct all gas developments outside of the National Park / AONBs*] *performs best overall, Options 2* [*high standard of siting, design and mitigation across the Plan Area*] *and 3* [*support exploration and appraisal across the plan area, but direct processing or electricity generating facilities outside of National Parks and AONBs*] *would provide a better framework for ensuing sufficient gas developments can come forward. A combination of options whereby license holders, whose license(s) cover land both within and outside National Parks and AONBs, must investigate possibilities outside of these areas first and all operators must aim to locate processing facilities outside of these areas and apply particularly high standards of siting, design and mitigation within these areas is recommended, though option 6's requirement for avoidance of 'significant adverse impacts on local communities or the environment' provides a broader scope for mitigation (provided it is coupled with the 'particularly high standard' mentioned in some of the options)".*

Policy M17: Exploration and appraisal for hydrocarbon resources

Proposals for the exploration and appraisal of hydrocarbon resources will be supported where they are considered to be in accordance with the overall spatial policy as set out in Policy M16 for onshore hydrocarbon development and the following requirements are met:-

i. any unacceptable adverse impact on the environment, local amenity, and heritage assets is avoided or can be appropriately mitigated so far as practicable taking into account the geological target being explored or appraised; and
ii. a robust assessment has been carried out to demonstrate that there will be no harm to the quality and availability of ground and surface water resources, ground stability and that public safety can be adequately protected;
iii. Following completion, of exploration and/or appraisal any wells are sealed to prevent the risk of any contamination of ground or surface waters or any emissions to air; and
iv. development would be consistent with other relevant policies in the plan

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ - ?	+	- ?	0 -	- ?	-	0	--	+ ?	+ - ?	+ - ?	++	+ -	0 - ?	+ -	+ ?	0
M	+ - ?	+	- ?	0 -	- ?	-	0	--	+ ?	+ - ?	+ - ?	++	+ -	0 - ?	+ -	+ ?	+
L	+ - ?	+	- ?	0 -	- ?	-	0	--	+ ?	+ - ?	+ - ?	++	+ -	0 - ?	+ -	+ ?	+

Summary of Sustainability Appraisal Findings

The preferred policy mostly acts as a positive safeguard against the main impacts of hydrocarbon exploration and appraisal, particularly as it combines with preferred policy M16 and other policies such as the development management policies, though uncertainty is noted as these other policies are as yet unadopted.

There are, however, some minor negative effects. These stem largely from the fact that despite the strong protection in the policy combined with other plan policies, residual effects which are difficult to avoid or mitigate for will remain. For instance, historic environment

character, landscape character, biodiversity, community vitality and health and wellbeing were all objectives which reported this residual risk.

The climate change objective reported outright minor negative effects as the policy ultimately supports hydrocarbon exploration and appraisal development which could cause release of fugitive methane or cause emissions of CO2 from traffic, soils and through the embodied energy of structures on site. A major conflict with the minimising resource use objective was also recorded as proposals brought forward under this policy could eventually lead to non-renewable resource extraction.

Recommendations

A potential approach to reducing resource intensity, waste and climate change impacts could be through better links to policy D11 'Sustainable Design, Construction and Operation of Development (which requires 'minimisation of waste generated by new minerals and waste development' and 'reduction or minimisation of greenhouse gases') by listing it in the 'key links to other relevant policies and objectives'.

Alternatives Considered and SA Recommendation at Issues and Options

1 option was assessed at Issues and Options, with a further 2 alternative options assessed that were suggested by consultees.

The policy approach for Coal Mine Methane is considered to be identical to that of other unconventional oil and gas resources and therefore it was considered appropriate to merge this policy with the other hydrocarbon policies.

The SA advised that Option 1*(sites selected to minimise adverse impacts on the environment, amenity, and transport / particularly high standards of siting, design and mitigation within or closes to National Park / AONBs / townscape and setting of York)* should be pursued as this criteria based approach provides guidance and standards specific to gas exploration and appraisal and provides greater certainty in the medium to long term. It is recommended that Option 1 is extended to include more detail as to social factors to be considered, such as effects on safety and local economy.

Policy M18: Production and processing of hydrocarbon resources

Proposals for the production and processing of hydrocarbon resources will be supported where they are in accordance with the overall spatial policy as set out in Policy M16 for onshore hydrocarbon development and the following requirements are met:-

- Any unacceptable impact on the environment, local amenity and heritage assets is avoided or can be appropriately mitigated. Where proposals are for unconventional resources particular care will need to be given to demonstrate that there will be no harm to the quality and availability of ground and surface water resources, ground stability and that public safety can be adequately protected; and
- Transportation of gas from locations of production, including to any remote processing facilities, will be via underground pipeline, with the routing of pipelines selected to have the least environmental or amenity impact; and
- Proposals are in accordance with other relevant policies in the plan.

A co-ordinated approach should be adopted through the preferential use and/or adaptation of any available and suitable processing and transport infrastructure for the processing and transport of any new gas finds. In relation to any development of new gas resources not accessible to available and suitable processing infrastructure preference will be given to siting of new processing infrastructure on brownfield, industrial or employment land, particularly where there are opportunities for use of combined heat and power. Where this requirement cannot be met applicants should seek to steer new development sites away from best and most versatile quality agricultural land. The Minerals Planning Authority will support co-ordination between licence operators and the development of shared processing infrastructure where this will help reduce overall impacts on the environment and local amenity.

At the end of production facilities should be dismantled with any wells sealed to prevent the risk of any contamination of ground or surface waters or any emissions to air and the site restored to its former use or other agreed use in accordance with Policy D10 Reclamation and after-use of minerals and waste sites.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ - ?	+	+	+ ?	++ -	+ -	0	++ --	+ ?	+ - ?	+ - ?	++	+ -	0 - ?	+ -	+ ?	++
M	+ -	+	+	+ ?	++ -	+ --	0	++ --	+ ?	+ -	+ -	++	+ -	0 -	+ -	+ ?	++

	?									?	?			?			
L	+ - ?	+	+	+ ?	++ -	+ ?	0	++ --	+ ?	+ - ?	+ - ?	++	+ -	0 - ?	+ -	++	++

Summary of Sustainability Appraisal Findings

There are a range of mixed effects from this option, though it is more positive than negative. The preferred policy mostly acts as a positive safeguard against the main impacts of hydrocarbon extraction, particularly as it combines with preferred policy M16 and other policies such as the development management policies, though uncertainty is noted as these other policies are as yet unadopted.

There are, however, some negative effects. These stem largely from the fact that despite the strong protection in the policy combined with other plan policies, residual effects which are difficult to avoid or mitigate for will remain. For instance, historic environment, landscape character, biodiversity, community vitality, recreation and health and wellbeing were all objectives which reported this residual risk.

The climate change objective reported a mixture of positive and up to major negative effects. This is because the policy supports combined heat and power generation and prefers brownfield land at the same time as supporting hydrocarbon production and processing development though sealing of wells at the end of production should limit longer term emissions. A major conflict with the minimising resource use objective was also recorded as this policy will allow non-renewable resource extraction and may also have a considerable 'materials footprint'. However that same objective also recorded some positive effects as it seeks to make good use of land and existing infrastructure where available which would reduce the overall resource use.

Recommendations

A potential approach to reducing resource intensity, waste and climate change impacts could be through better links to policy D11 'Sustainable Design, Construction and Operation of Development (which requires 'minimisation of waste generated by new minerals and waste development' and 'reduction or minimisation of greenhouse gases') by listing it in the 'key links to other relevant policies and objectives'.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no alternative options assessed that were suggested by consultees. The preferred approach takes forward option 1 of ID24 *(a co-ordinated approach to gas extraction and processing / preferential use of exiting processing infrastructure / co-ordination between license operators over shared processing infrastructure*).

The policy approach for Coal Mine Methane is considered to be identical to that of other unconventional oil and gas resources and therefore it was considered appropriate to merge this policy with the other hydrocarbon policies.

The SA recommended that option 1 of ID26 be pursued *(support new gas production and processing where consistent with other plan policies / minimise any adverse impacts on the environment / public safety / transport / preference for brownfield land and opportunities for CHP with particularly high standards of siting, design and mitigation within or close to National Park / AONBs / setting of York).* In relation to ID24 the SA recommended that supporting a co-ordinated approach such as option 1 is more likely to positively contribute to sustainable development and the consideration of cumulative effects as opposed to relying on other policies in the plan to make decisions on gas extraction and processing.

Policy M19: Carbon and gas storage

Proposals for carbon capture and storage and the underground storage of gas will be permitted where it has been demonstrated that:

i) The local geological circumstances are suitable; and
ii) There will be no harm to the quality and availability of ground and surface water resources, land stability and public health and safety;
iii) There would be no unacceptable impact on the environment or local amenity;
iv) The proposals are consistent with other relevant policies in the plan.

Transport of carbon or gas is expected to be via pipeline with the routing of lines selected to give rise to the least environmental or amenity impact.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- ? 0	0	+ ? 0	0 - ?	- ? 0	++ 0 -	0	0	0	? - 0	? - 0	+ 0	+ 0	? 0	0 -	0 ?	0
M	- ? 0	0	+ ? 0	0 - ?	- ? 0	++ 0 -	0	0	0	? - 0	? - 0	++ 0	+ 0	? 0	0 -	0 ?	0
L	- ? 0	0	+ ? 0	0 - ?	- ? 0	++ 0 -	0	0	0	? - 0	? - 0	++ 0	+ 0	? 0	0 -	0 ?	0

Summary of Sustainability Appraisal Findings

This preferred policy has strong positive effects for the economy (in terms of the energy security provided by gas storage and the business opportunities associated with CCS technology) as well as for climate change mitigation. Other effects tend to be location specific though could be negative due to factors such as the land footprint of buildings and pipelines and the risk that leaks could occur.

Recommendations

No further mitigation proposed.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were considered at Issues and Options (under the options grouping “Coal Bed Methane, Underground Coal Gasification, Shale gas and Carbon and Gas storage”). A further 2 options were suggested by consultees and also assessed.

The SA recommended that Option 1 (*support the development of CBM, UGC and shale gas resources with robust assessment of geological / hydrogeological resources / availability of water resources / local amenity / public safety issues; transport of gas to be via pipeline; high standard of design in / close to National Parks / AONBs / setting of York)* would provide a more certain approach for the Joint Plan area provided that the precautionary approach underlies the support in principle. It is considered that incorporating Option 3 (*extension to the precautionary principle in Option 1 or Option 4 by requiring applications for permission for the development of CBM, UCG and shale gas resources to demonstrate that the proposed site has been identified so as to avoid sensitive locations and designations including residential areas, important environmental designations and other important assets which require protection under the planning system*) may be beneficial but careful consideration would need to be given to defining the terms used.

Policy M20: Continuity of supply of deep coal

Proposals for lateral extensions to the permitted underground working area for Kellingley Colliery, in locations accessible from the current colliery site, will be supported where it can be demonstrated that the following criteria have been satisfactorily addressed;

i) the effects of subsidence upon land stability and important surface structures, infrastructure (including flood defences) and environmental and cultural designations, will be monitored and controlled so as to prevent unacceptable impacts;

ii) that opportunities have been explored, and will be delivered where practicable, to maximise the potential for reuse of any colliery spoil generated by the development and that proposed arrangements for any necessary disposal of mining waste materials arising from the development are acceptable;

iii) the proposals would be consistent with the development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	0	- ?	0	0	-	0	--	-- ?	0	- ?	+ ++ ?	++ ?	0	- ?	0 ?	+ ?
M	0	0	- ?	0	0	-	0	--	-- ?	0	- ?	+ ++ ?	++ ?	0	- ?	0 ?	+ ?
L	?	?	- ?	0 - ?	- + ?	--	0	--	-- ?	0 - ?	- ?	+ ++ ?	++ ?	0	- ?	0 ?	+ ?

Summary of Sustainability Appraisal Findings

This preferred policy exhibits a mixture of mainly minor positive and negative effects. Most minor negative effects occur because, while the preferred policy combines with the development control policies in the plan, because of the nature of deep coal development, residual effects may remain. This is the case for the flooding, health and wellbeing, landscape, historic environment, soils, traffic and water objectives. More significant minor effects occurred in relation to the resource use (as coal mining is the extraction of a non-renewable resource) and climate change (due to longer term greenhouse gas emissions from mines) objectives.

Positive contributions were also recorded, particularly in terms of the economy. However, all options recorded a high level of uncertainty as Kellingley Colliery is expected to close in late 2015.

Recommendations

To extend the capacity for colliery spoil to be put to productive use as secondary aggregate the policy could be strengthened by rewording the disposal arrangements sentence to *''the proposed arrangements for disposal of mining waste materials arising from the development are acceptable and opportunities for use as a secondary aggregate (or other productive use) have been explored'.*

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees. The Preferred approach is based on Option 1 *(Lateral extensions to Kellingley Colliery with criteria for assessment)*.

The SA made several recommendations to improve both objectives, including expanding the range of criteria considered to include water pollution impacts, considering the potential for a secondary use for spoil and considering the utilisation of coal mine methane (which may also be considered under other options, if chosen).

Broadly, the SA reports mixed effects for these options with option 2 *(no support for lateral extensions to Kellingley, but maximise exploitation from within current permitted area)* favoured for environmental performance, and option 1 favoured for economic and social performance.

Policy M21: Shallow coal

Proposals for the extraction of shallow coal will be supported where extraction would take place as part of an agreed programme of development to avoid sterilisation of the resource as a result of the implementation of other permitted surface development; and where the proposal would be consistent with the development management policies in the Plan.

Other proposals for the working of shallow coal will be permitted where all the following criteria are met:

i)The site is located outside the National Park and AONBs and, where located outside these designated areas, would not cause significant adverse impact within them;
ii)The site is located outside internationally and nationally important nature conservation designations and, where located outside these designated areas, would not cause significant adverse impact within them;
iii)Where located in the Green Belt, the working, reclamation and afteruse of the site would be compatible with Green Belt objectives in line with national policy on Green Belt;
iv)The site is well located in relation to the highway network and intended markets;
v) The development would be consistent with the development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- ?	- ?	+	- ?	-- ?	- -- ?	0	--	0	- ?	- -- ?	+	?	- ?	- ?	0	0
M	- ?	- ?	+	- ?	-- ?	- -- ?	0	--	-	- ?	- -- ?	+	?	- ?	- ?	0	0
L	0 + ?	- ?	+	- ?	?	- -- ?	0	--	--	- ?	- -- ?	+	?	- ?	- ?	0	0

Summary of Sustainability Appraisal Findings

This preferred option mainly reports minor negative effects against the SA objectives that result from the potential for shallow coal to create large scale holes in the ground or generate impacts such as traffic, dust and water pollution. While development management policies elsewhere in the plan will help mitigate these impacts (though uncertainty is noted until these are finalised), the possibility that one or more large scale sites could result from the policy may leave some minor residual impacts.

Some objectives fare slightly worse with minor to major / moderate negative effects being reported under the landscape objective and climate change objective, and temporary major negative effects expected in terms of the land and soils and waste objectives

Recommendations

This policy is generally mitigated by other policies in the plan (particularly relation to the water environment, local amenity and cumulative impacts, transport, agricultural land and soils, reclamation and after use and historic environment). However, the assessment has concluded that better links could be made to policy D10 'Reclamation and Afteruse' to ensure that all shallow coal development, inside and outside of the Green Belt is suitably restored (or suitable restoration / preparation for the development which would have otherwise sterilised the resource is enabled) Further mitigation might be achieved through restoration which helps to offset greenhouse gases – for instance restoration of habitats that sequester carbon or restoration to renewable energy production.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees. The Preferred approach is based is based on a combination of Option 1 *(no specific support for shallow coal, but allow extraction to avoid sterilisation by other surface development)* and elements of Option 2 *(support for shallow coal where consistent with the development management policies)*.

The sustainability appraisal has shown the potential for significant negative sustainability effects associated with option 2. From a sustainability perspective option 1 is preferable. Consideration of the implications for these options should be considered when selecting / drafting development management policies.

Policy M22: Disposal of colliery spoil

Disposal of spoil from Kellingley Colliery at the Womersley spoil disposal site, including proposals for increased capacity required to provide for the expected remaining life of the Colliery to the end of 2015, will be supported subject to compliance with development management policies in the Plan.

Any additional spoil disposal capacity requiring development of new disposal facilities in the Joint Plan area will be considered in relation to the following order of preference:

i) Infilling of quarry voids where this can deliver an enhanced overall standard of quarry reclamation
ii) Use of derelict or degraded land
iii) Where use of agricultural land is necessary, use of lower quality agricultural land (ALC Grade 3b or below) in preference to higher quality agricultural land (ALC Grade 3a or higher)

Preference will also be given to proposals which are located;

iv) Outside the Green Belt unless it can be demonstrated that the development at the particular location proposed would not represent inappropriate development, in line with national policy;
v) Where spoil can be delivered to the site via sustainable (non-road) means of transport or, where road transport is necessary, transport of spoil can take place without unacceptable impacts on the environment or residential amenity

Proposals should also demonstrate compliance with other relevant development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- ?	- ?	- ?	- ?	-	- ?	0 ?	- +	- +	- ?	- ?	0	0 -	- ?	- ?	0 ?	?
M	- -- ?	- ?	- ?	- ?	-	- ?	0 ?	- +	- +	- ?	-- ?	0	0 -	- ?	- ?	0 ?	?
L	- + ?	- ?	- ?	- ?	-	- ?	0 ?	- +	- +	- ?	- +	0	0 -	- + ?	- +	0 ?	?

Summary of Sustainability Appraisal Findings

Minor negative effects were observed for almost all sustainability objectives as most of the potentially major effects of colliery spoil disposal would be mitigated to a large degree by the development management policies. Effects may temporarily rise to major negative for the

biodiversity and landscape objectives largely due to the potential loss of a SINC site at Womersley (though this uncertain as it relates to an as yet undetermined application). For any new site there is, however, significant uncertainty on the magnitude of effects as this will depend on the location of the site in relation to population and other environmental receptors.

Objectives for minimising resource use and minimising waste observed mixed positive and negative effects as the policy is a disposal option for spoil and says little about re-use as secondary aggregate, though this is promoted by policy M11 which is linked. The climate change objective noted the potential for unknown greenhouse gas emissions at a new site, which depending largely on the distance from the source of colliery spoil. Some minor benefits for the recreation and wellbeing objectives may come through restoration in the long term.

Recommendations

The policy could be strengthened by making a stronger link to policy D11 (which isn't listed in the policy's 'key links to other relevant policies and objectives') so that a carbon assessment for new sites would be required.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with a further 2 alternative options assessed that were suggested by consultees. The preferred approach is based on a combination of Option 1 (revised to exclude reference to the Gale Common site) and elements of Option 2.

