



Bradford Waste Management
DPD

Sustainability Appraisal Report

Prepared for:

Bradford Metropolitan District Council

Prepared by:



**ENVIRON
Exeter, UK**

Date:

December 2010

Project or Issue Number:

64C11620

| | |
|--|---|
| Contract/Proposal No: | 64C11620 |
| Issue: | 2 |
| Author (signature): |  |
| Project Manager/Director (signature): |  |
| Date: | December 2010 |

This report has been prepared by ENVIRON with all reasonable skill, care and diligence, and taking account of the Services and the Terms agreed between ENVIRON and the Client. This report is confidential to the client, and ENVIRON accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known, unless formally agreed by ENVIRON beforehand. Any such party relies upon the report at their own risk.

ENVIRON disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the Services.

| Version Control Record | | | | |
|-------------------------------|------------------------------|-------------|--------------------------|-------------------------|
| Issue | Description of Status | Date | Reviewer Initials | Authors Initials |
| A | First Internal Draft | 16/11/10 | JC | EJ |
| 1 | Report to Client | 16/11/10 | JC | EJ |
| 2 | FINAL Report to Client | 14/12/10 | JC | EJ |

Table of Contents

| | |
|--|----|
| Glossary | 4 |
| 1 Introduction | 6 |
| 1.1 Background | 6 |
| 1.2 Structure of this Report | 6 |
| 1.3 Internationally Protected Nature Conservation Sites | 8 |
| 1.4 How to Comment on the Report | 8 |
| 2 The Bradford Preferred Approach Waste Management DPD | 9 |
| 3 Methodology of the SA | 11 |
| 3.1 Introduction | 11 |
| 3.2 Stage A: Scoping | 12 |
| 3.3 Stage B: Options assessment | 12 |
| 3.4 Stage B: Assessment of the draft plan (Preferred Approach) | 12 |
| 3.5 Stage C: Preparing the SA Report | 14 |
| 3.6 Stage D: Consulting on the SA Report | 14 |
| 3.7 Stage E: Monitoring | 15 |
| 3.8 When the SA was carried out | 15 |
| 3.9 Who carried out the SA | 15 |
| 3.10 Who was consulted on the SA, when and how | 15 |
| 4 Relationship with Other Plans and Programmes and the Sustainability Baseline | 17 |
| 4.1 Relationship with other plans and programmes | 17 |
| 4.2 Sustainability baseline and issues | 17 |
| 4.3 The Sustainability Appraisal Framework | 17 |
| 5 Options Assessment and the Reasons for Selecting Alternatives | 32 |
| 5.1 Introduction | 32 |
| 5.2 Developing the options | 32 |
| 5.3 Assessing the sustainability effects of the options | 34 |
| 5.4 How the SA Report influenced the development of the plan | 35 |
| 6 Results of the Appraisal of the Waste Management DPD: Preferred Approach | |
| Policies | 44 |
| 6.1 Introduction | 44 |
| 6.2 Significant effects identified | 44 |
| 6.3 Cumulative assessment | 63 |
| 7 Monitoring | 68 |
| 8 Next steps | 71 |

Glossary

| Acronym and title | Explanation |
|-----------------------------------|---|
| AAP (Area Action Plan) | A Development Plan Document that provides a detailed planning policy framework for a part of the Council's area that is a key area for change or conservation |
| AMR (Annual Monitoring Report) | A document within the LDF that monitors progress in implementing the Local Development Scheme and the effectiveness of the Council's adopted policies |
| Core Strategy | A Development Plan Document that sets out the key elements of the planning framework, including strategic objectives and core policies, with which other DPDs must be in conformity |
| LDF (Local Development Framework) | A portfolio of Development Plan Documents which provide the framework for delivering the spatial planning strategy for the area. |
| Local Development Scheme (LDS) | The Local Development Scheme (LDS) is a public 'project plan' prepared by a Local Authority identifying which Development Plan Documents will be produced, in what order and when. |
| Development Plan | The statutory framework for planning decisions, comprising the Regional Spatial Strategy and the Development Plan Documents prepared by local planning authorities (including the County Council and District Councils) |
| DPD (Development Plan Document) | The main type of Local Development Document which form part of the Development Plan, and include a Core Strategy, site specific allocations, development control policies and area action plans |
| LDD (Local Development Document) | The main group of documents within the LDF, comprising Development Plan Documents and Supplementary Planning Documents |
| PPG (Planning Policy Guidance) | Government planning guidance notes on a number of different topics, now being incrementally replaced by Planning Policy Statements |
| PPS (Planning Policy Statement) | Government planning policy statements on a number of different topics which are being introduced to replace Planning Policy Guidance notes |
| Proposals Map | A map accompanying the LDF showing areas of protection and identifying locations for land use and development proposals included in the adopted Development Plan Documents |

| | |
|--|--|
| SA (Sustainability Appraisal) | A systematic process, required by the Planning and Compulsory Purchase Act 2004 and incorporating the requirements of the SEA Directive, aimed at appraising the social, environmental and economic effects of plan strategies and policies and ensuring that they accord with the objectives of sustainable development |
| SCI (Statement of Community Involvement) | A document within the LDF setting out the County Council's proposals for involving the local community and other stakeholders in the preparation of LDDs and the determination of planning applications |
| SEA (Strategic Environmental Assessment) | A process required by EU Directive 2001/42/EC (known as the SEA Directive) for the formal strategic assessment of certain plans and programmes which are likely to have significant effects on the environment |

1 Introduction

1.1 Background

A Sustainability Appraisal (SA) of the Bradford Preferred Approach Waste Management Development Plan Document (DPD) has been undertaken in accordance with the requirements of the SEA Regulations (*Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004*) and applicable government guidance.

The SA is being carried out by consultants from ENVIRON UK Ltd, who are experienced in appraisal of spatial planning documents.

1.2 Structure of this Report

The sustainability appraisal process meets the requirements of the Planning and Compulsory Purchase Act 2004 and the SEA Regulations (Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004). This SA Report includes the required elements of an Environmental Report as required by the SEA Regulations. Table 1.1 signposts the relevant sections of the SA Report that represent the required contents of the Environmental Report.

| Table 1.1: Contents of the SA Report | |
|---|--|
| SEA Regulations – requirement for an Environmental Report | Where covered in the SA Report |
| Preparation of an Environmental Report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. | The whole report does this |
| An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes. | The contents and main objectives of the plan are presented in Section 2. The plan's relationship to other plans and programmes is addressed in Section 4 |
| The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme and the environmental characteristics of areas likely to be significantly affected. | Section 4 |
| Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC. | Section 4 |
| The environmental protection objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation. | Section 4 |
| The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, | Sections 5 and 6 (the definition of significance is addressed in section 5.3) |

| Table 1.1: Contents of the SA Report | |
|--|--|
| SEA Regulations – requirement for an Environmental Report | Where covered in the SA Report |
| landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects). | |
| The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme. | Section 6 |
| An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information. | Sections 5 and 3. Difficulties are addressed in section 3.3.1 |
| A description of measures envisaged concerning monitoring in accordance with Article 10. | Section 7 |
| A non-technical summary of the information provided under the above headings. | See separate Non Technical Summary |
| The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Art. 5.2). | The whole report does this. |
| <p>Consultation</p> <p>Authorities with environmental responsibility and the public shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying Environmental Report before the adoption of the plan or programme (Art. 6.1, 6.2).</p> | The public and environmental authorities will be given 10 weeks to comment on the Preferred Approach Waste Management DPD and SA Report. |

This chapter provides an introduction to the Core Strategy and related SA process. The rest of this report is structured as follows:

Section 2 describes the content and main objectives of the Waste Management DPD;

Section 3 outlines the methodology used in the SA;

Section 4 describes the plan's relationship with other plans, programmes and environmental / sustainability objectives and the sustainability baseline;

Section 5 sets out the results of the appraisal of options considered in the development of the Preferred Approach Waste Management DPD;

Section 6 sets out the results of the appraisal of the policies within the Preferred Approach Waste Management DPD;

Section 7 outlines initial proposals for monitoring the sustainability effects of the options; and

Section 8 outlines the next steps in the plan and the appraisal process.