The SA recommended that Option 1 *(support for maximising the disposal capacity at Womersley spoil disposal site and the utilisation of any available capacity at Gale Common ash disposal site)* performs better than option 2 *(utilise available capacity at Gale Common as well as support a new facility subject to certain criteria being met)* and 3 (*support new colliery spoil tips where existing facilities have reached capacity).* Option 4 (*support the disposal of colliery spoil at locations which are accessible by non-road transport methods or are close to the strategic road network*), where used in conjunction with other options, would enhance sustainability effects. However, it should be noted that there was significant uncertainty around this assessment as the outcome of a major planning application at the Womersley site was still to be determined and the location of a new site or new sites under options 2 and 3 is unknown. There is some potential to mitigate some negative effects for option 2 and 3, particularly through detailed criteria, and if a new facility is developed to encourage the utilisation of secondary aggregates. Options 2 and 3 will also offer the chance to reduce sustainability effects at communities that are currently adversely affected by existing sites (though effects may be displaced to other communities).

Policy M23: Potash, polyhalite and salt supply

Proposals for the extraction of potash, salt or polyhalite from new sites within the North York Moors National Park and renewed applications for the existing sites at Boulby Mine and Doves Nest Farm beyond their current planning permissions will be assessed against the criteria for major development set out in Policy D04.

Proposals for new surface development and infrastructure associated with the existing potash and polyhalite mine sites in the National Park, or their surface expansion, which are not considered to be major development will be supported provided they meet the requirements of Policy D11 and that no unacceptable impact would be caused to the special qualities of the National Park, its environment or residential or visitor amenity in the context of any overriding need for the development.

Proposals for increased volume of potash extraction, the extraction of other forms of potash not included in existing permissions, or sub-surface lateral extensions to the permitted working area in locations accessible from the existing sites at Boulby Potash Mine and the Doves Nest Farm site as well as proposals for new sites outside of the National Park, will be supported where it can be demonstrated that the following criteria have been satisfactorily addressed;

i) The proposals will reduce the impact on the special qualities of the National Park or where this is not possible include substantial mitigation measures to improve the special qualities of the Park;
ii) The effects of subsidence upon land stability, coastal erosion and important surface structures, infrastructure (including flood defences) and environmental and cultural designations, can be monitored and controlled so as to prevent unacceptable impacts;
iii) The proposed arrangements for disposal of mining waste materials arising from the development are acceptable; and
iv) The requirements of Policy I01 for transport and infrastructure have been fully considered; and
v) The proposals would be consistent with other relevant development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- ?	- -- ?	- ?	- ?	- ?	- -- ?	- ?	--	- ?	- ?	- ?	? - ++	? ++ -	? - +	? -	? -	+
M	- ?	- -- ?	- ?	- ?	- ?	- -- ?	- ?	--	- ?	- ?	- ?	? - ++	? ++ -	? - +	? -	? -	+

L	- ?	- -- ?	- ?	- ?	- ?	- -- ?	- ?	--	- ?	- ?	- ?	? - ++	? ++ -	? - +	? -	? -	+

Summary of Sustainability Appraisal Findings

Most SA objectives have negative effects resulting from application of the major development requirements, which significantly moderate effects, but may still allow some development in the National Parks and AONBs. Support for new development outside of designated landscapes (albeit subject to specific criteria and the development management policies) could lead to negative effects (with significant uncertainty) for most SA objectives. In addition, lateral extensions could lead to subsidence or could extend the time period in which Boulby and Dove Farm operate, with corresponding minor negative / uncertain sustainability effects.

The economic and community vitality SA objectives report a mixture of uncertain, strongly positive and minor negative effects. This is because significant jobs could be provided, but tourism may suffer, depending on location.

The climate change and resource use objectives show up to major negative effects, the former due to the factors such as possible transport of materials, loss of soils and habitat and the embodied carbon in infrastructure such as road connections, pipelines (if used) and buildings (with uncertainty noted about the configuration of future sites, and effects moderated to a degree by the sustainable design policy), the latter objective recognising a large scale extraction of a non-renewable resource (albeit a resource which has limited potential for substitution).

Minor to major negative effects are reported for the water quality SA objective, as the potash resource outside of the National Park includes a concentration of Source Protection Zones.

Recommendations

No further mitigation is proposed.

Alternatives Considered and SA Recommendation at Issues and Options

4 options were assessed at Issues and Options, with a further 1 alternative option suggested by consultees and then assessed. It is considered that elements of a number of options could provide the basis for a preferred approach

The SA recommended that option 1 *(support an indigenous supply of potash from one location only)* be pursued. The next best option, at least in terms for protecting the most nationally significant environmental assets, would be option 4 *(support extraction of potash from under the National Park as well as outside of the National Park, but only support siting of surface infrastructure outside the National Park)*. However, there are question marks over deliverability of this option as it is unknown if viable locations could be found. So if this option were to be pursued further work to establish the quality of the resource may be necessary, or an approach akin to option 5 (*support the supply of potash from new sites. Within the National Park and AONBs the requirements of the major development test would need to be*

met) may allow a better balance between protecting nationally important assets and delivering a steady supply of potash.

Policy M24: Supply of gypsum

The extraction of natural gypsum and the supply of desulphogypsum will be supported where the proposal complies with the development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0 + ?	0 + ?	+ ?	+ ?	0 + ?	0 + ?	0	- +	- +	0 + ?	0 + ?	++	+	0	0 + ?	0 + ?	++
M	0 + ?	0 + ?	+ ?	+ ?	0 + ?	0 + ?	0	- +	- +	0 + ?	0 + ?	++	+	0	0 + ?	0 + ?	++
L	0 + ?	0 + ?	+ ?	+ ?	0 + ?	?	0	- +	- +	0 + ?	0 + ?	++	+	0	0 + ?	0 + ?	++

Summary of Sustainability Appraisal Findings

The consideration of future gypsum and DSG proposals against the development control policies should have broadly neutral to minor positive effects as future development will need to take account of a range of environment and amenity criteria. It will also have more major positive effects on the economic growth and changing population needs objectives as gypsum supply will be more secure going forward as both gypsum and DSG are supported. This will underpin future development due to gypsum's importance as a construction material.

Two objectives reported mixed positive and negative effects. The 'minimising resource use' objective identified that support for gypsum would consume a primary natural resource on the one hand, but support for DSG would do the opposite in that it would save / offset consumption of primary gypsum. A similar effect was observed for the 'minimising waste objective' in that the policy might, though supporting gypsum, allow gypsum to be extracted at the expense of utilising waste DSG as a resource. However, the policy also supported DSG, so the market may play a role in optimising the balance between these two materials.

Recommendations

None.

Alternatives Considered and SA Recommendation at Issues and Options

4 options were assessed at Issues and Options, with no further alternative options suggested by consultees. The Preferred approach combines option 1 *(support the principle of the extraction of natural gypsum subject to environmental criteria)* and 3 (*support the principle of continued supply of desulphogypsum (DSG) from power stations).*

The SA recommended that Option 1 should be pursued for natural gypsum. In relation to synthetic gypsum, it is likely that the planning processes cannot influence the process of supply in the long-term given it is a by-product from coal-fired power stations; pursuing either option 3 or 4 *(policy would not support continued supply of desulphogypsum (DSG) from power stations)* in this case would present broadly the same sustainability outcomes.

Policy M25: Supply of vein minerals

Proposals for the extraction of vein minerals, including proposals for the reactivation of dormant permissions, will be determined in accordance with the development management policies in the Plan, having particular regard where relevant to any impacts on:

i) important habitats and species
ii) protected landscapes
iii) heritage assets
iv) tourism assets

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0 - ?	0 - ?	0 - ?	0 - ?	0 - ?	0 - ?	0	0 -	0 -	0 - ?	0 - ?	0 +	0	0 -	0 -	0	0
M	0 - ?	0 - ?	0 - ?	0 - ?	0 - ?	0 - ?	0	0 -	0 -	0 - ?	0 - ?	0 +	0	0 -	0 -	0	0
L	0 - ?	0 - ?	0 - ?	0 - ?	0 - ?	0 - ?	0	0 -	0 -	0 - ?	0 - ?	0 +	0	0 -	0 -	0	0

Summary of Sustainability Appraisal Findings

This policy does not provide support for the extraction of vein minerals in the plan area however should development come forward and gain consent; a number of negative impacts could result particularly in relation to the environmental SA objectives. This is largely because vein minerals occur close to sensitive receptors (such as wildlife sites and designated landscapes) and extraction techniques can utilise a significant area of land and can be energy intensive. There may be positive economic benefits associated with this policy should new vein minerals development come forward and gain consent. An element of uncertainty is noted throughout the assessment as any proposal would be considered in line with the development control policies in the Plan which are not yet finalised.

Recommendations

No mitigation proposed.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further alternative options suggested by consultees. The preferred approach is based on Option 2 *(no support in principle for the development of vein minerals but identify criteria to be applied to the consideration of such applications).*

The SA recommended that while both options 1 *(support the principle of the further development of resources of vein minerals in suitable locations subject to criteria)* and 2 display broadly negative effects, option 2 performs more favourably against the SA framework. However, the assessment notes significant potential for development of more comprehensive criteria which could lessen environmental effects under both options.

Policy M26: Borrow pits

Proposals for borrow pits will be supported where the required mineral cannot practicably be supplied by secondary or recycled material of appropriate specification and from a source in close proximity to the construction project, and; where all the following criteria can be met:

i)The site lies on, or immediately adjoins, the proposed construction scheme so that mineral can be transported from the borrow pit to the point of use without significant use of the public highway system;
ii)The site can be landscaped and appropriately restored within an agreed timescale and to an agreed end-use without the use of imported material other than that generated on the adjoining construction scheme;
iii)The proposal meets all the relevant criteria set out in other relevant development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0 -	0 -	++	0 -	+	+	0	-	-	? - 0	? - 0	+	?	? -	+ - 0	0	++
M	0 -	0 -	++	0 -	+	+	+	-	-	? - 0	? - 0	+	?	? -	+ - 0	+	++
L	0 - +	0 -	++	0 -	+	+	+	-	-	? - 0	? - 0	+	?	? -	+ - 0	+	++

Summary of Sustainability Appraisal Findings

This policy would have some positive impacts in terms of reducing transport miles, reducing climate change impacts and shortening supply chains resulting in positive economic effects and a positive contribution towards meeting the needs of a changing population. However, borrow pits would also have some negative effects, such as possible local effects on water quality, temporary generation of dust, loss of primary resources, and impacts on the historic environment, landscape or recreation. However, these effects are generally very short term and uncertain due to being dependent on location.

Recommendations

The existing development management criteria are considered sufficient to mitigate negative effects to acceptable levels.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees. The preferred approach is a modified option, based on Option 1 *(support borrow pits where all of a series of criteria can be met).*

The SA recommended that option 2 *(only support borrow pits where the mineral cannot be supplied by existing quarries / secondary or recycled sources or the supply from existing sources would be detrimental to the area subject to criteria)* should be followed.

SA options assessments can be viewed in the Updated Issues and Options Sustainability Appraisal Update.

Question SA4: Do you agree with the assessments of the Minerals preferred options? Have we missed anything?

4.3 Sustainability Effects of Waste Policies

Policy W01 - Moving waste up the waste hierarchy

Proposals which help move management of waste up the waste hierarchy will be supported, with priority given to the delivery of development which would contribute to the minimisation of waste, the increased re-use and/or recycling of waste and to the delivery of waste treatment capacity which would contribute to the diversion of waste from landfill.

Further capacity for the large scale recovery of energy from waste will only be supported in line with Policy W04 and where any heat generated can be utilised as a source of low carbon energy or, where use of heat is not practicable, the efficient use of electrical energy can be achieved.

The provision of new capacity for the landfill of biodegradeable residual waste will only be supported where it can be demonstrated that it is the only practicable option and sufficient permitted capacity within or in close proximity to the Plan area is not available. Proposals for the extension of time, where necessary at existing permitted biodegradeable landfill sites with remaining void space, will be supported in principle in order to facilitate provision of adequate capacity for disposal of residual waste in line with identified needs, or in order to achieve the satisfactory restoration of the site.

Landfill of inert waste will only be supported where it would facilitate a high standard of quarry reclamation in accordance with agreed reclamation objectives, or the substantial improvement of derelict or degraded land where it can be demonstrated that the import of the waste is essential to bring the land back into beneficial use and the scale of the importation would not undermine the potential to manage waste further up the hierarchy.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	? 0	? -	?	? +	- ++	++	0	++	++	? 0	? 0	++	+ -	? 0	+ - ?	? 0	++
M	? 0	? -	?	? +	- ++	++	0	++	++	? 0	? 0	++	+ -	? 0	+ - ?	? 0	++
L	? 0	? -	?	? +	- ++	++	0	++	++	? 0	? 0	++	+ -	? 0	+ - ?	? 0	++

Summary of Sustainability Appraisal Findings

This policy would encourage sustainable resource management by prioritising the management of waste as high up the waste hierarchy as possible. This results in particularly positive effects in relation to resource consumption, soils, climate change, minimising waste generation and managing waste as high up the waste hierarchy as practicable, the economy and meeting the needs of a changing population. Uncertain effects or effects which have both positive and negative aspects have been recorded against several of the other environmental and social objectives as the scale of impacts would be determined by the nature and location of the particular waste management facility. One area where minor negative effects could occur on balance is in relation to water demand, as some recycling operations can be water intensive.

Recommendations

No mitigation is proposed as locational/development management issues will be dealt with under other policies in the Plan.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with 11 further alternative options suggested by consultees and subsequently assessed. The preferred approach is based on Option 5.

The SA recommended that the most sustainable approach would be to pursue option 5 (*waste managed at highest practicable level of the waste hierarchy / new capacity for landfill only in exceptional circumstances / use heat from incineration / support landfill only for quarry restoration).* Option 13 (*carbon emissions would be a key consideration whilst also aiming to manage waste as far up the waste hierarchy as possible)* could also be combined with option 5 or other options to maximise sustainability.

Policy W02 - Strategic role of the Plan area in the management of waste

Support will be given to proposals for additional waste management capacity needed to achieve an increase in net self-sufficiency in the management of waste to a level equivalent to expected arisings in the Plan area by the end of the plan period.

Where it is not practicable to provide specific capacity in the Plan area, including capacity for the landfilling of hazardous waste and the management of low level (non-nuclear) radioactive waste, as well as for other specialist provision which can only be met on a wider geographical basis, including reprocessing capacity for LACW and C&I waste, capacity requirements will be met principally through exports from the Plan area.

Provision of capacity within the Plan area shall include provision for waste arising in the Yorkshire Dales National Park, with the exception of mining and quarrying waste and small scale waste arisings which can be appropriately managed at facilities within the National Park.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- ?	- ?	++	- +	-	+ - ?	-	--	0	-	-	++	?	-	--	-	++
M	- ?	- ?	++	- +	-	+ - ?	-	--	0	-	-	++	?	-	--	-	++
L	-- ?	-- ?	++	- +	--	+ - ?	-	--	0	--	--	++	?	--	--	-	++

Summary of Sustainability Appraisal Findings

This policy would have positive effects in the Plan Area in terms of reducing transport miles and associated emissions and in supporting the economy and jobs, however it is likely to have negative effects on most of the environment and community SA objectives. This is because it may require additional facilities to ensure that waste capacity is equivalent to total arisings with the additional impacts that these would bring. In terms of providing capacity within the plan area to deal with waste arising in the Yorkshire Dales National Park this would largely maintain the status quo in terms of how waste is managed from the National Park, and this would have mainly neutral effects on the Plan Area and modest benefits for the Yorkshire Dales as it will allow the special qualities of the National Park to be maintained.

Recommendations

No further mitigation is proposed.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with 2 further alternative options suggested by consultees and subsequently assessed. The preferred approach is based on a combination of elements of Options 1 (*ensure that capacity is provided across the Plan area at a level sufficient to meet identified needs for waste arising in the area whilst allowing for current known levels of imports to continue*) and 3 (*same approach as for Option 1 or 2 but would in addition make an express commitment that the Plan would make provision for the management of waste arising within that part of the Yorkshire Dales National Park falling within NYCC*).

The SA recommended that a combination of Options 1 and 2 (*assume that existing cross-border export movements would continue to operate in conjunction with existing and planned capacity in the area. Where necessary, this approach could also seek opportunities to use existing or planned capacity elsewhere in order to meet any additional un-met requirements*), which would enable facilities to be provided for in the plan area where this would lead to sustainability benefits such as reduced transportation distances, be followed along with Option 3.

Policy W03 - Meeting waste management capacity requirements - Local Authority Collected Waste

Net self-sufficiency in capacity for management of Local Authority Collected Waste will be maximised through:

1) Identification of the Allerton Park (WJP08) and Harewood Whin (WJP11) sites as strategic allocations over the plan period for the management of LACW. Where necessary, proposals to extend the time period for continued waste management operations at these sites over the plan period and the development of other appropriate waste management infrastructure will be supported in principle subject, in the case of the Harewood Whin site, to consistency with relevant national and local Green Belt policy.

2) Delivery of additional transfer station capacity for LACW to serve the needs of Selby District through the allocation of a site at Common Lane, Burn (WJP16). Proposals for development of transfer capacity for LACW at this site or at an alternative location consistent with Polices W10 and W11 will be supported in principle.

3) Subject to compliance with Policies W10 and W11 and the development management policies in the Plan, supporting in principle proposals for:

   a. increased capacity for the recycling, reprocessing and composting of LACW where this would reduce reliance on export of waste from the Plan area for recycling or reprocessing;

   b. Improvements to the Household Waste Recycling Centre network.

LACW will be exported for management where sufficient capacity cannot be provided within the area.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	-	-	-	-	-	-	0 -	++	++	-	-	++	+ -	-	-	0 -	0
M	-	-	-	-	-	-	0 -	++	++	-	-	++	+ -	-	-	0 -	0
L	-	-	-	-	-	-	0 -	++	++	-	-	++	+ -	-	-	0 -	0

Summary of Sustainability Appraisal Findings

For this policy Allerton Park (WJP08), Harewood Whin (WJP11) and Common Lane Burn (WJP16) have been assessed separately as part of the site assessment process as they each have quite different sustainability impacts.

Supporting additional proposals for recycling, reprocessing and composting may also generate new facilities with potential environmental and community effects (though these effects will be reduced by policies W10 and W11 as well as the development management policies). Similarly, supporting improvements to the Household Waste Recycling network may result in new development. Again, the effects of this development are considered to potentially involve minor effects on the environment and community objectives that will be reduced by development management policies. The effects on the environmental and community objectives are considered to range from insignificant to minor negative.

This policy is likely to have strong benefits on the economy SA objective. It will generate jobs and promote low carbon resources from what previously would have been considered waste. It will also reduce the costs associated with alternative disposal in landfill. There are also strong benefits for the minimising resources and waste hierarchy SA objectives as this development is essential for reducing waste.

Recommendations

Mitigation has been proposed in relation to Allerton Park (WJP08), Harewood Whin (WJP11) and Common Lane Burn (WJP16) in the Site Assessment Report.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with 1 further alternative option suggested by consultees and subsequently assessed. The preferred approach is based on Option 1 (*Support provision of adequate capacity for management of LACW through…Allerton Park and Harewood Whin as strategic locations; transfer station capacity; proposals which would deliver increased capacity for the recycling, reprocessing and composting of LACW where this would reduce reliance on export of waste; supporting improvements to the Household Waste Recycling Centre network*).

The sustainability appraisal observed a slight preference for Option 3 *(combine Options 1 and 2 to give support to permitted facilities but also provide an element of flexibility if some of the permitted facilities were not operational)* as this combines the benefits of Option 1 and Option 2 (*less targeted approach and would seek to provide more flexibility for the delivery of any new capacity required for managing LACW*).

Policy W04 - Meeting waste management capacity requirements - Commercial and Industrial waste (including hazardous C&I waste)

1) Capacity requirements for management of C&I waste will be provided through:

i) Supporting proposals which would deliver increased capacity for the recycling and/or reprocessing and the treatment of C&I waste, particularly where this would reduce reliance on export of waste from the Plan area;
ii) Supporting the delivery of additional transfer station capacity for C&I waste where it can be demonstrated that additional provision would contribute to the objective of dealing with waste in proximity to where it arises;
iii) Providing strategic scale capacity for recovery of energy from C&I waste through a combination of spare capacity within the Allerton Waste Recovery Park facility and, if developed, the Southmoor Energy Centre and former Arbre Power Station site and supporting in principle the delivery of additional energy recovery capacity for suitable C&I waste, where the planning authority can be satisfied that the facility would be appropriately scaled to meet unmet needs for management of residual C&I waste arising in the area. Subject to construction of the permitted large scale treatment capacity at Southmoor Energy Recovery Centre and/or the former Arbre Power Station site, support will not be given to proposals for large scale energy recovery for C&I waste where the waste to be recovered would arise mainly outside the Plan area, unless it can be demonstrated that the facility would represent the nearest appropriate installation for the waste to be recovered.

2) Additional provision to help increase self-sufficiency in capacity for management of C&I waste is made through site allocations for:

Allocations for recycling, transfer and treatment of C&I waste:

Land at Hillcrest, Harmby (WJP01)
Land at Halton East, near Skipton (WJP13)
Land at Skibeden, near Skipton (WJP17)
Land at Allerton Park, near Knaresborough (WJP08)
Land at Seamer Carr, near Scarborough (WJP15)
Land at Common Lane, Burn (WJP16)
Land at Pollington (WJP22)
Land at Fairfield Road, Whitby (WJP19)
Land at Harewood Whin, Rufforth (WJP11)

Proposals for development of these sites will be supported subject to compliance with the development management policies in the Plan.

3) No site specific provision for additional landfill capacity for non-hazardous C&I waste is identified although provision of additional capacity for landfill of non-hazardous non-inert C&I waste, as well as for an extension of the time period for the utilisation of remaining void space at existing landfill sites subject of time limited permissions, will be supported in principle where it can be demonstrated that the waste to be landfilled cannot practicably be dealt with further up the waste hierarchy and that there is insufficient permitted capacity within the Plan area. Any further unmet requirements for landfill capacity which cannot be met within the Plan area will be met through export.

Capacity for hazardous C&I waste requiring landfill will be met through provision outside the

Plan area.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ -	0	+ -	+ -	+ -	+ - ?	0	++	++	+ -	+ -	+	0 ?	0 ?	- ?	0	+
M	+ -	0	+ -	+ -	+ -	+ - ?	0	++	++	+ -	+ -	+	0 ?	0 ?	- ?	0	+
L	+ -	0	+ -	+ -	+ -	+	0	++	++	+ -	+ -	+	0 ?	0 ?	- ?	0	+

Summary of Sustainability Appraisal Findings

This policy has both positive and negative effects in relation to many of the objectives. This is because it supports the management of waste higher up the waste hierarchy and away from landfill, which has benefits in terms of reducing the land take and amenity impacts of simply landfilling waste, though the facilities for waste management higher up the waste hierarchy will themselves have a land footprint or amenity impacts.

Some effects are outright positive, for instance strong positive effects were noted for the minimising resource use and minimising waste objectives. Other impacts were related to the transport of waste, for which there are benefits through reducing reliance on exporting waste for recycling and/or reprocessing (resulting in shorter journeys), while there are lesser negative effects associated with exporting hazardous waste. This results in mixed effects for the transport, air quality and climate change objectives.

Positive effects were noted for the economy objective (due to the greater local focus being more cost effective for industry and supporting local jobs) and the changing population objective (as there may be benefits such as increased energy security). Elsewhere in the assessment uncertainty was noted as effects were seen as highly dependent on location.

A potential effect was noted in relation to community vitality and health and wellbeing. This is because hazardous waste will be managed outside of the Plan Area, which will in effect mean that some small scale noise and traffic effects may be exported and also negative perceptions of any properties close to hazardous waste sites may endure. However, such disposal sites are often remote from community receptors so the effect is considered insignificant.

Recommendations

Most negative effects are moderated by the development management policies. No further mitigation is proposed.

Alternatives Considered and SA Recommendation at Issues and Options

4 options were considered at Issues and Options stage. The preferred option is based on elements of options 1 (*support provision of adequate capacity for, and promote self-sufficiency in, management of C&I waste through a series of defined measures*) and 2 (*same as option 1 but would, additionally, provide support in principle for proposals for the management of C&I waste arising outside the area (consistent with the locational and other relevant policies in the plan) and additionally, for proposals for recovery of waste, the facility would represent the nearest appropriate installation for the waste to be dealt with*).

The Issues and Options SA considered that Option 2 could be the most sustainable.

Policy W05 - Meeting waste management capacity requirements - Construction, Demolition and Excavation waste (including hazardous CD&E waste)

1) Capacity requirements for management of CD&E waste will be provided through:

- Supporting proposals which would deliver increased capacity for the recycling of CD&E waste;
- Supporting the delivery of additional transfer station capacity for CD&E waste where it can be demonstrated that additional provision would contribute to the objective of dealing with waste in proximity to where it arises;
- Supporting provision of additional landfill capacity for non-hazardous non-inert CD&E waste where it can be demonstrated that the waste to be landfilled cannot practicably be dealt with further up the waste hierarchy and that there is insufficient capacity in permitted or allocated sites in the Plan area. Landfill of inert CD&E waste, including such waste arising outside the Plan area, will be supported where it would facilitate a high standard of quarry reclamation in accordance with agreed reclamation objectives, or the substantial improvement of derelict or degraded land to a condition where it can be returned to a beneficial use;
- Supporting the principle of an extension of the time period for the utilisation of remaining void space at existing CD&E landfill sites subject of time limited permissions;
- Capacity for hazardous CD&E waste requiring landfill will be met through provision outside the Plan area.

2) Additional provision to help meet requirements and increase self-sufficiency in capacity for management of CD&E waste is made through site allocations for:

Allocations for recycling of CD&E waste:

Land at Potgate Quarry, North Stainley (WJP23)
Land at Allerton Park, near Knaresborough (WJP08)
Land at Darrington Quarry, Darrington (MJP27)
Land at Barnsdale Bar, Kirk Smeaton (MJP26)
Land at Went Edge Quarry, Kirk Smeaton (WJP10)
Land at Whitewall Quarry, Norton (MJP13)
Land at Duttons Farm, Upper Poppleton (WJP05)

Proposals for development of these sites will be supported subject to compliance with the development management policies in the Plan.

Allocations for landfill of inert CD&E waste:

Land at Brotherton Quarry, Burton Salmon (WJP21)
Land at Tancred Quarry, Scorton (WJP18)

Proposals for development of these sites will be supported subject to compliance with the development management policies in the Plan.

Allocations for landfill of inert CD&E waste:

Land at Duttons Farm, Upper Poppleton (WJP05
Land adjacent to former Escrick brickworks, Escrick (WJP06)

Proposals for landfill at these sites will only be supported as a means of enabling reclamation of any mineral workings developed in connection with allocations MJP52 and MJP55 and subject to compliance with development management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	-	0	+ ?	+ -	++	+ -	0	++	++	0 +	0 +	+	+	+	0	0	+
M	-	0	+ ?	+ -	++	+ -	0	++	++	0 +	0 +	+	+	+	0	0	+
L	- +	0	+ ?	+ -	++	+ -	0	++	++	0 +	0 +	+	+	+	0	0	+

Summary of Sustainability Appraisal Findings

This policy has a range of mixed effects. Many SA objectives report both minor positive and negative effects because while new facilities may be built to support the policy (impacting on biodiversity and generating dust, noise, local traffic and carbon), utilising CD&E waste to regenerate land or for quarry restoration will often restore degraded land, which, depending on the restoration proposed, could bring a range of sustainability benefits. The 'restoration' aspect of this policy is the key reason why a strong positive effect is noted for the soils and land SA objective.

In a similar way some objectives noted both a neutral effect and a positive effect, largely because policies elsewhere in the Plan would mitigate for any negative effects, but the positive effects of quarry restoration would still occur. This occurs with the historic environment and landscape objectives.

Other strong positives are noted for the minimising resources and minimising waste SA objectives, which identified that more recycling of CD&E waste would reduce demand for new materials to be extracted and also reduce demand for disposal of materials. This can add value to what was once a waste, bringing economic benefits.

A potential effect was noted in relation to community vitality and health and wellbeing. This is because hazardous CD&E waste will be managed outside of the Plan Area, which will in effect mean that some small scale noise and traffic effects may be exported and also negative perceptions of any properties close to hazardous waste sites may endure.

However, such disposal sites are often remote from community receptors so the effect is considered insignificant.

One area of uncertainty is highlighted as a result of the policy's support for the group of sites around Whitewall Quarry, which have an uncertain hydrological relationship with the River Derwent SAC.

Recommendations

A recommendation made through the Habitat Regulations Assessment process is that the policy should include an explicit link to the development management policies for water and biodiversity (D:07 and D:09) in the key links to other relevant policies section. Alternatives Considered and SA Recommendation at Issues and Options

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with 1 further alternative option suggested by consultees and subsequently assessed. The preferred approach is based on a combination of elements of Options 1 (support provision of adequate capacity for, and promote self-sufficiency in, management of CD&E waste through a series of defined measures) and 2 (*same as option 1 but would, additionally, provide support in principle for proposals for the import for landfill of inert CD&E waste arising outside the area where needed to achieve mineral site reclamation*).

The SA recommended that on balance Option 2 would be more sustainable as it would provide greater opportunity for securing enhancements to former quarries.

Policy W06 - Managing agricultural waste

Proposals for the on-farm management of agricultural waste at the point of arising, including proposals for individual farm-scale anaerobic digestion, will be supported where the proposed development would help move waste up the waste hierarchy, is appropriately scaled in relation to the arisings requiring management and compliance with relevant development management policies in the Plan can be demonstrated.

Proposals scaled to provide capacity for the management of agricultural waste from more than one agricultural holding, including facilities for the anaerobic digestion of agricultural waste, will be supported where they would be consistent with the overall locational principles and site identification principles for waste development in Policies W10 and W11; would help move waste up the waste hierarchy, and; compliance with relevant development management policies in the Plan can be demonstrated.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- ?	+ ?	+	0 ?	++ ?	++	0 +	++	++	0 ?	0 ?	+	0	0	0 ?	0	0
M	- ?	+ ?	+	0 ?	++ ?	++	0 +	++	++	0 ?	0 ?	+	0	0	0 ?	0	0
L	- ?	+ ?	+	0 ?	++ ?	++	0 +	++	++	0 ?	0 ?	+	0	0	0 ?	0	0

Summary of Sustainability Appraisal Findings

For most objectives this option displays either positive effects or neutral effects. In particular the preferred policy performs very positively against the resource use and waste minimisation objectives, in part because it encourages lower resource use and moves waste up the waste hierarchy by supporting anaerobic digestion. It also performs well for the soils and land objective because of the benefits of utilising organic farm wastes in composts (which are routinely made on farms) or as biodigestate for improving the productivity of land. However, this same objective records some uncertainty that crops may be grown as a feedstock for an AD facility, which if this were to happen could negatively impact on land as it my displace food crops.

Other areas of uncertainty were recorded for several objectives as the policy relies on other policies in the plan being adopted in their current form. A negligible to minor negative effect was noted in relation to biodiversity due to the possible combined effect of land take and leachate from off and on-farm facilities as well as localised nutrient loading of soils from on-farm facilities still being significant even after other policies mitigating policies are applied.

Recommendations

It may be advantageous to slightly alter the policy to add wording akin to ‘additional organic waste streams may be acceptable at agricultural anaerobic digestion facilities provided that they serve a local need and comply with the overall policy’. This would further enhance benefits, particularly to the land / soils objective.

Clear links in the supporting text to policy D11 on sustainable design would further lessen effects on biodiversity.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees. The preferred approach is based on a combination of elements of option 1 (*support self-sufficiency in capacity for management of waste, as well as supporting the on-farm management of agricultural waste at the point of arising. Where waste can only be managed through more specialised facilities or facilities which can only realistically be provided at a larger scale, then support would be provided subject to various requirements*) and option 2 (*in combination with Option 1 give specific support in principle for the development of Anaerobic Digestion (AD) facilities for the management of agricultural waste*).

The SA advised that option 2 is considered the more sustainable option, though both options would require a supporting policy framework to maximise sustainability benefits.

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Policy W07 – Managing low level (non-nuclear) radioactive waste

Capacity requirements for management of Low Level Radioactive Waste arising in the Plan area will be met through a combination of export to facilities outside the area and, where practicable, the provision of capacity within the Plan area to meet needs for LLRW arising within it. Particular support will be given to proposals which would assist in moving management of LLRW up the waste hierarchy, with preference being given to the onsite management of waste at the point of arising where practicable. Proposals for management of LLRW within the Plan area will need to demonstrate compliance with relevant Development Management policies in the Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- ?	- ?	+ -	+ -	- ?	+ -	0	?	+ 0	- ?	- ?	0	0	?	0	?	0
M	- ?	- ?	+ -	+ -	- ?	+ -	0	?	+ 0	- ?	- ?	0	0	?	0	?	0
L	- ?	- ?	+ -	+ -	- ?	+ -	0	?	+ 0	- ?	- ?	0 +	0	?	0	?	0

Summary of Sustainability Appraisal Findings

Mostly the effects of this preferred policy are small scale as the volume of LLRW is expected to be low and most significant impacts would be regulated through the environmental permitting regime. There could however be small impacts associated with land take, the possibility of accidental spills, changes to character resulting from small built structures or low level changes in traffic levels as a result of this preferred policy. This leads to low level negative effects (with considerable uncertainty) on the biodiversity, water quality, soil, climate change, historic environment, and landscape objectives with mixed positive and negative effects on the transport objective. There are low level positive effects on the waste management and economy (longer term only) objectives. Elsewhere effects are either uncertain or no effects are observed.

Some uncertainty has been noted by the Habitat Regulations Assessment process as the policy is not location specific, and it may be possible that handling low level radioactive waste could make a future larger waste disposal site more economically viable. If such a site were hydrologically linked to a European Protected Site, without mitigation there might be a small risk of a significant effect.

Recommendations

To address the uncertainty noted through the Habitat Regulations Assessment process it is recommended that policy wording stating that any development would need to be compliant with development management policies in the Plan would remove the possibility of significant impacts.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees. The preferred approach is based on Option 2 *(assume that the needs for capacity for management of LLNNR waste are likely to be met outside the plan area but would provide support in principle for development of specialist facilities in the Plan area where is can be demonstrated that the facility would enable LLNNR waste arising in the area to be managed further up the hierarchy)*.

The SA expressed a preference for option 1 *(assume that needs for capacity for management of LLNNR waste would be met outside of the Plan area)* primarily as it may allow the building of new facilities in the plan area which would inevitably have some low level sustainability effects (though there was considerable uncertainty in the assessment)[10].

[10] It should be noted that this recommendation is largely the result of the scope of the SA which is best suited to identifying effects within the Plan Area. Uncertainty was noted for a number of effects outside of the Plan Area where baseline data was not available.

Policy W08 - Managing waste water (sewage sludge)

Proposals for the development of new infrastructure and increased capacity for the management of waste water and sewage sludge will be supported in line with requirements identified in asset management plans produced by waste water infrastructure providers active in the Plan area. Preference will be given to the expansion of existing infrastructure in appropriate locations rather than the development of new facilities. Where it is not practicable to provide required additional capacity at existing sites, support will be provided for the development of new sites for the management of waste water and sewage sludge in line with the Waste Site Identification Principles in Policy W11. In all cases compliance with relevant Development Management policies in the Plan will need to be demonstrated.

Co-location of Anaerobic Digestion capacity with waste water treatment infrastructure will be supported in principle where the Anaerobic Digestion capacity to be provided would utilise output from the associated treatment works, where it would be of a scale appropriate to the location of the host waste water treatment site and where compliance with the development management policies in the Plan can be demonstrated.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- + ?	+	+	-	- +	- +	-	++	++	-	-	+	+	-	-	-	++
M	- + ?	+	+	-	- +	- +	-	++	++	-	-	+	+	-	-	-	++
L	- + ?	+	+	-	- +	- +	-	++	++	-	-	+	+	-	-	-	++

Summary of Sustainability Appraisal Findings

Mostly the sustainability effects of this preferred option are small scale and minor and may be positive or negative. For instance, minor negative effects are associated with the objectives for air, adaptation to climate change, historic environment, landscape and flooding in part because the facilities supported by the policy have a physical land take, would be likely to be located close to water and through traffic, construction activities and bio-aerosols, would impact upon air. Some objectives (such as the biodiversity, land use, climate change and health and wellbeing objectives) displayed mixed positive and negative effects because while the processes that take place may intrinsically have negative effects associated with them, co-location with AD and expanding sites allows for new positive effects such as reduced additional land take or the offsetting of energy use to take place. For the health and

wellbeing objective, waste water treatment is on the one hand seen as essential for health and wellbeing while on the other hand could have local amenity effects.

The preferred policy performs particularly strongly against the resource use and waste hierarchy objectives as co-locating AD facilities with waste water / sewage treatment facilities will help turn waste materials into economically valuable resources. Sewage / water treatment also underpins the further development of settlements so performs well against the changing population needs objective.

Some uncertainty is noted in the Habitat Regulations Assessment as the policy is not location specific. Effects such as accidental water pollution could affect adjacent watercourses which in turn could affect riparian Natura 2000 sites.

Recommendations

Negative effects associated with this preferred policy have already largely been reduced by this policy. However, sequential testing for flooding will be required prior to allocation or planning approval. Flood plain compensatory storage may also be required. To address uncertainty highlighted in the Habitat Regulations Assessment policy wording could be altered to state that any development would need to be compliant with development management policies in the Plan and by including policy DO7 (biodiversity) in the key links.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees. (Option 1 *would support the development of new infrastructure for the management of waste water, where such provision would be in line with requirements identified in asset management plans (with a preference given to the expansion of existing infrastructure in appropriate locations).* Option 2 would be the same as option 1 *but support would also be provided in principle for the development of new sites in appropriate locations for management of waste water as well as for the expansion of existing facilities*.) The preferred approach is based on Option 2.

The SA recommended that Option 1 be pursued.

Policy W09 - Managing power station ash

Support will be given to proposals to increase the utilisation of power station ash as secondary aggregate or for other beneficial use, in line with the preferred policy M11 for the Supply of Alternatives to Land Won Primary Aggregate.