1.3 Internationally Protected Nature Conservation Sites

The Waste Management DPD has been subject to a separate Appropriate Assessment (AA) process. The AA process examines the effect of the plan on internationally designated conservation sites, Special Areas of Conservation (SAC) and Special Protection Areas (SPAs). The first stage of this process is called screening and this has been reported in the: *Waste Management DPD Appropriate Assessment Screening Report (September 2010)*. This document has been produced by Bradford Metropolitan District Council and can be found at the following web site address:

http://www.bradford.gov.uk/bmdc/the_environment/planning_service/local_development_framework/bradford_waste_development_plan.htm

The screening report has examined the potential for the plan to adversely affect the South Pennine Moors SAC and SPA and the North Pennine Moors SAC and SPA.

The screening report has not identified any negative effects from the Preferred Approach on the integrity of internationally designated conservation sites. However, please note that the screening report is in the process of being review by Natural England and therefore, any results should be considered preliminary at this stage. Because of the preliminary nature of the report the results have not been fully integrated into this SA report and where referenced have been considered as uncertain. Any changes to the Appropriate Assessment (once it has been agreed with Natural England) will be reported in an updated Final SA Report.

1.4 How to Comment on the Report

The SA Report is being published for consultation alongside the Preferred Approach Waste Management DPD to demonstrate the significant sustainability effects the draft plan (Preferred Approach) and the alternative options considered in developing the plan.

The purpose of the consultation is to provide the statutory environmental bodies and other interested parties the opportunity to express their opinion on the SA Report. It also enables them to use the information within the SA Report to guide their deliberations on the Preferred Approach Waste Management DPD. Please send your comments on this report by 1st April 2011.

2 The Bradford Preferred Approach Waste Management DPD

Bradford Metropolitan District Council's planning policies relating to waste management are currently contained within the Replacement Unitary Development Plan (2005) (RUDP). Under the regulations imposed through the Planning and Compulsory Purchase Act (2004) Councils are required to replace RUDP's with a Local Development Framework (LDF). The LDF for Bradford will comprise a series of detailed DPDs to guide development within the District.

The Council have previously consulted on the waste management policies to be included within the LDF Core Strategy, which will set out the strategic planning policies for the District over the plan period to 2026. This included the testing of issues and options and identification of a preferred Core Strategy policy approach to the scale of waste arisings, the nature of waste arisings, and associated spatial dynamics (including cross-boundary considerations).

The purpose of the Waste Management DPD is to build on the LDF Core Strategy relating specifically to waste management. The Waste Management DPD will be an important tool in ensuring that the District has sufficient and appropriate waste infrastructure to deliver established aspirations for self-sufficiency in waste management over the plan period up to 2026. It outlines the Council's strategy for the effective management of waste generated within the District over the plan period including consideration of:

- Mechanisms for identifying land suitable for some types of waste management facilities in the District over the plan period, including identification of sufficient land relative to forecast waste arisings;
- Policies and guidance to be used by the Council when determining planning applications for waste management-related developments; and
- The role of the Council in the wider sub-region in relation to waste management (where appropriate).

The DPD sets out a vision for waste management to 2026, as follows:

Bradford needs to take responsibility for the waste it generates, undertaking a step-change in the way it manages its waste, through more sustainable waste management, moving the management of waste up the waste hierarchy of: reduction, re-use, recycling and composting; using waste as a source of energy and only disposing of waste as a last resort. We should look to be self-sufficient in managing the waste we generate, locating facilities for the management of waste as close as possible to its place of production.

This vision is supported by five waste management objectives. The waste management objectives for Bradford District, which should be read collectively, are summarised below:

- To be more self-sufficient in managing our own waste through maximising opportunities for waste reduction and increasing the amounts of waste we re-use, recycle, compost and recover meeting national and regional (included as indicative following the revocation of RSS) targets over the period to 2026, but also working with surrounding waste authorities and handling waste arisings within Bradford that arise elsewhere in the sub-region;

- To minimise the amount of residual waste sent on to landfill sites within and outside Bradford District with a long term objective of self sufficiency. We need to make it a policy priority to deal with our own waste, where appropriate, within the District;
- To ensure that expansions to existing facilities where appropriate and new waste facility developments support the planned growth and waste needs of the Bradford community and are delivered in a manner which protects the District's environmental assets and safeguards human health;
- To consider and plan for the use of waste as a raw material / energy source for local industry and communities both existing and new; and
- To work in collaboration with neighbouring local authorities and waste industry operators to ensure that sub-regional waste issues are effectively considered and planned for. Cross boundary issues including the movement of waste and locating of facilities near to source must be managed and planned for collectively where possible.

3 Methodology of the SA

3.1 Introduction

The purpose of the SA is to advise Bradford Metropolitan District Council of the sustainability effects of the Preferred Approach Waste Management DPD. The SA has a number of set stages which are defined in Table 3.1.

| Table 3.1: SA Stages | |
|---|--|
| SA Stage | Purpose of the SA Stage |
| Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope | |
| Identifying other relevant policies, plans and programmes and sustainability objectives. | To document how the plan is affected by outside factors and suggest ideas for how any constraints can be addressed. |
| Collecting baseline information. | To provide an evidence base for sustainability issues, effects prediction and monitoring. |
| Identifying sustainability issues and problems. | To help focus the SA and streamline the subsequent stages, including baseline information analysis, setting of the SA Framework, prediction of effects and monitoring. |
| Developing the SA framework. | To provide a means by which the sustainability of the plan can be appraised. |
| Producing Scoping Report and consulting on the scope of the SA. | To consult with statutory bodies with social, environmental, or economic responsibilities to ensure the appraisal covers the key sustainability issues. |
| Stage B: Developing and refining options and assessing effects | |
| Developing and testing the DPD options. | To assist in the development and refinement of the options, by identifying potential sustainability effects of options. |
| Testing the draft plan. | To assess the significant effects of the draft plan. |
| Stage C: Preparing the SA Report | |
| Preparing the Environmental Report | To present the predicted environmental effects of the plan or programme, including alternatives, in a form suitable for public consultation and use by decision-makers. |
| Stage D: Stage D: Consultation on the preferred options and SA Report | |
| Consulting the public and environmental bodies on the draft plan and the SA Report | To give consultees an opportunity to express their opinions on the findings of the SA Report and to use it as a reference point when commenting on the plan. |
| Assessing significant changes | At the Submission Draft Stage: To ensure that the sustainability implications of any significant changes to the draft plan are assessed and taken into account. |
| Making decisions and providing information (SA adoption statement) | After the plan is adopted: To provide information on how the SA Report and consultees' opinions were taken into account in deciding the final form of the plan to be adopted. |
| Stage E: Monitoring the significant effects | |
| Developing aims and methods for | To track the effects of the plan to show whether they are as |

| | |
|-------------------------------|--|
| monitoring | predicted and to help identify unforeseen adverse effects |
| Responding to adverse effects | To prepare appropriate responses where adverse effects are identified as part of the monitoring. |

3.2 Stage A: Scoping

A Scoping Report was first published in July 2007 and a full consultation exercise was undertaken at this time. The Scoping Report included an SA Framework based on the SA Framework developed for the SA of the LDF Core Strategy DPD which has been revised so that the objectives and appraisal questions within it are relevant to the appraisal of a waste management plan.

A second Scoping Report was prepared in December 2008 following the consultation on the original version which took into account the responses from consultees. The SA Framework was changed in response to consultation comments and the second Scoping Report was also subject to another round of consultation.