Where ash cannot be utilised for beneficial purposes, support will be given for the continued disposal of power station ash at the existing Gale Common, Barlow and Brotherton Ings ash disposal sites, which are identified and safeguarded in the Plan as strategic sites for the disposal of waste.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- +	- +	0 -	- +	0	+	0	++	++	- +	0 - +	0 +	- +	0	- +	0	+
M	- +	- +	0 -	- +	+	+	0	++	++	- +	0 - +	0 +	- +	0	- +	0	+
L	- +	- +	0 -	- +	+	++	0	++	++	- +	0 - +	0 +	- +	0	- +	0	+

Summary of Sustainability Appraisal Findings

There are some minor negative effects on biodiversity, water, local air quality and the historic environment, as well as less certain minor negative effects on landscape, community vitality (for which there are also some positive effects associated with employment) and health and wellbeing associated with this preferred policy, arising out of localised problems such as dust generation, possible runoff / leachate and traffic. These may however be offset to a degree by positive environmental and social effects, particularly in relation to reduced land take, resulting from lower levels of primary minerals extraction should support for use of power station ash result in less demand / need for this.

There are some major positive effects associated with climate change, minimising the use of resources and minimising waste generation resulting from the potential for power station ash to reduce demand for primary aggregates, and minor positive effects associated with the economy and meeting the needs of the population.

Recommendations

It is considered that other development management policies in the Plan, combined with environmental permitting would deal with the issues relating to dust, water pollution and air quality that have been identified in this assessment. No further mitigation is proposed.

Alternatives Considered and SA Recommendation at Issues and Options

1 option was assessed at Issues and Options (*Option 1: support the use of ash as an alternative to primary aggregate but, for ash which cannot be used in this way, support its continued disposal in accordance with existing arrangements at the Gale Common, Barlow and Brotherton Ings ash disposal sites*), with 1 further alternative option (*Option 2: support the disposal of power station ash along with inert material in landfill*) suggested by consultees and subsequently assessed. The preferred approach is based on Option 1.

The SA recommended Option 1 be pursued with mitigation measures.

Policy W10 - Overall locational principles for provision of new waste capacity

The main focus for provision of new waste management capacity required to meet identified needs will be within those parts of the Plan area outside the North York Moors National Park and the Areas of Outstanding Natural Beauty, unless the facility to be provided is appropriately scaled to meet waste management needs arising in the designated area and can be provided without causing unacceptable harm to the designated area.

Capacity requirements will be met through a combination of:

Maximisation of capacity within the existing facility network through granting permission for the continuation of activity at existing time limited sites with permission, the grant of permission for additional capacity within the footprint of existing sites and, the extension to the footprint of existing sites, subject to compliance with other relevant policies in the Plan;

Supporting proposals for development of waste management capacity at new sites where the site is compatible with other waste site identification criteria in the Plan (see Policy W11); and the site is located as close as practicable to the source/s of waste to be dealt with. This means:

a) For new smaller scale facilities serving district scale markets for waste, particularly LACW, C&I and CD&E waste, giving priority to locations which are within or near to main settlements in the area (identified on the key diagram) or, for facilities which are intended mainly to serve needs for small scale waste management capacity in more rural parts of the Plan area, including agricultural waste, where they are well located with regard to the geographical area the facility is expected to serve;

b) For larger scale or specialised facilities expected to play a wider strategic role (i.e. serving multi-district scale catchments), these will be located where overall transportation impacts would be minimised taking into account the market area expected to be served by the facility.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ?	+ ?	+	+ ?	+ ?	+	0	++	++ ?	+ ?	+ ?	++	+ ?	+ ?	0 + ?	0	+ -
M	+ ?	+ ?	+	+ ?	++ ?	+	0	++	++ ?	+ ?	+ ?	++	+ ?	+ ?	0 +	0	+ -

															?		
L	+ ?	+ ?	+	+ ?	++ ?	+	0	++	++ ?	+ ?	+ ?	++	+ ?	+ ?	0 + ?	0	+ -

Summary of Sustainability Appraisal Findings

This preferred policy has mostly positive effects when compared to the SA objectives. This is largely because it maximises and builds on the use of facilities that are already there (which is generally a good thing to do in sustainability terms), and also seeks to reduce the transport footprint of new facilities while linking the policy strongly to the waste site identification principals and other policies in the plan.

Amongst the most notable sustainability effects were strong positive contributions to the 'reduce resource use' and 'minimise waste' objectives (as less building will be needed to deliver the policy, and the policy underpins a wider strategy in this Plan to move waste up the waste hierarchy). In addition, the policy has strong economic effects as it retains jobs and potentially reduces business costs. The policy would also protect the special qualities of protected landscapes as well as the tourist jobs that depend on them.

Mixed positive and negative effects were recorded for the changing population objective as there is a minor concern that waste management in designated landscapes will become more difficult in the future.

Recommendations

None.

Alternatives Considered and SA Recommendation at Issues and Options

4 options were assessed at Issues and Options, with 3 further alternative options suggested by consultees and subsequently assessed. The preferred approach is based on a combination of elements of options 2 *(ensure that sufficient waste management capacity is provided through a combination of making the best use of the existing facility network, supporting the provision of capacity at new sites and locating strategic sites where overall transport requirements would be minimised)* and 4 (*alongside options 1 to 3 limit provision of new waste management capacity to those parts of the Plan area outside the North York Moors National Park and AONBs unless the facility to be provided is designed and scaled specifically for meeting waste management needs arising in the designated area and can be provided without causing harm to the designated area*).

The SA concluded that Options 2, 3 (*provide sufficient waste management capacity through best use of facility network and new sites to be compatible with the waste site identification criteria with priority to new sites within 5km of the major road network*) and 5 (*best use of existing facility network, support capacity to meet needs identified in the Plan and consistent with waste site identification criteria, and support strategic facilities where transport impacts would be minimised*) performed best against the SA Framework.

Policy W11 - Waste site identification principles

Proposals and site allocations for new waste management capacity should reflect the following principles:

1) Siting facilities for the recycling, transfer and recovery of waste (excluding energy recovery) on previously developed land, industrial and employment land, or at existing waste management sites, giving preference to sites where it can be demonstrated that co-locational benefits would arise taking into account existing or proposed uses and economic activities nearby. Where the site or facility is proposed to deal mainly with waste arising in rural areas then use of redundant agricultural buildings or their curtilages will also be acceptable in principle and, for agricultural waste, appropriate on-farm locations;

2) Siting facilities involving the recovery of energy from waste on previously developed land, industrial and employment land, or at existing waste management sites, giving preference to sites where it can be demonstrated that co-locational benefits would arise taking into account existing or proposed uses and economic activities nearby, including where the energy produced can be utilised efficiently. For facilities which can produce combined heat and power, this includes giving preference to sites with the potential for heat utilisation. Where the site or facility is proposed to deal mainly with agricultural waste through anaerobic digestion including energy recovery, then use of redundant agricultural buildings or their curtilages and appropriate on-farm locations will also be acceptable in principle;

3) Siting facilities to support the re-use and recycling of CD&E waste at the point of arising (for temporary facilities linked to the life of the associated construction project) and at active mineral workings where the main outputs of the process are to be sold alongside or blended with mineral produced at the site; as well as at the types of sites identified in bullet point 1 above, where these are well related to the sources of arisings and/or markets for the end product;

4) Siting facilities to provide additional waste water treatment capacity at existing waste water treatment works sites as a first priority. Where this is not practicable preference will be given to use of previously developed land or industrial and employment land. Where development of new capacity on greenfield land is necessary then preference will be given to sites located on lower quality agricultural land.

5) Providing any additional capacity required for landfill of waste through preferring the infill of quarry voids for mineral site reclamation purposes, giving preference to proposals where a need for infill has been identified as part of an agreed quarry reclamation scheme and where pollution control concerns can be mitigated to an acceptable level.

In all cases sites will need to be suitable when considered in relation to physical, environmental, amenity and infrastructure constraints including existing and proposed neighbouring land uses, the capacity of transport infrastructure and any cumulative impact from previous waste disposal facilities, in line with national policy.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	- 0 + ?	+	+	+	++	++	+	+	+	+	- +	+	+	+	+	+	+
M	- 0 + ?	+	+	+	++	++	+	+	+	+	- +	+	+	+	+	+	+
L	?	?	+	?	++	++	?	+	+	?	?	+	+	?	+ ?	?	++

Summary of Sustainability Appraisal Findings

Effects in relation to this policy are largely positive. The preference for locations close to where heat generated through Combined Heat and Power schemes can be utilised, would support climate change objectives as well as having a positive outcome for local communities and businesses. The principle of co-location could also have some positive impacts in terms of the economy, reducing transport miles, soils and land, and minimising resource use. Reference to national waste planning policy in relation to consideration of specific environmental and community issues, may lead to a number of positive impacts in the short to medium term as the NPPF and National Planning Policy for Waste cover issues relating to most of the SA objectives, however uncertain effects are recorded in the longer term as the implications of any future changes to national waste policy are unknown.

Some minor negative effects are recorded in relation to biodiversity (as habitats on previously developed land may be lost) and landscape (where less valued landscapes may endure negative effects).

Recommendations

Consideration could be given to supporting the re-use of other buildings (such as industrial buildings) for waste development.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no sufficiently distinct alternatives were put forward by consultees. (Option 1 supported *'provision of waste management capacity at sites which meet the range of criteria identified in national waste policy'* while Option 2 *set out more specific local principles for identification of sites*) The preferred approach is based on Option 2.

The SA recommended that option 2 be pursued.

Question SA5: Do you agree with the assessments of the waste preferred options? Have we missed anything?

4.4 Minerals and waste transport and other infrastructure

Policy I01 - Minerals and waste transport infrastructure

The development of rail, water, pipeline or conveyor transport infrastructure or use of existing such infrastructure, will be encouraged and supported for the transport of minerals and waste produced or arising in the Plan area, as well as for the reception of any large scale imports of minerals or waste into the area.

Where minerals or waste development involving the movement of an average of more than 250,000tpa of minerals or waste is involved, proposals should demonstrate that consideration has been given to the potential to move the materials by non-road means and where such potential is considered to exist should include a relative assessment of the benefits of the various modes considered in terms of carbon emissions.

Proposals involving the development of, or use of existing, non-road transport infrastructure (other than pipelines and conveyor systems) should also be well located in relation to the main road network in order to facilitate multi-modal movements of minerals and waste and will be required to demonstrate compliance with other relevant development management policies in the Plan. Where new minerals or waste transport infrastructure is proposed in the Green Belt the development should preserve openness and be consistent with the purposes of Green Belt designation.

Availability of sustainable minerals supply infrastructure is supported through a site allocation for the rail reception, handling and onward distribution of aggregate at:

Land at Barlby Road, Selby (MJP09)

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	?	+	+	0	+	0	+	0	?	?	+ -	?	- +	+ ?	0 ?	0
M	- ?	?	+ ?	++	0 -	++	0	+ -	0	?	?	+ -	?	- +	+ ?	0 ?	0
L	- ?	?	+ ?	++	0 -	++	0	+ -	0	?	?	+ -	?	- +	+	?	0

Summary of Sustainability Appraisal Findings

This policy is likely to have a number of positive effects through the retention of the existing rail, pipeline and water transportation infrastructure and support for the development of new

infrastructure. These positive effects relate to reducing the need to transport minerals and waste by road with benefits in relation to air quality, climate change, health and amenity and the economy. Effects are more uncertain in relation to a number of the environmental objectives such as biodiversity, water quality, landscape and cultural heritage as impacts will be dependent upon the location, type and scale of additional infrastructure as well as the frequency of its use. Locally negative effects may occur as a result of construction of new transport links due to loss of habitats, impacts upon the setting of historic assets or loss of archaeology and landscape impacts.

Recommendations

It is considered that positive effects could be further enhanced by adding a requirement for the consideration of non-road forms of transport wherever possible (rather than just for larger scale sites) and requiring a justification for not utilising them.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees (Option 1 *would encourage the use of existing rail, water and pipeline transport infrastructure, and also support the development of new rail, water or pipeline facilities in appropriate locations consistent with protection of local communities and the environment, for the transport of minerals and waste*; Option 2 *would be the same as option 1 but would require the carbon implications of any proposal to also be considered.*) The preferred approach is based on Option 2.

The SA concluded that option 2 performed marginally better than option 1 (on account of its positive climate change and air pollution effects).

Policy I02 - Locations for ancillary minerals infrastructure

Development of ancillary minerals infrastructure at active minerals extraction sites and sites producing secondary aggregate will be supported provided the following criteria are met:

- The ancillary development produces a 'value added' product based mainly on the mineral extracted or secondary aggregate produced on the host site; and
- The development does not create significant additional adverse impact on local communities, businesses or the environment; and
- The development does not unacceptably increase the overall amount of road transport to or from the host site; and
- Where the host site is located in the Green Belt the ancillary development would preserve openness and the purposes of Green Belt designation; and
- The development is linked to the overall life of minerals extraction or supply of secondary aggregate at the host site, unless the location is appropriate to its retention in the longer term.

Within the City of York area development of ancillary minerals infrastructure will also be supported provided the following criteria are met:

- The site is located on industrial or employment land, previously developed land, or would be co-located with other compatible industrial or commercial development; and
- The site has good access to the transport network; and
- The development would not create significant adverse impact on local communities, businesses or the environment including heritage assets.

Siting of minerals ancillary infrastructure within the North York Moors National Park will only be supported where it would be located within the Whitby Business Park identified on the Policies Map.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ?	+ ?	+ ?	+	?	0	0	0 +	0	+	+ -	+ -	+ -	+	+ -	0	0
M	+ ?	+ ?	+ ?	+	?	0	0	0 +	0	+	+ -	+ -	+ -	+	+ -	0	0
L	+ ?	+ ?	+ ?	+	?	0	0	0 +	0	+	+ -	+ -	+ -	+	+ -	0	0

Summary of Sustainability Appraisal Findings

In the main the protections in this policy will avoid significant effects on the environmental objectives, though uncertainty is often noted due to uncertainty over locations where minerals ancillary infrastructure would take place and how 'additional significant

environmental effects' may be interpreted by different developers, particularly if the host site already has significant impacts.

Elsewhere, mixed effects are often reported. For instance, the economic objective notes how this policy helps to add value to minerals products, but also the potentially restrictive nature of the policy which may make some development more difficult to achieve. The community vitality and health and wellbeing objectives note that synergies between different impacts, such as traffic, noise and visual impacts may together result in minor significant effects on perceptions of an area or on wellbeing.

Recommendations

Given that secondary aggregate processing may have significant water impacts policy DO9 should be referred to in the key links to other relevant policies and objectives. In addition, to address synergies between effects, policy D:02's reference to cumulative effects could be clarified in that policy's supporting text so that it includes synergies between different types of effect.

Alternatives Considered and SA Recommendation at Issues and Options

4 options were assessed at Issues and Options, with no further alternative options suggested by consultees. The preferred approach is based on a combination of elements from Option 1 (*support locating ancillary minerals infrastructure on active mineral extraction sites (including sites for the production of secondary aggregate) provided certain listed criteria are met*) and Option 4 (*this would be the same as option 3 (allows ancillary infrastructure away from minerals extraction sites subject to criteria) except that support would only be provided where the site would be located outside the North York Moors National Park, with the exception of Whitby Business Park*).

The SA concluded that overall it is considered that Options 2 (*the same as option 1 except that support would only be provided where the 'host' site would be located outside the North York Moors National Park and AONBs and ancillary infrastructure related to extraction sites in National Parks or AONBs would need to be located outside of these areas*) and 4 would have the most sustainability benefits but may be more applicable to different ancillary functions. The SA recommended that they could be combined to optimise positive effects.

Question SA6: Do you agree with the assessments of the infrastructure preferred options? Have we missed anything?

4.5 Minerals and waste safeguarding policies

Policy S01 - Safeguarding mineral resources

Part one- Surface mineral resources:

The following surface minerals resources and associated buffer zones identified on the policies map will be safeguarded from other forms of surface development to protect the resource for the future :
i) All crushed rock and silica sand resources with an additional 500m buffer
ii) All sand and gravel, clay and shallow coal resources with an additional 250m buffer
iii) Building stone resources and active and former building stone quarries with an additional 250m buffer

Part two – Deep mineral resources:

The following deep mineral resources and associated buffer zones identified on the policies map will be safeguarded from surface development to protect the resource for the future:
i) Underground coal resources within the Kellingley Colliery licensed area with an additional 700m buffer;
ii) Underground potash and polyhalite resources within the Boulby Mine licensed area and York Potash indicated and inferred resource area;
iii) Underground gypsum deposits within the former Sherburn in Elmet Mine planning permission area;
iv) Vein mineral reserves within extant planning permissions with an additional 250m buffer

Part three – protecting deep mineral resources from other underground minerals development:

Reserves and resources of potash and polyhalite identified on the Policies Map, including a 2km buffer zone, will be protected from sterilisation by other forms of underground minerals extraction and the underground storage of gas or carbon in order to protect the resource for the future.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ?	+ ?	0 ?	+ ?	+ ?	0 ?	0 ?	++	0	++ ?	+ ?	++ ?	0 ?	0 ?	+ ?	0 ?	++
M	+ ?	+ ?	0 ?	+ ?	+ ?	0 ?	0 ?	++	0	++ ?	+ ?	++ ?	0 ?	0 ?	+ ?	0 ?	++
L	+ ?	+ ?	0 ?	+ ?	+ ?	0 ?	0 ?	++	0	++ ?	+ ?	++ ?	0 ?	0 ?	++ ?	0 ?	++

Summary of Sustainability Appraisal Findings

As safeguarding does not infer that minerals extraction will take place there are generally no predicted direct effects. Were development to take place it would need to accord with other policies in the Plan.

This policy is likely to result in minor to major positive impacts in relation to encouraging the safeguarding of resources, economic growth and meeting the needs of a changing population as future mineral resource sterilisation is avoided, thus conserving resources for future economic benefit. The safeguarding of buffer zones around mineral reserves may also have minor positive impacts in relation to minimising air quality and amenity impacts experienced by users of new proximal development.

Some uncertainty is noted in the assessment as the nature and location of any future development that may be displaced as a result of this policy, and the consequences of this displacement, is not known. However, some objectives noted that there could be some positive benefits from not developing the area which is safeguarded.

Recommendations

None

Alternatives Considered and SA Recommendation at Issues and Options

Safeguarding of mineral resources has been combined into one Policy (S01). The table below sets out the original policies at Issues and Options and the options that have been taken forward and combined.

Table 6: Safeguarding Options Audit Trail

Original Option Number	**Issue**	**Number of options considered**	**How the options influenced preferred option S01**
ID06	Safeguarding of sand and gravel resources	6	Combination of option 1 and option 5 represented the most appropriate approach.
ID09	Safeguarding crushed rock	4	The preferred approach is based on a combination of Option 1 and 4.
ID16	Silica sand resources safeguarding	4	The preferred approach is based on Option 1. Safeguarding of mineral resources has been combined into one Policy.
ID19	Clay resources safeguarding	4	The preferred policy approach is based on a combination of Option 1 and 4.
ID22	Safeguarding building stone	4	A combination of options 3 and 4 will be taken forward.
ID31	Safeguarding shallow coal	4	The preferred approach is

			based on Option 4. Safeguarding of mineral resources has been combined into one Policy.
ID32	Safeguarding deep coal	5	The preferred policy approach is based on a combination of options 4 and 5.
ID37	Gypsum safeguarding	2	The preferred approach is based on Option 1.
ID38	Safeguarding deep mineral resources	3	The preferred approach is therefore based on Option 3.
ID40	Safeguarding vein minerals	2	The preferred approach is based on Option 1.

For ID06 the SA does not show a strong preference for one particular option, though options 2 (*safeguard all known sand and gravel resources with a 100m buffer zone to help prevent sterilisation from proximal development*) and 4 (*safeguard sand and gravel resource areas with an identified tonnage of 0.75mt or more*) are considered less sustainable than options 1 (safeguard all known sand and gravel resources with a 250m buffer zone) and 6 *(safeguard all known sand and gravel resources with a 500m buffer zone)*. Option 5 (*in parallel with other options and would safeguard any additional resources (not identified in the current evidence base) where proposed in site allocations and preferred areas*) can add some beneficial effects to other options when used together with them.

For ID09 the SA recommended that Option 1 *(safeguard all known crushed rock resources with a 500m buffer zone)* be pursued due to the greater level of sustainability benefits along with Option 4 (*in parallel with other options safeguard any additional resources proposed in site allocations and preferred areas where supported by adequate resource information*) which would bring additional slight positive benefits.

For ID16 the SA concluded on the basis of the information available at the time of assessment options 1 (*safeguard all known silica sand resources, with a 500m buffer zone*) and 4 *(in parallel with other options safeguard any additional resources of silica sand not identified in current minerals resource evidence proposed in site allocations and preferred areas)* performed most strongly in sustainability terms.

For ID19 the SA indicates that Option 1 *(safeguard all known clay resources with a 250m buffer zone*) and Option 4 *(in parallel with other options safeguard any additional resources of clay not identified in current minerals resource evidence proposed in site allocations and preferred areas)* should be pursued.

For ID22 a combination of Option 1 and Option 4 is likely to be most beneficial in sustainability terms as the greatest area of building stone resource would be safeguarded. (*Option 1 is to safeguard all known resources with potential for use as building stone, while option 4 would operate in parallel with the other options and would safeguard any additional resources of building stone not identified in current BGS minerals resource information proposed in the site allocations and preferred areas.*)

For ID31 the SA showed a mild preference for option 3 (*only safeguard shallow resources outside urban areas and National Park and AONB designations as working in these areas are less likely to be acceptable*), though it should be noted that this preference is based on an assumption that development is less likely outside of safeguarded areas. Option 1 (*safeguard the whole of the known shallow coal resource, with a 500m buffer zone*) and 4 (*250m buffer zone*) advocate 'buffer zones' which show some limited benefit when contrasted with option 2 (no buffer zone).

For ID32 Option 5 combined with option 2, 3 or 4) is the most compatible with the SA Framework. (Option 5 would add a 700m buffer to other safeguarding deep coal options. Options 2, 3 and 4 would safeguard the whole deep coal area; extant coal mining licence areas for Kellingley Colliery and within the Selby Coalfield; and deep coal resources within only the Kellingley Colliery licensed area respectively.

The SA indicated that option 1 is the most sustainable option for ID37. (*Option 1 would safeguard gypsum based on the area covered by the extant permission for gypsum in the Sherburn-in-Elmet area*).

For ID38 the SA recommended that option 3 be pursued. (*Option 3 would expand on option 1 (requires the developer to demonstrate that there would not be significant conflict with other areas and forms of deep minerals extraction*) to state that the greatest weight should be given to the mineral reserve which is scarcest and most economically significant). For ID40 the SA recommended option 1 as the most sustainable. (*Option 1 would safeguard the area of extant dormant permissions for vein minerals extraction*).

Policy S02 - Developments proposed within Minerals Safeguarding Areas

Part one - Surface mineral resources:

Within Surface Minerals Safeguarding Areas shown on the Policies Map permission for development other than minerals extraction will be granted where:

i) It would not sterilise the mineral or prejudice future extraction; or
ii) The mineral will be extracted prior to the development (without unacceptable adverse impact on the environment or the amenity of local communities), or
iii) The need for the non-mineral development can be demonstrated to outweigh the need to safeguard the mineral; or
iv) It can be demonstrated that the mineral in the location concerned is no longer of any potential value as it does not represent an economically viable and therefore exploitable resource; or
v) The non-mineral development is of a temporary nature that does not inhibit extraction within the timescale that the mineral is likely to be needed; or
vi) It constitutes 'exempt' development (as defined in the safeguarding areas exemption list).

Part two - Deep minerals resources:

In areas identified as Underground Mineral Safeguarding Areas on the Policies Map, proposals for the following types of development should be accompanied by information on the effect of the proposed development on the potential future extraction of the safeguarded underground resource, as well as on the potential for the proposed surface development to be impacted by subsidence arising from working of the underlying minerals resource:

- Large institutional and public buildings;
- Major industrial buildings including those with sensitive processes and precision equipment vulnerable to ground movement;
- Major retail complexes;
- Non-residential high rise buildings (3 storeys plus);
- Strategic gas, oil, naphtha and petrol pipelines;
- Vulnerable parts of main highways and motorway networks (e.g. viaducts, large bridges, service stations and interchanges);
- Security sensitive structures;
- Strategic water pumping stations, waterworks, reservoirs, sewage works and pumping stations;
- Ecclesiastical property;
- Power stations; and
- Wind turbines

Permission will be granted where the assessment demonstrates that a significant risk of adverse impact on the development from mining subsidence will not arise or that the criteria in Part one of the policy (other than the final criterion) are met.

Part three – Protecting deep mineral resources from other underground minerals development:

Where proposals for appraisal or development of underground gas resources or the underground storage of gas or carbon are located within the area safeguarded for potash, salt and polyhalite shown on the Policies Map, permission for development will only be granted where it can be demonstrated that the development will not adversely affect the potential future extraction of the protected mineral.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ?	+ ?	0	+ ?	+ ?	0	+	++	0	+ ?	+ ?	-	-	+ ?	+ ?	0	- +
M	+ ?	+ ?	0	+ ?	+ ?	0	+	++	0	+ ?	+ ?	-	-	+ ?	+ ?	0	- +
L	+ ?	+ ?	0	+ ?	+ ?	0	+	++	0	+ ?	+ ?	- +	-	+ ?	+ ?	0	- +

Summary of Sustainability Appraisal Findings

In terms of the environmental sustainability objectives there are minor benefits from this policy, as arguably it would potentially reduce the amount of development in safeguarding areas, though to some extent some of this development would simply go somewhere else. The assessment also picked strong benefits for the minimising resource use objective as safeguarding a broad range of minerals resources would help protect resources for possible future use. Similarly, an additional benefit was noted for climate adaptation as safeguarding potash and polyhalite will help save a key resource for manufacturing fertiliser, which ultimately will help tackle the issue of food security (which is a recognised climate change vulnerability).

There were however some minor negative effects noted in relation to the economy, community vitality and changing population objectives. This is because some economically valuable development may be deterred from taking place (though the policy does contain a criteria which considers the need for the development and whether this outweighs the need to safeguard the mineral), while some housing projects may also be less viable (though there are exemptions which help moderate this). The economy objective also records a long term benefit arising from having greater access to minerals for extraction.

Recommendations

No mitigation is suggested.

Alternatives Considered and SA Recommendation at Issues and Options

4 options were assessed at Issues and Options, with no further alternative options suggested by consultees. The Preferred approach is based on a combination of Options 1, 2 and 3. (*Option 1 indicated that within Minerals Safeguarding Areas non-minerals development will only be permitted in certain circumstances and outlined a list of appropriate circumstances; Option 2 would adopt a list of application types that would be exempt from consideration under the Minerals Safeguarding Area policy and set out a list of application types; option 3 proposed that in areas identified as underground coal or potash Minerals*

Safeguarding Areas, applicants proposing certain listed types of development would be required to consider the potential impacts on the proposed development arising from extraction of the safeguarded resources, as well as the potential for the surface development to sterilise the underlying resource.)

The SA recommended that a combination of Options 5 (*which is essentially the same as option 1 but with an additional circumstance in which non minerals development would be appropriate in a Minerals Safeguarding Area – i.e.* the mineral is not needed in the foreseeable future), as well as options 2 and 3 are pursued.

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Policy S03 - Waste management facility safeguarding

Waste management sites shown on the Policies Map, including a 250m buffer zone, will be safeguarded from incompatible development.

Other forms of non-exempt development which would replace the safeguarded waste site will be permitted where there is overriding justification, or a suitable alternative location for the waste development can be provided. Where other forms of non-exempt development are proposed in the safeguarded buffer zone, development will only be permitted where adequate mitigation can, if necessary, be provided within the encroaching development proposals in order to reduce any impacts from existing or proposed adjacent waste uses to an acceptable level.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	? +	? +	+	? +	? +	+	0	+	++ -	? +	? +	?	? +	? +	? +	0	+
M	? +	? +	+	? +	? +	+	0	+	++ -	? +	? +	?	? +	? +	? +	0	+
L	? +	? +	+	? +	? +	+	0	+	++ -	? +	? +	?	? +	? +	? +	0	+

Summary of Sustainability Appraisal Findings

It is not possible to identify effects against a number of environmental sustainability objectives as often the main sustainability effect arises as a result of a safeguarded site and its buffer displacing another type of development to an alternative location. It is unknown as to whether through locating somewhere else, this displaced development would have greater or lesser sustainability effects than if it were to be allowed in the safeguarded area. On the other hand, there could be some positive benefits from not developing the area which is safeguarded.

This policy may also however provide positive effects in relation to a number of objectives including minimising the use of resources, managing waste as high up the waste hierarchy as practicable and meeting the needs of a changing population. Minor negative impacts may arise should the policy result in facilities that manage waste lower down the waste hierarchy (e.g. landfill and incineration facilities) being safeguarded.

Recommendations

None.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with 2 further alternative options suggested by consultees and subsequently assessed. The preferred approach is based on Option 1. (*Option 1 would identify a limited number of strategically significant sites for specific safeguarding. Other waste facilities and sites would be safeguarded through a development control policy requiring the presence of an existing waste site or facility to be taken into account in other development control decisions*).

The SA recommended that Option 1 be pursued as this would support the overall approach to provision of waste management facilities in the Plan area in line with other policies in this Plan.

Policy S04 - Transport infrastructure safeguarding

Railheads, rail links and wharves identified on the Policies Map will be safeguarded against replacement development which would prevent the use of the land for minerals or waste transport purposes, unless;

i) The need for the alternative development outweighs the benefits of retaining the facility; or
ii) A suitable alternative location can be provided for the displaced use; or
iii) The facility is not in use and there is no reasonable prospect of it being used for minerals or waste transport in the foreseeable future.

An additional 100m buffer zone around each facility, as shown on the Policies Map, is also safeguarded against encroaching development which would not be compatible with the use of the facility for minerals or waste transport. Where development in the safeguarded buffer zone would substantially restrict the continued use or potential future use of the facility for the transport of minerals or waste then permission will be refused unless adequate mitigation can be provided.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0 ?	?	++ ?	+ ?	+ ?	+ ?	0	++	0	0 ?	0 ?	+ ?	0 ?	0 ?	0 ?	0 ?	0 ?
M	0 ?	?	++ ?	+ ?	+ ?	+ ?	0	++	0	0 ?	0 ?	+ ?	0 ?	0 ?	0 ?	0 ?	0 ?
L	0 ?	?	++ ?	+ ?	+ ?	+ ?	0	++	0	0 ?	0 ?	+ ?	0 ?	0 ?	0 ?	0 ?	0 ?

Summary of Sustainability Appraisal Findings

This policy would ensure that wharves and railheads/rail links are safeguarded for the transportation of minerals and waste but retains an element of flexibility to ensure that unused sites with little potential for future use, or sites that would have greater benefit being used for an alternative purpose, are not safeguarded. As a result, positive impacts have been identified in relation to encouraging the use of more sustainable modes of transport, air quality, land use, climate change, resource use and the economy. There is an element of uncertainty throughout the assessment as safeguarding may displace other forms of development that may otherwise have taken place if these sites were not safeguarded. The consequences of this displacement is not known.

Recommendations

No mitigation is proposed.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with no further alternative options suggested by consultees. The preferred approach is based on Option 1 (*safeguard all known railheads, rail links to quarries and wharfage which would have the potential for minerals transport, unless the need for the alternative development would outweigh the benefits of retaining the facility).*

The SA considered that Option 3 (*option would consider each railhead, quarry rail link and wharfage to assess its potential for minerals transport now and in the future, and only those with greater potential for such use would be safeguarded*) showed more positive benefits overall when compared to option 1 and 2, although it is acknowledged that for the majority of objectives no strong preference for any option was identified.

Policy S05 - Minerals ancillary infrastructure safeguarding

Minerals ancillary infrastructure sites identified on the Policies map are safeguarded against replacement development which would prevent the use of the land for minerals ancillary infrastructure purposes, unless;

- The need for the alternative development outweighs the benefits of retaining the site, or
- A suitable alternative location can be provided for the displaced use, or
- The site is not in use and there is no reasonable prospect of it being used for minerals ancillary infrastructure in the foreseeable future

An additional 100m buffer zone around each site, as shown on the Policies map, is also safeguarded against encroaching development which would not be compatible with the use of the site for ancillary minerals infrastructure. Where development in the safeguarded buffer zone would substantially restrict the continued use or potential future use of the site for minerals ancillary infrastructure then permission will be refused unless adequate mitigation can be provided.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ?	+ ?	0	+ ?	+ ?	0	0	++	+	+ ?	+ ?	0	0 ?	0 ?	0	0	- +
M	+ ?	+ ?	0	+ ?	+ ?	0	0	++	+	+ ?	+ ?	+	+ ?	+ ?	+ ?	0	- +
L	+ ?	+ ?	0	+ ?	+ ?	0	0	++	+	+ ?	+ ?	+	+ ?	+ ?	+ ?	0	- +

Summary of Sustainability Appraisal Findings

There are some very minor benefits that occur because this policy essentially reduces the likelihood of development within 100m of safeguarded sites. Alternatively it may displace some development, leading to uncertain effects (which depend on the location that development is displaced to).

Elsewhere in the assessment a strong benefit was noted relating to minimising resource use, as safeguarding land for ancillary infrastructure would cover land for facilities for processing and distribution of substitute, recycled and secondary aggregate material. Where this is the case an indirect positive effect on minimising resources is expected. The policy also allows an option for future minerals ancillary infrastructure development to happen which would add value to minerals and help promote economic viability.

Effects on communities and health are minimised by the application of the 100m buffer, whereas mixed positive and negative effects were predicted for the changing population objective (as some limited housing development might be displaced, but minerals supply would be facilitated).

Recommendations

No recommendations are made.

Alternatives Considered and SA Recommendation at Issues and Options

4 options were assessed at Issues and Options, with 1 further alternative option suggested by consultees and subsequently assessed. The preferred policy approach is based on Option 2 combined with elements of Option 4 and Option 5. (*Option 2 would safeguard only stand-alone sites for concrete batching, roadstone manufacture, other concrete products manufacture and the handling, processing and distribution of recycled and secondary aggregate; Option 4 would safeguard all known sites for concrete batching, roadstone manufacture, other concrete products manufacture and the handling, processing and distribution of recycled and secondary aggregate; Option 5 would safeguard the surface infrastructure for oil and gas developments.*)

The SA suggested that, on balance, it is considered that Option 4 would have the most sustainability benefits.

Policy S06 - Consideration of applications in Consultation Areas

Where non-exempt development is proposed in an area safeguarded on the Policies Map for minerals resources, minerals transport infrastructure, minerals ancillary infrastructure and waste infrastructure, and the proposed development site is located outside the City of York and North York Moors National Park areas, consultation with North Yorkshire County Council will be required before permission is granted.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	0	0	0	0	0	0	++	0	+	0	0	0	0	0	0	++
M	0	0	0	0	0	0	0	++	0	+	0	0	0	0	0	0	++
L	0	0	0	0	0	0	0	++	0	+	0	0	0	0	0	0	++

Summary of Sustainability Appraisal Findings

In most cases this preferred option has no link with the SA objectives. However, there are positive effects in relation to three objectives. In terms of minimising resource use, this would prevent needless sterilisation of minerals resources. In terms of the historic environment, building stone may be protected from sterilisation, and these benefits would also support the changing population objective. Similarly requiring consultation with the County Council over development affecting safeguarded infrastructure (minerals transport infrastructure, minerals ancillary infrastructure and waste infrastructure) performs positively as it reduces the need for resource use and supports future supply and distribution of minerals for the population.

Recommendations

No mitigation is required.

Alternatives Considered and SA Recommendation at Issues and Options

1 option was assessed at Issues and Options, with 1 further alternative option suggested by consultees and subsequently assessed. The preferred approach is based on Option 1 and Option 2. *(Option 1 outlined that where safeguarding of a particular minerals resource is identified in the Plan, this option would define the whole of that area as a Minerals Consultation Area, where District/Borough Councils would be required to consult the County Council in respect of any non-exempt proposals. Option 2 suggested minerals infrastructure and ancillary development would be included within Minerals Consultation Areas.*)

The SA recommended that a combination of both options be pursued.

Question SA7: Do you agree with the assessments of the safeguarding preferred options? Have we missed anything?

4.6 Development Management Policies

Policy D01 - Presumption in favour of sustainable minerals and waste development

When considering development proposals the Authorities will take a positive approach that reflects the presumption in favour of sustainable development contained in the NPPF. The authorities will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

Planning applications that accord with the policies in this Local Plan (and where relevant with policies in neighbourhood plans) will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are out of date then the Council will grant permission unless material considerations indicate otherwise taking into account whether:

- Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the NPPF taken as a whole; or
- Specific policies in the NPPF indicate that development should be restricted such as in National Parks and AONBs. Where proposals constitute major development in the National Park and AONBs they will be assessed against the requirements for major development in designated areas set out in national policy and Policy D04 of this Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	0	0	0	0	0	0	0	0	0	0	+	+	0	+	0	+
M	0	0	0	0	0	0	0	0	0	0	0	+	+	0	+	0	+
L	?	?	?	?	?	?	?	?	?	?	+	+	+	?	+	?	- ?

Summary of Sustainability Appraisal Findings

Most environmental SA objectives report neutral effects in the short and medium term as a result of this policy as this is largely an affirmation that the policies in the Plan, and national policy and Neighbourhood Plans, will be taken into account. However, uncertainty creeps into the assessment in the longer term as some locally distinctive issues may get a lesser degree of emphasis if the NPPF becomes the sole decision making document when the plan

becomes out of date. In terms of National Parks and AONBs however, the continued application of the major development test positively supports the long term outlook for achieving the landscape objective.

The preferred policy supports the economic objective due to its 'pro-active approach' to finding solutions. It also supports the community vitality, wellbeing and population needs objectives in the short and medium term as it takes into account community defined Neighbourhood Plans. In the longer term the policy makes decision making more reliant on national policy than local views.