The revised SA framework that was published within the second Scoping Report has been used to test the plan options and preferred policies. The revised SA Framework is presented in Section 4.3.

3.3 Stage B: Options assessment

The purpose of the SA is to appraise the social, environmental and economic effects of strategies and policies from the outset of the plan preparation process. The SA is a tool used in ensuring that decisions are made that meet the requirements of sustainable development. The integration of sustainability into the plan starts formally at the stage of issues and options. In keeping with SA guidance, the effects of the strategic options were assessed in broad terms with the aim of assisting in the selection of the preferred approach.

The alternative options for the DPD were set out in a document called the Bradford Waste Management DPD Issues and Options Paper, which was published in November 2009. This document included both site and policy options and both of these elements were subject to SA. For further details please see Section 5.

3.4 Stage B: Assessment of the draft plan (Preferred Approach)

The purpose of this stage of the SA is to appraise the social, environmental and economic effects of the plan. The SA is a tool used in ensuring that decisions are made that meet the requirements of sustainable development. In order to adhere to the SEA regulations where relevant (and possible to assess) the following types of effects have been identified - short, medium and long term effects, permanent and temporary effects, positive and negative effects and secondary, cumulative and synergistic effects.

The plan has been assessed using appraisal matrices. Mitigation and recommendations are included within the appraisal matrices. The following policies have been assessed:

- Preferred Policy W1: Vision and Waste Objectives;
- Preferred Policy W2: Cross Boundary Working;
- Preferred Policy W3: Bradford's Approach to Future Waste Arisings;
- Preferred Policy W4: Waste Management Sites in Bradford District;

- Preferred Policy W5: Location of Waste Management Facilities and Sites;
- Preferred Policy - W6: MSW and C&I Waste Site Assessment;
- Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste;
- Preferred Policy W8: Agricultural Waste;
- Preferred Policy W9: Hazardous Waste;
- Preferred Policy W10: Sites for Residual Waste;
- Preferred Policy WDM1: Unallocated Sites;
- Preferred Policy WDM 2: Assessing All Applications for New, Expanded and Residual Waste Management;
- Preferred Policy WDM3: Applications Resulting in the Loss of a Proposed or Existing Waste Management Facility;
- Preferred Policy WDM4: Waste Management within Development; and
- Preferred Policy WDM5: Landfill Development for Residual Waste.

Each preferred site has also been assessed.

3.4.1 Assumptions made and difficulties encountered

The purpose of this work is to assess the likelihood of significant sustainability effects. SA relies on expert judgement, which is guided by knowledge of the likely impacts of the plan, the baseline data available and responses and information provided by consultees and other stakeholders. The assessment has been carried out and reported using an expert, judgement-led qualitative assessment. A 'precautionary approach' is taken, especially with qualitative judgements.

The SEA Regulations state that effects assessment should include assessment of secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects. At this strategic level the information is often not available to assess to this level of detail. However, where information is available on the likelihood of different types of impacts this has been included in the results.

3.4.2 Defining significance

The SEA Regulations require that only those impacts regarded as significant are to be identified, assessed, mitigated and monitored. However, in practice, especially at a strategic level, significance can be difficult to define. The approach this SA has taken in defining significance is as follows:

- The careful definition of the SA framework to ensure that it focuses on only those issues that have been determined to be potentially significant in the District; and
- When determining how likely the plan is to support the achievement of the SA objectives (and therefore be a significant effect) the following factors have been considered:
 - Characteristics of the effects; and
 - The sensitivity of the receptors involved.