Recommendations

No specific recommendation is made. However, when policies in the Plan become out of date they should be updated to ensure that a locally relevant approach to sustainable development is still applied.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with no further alternative options suggested by consultees. The preferred approach is based on a combination of Option 1 and 2. (*Option 1 was where the NPPF model policy would include a minor adjustment to replace the word 'council' with 'authority' to reflect it being a Joint Plan and to replace reference to 'neighbourhood plans' with a reference to 'and other elements of the development plan where relevant'; Option 2 would develop a more specific phrasing based on the national presumption but which promotes not only working proactively with applicants, but also with other stakeholders including consultees and communities jointly to find solutions to planning issues, in line with the draft vision of the Joint Plan.*)

The SA suggested that it is likely that a combination of Options 2 and 3 (*use the model wording (under either option 1 or 2 above) as a starting point but adapt it to specifically state that within the North York Moors National Park and the AONBs the starting point for any decisions will be ensuring that development is consistent with delivering sustainable development within the context of statutory National Park purposes*) would provide the most positive effects on the sustainability objectives.

Policy D02: Local amenity and cumulative impacts

Proposals for minerals and waste development, including ancillary development and minerals and waste transport infrastructure, will be permitted where it can be demonstrated that there will be no unacceptable effects on local amenity and local businesses, including as a result of impacts from: noise, dust, subsidence, vibration, odour and other emissions to air, vermin and litter, public safety, visual impact arising from the design, scale and location of the development, site lighting, cumulative effects, or as a result of adverse impacts on the public rights of way network and access to open space including, in the National Park, on opportunities for enjoyment and understanding of the special qualities of the National Park.

Proposals will be expected as a first priority to prevent adverse impacts through avoidance, with the use of robust mitigation measures where avoidance is not practicable.

Applicants are encouraged to conduct early and meaningful engagement with local communities in line with Statements of Community Involvement prior to submission of an application and to reflect the outcome of those discussions in the design of proposals as far as practicable.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+	0	+	+	+	+	0	0	+	+	+	+ ?	+	+	++	0	+
M	+	0	+	+	+	+	0	0	+	+	+	+ ?	+	+	++	0	+
L	+	0	+	+	+	+	0	0	+	+	+	+ ?	+	+	++	0	+

Summary of Sustainability Appraisal Findings

Broadly this policy performs well against the sustainability appraisal objectives. In particular it strongly contributes to the wellbeing, health and safety objective. Although broadly positive for the economy as amenity is important to local businesses, there is an uncertain effect on the viability of some proposals.

Recommendations

Although no mitigation is proposed for this policy it will be important to address the uncertain effect on the viability of local businesses through monitoring this aspect of the plan.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further alternative options suggested by consultees. The preferred approach is based on Option 2 with the addition of additional criteria. (*Option 2 suggested that in addition to the matters outlined in option 1 (which supported proposals that could demonstrated unacceptable effects on local amenity will not arise), this option would specifically encourage applicants to conduct early and meaningful engagement with local communities, in line with statements of community involvement, prior to submission of an application, and to reflect the outcome of those discussions in the design of the proposals*).

The SA recommended that option 2 be taken forward.

Policy D03 - Transport of minerals and waste and associated traffic impacts

Where practicable minerals and waste movements should utilise alternatives to road transport.

Where road transport is necessary, proposals will be permitted where;

- There is capacity within the existing network for the level of traffic proposed; and
- Access arrangements are appropriate to the volume and nature of any road traffic generated and safe and suitable access can be achieved for all users of the site; and
- There are suitable arrangements in place for on-site manoeuvring, parking and loading/unloading; and
- Any adverse impacts can be appropriately mitigated for example by traffic controls, highway improvements and traffic routing agreements.

For all proposals generating significant levels of road traffic, a transport assessment and green travel plan will also be required to demonstrate that opportunities for sustainable transport and travel have been considered and will be implemented where practicable.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	0	+	+	0	+	0	0	0	0	?	+	+	0	+ ?	0	+
M	0	0	+	+	0	+	0	0	0	0	?	+	+	0	+ ?	0	+
L	0	0	+	+	0	+	0	0	0	0	?	+	+	0	+ ?	0	+

Summary of Sustainability Appraisal Findings

Mostly this preferred policy option either supports or has no effect on the SA objectives. Key positives (all minor) relate to the transport, air quality, climate change, economic growth, community vitality and population needs objectives. Some uncertainty was noted in relation to the effect of road improvements etc. on sensitive landscapes as well as a mixed positive / uncertain outcome for the health and wellbeing objective as the policy supporting text currently does not link well to other policies relating to amenity and cumulative impacts.

Recommendations

Better linkages between this policy and the landscape and amenity / cumulative effects policies in the supporting text would help reduce the uncertainties identified in this assessment.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with 3 further alternative options suggested by consultees and subsequently assessed. The preferred approach is based on a combination of Option 2 and Option 3. *(Option 2 would not seek to give preferential consideration to proposals which would include non-road modes of transport but would require all proposals involving significant transport of minerals or waste by road to demonstrate that the development would, taking into account minerals resource constraints where relevant, be well located in relation to sources of arisings or markets and in relation to suitable road networks; Option 3 would, in combination with either Option 1 (priority for proposals utilising non –road transport) or Option 2, set out criteria to address various potential impacts arising from unavoidable road transport of minerals and waste.)*

The SA advised that option 3 combined with option 4 *(priority for non-road transport plus waste and non-energy minerals developments should demonstrate that the development be well located in relation to sources of arisings or markets and in relation to suitable road networks)* would be most sustainable.

Policy D04 - North York Moors National Park and the AONBs

Part One – Major Development

Proposals for major development in the National Park, Howardian Hills, Nidderdale, North Pennines and Forest of Bowland Areas of Outstanding Natural Beauty will be refused except in exceptional circumstances and where it can be demonstrated it is in the public interest. The demonstration of exceptional circumstances and public interest will require justification based on the following:

- The need for the development, which will include a national need for the mineral and the impact of the development on the national economy; and
- The impact of permitting it, or refusing it upon the local economy of the National Park or AONB; and
- Whether the development can technically and viably be located elsewhere outside the designated area, or the need for it can be met in some other way; and
- Whether any detrimental effect on the environment, the landscape and recreational opportunities, can be moderated to a level which does not significantly compromise the reason for the designation

Part Two – All developments

Planning permission will be supported where proposals contribute to the achievement of, or are consistent with, the aims, policies and aspirations of the relevant Management Plan and are consistent with other relevant development management policies in the Plan.

Part Three – Proposals which impact the setting of Designated Areas

Proposals for development outside of the National Parks and AONBs will not be permitted where it would have a harmful effect on the setting of the designated area**.**

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+	+ ?	+	+	-	0	0	0	0	+ -	++	+ -	+	++	0	0	0
M	+	+ ?	+	+	-	0	0	0	0	+ -	++	+ -	+	++	0	0	0
L	+	+ ?	+	+	-	0	0	0	0	+ -	++	+ -	+	++	0	0	0

Summary of Sustainability Appraisal Findings

Whilst the assessment identifies that there may be negative effects for the economy of these areas through restricting minerals and waste developments it also identifies potential positive effects on the tourism economy of maintaining these high quality environments. Particularly

positive impacts have been identified in relation to recreation and leisure and landscape whilst some minor negative impacts have been identified in relation to land use, as development may be displaced to areas of higher agricultural land value, and cultural heritage, as this policy may restrict the supply of local building stone in the National Parks and AONBs.

Recommendations

Overall the policy is considered to be largely positive and no mitigation is suggested.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees. The preferred approach is based on a combination of Option 2 and Option 3. *(Option 2: include the major development test, but also include a criteria based policy setting out the factors that should be considered for any development in the National Park and AONBs, including non-major development; Option 3: in association with either option 1 (apply the major development test) or option 2, for development outside of National Parks and AONBs consideration to be given to the effects on the setting and views out of these protected areas. These considerations would also apply to the setting of and views out of the adjacent Yorkshire Dales National Park.)*

The SA recommended that a combination of Options 2 and 3 be pursued.

Policy D05 - Minerals and waste development in the Green Belt

Part one - minerals

Proposals for minerals development within the York and West Yorkshire Green Belts will be supported where they would preserve the openness of the Green Belt and are consistent with the purposes of Green Belt designation set out in national policy. Where minerals extraction in the Green Belt is permitted, reclamation and afteruse will be required to be compatible with Green Belt objectives.

Part two - waste

Proposals for most waste development in the Green Belt will be considered inappropriate and will only be permitted in very special circumstances. The following types of development may be appropriate in the Green Belt where it can be demonstrated that the openness of the Green Belt will be preserved and where significant conflict with the purposes of Green Belt designation would not arise:

i) open windrow composting;
ii) small scale on farm composting and anaerobic digestion;
iii) recycling of construction and demolition waste in order to produce recycled aggregate where it would take place in an active quarry or minerals transport site and is linked to the life of the quarry or site;
iv) short term waste sorting and recycling activity in association with, and on the same site as, other permitted demolition and construction activity;
v) recycling, transfer and treatment activities at established industrial and employment sites in the Green Belt where the waste development would be consistent with the scale and nature of other activities already taking place at the site;
vi) landfill of quarry voids including for the purposes of quarry reclamation and where the site would be restored to an after use compatible with the purposes of Green Belt designation;
vii) small scale deposit of inert waste for agricultural improvement purposes or the improvement of derelict or degraded land; and
viii) continued activities within the footprint of established waste sites in the Green Belt.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	0	+ -	0	+ -	+ -	0	0	-	+	++	+ -	+	+	0	0	0
M	0	0	+ -	0	+ -	+ -	0	0	-	+	++	+ -	+	+	0	0	0
L	0	0	+ -	0	+ -	+ -	0	0	-	+	++	+ -	+	+	+	0	0

Summary of Sustainability Appraisal Findings

For some SA objectives the predicted effects for the waste and minerals parts of this preferred policy diverge, with a continuation of minor positive effects resulting from minerals development noted for the transport and climate change objectives, while at the same time negative effects are noted that arise from the lack of consideration of locational factors in relation to waste sites in the Green Belt. Similarly, for the economy SA objective, while minerals sites may continue to bring jobs to Green Belt communities, waste related jobs may become scarcer.

Elsewhere effects are broadly neutral or positive, with strong positive effects noted for landscape. The soils objective notes positive effects from the policy's approach to waste in relation to conserving soils (as in the Green Belt allowable waste development will mostly be located in places such as quarry voids or established industrial sites), while negative effects are noted for minerals development (as the Green Belts coincide with a large amount of higher quality grade 2 and 3 land). Similarly effects on the waste hierarchy may be negative, as the policy may drive some facilities to less optimal locations (which may affect the costs of operating waste sites or even viability for more some future facilities).

Recommendations

This option largely complements national policy and affords a level of protection that, while having some minor effects, is balanced by a broad sweep of positive effects. Therefore no mitigation is recommended.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with 1 further alternative option suggested by consultees. The Preferred approach is based on Option 1. (Option 1: *Include a specific policy supporting waste development and minerals extraction and minerals ancillary development within the Green Belt unless it conflicts with the purposes of the Green Belt designation.*)

The SA recommended that option 1 be pursued for minerals and option 3 pursued for waste. (Option 3: *providing a more flexible approach to waste development in the Green Belt where the development would be located at existing Green Belt waste management facilities within the Plan area, as well as being subject to the other criteria outlined in Option 2*. Option 2 *sought to allow a more flexible local approach to waste development proposals in the Green Belt subject to demonstration that the development would make a significant contribution to the provision of an appropriate overall network of facilities, enabling waste to be moved up the hierarchy and managed in proximity to arisings, and where particularly high standards of siting, design and mitigation of any impacts can be achieved.*)

Policy D06 - Landscape

Proposals will be permitted where it can be demonstrated that there will be no unacceptable impact on the landscape, having taken into account any proposed mitigation measures.

For proposals which may impact on nationally designated areas including the National Park, AONBs, Heritage Coast and the adjacent Yorkshire Dales National Park, including their setting, a very high level of protection to landscape will be required. Development which would have an unacceptable adverse landscape impact on these designated areas will not be permitted.

Protection will also be afforded to the landscape setting of the historic City of York. Permission will only be granted for development which would harm the landscape setting of the City where the need for, or benefits of, the development outweigh the harm caused.

Where proposals may have an adverse impact on landscape, tranquillity or dark night skies, schemes should provide for a high standard of design and mitigation, having regard to landscape character, the wider landscape context and setting of the site and any visual impact, as well as for the delivery of landscape enhancement where practicable.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ?	?	+ -	+ -	- ?	+ -	0	0	0	++ -	++	+ -	+ -	+	+ -	-	0
M	+ ?	?	+ -	+ -	- ?	+ -	0	0	0	++ -	++	+ -	+ -	+	+ -	-	0
L	+ ?	?	+ -	+ -	- ?	+ -	0	0	0	++ -	++	+ -	+ -	+	+ -	-	0

Summary of Sustainability Appraisal Findings

This policy is likely to result in a number of positive impacts particularly in relation to protection of the landscape. This is likely to also result in positive impacts in relation to cultural heritage, tourism and amenity in those areas of high landscape value. This policy may result in a clustering of development outside of the designated and high value landscapes in the plan area therefore resulting in cumulative negative impacts.

Recommendations

Overall the policy is considered to be largely positive however it is considered that it could be strengthened by supporting the provision of landscape enhancements in association with minerals and waste development where this would be compatible with landscape character.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees. The Preferred approach is based on Option 1. (Option 1: *support proposals which demonstrate that unacceptable impact on the landscape would not arise, having regard to the nature and purpose of any statutory or non-statutory designations that apply, including the setting of these designations, and taking into account any mitigation measures.*)

In terms of this sustainability appraisal, while there are benefits and disadvantages associated with both options, option 1 is favoured.

Policy D07 - Biodiversity and geodiversity

Proposals will be permitted where it can be demonstrated that there will be no unacceptable impacts on biodiversity or geodiversity, including on statutory and non-statutory designated sites, local priority habitats, habitat networks and species, having taken into account any proposed mitigation measures. A very high level of protection will be afforded to sites designated at an international or national level, including SPAs, SACs, RAMSAR sites and SSSIs. Development which would have an unacceptable impact on these sites will not be permitted.

Through the design of schemes, including any proposed mitigation measures, proposals should seek to contribute positively towards the delivery of agreed biodiversity and/or geodiversity objectives, including those set out in agreed local Biodiversity or Geodiversity Action Plans, or in line with agreed priorities of any relevant Local Nature Partnership, with the aim of achieving net gains for biodiversity or geodiversity.

In exceptional circumstances, and where the development site giving rise to the requirement for offsetting is not located within a SPA, SAC, RAMSAR or SSSI, the principle of biodiversity offsetting to fully compensate for any losses will be supported. These circumstances include where:

i) It has been demonstrated that it is not possible to avoid or mitigate against adverse impacts; and
ii) The provision of compensatory habitat within the site would not be feasible; and
iii) The need for or benefits of the development override the need to protect the site; and
iv) Any compensatory gains would be delivered within the minerals or waste planning authority area in which the loss occurred.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	++ ?	+	0	+	+	+ ?	+	0	0	0	+	- +	- +	+	+	+	-
M	++ ?	+	0	+	+	+ ?	+	0	0	0	+	- +	- +	+	+	+	-
L	++ ?	+	0	+	+	+ ?	++	0	0	0	+	- +	- +	+	+	+	-

Summary of Sustainability Appraisal Findings

This preferred policy will have a range of largely positive effects as through the protection and enhancement of biodiversity valuable ecosystem services, such as water or air quality improvements, carbon storage benefits, or increased access to outdoor space. It may also benefit the local economy, helping to ensure that the plan area remains attractive to tourists

and investors. Some uncertainty was however noted in relation to biodiversity offsetting which while seeking to provide a net gain, might fail to fully replicate lost habitats (albeit that these are likely to be of local rather than national value), or might locate them some distance away from the original beneficiaries of habitats. Nonetheless, offsetting would provide minerals and waste developers with greater flexibility to locate in the best locations. Some negative effects were noted due the burden that this policy may put on new development.

Recommendations

Broadly the policy is seen as positive in terms of most SA objectives. However, the uncertainties raised over biodiversity may benefit from additional clarification on the circumstances when it would be suitable (i.e. when exceptional circumstances; might apply, the offset metrics expected of developers and the geographical scope of its application)[11].

Alternatives Considered and SA Recommendation at Issues and Options

4 options were assessed at Issues and Options, with 2 further alternative options suggested by consultees and subsequently assessed. The preferred approach is based on Options 2 and 3. (*Option 2: support proposals which demonstrate that unacceptable impacts on biodiversity and geodiversity would not arise, having regard to any statutory or non-statutory designations and/or legal protections that apply as well as any agreed local priority habitats, habitat networks and species, looking to avoid effects and, where this is not possible, mitigate effects. Proposals should look to contribute towards the delivery of agreed biodiversity and geodiversity objectives with the aim of achieving net gains for biodiversity or geodiversity ;* Option 3: *Where impacts cannot be avoided and mitigation is not feasible and the need for the development overrides the need to protect the site, habitat or species, the option would support the principle of biodiversity offsetting in relation to fully compensating for any losses and would require any gains to be related to the planning authority area in which the loss occurred*.)

The SA recommended options 2 and 3 but that reference is included to ensuring that any offsetting includes consideration of replacing the community and climate regulation value attached to the biodiversity of the site to be developed.

[11] National guidance on biodiversity offsetting has not yet been finalised. Information on the pilot work and consultation work run by Defra is available at https://www.gov.uk/biodiversity-offsetting.

Policy D08 - Historic environment

Minerals or waste development proposals will be permitted where it can be demonstrated that they will conserve and, where practicable, enhance those elements which contribute to the significance of the area's heritage assets including their setting.

Particular regard will be had to the benefits of conserving those elements which contribute most to the distinctive character and sense of place of the Plan area including:

- The World Heritage Site at Fountains Abbey/Studley Royal;
- The special historic character and setting of York;
- The archaeological resource of the Vale of Pickering, the Yorkshire Wolds, the North York Moors and Tabular Hills, and the Southern Magnesian Limestone Ridge.

Proposals that would result in harm to a designated heritage asset (or an archaeological site of national importance) will be permitted only where this is outweighed by the public benefits of the proposal. Substantial harm or total loss to the significance of a designated heritage asset (or an archaeological site of national importance) will be permitted only in exceptional circumstances and where it can be demonstrated that substantial public benefits would outweigh that harm.

Proposals affecting an archaeological site of less than national importance will be permitted where they would conserve those elements which contribute to its significance in line with the importance of the remains. In those cases where development affecting such sites is acceptable in principle, mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, adequate provision should be made for excavation and recording before or during development.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	0	0	0	0	0	0	?	?	++ ?	+	- +	+	+	0	0	-
M	0	0	0	0	0	0	0	?	?	++ ?	+	- +	+	+	0	0	-
L	0	0	0	0	0	0	0	?	?	++ ?	+	- +	+	+	0	0	-

Summary of Sustainability Appraisal Findings

This policy would have particularly strong positive impacts in relation to the historic environment and landscape objectives. The policy would conserve and where appropriate enhance the historic environment and affords particular protection for the most significant historic assets within the plan area. Positive impacts are also likely to result in relation to tourism, recreation, community viability and vitality and the economy as this policy may

boost tourism and conserve and enhance the special qualities of the National Park. Some negative impacts may result particularly in relation to the economy and meeting the needs of a changing population should this policy result in prevention of minerals and waste development due to historic environment considerations.