In order to make the assignment of significance clearer to readers we have employed a key set out in Table 3.2.

| Table 3.2: Significance criteria | | |
|---|--|---------------|
| Score | Description | Symbol |
| Significant positive impact | The option / plan achieves all of the applicable SEA questions and has a positive effect with relation to characteristics of the effect and the sensitivity of the receptors | ++ |
| Minor positive impact | The option / plan achieves some of the SEA questions and has a positive effect with relation to characteristics of the effect and the sensitivity of the receptors | + |
| Neutral | The option / plan does not have an effect on the achievement of the SEA Objective or SEA questions | 0 |
| Minor negative impact | The option / plan conflicts with some of the SEA questions and has a negative effect with relation to characteristics of the effect and the sensitivity of the receptors | - |
| Significant negative impact | The option / plan conflicts with all of the applicable SEA questions and has a negative effect with relation to characteristics of the effect and the sensitivity of the receptors. In addition the future baseline indicates a worsening trend in the absence of intervention | -- |
| Uncertain | It is unclear whether there is the potential for a negative or positive effect on the SEA Objective | ? |

3.5 Stage C: Preparing the SA Report

This document is the SA Report. It outlines the significant effects on the environment, social and economic factors of the Preferred Approach Waste Management DPD. It outlines the reasons for selecting the options dealt with and the measures envisaged to prevent, reduce and as fully as possible offset any significant effects of implementing the Preferred Approach Waste Management DPD.

The SA Report is being published for consultation alongside the Preferred Approach Waste Management DPD to demonstrate the significant sustainability effects of each of the options considered in developing the draft plan and the Preferred Approach Waste Management DPD itself.

An updated final version of the SA Report will be published alongside the Submission version of the Waste Management DPD.

3.6 Stage D: Consulting on the SA Report

The purpose of the consultation is to provide the statutory environmental bodies and other interested parties the opportunity to express their opinion on the SA Report. It also enables them to use the information within the SA Report to guide their deliberations on the Preferred Approach Waste Management DPD.

3.7 Stage E: Monitoring

Please see Section 7 for further details on monitoring.

3.8 When the SA was carried out

The SA has been carried out in parallel with work on the Waste Management DPD. The Scoping Report, representing the culmination of “Stage A”, was published in May 2007. A Revised Scoping Report was published in December 2008 to incorporate consultation feedback.

The criteria for selecting sites suitable for waste management uses were reviewed and commented on by the SA team at the end of 2009.

Emerging options for the Waste Management DPD were appraised using the SA Framework during April and May 2010.

The Preferred Approach Waste Management DPD was appraised in October 2010.

3.9 Who carried out the SA

ENVIRON UK Ltd consultants have undertaken the SA from the start of the SA process, in close contact with the plan authors. The following tasks have been undertaken to date as a part of the SA:

- Scoping: Scoping Report (original (May 2007) and revised (December 2008) versions);
- Review of first draft site selection criteria and provision of recommendations for amendment of the criteria;
- Assessment of policy options presented in the Issues and Options document dated November 2009: internal report of the methodology and findings of the SA of options produced in May 2010;
- Review of 56 short listed potential waste management sites to inform the site selection process undertaken by the plan authors; and
- Assessment of the policies presented within the Preferred Approach Waste Management Plan DPD: SA Report prepared in June and July 2010.

3.10 Who was consulted on the SA, when and how

Statutory consultees were consulted twice on the scope of the SA, during 2007 and 2009.

This SA Report (published alongside the Preferred Approach Waste Management DPD) is being sent (electronically) to the statutory consultee bodies (English Heritage, Environment Agency and Natural England) at the Preferred Approach stage for comment / advice and in order to inform their deliberations on the Preferred Approach Waste Management DPD.

This SA Report is the vehicle through which the appraisal of the Waste Management DPD options and policies is formally documented. This SA Report is being made available on the

Council's website alongside all other LDF publications. The Preferred Approach Waste Management DPD consultation period will run from 21st January 2011 to 1st April 2011.

An Updated Final SA Report will be published alongside the Submission version of the Waste Management DPD.

4 Relationship with Other Plans and Programmes and the Sustainability Baseline

4.1 Relationship with other plans and programmes

The purpose of reviewing other plans, policies and programmes is to set out factors that might influence preparation of the Waste DPD and to identify potential inconsistencies and constraints so that these can be addressed by the plan. The SEA Directive specifically requires environmental protection objectives established at international, European Community and national levels to be taken into account.