Recommendations

There is an element of uncertainty in relation to the magnitude of positive impact that would result from this policy as it states that enhancements will be made 'where appropriate'. This policy could be strengthened by requiring enhancements to be made 'wherever possible'.

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with 1 further alternative option suggested by consultees and subsequently assessed. The Preferred approach is based on a combination of Options 2 and 3. (Option 2: *would indicate that heritage assets will be conserved in line with the requirements of the NPPF but would encourage proposals, where practicable, to deliver enhancements to the setting and/or secure improved access to and understanding of the asset.* Option 3: *under either option 1 or option 2, this option would seek to protect the setting of the City of York by supporting proposals which do not compromise the setting.*)

The SA recommended that option 1 and option 4 are taken forward. (Option 1: option would not set out specific local policy for conservation and enhancement of the historic environment and would rely on national policy in the NPPF, together with any other relevant policies in the development plan; Option 2: *In conjunction with either Option 1 or Option 2, this option would seek to protect the setting of the City of York and other historic settlements in the Plan area by supporting proposals which do not compromise their settings.)*

Policy D09- Water environment

Proposals for minerals and waste development will be permitted where it can be demonstrated that no unacceptable adverse impacts will arise, taking into account any proposed mitigation, on:
Surface or groundwater quality;
Surface or groundwater supplies and flows.

In relation to surface and groundwater quality and flows a very high level of protection will be applied to principle aquifers and groundwater Source Protection Zones. Development which would have an adverse impact on principle aquifers and Source Protection Zones will only be permitted where the need for, or benefits, of the development clearly outweigh any harm caused.

Permission for minerals and waste development on sites not allocated in the Plan will, where relevant, be determined in accordance with the Sequential Test and Exception Test for flood risk set out in national policy. Development which would lead to an unacceptable risk of, or be at an unacceptable risk from, surface, ground or coastal water flooding will not be permitted.

Proposals for minerals and waste development should, where necessary or practicable taking into account the scale, nature and location of the development proposed, include measures to contribute to flood alleviation and other climate change mitigation and adaptation measures including use of sustainable urban drainage systems.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+ ++	+ ++	0	0	0	+	++	0	0	0	0	++	+	+	++	++	+
M	+ ++	+ ++	0	0	0	+	++	0	0	0	0	++	+	+	++	++	+
L	+ ++	+ ++	0	0	0	+	++	0	0	0	0	++	+	+	++	++	+

Summary of Sustainability Appraisal Findings

This is a generally positive development management policy, with benefits to biodiversity, water, climate change mitigation and adaptation, the economy, community vitality, recreation, health and wellbeing and a changing population. It will work well alongside the environmental permitting and water licensing regimes.

Recommendations

A reference to the importance of not impeding the achievement of water status objectives outlined in River Basin Management Plans (which is important in meeting obligations under the Water Framework Directive) in the supporting text could add some additional clarity for future development proposals. This can generally be demonstrated by achieving a relevant environmental permit flood defence consent or land drainage / ordinary watercourse consent.[12]

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with no further alternative options suggested by consultees taken forward but several points were raised which should be considered during the progression of the policy. The preferred approach is based on Options 1 and 2. (Option 1: *this would not set out a specific local policy for the protection of the water environment and would rely on national policy in the NPPF, together with any other relevant policies in the development plan;* Option 2: *Proposals will be supported where it can be demonstrated, when considered against the criteria (which include impacts a range of water constraints as well as impacts on ground and surface water flooding), that unacceptable adverse (including cumulative) effects can be avoided or have been appropriately mitigated and, where possible, that the development would provide enhancements to the locality*).

The SA recommended that option 2 be pursued.

[12] See Environment Agency, 2014. Living on the Edge URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/403435/LIT_7114.pdf

Policy D10 - Reclamation and afteruse

Part One

Proposals which require restoration and afteruse elements will be permitted where it can be demonstrated that they would be carried out to a high standard and which, where relevant, have demonstrably:

i) Been brought forward in discussion with local communities and other relevant stakeholders and where practicable reflect the outcome of those discussions;
ii) Taken into account the location and context of the site, including the implications of other significant permitted or proposed development in the area and the range of environmental and other assets and infrastructure that may be affected, including any important interactions between those assets and infrastructure;
iii) Reflected the potential for the proposed restoration and/or afteruse to give rise to positive and adverse impacts, including cumulative impacts, and have sought where practicable to maximise potential overall benefits and minimise overall adverse impacts;
iv) Taken into account potential impacts on and from climate change factors
v) Made best use of onsite materials for reclamation purposes and only rely on the need for importation of waste where essential to deliver an appropriate standard of reclamation;
vi) Provided for progressive, phased restoration where appropriate and which provide for the restoration of the site at the earliest opportunity in accordance with an agreed timescale;
vii) Provided for the longer term implementation and management of the agreed form of restoration and afteruse (except in cases of agriculture or forestry afteruses where a statutory 5 year maximum aftercare will apply).

Part two

In addition to the criteria in Part One above, proposals will be permitted which deliver a more targeted approach to minerals site restoration and afteruse by contributing towards objectives, appropriate to the location of the site, including where relevant:

i) In areas of best and most versatile agricultural land, prioritising the protection and enhancement of soils and the long term potential to create areas of best and most versatile land during reclamation of the site;
ii) Where opportunities allow, particularly for sand and gravel extraction in the flood plains of the rivers Swale and Ure, providing additional flood storage capacity to help minimise flooding in upstream and downstream locations;
iii) Within the National Park and AONBs, enhancing the special qualities of the designated area and/or providing opportunities for the enjoyment and understanding of those special qualities;
iv) Within airfield safeguarding zones, particularly where reclamation for biodiversity is involved, ensuring that reclamation and afteruse proposals respect safeguarding constraints whilst maximising the potential restoration and afteruse benefits delivered by the site;
v) In proximity to important heritage assets, ensuring that the significance of assets and their settings is sustained and where practicable enhanced and, also where practicable, that opportunities to facilitate enjoyment of the asset are provided;
vi) Where the development is located within or adjacent to identified green infrastructure corridors, reflecting any locally agreed priorities for delivery of additional or enhanced green infrastructure and ecosystems services;
vii) In proximity to major settlements within and adjacent to the Plan area, and subject to local amenity considerations, providing enhanced opportunities for informal and formal public access and recreation;

viii) Delivering enhancements for biodiversity, improvements to habitat networks and the connectivity between these, including the creation of Biodiversity Action Plan habitats, based on contributing towards established objectives, seeking to deliver benefits at a landscape scale where practicable;

ix) Creating geodiversity benefits where appropriate including contributing towards the delivery of priorities identified in any relevant Geodiversity Action Plan.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	++	+	+	+	++	+	++	-	?	++	+ ++	+ ?	+	+	+	++	++
M	++	+	+	+	++	+	++	-	?	++	+ ++	+ ?	+	++	+	++	++
L	++	+	+	+	++	++	++	-	?	++	+ ++	+ ?	+	++	+	++	++

Summary of Sustainability Appraisal Findings

This policy is likely to result in largely positive impacts with particularly strong positive effects recorded in relation to biodiversity, land use, climate change adaptation, historic environment, flood risk and meeting the needs of a changing population due to the wide range of considerations promoted by the policy. A minor negative impact has been recorded in relation to resource use and encouraging re-use of materials as through encouraging the use of on-site materials above the importation of previously used ones/waste, this policy would not help with reducing the use of materials and encouraging their re-use. Uncertain effects are recorded in relation to sustainable waste management as the policy provides less scope for wastes other than those generated on site to be used in reclamation with uncertain implications for the management of other wastes.

Recommendations

This policy is considered to be largely positive and no mitigation is proposed.

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options, with 2 further alternative options suggested by consultees and subsequently assessed. The preferred approach is based on a combination of Options 1 and 2. (Option 1: *would support reclamation and afteruse proposals across the whole of the Plan area which meet a number of general criteria*; Option 2: *In addition to the general criteria identified in Option 1, this option would seek to deliver a more targeted approach to minerals site reclamation and afteruse by supporting proposals*

which, where relevant, focus reclamation and/or afteruse proposals towards particular objectives.)

The SA recommended that both options 1 and 2 be followed.

Policy D11 - Sustainable design, construction and operation of development

Part one

Proposals for minerals and waste development will be permitted where it has been demonstrated that measures appropriate and proportionate to the scale and nature of the development proposed have been incorporated in the design, construction and operation of the development in relation to:

i) Reduction or minimisation of greenhouse gas emissions through incorporation of energy efficient siting, design and operational practices including those relating to bulk transport of materials;
ii) Minimisation of waste generated by new minerals and waste development;
iii) Generation and utilisation of renewable or low carbon energy where practical and in a manner appropriate to the character and location of the development;
iv) Minimisation of water consumption through incorporation of water efficiency measures, including where practicable the re-use of waste water originating from the development;
v) Measures to minimise flood risk associated with the development including use of Sustainable Drainage Systems and permeable surfacing;
vi) A requirement for the relevant built or civil engineering elements of significant new minerals and waste developments to meet a minimum 'Very Good' BREEAM or CEEQUAL standard as appropriate;
vii) For energy from waste development the efficient use of energy generated by the development including, for development with the potential for generation of combined heat and power, the beneficial use of heat either on site or to serve other existing or proposed development in the vicinity of the site;
viii) Implementation of landscape planting comprising native species able to successfully adapt to climate change and where practicable incorporation of areas of new wildlife habitat that would help to improve habitat connectivity;
ix) Mitigation of the impacts on the development arising from any predicted mining subsidence or land instability;
x) For minerals workings and mineral working deposits, consideration of tip and quarry slope stability, the impacts of any dewatering activity and incorporation of appropriate mitigation in the design of tips and slopes in order to minimise any hazard to people and property.

Proposals for substantial new minerals extraction and for the large scale treatment, recovery or disposal of waste should be accompanied by a climate change assessment showing how the proposals have taken into account impacts from climate change and include appropriate mitigation measures where necessary.

Part two

Proposals for new built development should demonstrate how the development would be designed, constructed and operated in order to:

i) minimise waste generated during construction of the development, and incorporate measures to encourage or facilitate the re-use and recovery of any waste generated during construction of the development;
ii) Incorporate appropriate space to enable waste arising during use of the development to be sorted and stored prior to being collected for recycling or re-use;
iii) Use sustainable construction materials where practicable, including use of alternatives to primary land-won aggregate.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+	+	+	+ ++	+	+ ++	++	+	+	+ 0 ?	+ 0 ?	?	0	0	+ - ?	+ ++	0
M	+	+	+	+ ++	+	+ ++	++	+	+	+ 0 ?	+ 0 ?	?	0	0	+ - ?	+ ++	0
L	+	+	+	+ ++	+	+ ++	++	+	+	+ 0 ?	+ 0 ?	?	0	0	+ - ?	+ ++	0

Summary of Sustainability Appraisal Findings

It is considered that this policy would have an overall positive effect on achieving sustainable design, construction and operation of developments. The policy performs positively against most SA objectives, particularly those relating to air quality, climate change and flooding. Some areas of uncertainty have been highlighted including in relation to objective 12 (economic growth) as the costs associated with developing a site are likely to increase given the requirement for high standards of sustainable design and construction and additional mitigation where required. Also, part 2 of the policy requires additional land for the sorting and storage of waste arising through construction. These additional costs would be balanced with the gains that are likely to accrue through low running costs due to the energy efficiency of any development and cost reduction through re-using resources. However, this will vary depending on the site. Uncertainty/minor negative impacts have also been recorded in relation to the historic environment and landscape objectives. These impacts relate to only one element of the policy: the provision of space for the sorting and storage of waste prior to collection. It is also considered that minor negative amenity impacts may result depending on the location and design of the sorting and storage site.

Recommendations

This policy is largely very positive and no mitigation is proposed. This policy could however be further strengthened by adding a requirement to achieve certification via an engineering quality mark such as the CEEQUAL[13] environmental assessment scheme for engineered structures that fall outside of BREEAM (such as pipelines).

[13]See http://www.ceequal.com/about.html

Alternatives Considered and SA Recommendation at Issues and Options

2 options were assessed at Issues and Options. The preferred approach is based on Options 1 and 2. (Option 1: *support proposals for minerals and waste development which demonstrate that, where relevant, appropriate measures have been incorporated in the design, construction and operation of the development and where relevant, reclamation of the site in relation to a range of criteria defined in the option / proposals for new minerals extraction / treatment, recovery or disposal of waste should be accompanied by a climate change assessment;* Option 2: *sets out criteria which would, where relevant, apply in addition to the criteria set out in option 1, and which would also apply to proposals for new residential, industrial and commercial development. The additional criteria would seek to help deliver sustainable waste management and the sustainable use of minerals*.)

The SA recommended that option 1 in combination with option 2 should be taken forward.

Policy D12 - Protection of agricultural land and soils

Best and Most Versatile agricultural land will be protected from unnecessary and irreversible loss. Where development of best and most versatile agricultural land is justified, taking into account the requirements of relevant strategic policies in the Plan, proposals should specify the measures to be taken to ensure that any soils requiring removal as part of the development are retained and conserved on site in order to maintain their longer term potential for agricultural production.

Reclamation proposals for minerals and waste development on best and most versatile land should, where practicable, include provision for the restoration of land to best and most versatile quality and will be subject to aftercare requirements to ensure that a high standard can be achieved.

Soils which have a benefit other than their value for agriculture should, where practical, be retained for incorporation into site restoration.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	+	+	0	0	+ ++	+	++	+	+	+	+ ++	+	+	+	+	+	++
M	+	+	0	0	+ ++	+	++	+	+	+	+ ++	+	+	+	+	+	++
L	+ -	+	0	0	+ ++	+	++	+	+	+	+ ++	+	+	+	+ -	+ -	++

Summary of Sustainability Appraisal Findings

This policy will help towards the sustainable conservation of our most important soil resources. It performs positively against most SA objectives, particularly those relating to protecting soils and land, adapting to climate change, protecting landscapes and supporting a changing population's needs. While some mixed outcomes may be expected in the long term when the benefits of low level quarry restoration are considered (i.e. for the biodiversity, recreation and health objectives) these are minor exceptions to a broadly very positive assessment.

However, the policy applies only to best and most versatile land, which limits its potential in relation to some SA objectives (e.g. biodiversity, landscape).

Recommendations

To strengthen the policy further additional wording could be added akin to ‘Soils which have a benefit other than their value for agriculture should, where practical, be retained for incorporation into site restoration’

Alternatives Considered and SA Recommendation at Issues and Options

Neither of the 2 options for ID69: ‘Other key criteria for minerals and waste development’ were taken forward. Following consultation the scope of this option set was amended to relate specifically to BMV Land (now D12).

The SA’s recommendation in relation to ID69 was for option 1 to be pursued (*which supported development that avoid / mitigate for unacceptable impacts on, or enhance, a range of criteria, including impacts on best and most versatile land and protection of soil resource.)*

Policy D13- Consideration of applications in Development High Risk Areas

Proposals for non-exempt development in Development High Risk Areas identified by the Coal Authority should be accompanied by a Coal Mining Risk Assessment and where necessary incorporate suitable mitigation measures in relation to land stability. Permission will be granted where it can be demonstrated, through the Coal Mining Risk Assessment, that the development will not be at unacceptable risk.

SA Findings

Timescale	1.Bio / geo-diversity	2.Water	3.Transport	4. Air	5. Soil / land	6. Climate change	7. Climate adaptation	8. Minimise resources	9. Waste hierarchy	10. Historic environment	11. Landscape	12. Economic growth	13. Community vitality	14. Recreation	15. Health / wellbeing	16. Flooding	17. Changing population
S	0	0	0	0	+	0	+	0	0	0	0	0	0	0	+	+	+
M	0	0	0	0	+	0	+	0	0	0	0	0	0	0	+	+	+
L	0	0	0	0	++	0	+	0	0	0	0	0	0	0	+	+	+

Summary of Sustainability Appraisal Findings

There are unlikely to be widespread effects as a result of this policy, however, there are some small scale positive effects on soil / land, climate change adaptation, health and wellbeing, flood risk and meeting the needs of the population. This is because the policy is likely to ensure that development is less prone to land instability impacts.

Recommendations

None

Alternatives Considered and SA Recommendation at Issues and Options

3 options were assessed at Issues and Options, with no further realistic alternative options suggested by consultees. The preferred approach is based on Option 1 of ID72 'Coal Mining Legacy'. (Option 1: *ensure that coal mining legacy issues are taken into account during assessment of development proposals which are proposed in development high risk areas identified by the Coal Authority*)

The SA recommended Option 1 be taken forward.

SA options assessments can be viewed in the Updated Issues and Options Sustainability Appraisal Update.

Question SA8: Do you agree with the assessments of the development management preferred options? Have we missed anything?

5. Considering Sites

5.1 Site Identification and Assessment Methodology

The assessment of sites has been a core part of the sustainability appraisal process and the SA has helped to select a number of preferred sites. To carry out this task we have followed a Site Identification and Assessment Methodology. This methodology took a stepped approach to assessing sites:

Step 1: Identification and initial screening of potentially suitable Sites and Areas;
Step 2: Identification and mapping of key constraints;
Step 3: Initial sustainability appraisal of Sites;
Step 4: Panel review of initial SA findings and feedback to Sustainability Appraisal Report

Following the initial screening at step 1, all sites were mapped and considered against a broad range of constraints and opportunities, most of which was available as mapped information, though other data sets, such as studies and reports were also considered. These datasets are listed in the Site Identification and Assessment Methodology and a limited number are also available on the Site Assessment Website.

This information was used to complete an assessment of each site against the 17 SA objectives that have also been used for the assessment of policy options. A key difference, however, was that a series of site based (rather than strategic) questions to ask of each site were defined to support each objective[14]. Following the completion of these assessments 3 specialist panels were convened to review sites. The details of who attended the panel sessions and the key points raised are published on the Site Assessment Website. The findings of these panel sessions allowed us to refine the assessments. Proposals for mitigation were then developed.

The key issues and mitigation identified for each site are summarised in appendix 1 of the main Preferred Options report.

5.2 Results of Site Assessment and Mitigation

The full site assessment findings, as well as consideration of cumulative effects and proposed mitigation are available in Volume II of this SA report.

Question SA9: Do you agree with the assessments of the sites? Have we missed anything?

[14] Analogous to the sub objectives used in the sustainability appraisal of policies)

6. Proposal for Monitoring

6.1 Proposed Indicators

The SA process so far has predicted a number of positive and negative effects associated with minerals and waste policies and sites as well as areas of uncertainty. We have also identified mitigation for key significant effects. As a strategic assessment it is important that we seek to monitor whether these effects do in actual fact occur or whether other effects that we have not identified may be occurring. This will help us to take remedial action if necessary (for instance at the plan review stage) and also to refine future assessments.

We will present a full list of monitoring proposals in our Sustainability Appraisal Report which will be published in draft form at the pre submission stage of plan preparation. However, we would like to seek views on an initial list of indicators.

It is important to note that as a local planning authority the resources available to monitor indicators are very limited. This means that we need to develop 'smart' and focussed indicators rather than seeking to monitor everything. Smart indicators are:

-Specific

-Measurable

-Achievable

-Realistic

-Time bound

Table 6 sets out our initial proposals for monitoring. Following consultation these will be further refined and added to.

Table 6 Initial proposals for monitoring

SA objective	Key issues Identified by SA	Possible Indicator
1. Protect and enhance biodiversity and geo-diversity and improve habitat connectivity	• Effects on protected species • Effects on priority habitats • Effects on protected sites	• Number of Planning Applications supported by a Habitat Regulations Assessment • SSSI condition status
2. Enhance or maintain water quality and supply and improve efficiency of water use	• Diversion of or pollution of watercourses • Effects on groundwater	• Water body status for key rivers
3. Reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	• HGV use on minor roads	• Number of planning applications with a travel plan / traffic assessment • Number of planning

		applications utilising rail or water transport
4. Protect and improve air quality	• Impacts on AQMAs • Dust in reaching receptors	• Number of Air Quality Management Areas
5. Use soil and land efficiently and safeguard or enhance their quality	• Loss of Best and Most Versatile Land	• Area of BMV land lost.
6. Reduce the causes of climate change	• Embodied energy in built infrastructure	• Number of planning applications providing a BREEAM pre-assessment
7. Respond and adapt to the effects of climate change	• Development prone to flooding • Ecological networks become fragmented	• Percentage of planning applications submitted with a Flood Risk Assessment. • Area of Minerals Applications providing flood storage.
8. Minimise the use of resources and encourage their re-use and safeguarding	• Secondary and recycled aggregate use	• Number of Sites providing Secondary or Recycled Aggregates
9. Minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	• Volumes of waste managed	• Municipal Waste to Landfill
10. Conserve and enhance the historic environment, heritage assets and their settings.	• Loss of heritage assets • Effects on the setting of heritage	• Number of sites on Heritage at Risk Register
11. Protect and enhance the quality and character of landscapes and townscapes	• Visibility of sites • Loss of tranquillity	• Planning applications including a Landscape and Visual Impact Assessment
12. Achieve sustainable economic growth and create and support jobs	• Value added to minerals • Viability	• Total employment in the minerals sector
13. Maintain and enhance the viability and vitality of local communities	• Creation of Jobs • Effects on the tourism economy	• Economically active rate of 16-64 year olds
14. Provide opportunities to enable recreation, leisure and learning	• Diversion of rights of way	• Number of minerals / waste sites restored to accessible open space
15. Protect and improve the wellbeing, health and safety of local communities	• Dust / particulates affecting wellbeing	• Number of planning applications providing an air quality / dust assessment
16. Minimise flood risk and reduce the impact of flooding	• Development prone to flooding	• Percentage of planning applications

		submitted with a Flood Risk Assessment. • Area of Minerals Applications providing flood storage.
17. Address the needs of a changing population in a sustainable and inclusive manner	• Minerals supply to support housing	• House completions

Question SA10: What do you think we should monitor? Can you suggest anything else?

Question SA11: Do you have any further comments about this assessment or any of the supporting assessment work (Habitat Regulations Assessment / Strategic Flood Risk Assessment)?

7. Next Steps and Consultation

7.1 Next Steps

Following consultation on this document we will consider all the responses received and use them to update the findings of this report. These will then be fed back to the authors of the Joint Plan to consider the need to alter or mitigate for policies that may have negative sustainability effects.

A Pre Submission draft of the Joint Plan is expected to be issued for consultation in early 2016. We will consult on a draft sustainability report and Habitats Regulations Assessment during that consultation window.

Following this pre-submission phase the SA and supporting assessments will be revised and submitted for examination in public alongside the Joint Plan and its supporting evidence.

7.3 Consultation

We would like you to comment in any way you see fit on this sustainability appraisal work. Although we have asked a series of questions in this assessment, if you prefer to create your own response without using the questions as a guide, then please do so.

A blank questionnaire is available on the Sustainability Appraisal Website.

We are consulting on the findings of this report from **Monday 16th November to Friday 15th January.**

Comments should be sent to:

Environmental Policy,
Heritage Services, Waste and Countryside Services,
North Yorkshire County Council,
County Hall, Northallerton,
North Yorkshire, DL7 8AH
Tel: **01609 536493**

Email: mwsustainability@northyorks.gov.uk

Appendix 1: Revised Sustainability Appraisal Framework

Sustainability Objective	Sub objectives	Indicators[15]
1. Protect and enhance biodiversity and geodiversity and improve habitat connectivity	-Protect and enhance designated nature conservation sites and protected species; -To contribute to the suitable protection of trees, woodlands and forests -Avoid damage to designated geological assets and create new areas of geodiversity value; -Seek to contribute to national targets for biodiversity, including for national and local priority species and habitats; -Seek to contribute to local targets for geodiversity; -Preserve the integrity of habitat networks and increase the connectivity between habitats; -Maximise the potential for the creation of new habitats; -Minimise the spread of invasive species; -Provide opportunities for people to access the natural environment; -Protect and manage ancient woodland; -Appropriately manage and enhance PAWS;	1. Percentage of SSSIs in favourable condition (Natural England) 2. Total area of SSSI (Natural England) 3. Total area of UK BAP Priority Habitat (Natural England) 4. Area of ancient and semi natural woodland (Natural England) 5. Area of ancient replanted woodland (PAWS) (Natural England) 6. Area of land in Higher Level Stewardship (Natural England) 7. Area of SINC land (NYCC) 8. Number of alerts for invasive species relevant to North Yorkshire (Defra)[16] 9. Number of alien species on UKTAG List found in North Yorkshire[17]

[15] See explanation above regarding the purpose of indicators
[16] Species distribution to be taken from the National Biodiversity Network.
[17] Species distribution to be taken from the National Biodiversity Network.

Sustainability Objective	Sub objectives	Indicators[15]
	-Promote improvements for biodiversity at the landscape scale; -Achieve a net gain for biodiversity	
2. Enhance or maintain water quality and supply and improve efficiency of water use	-Ensure that Water Framework Directive status objectives for surface and groundwater are not compromised by maintaining or improving upon ecological and chemical status; - Prevent unsustainable levels of ground and surface water abstraction; - Avoid wasting water; -Protect groundwater source protection zones;	1. Percentage of water bodies achieving overall good status in River Basin Management Plans (Environment Agency) 2. Water resource availability at low flows as reported in CAMS (Environment Agency) 3. Groundwater resource availability as reported in CAMS (Environment Agency)
3. Reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	-Encourage more sustainable transport modes; -Reduce the impact of transporting minerals by road on local communities; -Reduce vehicle emissions due to mineral and waste movements; -Encourage proximity between minerals and waste sites and markets / sources[18]; -Safeguard or deliver valuable infrastructure that may contribute to modal shift;	1. Motor vehicle traffic (Vehicle miles) by local authority (DfT) 2. Proportion of residents who walk or cycle, at least one per month, for utility purposes (for reasons other than recreation, health, training or competition) by local authority[19] (DfT) 3. Road transport energy consumption at local authority level (DfT/NAEI)

[18] This reduces the distance required to transport products / waste and can provide benefits to businesses in terms of supply chains

[19] Department for Transport/Sport England, 2012. Local Area Walking and Cycling Statistics: England 2010/11 [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9105/local-area-walking-and-cycling-2010-11.pdf].

Sustainability Objective	Sub objectives	Indicators[15]
	-Promote active travel and sustainable commuting -Improve congestion	
4. Protect and improve air quality	-Reduce all emissions to air from new development; -To reduce the causes and levels of air pollution in Air Quality Management Areas and seek to avoid new designations; -To minimise dust and odour, particularly where communities or other receptors may be affected; -Support cleaner technology for minerals and waste development; -Avoid locating development in areas of existing poor air quality where it could result in negative impacts on the health of present and future occupants / users; -Seek to avoid adding to pollutant deposition at sensitive habitats.	1. Number of Air Quality Management Areas 2. Number of SAC and SPAs exceeding critical loads for deposition of either N or S (APIS) 3. Mapped distribution of NOX, NO2, PM10 and PM2.5 (Defra LAQM)
5. Use soil and land efficiently and safeguard or enhance their quality	-Reduce the permanent loss of best and most versatile agricultural land; -Conserve and enhance soil resources and quality; -Promote good land management practices on restored land; -Reduce the amount of derelict, contaminated, degraded and vacant / underused land; -Recover nutrient value from biodegradable wastes (e.g. compost, biodigestate)	1. Number of minerals and waste applications which are located within areas of best and most versatile (BMV) agricultural land (NYCC) 2. Land use change: previous use of land changing to developed use annual average by region[20] (DCLG)

[20]Derived from the Department for Communities and Local Government 'Live Tables on Land Use Change Statistics' which are collated by Government Office Region [https://www.gov.uk/government/statistical-data-sets/live-tables-on-land-use-change-statistics].

Sustainability Objective	Sub objectives	Indicators[15]
	-Minimise land taken up by minerals and waste development -Seek to utilise brownfield land for waste development where possible	
6. Reduce the causes of climate change	-Reduce emissions of greenhouse gases; -Reduce CO2 from minerals and waste development through use of energy efficient and low and zero carbon design and adoption of efficient plant and processes; -Maximise the generation and use of renewable energy in appropriate locations; -Prevent the loss of embodied energy by promoting the use of recycled, recyclable and secondary resources; -Promote carbon storage through appropriate land management -Adhere to the principles of the energy hierarchy[21]	1. Emissions of CO2 per capita by Local Authority (excluding LULUCF[22]) (DECC) 2. Industrial and commercial per capita CO2 emissions by Local Authority (DECC) 3. Road transport CO2 emissions per capita by Local Authority (DECC) 4. Land use change CO2 emissions per capita by Local Authority (DECC)[23]
7. Respond and adapt to the effects of climate change	-To plan and implement adaptation measures for the likely effects of climate change; -Ensure 'sustainable adaptation' is planned for[24];	1. UKCP climate change scenarios[25](UKCP) 2. Mapped extent of Flood Zones under Climate Change as reported in available Strategic Flood Risk

[21] The energy hierarchy is analogous to the waste hierarchy in that it shows a sequence of preferred approaches to obtaining energy. Broadly this can be shown as three steps, in order of preference: 'Reduce' the amount of energy required in the first place (for instance through good design); 'Re-use' waste energy such as heat (e.g. through combined heat and power technology); and 'recycling' (which means the provision of energy that has some processing applied – e.g. renewable energy to meet demand or the extracting of energy from waste). CABE, 2011. Thinking Differently – The Energy Hierarchy.

[22] LULUCF relates to emissions from Land Use, Land Use Change and Forestry.

[23] There is a time lag between publication of the DECC carbon statistics at a local authority level and the present year, such that 2010 figures were published in 2012.

Sustainability Objective	Sub objectives	Indicators[15]
	Ensure that minerals and waste developments are not susceptible to effects of climate change -Ensure that minerals and waste developments do not hinder adaptation to climate change	Assessments[26] (NYCC, CYC, NYMNPA) 3. Allocations requiring exception testing in North Yorkshire SFRA (NYCC)
8. Minimise the use of resources and encourage their re-use and safeguarding	-To safeguard and use minerals resources efficiently; -Safeguard infrastructure that may support more sustainable minerals and waste development -To encourage the re-use of primary materials; -To promote the efficient use of resources throughout the lifecycle of a development, including construction, operation and decommissioning of minerals and waste infrastructure; Encourage the utilisation of sustainable construction techniques; -Promote the use of secondary and recycled minerals resources where they can play a role in reducing the need for more primary minerals extraction	1. Number / type / area of safeguarding areas defined in Plan 2. Reserves of primary land won aggregate and crushed rock (LAA) 3. Sales of secondary aggregate in the North Yorkshire sub region (LAA)
9. Minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	-Use less materials through design and processing; -Re-use materials where possible; -Encourage recycling;	1. Total waste received by waste facilities by category ('household, industrial and commercial', 'inert / construction and demolition', 'hazardous', 'unknown') (Environment Agency); 2. Waste management method of household waste

[24] Sustainable Adaptation has been defined by Natural England. According to Natural England 'It is important that any adaptation action is sustainable. This means that any response by society should not actually add to climate change, cause detrimental impacts or limit the ability or other parts of the natural environment society or business to carry out adaptation elsewhere" (Natural England, undated. Sustainable Adaptation [URL: naturalengland.org.uk/ourwork/climateandenergy/climatechange/adaptation/sustainable.aspx].

[25] Changes to precipitation and temperature to be recorded in line with latest available data.

[26] As further SFRA work becomes available the spatial extent of increased flood risk from rivers will become clearer.

Sustainability Objective	Sub objectives	Indicators[15]
	-Recover residual resources (e.g. through anaerobic digestion or energy recovery); -Support 'recycling on the go';[27] -Recognise and promote the value of waste streams as alternatives to primary mineral extraction; -Promote economic gain through re-use	arisings in North Yorkshire (NYCC) 3. Anaerobic digestion plants in the plan area[28]
10. Conserve and enhance the historic environment, heritage assets and their settings.	-To protect and enhance those elements, including setting, which contribute to the significance of: ➢ World Heritage Sites ➢ Scheduled Monuments ➢ Archaeological Features ➢ Listed buildings ➢ Historic parks and gardens ➢ Historic battlefields ➢ Conservation Areas; ➢ The city of York -To provide appropriate protection for archaeological features in areas of potential development; -To protect the wider historic environment from the potential impacts of proposed development and the cumulative impacts; -To improve access to, and enjoyment of, the historic environment where appropriate; -Preserve and enhance cultural heritage	1. Buildings, scheduled monuments, conservation areas, registered parks and gardens, registered battlefields 'at risk' as defined by the Heritage at Risk Register (English Heritage) 2. Number of visits to historic sites (Yorkshire and the Humber) (English Heritage)

[27] 'Recycling on the go' is promoted by the Government's Waste Policy Review. It represents recycling on the street and in public places.
[28] As shown on the official biogas plant map produced by 'Anaerobic Digestion' [URL: http://www.biogas-info.co.uk/].

Sustainability Objective	Sub objectives	Indicators[15]
	-Safeguard those elements which contribute to the special historic character and setting of York. -To ensure a steady supply of building and roofing stone for the repair and construction of buildings and structures -Protect and enhance important non-designated heritage assets	
11. Protect and enhance the quality and character of landscapes and townscapes	-Conserve and enhance the natural beauty and cultural heritage of the North York Moors National Park; - To conserve and enhance the setting of designated landscapes, including those outside of the Plan area; - To protect and enhance the natural beauty of Areas of Outstanding Natural Beauty -To protect and enhance local landscape / townscape character and quality, local distinctiveness and sense of place; -To protect the setting of important townscapes; -To protect the purposes and 'positive use'[29] of the Green Belt; -To protect coastal landscape and seascape character; -To protect and improve tranquillity levels and reduce sources of intrusion, such as light pollution; -To co-locate waste facilities with complementary industrial facilities where possible to reduce dispersed visual intrusion;	1. Number of minerals and waste planning applications in the green belt / designated landscapes / conservation areas (NYCC, CYC, NYMNPA); 2. Number of planning conditions related to visual amenity / noise / lighting for minerals and waste sites (NYCC, CYC, NYMNPA);

[29] The National Planning Policy Framework defined 5 purposes to the Green Belt and also recommends that local planning authorities should 'plan positively to enhance the beneficial use of the Green Belt'.

Sustainability Objective	Sub objectives	Indicators[15]
	-Preserve, enhance and complement architectural character and complexity	
12. Achieve economic growth and create and support jobs	-To increase the level and range of employment opportunities, particularly in deprived areas; -To encourage stable economic growth through provision of an adequate, sustainable and steady supply of minerals; -To promote conditions which enable sustainable local economic activity and regeneration and encourage creativity and innovation; -To capture value from waste streams by creating saleable products from them -Promote a low carbon economy -Support existing employment drivers and create new ones -Support existing businesses and the local economy outside of the minerals and waste sectors	1. Economically Active Rate of 16 to 64 year olds 2 Number of new bank accounts (first current accounts from a small business banking range) (LEP) 3. Unemployment rate (Annualised Population Survey Rate) 4. Gross median weekly earnings of residents and people who work within the area (NYCC) 5. Number of minerals and waste planning applications (NYCC)
13. Maintain and enhance the viability and vitality of local communities	-Provide opportunities to boost tourism -To promote job creation, training and volunteer opportunities through sustainable site restoration -Contribute to the provision of housing through the provision of construction materials -Promote conditions that would maintain the vitality and functionality of the community	1.Ratio of lower quartile house prices to lower quartile earnings (NYCC Stream) 2.Economically Active Rate of 16 to 64 year olds 4.Number of visits to historic sites (Yorkshire and the Humber) (English Heritage)
14. Provide opportunities to enable recreation, leisure and	-Provide opportunities to enable the enjoyment and	1. Length of Public Rights of Way Network

Sustainability Objective	Sub objectives	Indicators[15]
learning	understanding of the special qualities of the National Park; -Promote recreation in the countryside and AONBs, consistent with the wider social, economic and environmental facets; -Provide opportunities for lifelong learning -To contribute to networks of multifunctional green infrastructure -To increase access to the public rights of way network and the wider countryside	(NYCC/CYC/NYMNP) 2. People qualified to at least level 4 who are economically active (NYCC Stream) 3. Visits to places out of doors (as measured in Natural England's MENE programme) (Natural England)
15. Protect and improve the wellbeing, health and safety of local communities	-To minimise the impact of nuisances associated with minerals and waste development, such as noise pollution, odour and severance; -Reduce traffic accidents -To reduce health inequalities; -To promote healthy living, offer opportunities for more healthy lifestyles and improve life expectancy; -To improve levels of wellbeing -To ensure the safety and security of local people and visitors -To ensure that pollution does not pose unacceptable risks to health	1. Incapacity benefit claimants as percentage of working age population (NYCC Steam) 2. Mortality rate from coronary heart disease (NYCC Stream) 3. Road accident Casualties – Killed and Seriously Injured (NYCC Stream) 4. Life expectancy at birth (ONS) 5. Fly tipping incidents reported by Local Authorities (by waste source) (NYCC Stream) 6. Anti-social behaviour (all categories) number (NYCC Stream) 7. All age respiratory disease mortality (Public Health England)
16. Minimise flood risk and reduce the impact of flooding	-To ensure that the location and design of new development has regard to the potential risk, causes and consequences of	1. Allocations requiring exception testing in North Yorkshire SFRA (NYCC)

Sustainability Objective	Sub objectives	Indicators[15]
	flooding; -To promote opportunities for sustainable flood alleviation; -To reduce the number of people and properties at risk of flooding.	2. Number of planning conditions relating to SUDS (NYCC, CYC, NYMNPA)
17. Address the needs of a changing population in a sustainable and inclusive manner	- To enable development and wider activity to meet the needs of the population; -To support shortened supply chains for building materials; -To enable the community to contribute to and have influence in decision making -To improve public access to facilities enabling sustainable waste management -To support community led waste management schemes -Reduce social exclusion	1. Number of consultation responses to Joint Plan and Sustainability Appraisal (NYCC) 2. Number of Household Waste Recycling Centres (NYCC, CYC) 3. Indices of Deprivation Average Rank (NYCC Stream)

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