A number of plans, policies and programmes have been reviewed in the course of preparing the Core Strategy SA Scoping Report and an in depth review of plans and programmes has been undertaken especially at the local level. However, it was felt that due to the key influences on waste planning from the international, national and regional level that a more comprehensive policy review needed to be undertaken which focused on waste policy. Please see Annex A (of this report) for the results of this waste specific policy review undertaken for the Waste DPD. For a full review of the other local plans and programmes that were reviewed, readers should refer to Appendix 3 of the Core Strategy SA Scoping Report.

Some of the key “sustainable development” messages coming out of the review of plans, policies and programmes are:

- Ensure natural resources are used efficiently and waste is minimised, reused or recycled;
- Contribute towards achieving sustainable development;
- Protect and enhance biodiversity;
- Contribute to sustainable communities;
- Reduce and avoidance nuisance associated with waste management;
- Improve air and water quality and reduce pollution;
- Reduce CO₂ emissions; and
- Reduce the need to travel and promote more sustainable freight transport.

4.2 Sustainability baseline and issues

Table 4.1 presents a summary of baseline data and the likely evolution of the baseline in the future, without the Waste Management DPD. The likely evolution of the baseline has been extrapolated using available information, such as that relating to trends and information provided by Bradford Metropolitan District Council. This information is summarised from the waste data collected as part of the Waste DPD SA Scoping Report (updated 2008), the Core Strategy SA Scoping Report and data collected by the waste plan team and included in the Preferred Approach document itself.

4.3 The Sustainability Appraisal Framework

The SA Framework is presented in Table 4.2.

| Table 4.1: SA Baseline Summary and Future Baseline (current state and trends) | | |
|---|---|---|
| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
| Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy. | <p>Bradford's cumulative improvement in energy efficiency between 1996 and 2005 is 15.6%, which compares with the Government target of a 30% reduction in domestic consumption by 2010. Based on current rates of progress, the best estimate is that it will take a further two years, to 2012, to meet the target.</p> <p>Sandstone is the principal mineral extracted in Bradford District, but there are also deposits of fireclay, peat, coal, sand and gravel. Sandstone makes a significant contribution to the regional output of building stone and crushed aggregates and will continue to be of importance in the future. There is only one site where fireclay, coal and sandstone are worked together, at Buck Park Quarry, south of Cullingworth, and there is no commercial extraction of peat or sand and gravel in the District.</p> | <p>It is assumed that energy efficiency in domestic consumption will continue to improve each year without the plan, due to the legislative controls and targets that are currently in place. However, waste management can influence energy use either through increasing or decreasing energy consumption and therefore it is difficult to predict the future baseline environment with regards to carbon dioxide emissions without the Waste Management DPD. The Waste Management DPD could be a mechanism to help the achievement of the energy efficiency target.</p> <p>There are no waste to energy technologies which can be described as purely renewable energy technologies but some, such as anaerobic digestion of agricultural waste, are considered to be low carbon. Without the Waste Management DPD, the promotion of low-carbon energy generation from waste is unlikely to increase.</p> <p>Without the Waste Management DPD the production of recycled aggregate may be less because this is something that the Waste Management DPD will encourage.</p> |
| Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered. | <p>Bradford District produces a total municipal waste stream of some 292,000 tonnes per annum, 60,000 tonnes of which is trade waste. The majority of this is delivered directly to the two waste transfer stations (in Bradford to the south of the District and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton.</p> <p>The volume of waste produced is currently growing at approx 3% per</p> | <p>The Bradford Core Strategy is also likely to contain policies which promote recycling and minimise the growth in waste therefore the future baseline with regards to waste arisings is likely to show a reduction. However, the Waste Management DPD will be instrumental in providing facilities for recycling</p> |

| Table 4.1: SA Baseline Summary and Future Baseline (current state and trends) | | |
|---|---|---|
| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
| | annum. The Council achieved a recycling / composting rate for domestic waste of 17% for 2004/5 and had a statutory target of 24% for 2005/6. | materials and therefore the future baseline situation would be better with the Waste Management DPD. |
| Reduce the District's impact on climate change and vulnerability to its effects. | <p>Bradford has a history of land and property being flooded through heavy downpours of rain and watercourses overflowing their banks. Communities on the River Aire and Wharfe were flooded in November 2000, particularly in Shipley, Bingley, Apperley Bridge and Stockbridge, where substantial flood damages were sustained. An increased programme of investment is currently underway to improve the standard of protection to existing communities and the Council works in partnership with a variety of organisations to address water management in the District.</p> <p>The CO₂ emissions per capita in Bradford Metropolitan District in 2007 were 6 tCO₂, compared with 7.3 tCO₂ in the Leeds Metropolitan area during the same period. Carbon dioxide reduction per annum as a result of the improvement to 2005 is 588,250 tonnes.</p> | <p>With regards to flooding, the future baseline situation is considered to be stable or stable and declining because although climate change is likely to make the extend of areas at risk from flooding more widespread and the risk of flooding more frequent, the programme of investment for flood protection should manage flood risk. The Bradford Core Strategy should also contain policies which steer development away from areas at risk from flooding and require developments to control their potential to increase the risk of flooding elsewhere.</p> <p>It is assumed that carbon dioxide will continue to reduce each year without the plan, due to the legislative controls and targets that are currently in place. However, waste management can influence carbon dioxide emissions either through increasing or decreasing the amount that is emitted and therefore it is difficult to predict the future baseline environment with regards to carbon dioxide emissions without the Waste Management DPD. The Waste Management DPD could be a mechanism to help the achievement of carbon dioxide reduction targets.</p> |
| Safeguard and improve air, water and soil resources and reduce the number of people affected by | <p>Air Quality: The pollutant of most concern is nitrogen dioxide, produced mainly by traffic. There are four AQMAs within Bradford, at:</p> <ul style="list-style-type: none"> • Manningham Lane / Queens Rd junction; | Air quality in the AQMAs at Mayo Avenue and Shipley Airedale Road is predicted to potentially exceed the NO ₂ objective at least to 2015 unless action is taken to reduce pollutant contributions (NO ₂ in particular) from road transport by 25-40% (City of |

| Table 4.1: SA Baseline Summary and Future Baseline (current state and trends) | | |
|--|---|---|
| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
| noise and dust from waste management sites. | <ul style="list-style-type: none"> • Mayo Ave / Manchester Rd junction; • Thornton Rd (nr junction with Princes Way and Godwin St); and • Shipley Airedale Rd and Church Bank. <p>Water: The main river systems comprise:</p> <ul style="list-style-type: none"> • The becks in the south of the District; • The streams around Bradford; • The River Worth; • The River Aire; and • The River Wharfe. <p>Public water supplies come from surface water, mostly from reservoirs, although there are also a number of licensed spring sources and significant quantities are extracted from the River Wharfe. In terms of water quality, it is more likely to be poor or bad in the urban areas (Bradford and the becks to the south of the District). The Aire catchment tends to have better water quality.</p> <p>Soil: The soil in Bradford District is mainly acidic and infertile, produced by a combination of geology, historic agricultural practice and high rainfall. Agriculture in Bradford is generally based around stock rearing, mainly sheep. Most of the farmland is constrained by climate and physical topography. Nearly half the farmland is described as Grade 4 or 5, however, some of the alluvial soils along the flood plains of the Rivers Wharfe and Aire are more productive.</p> | <p>Bradford Metropolitan District Council, April 2009, 2009 Air Quality Updating and Screening Assessment for Bradford). Air quality at Manningham Lane and Thornton Road AQMAs is due to meet the NO2 objective by 2010.</p> <p>The future water quality of the District's watercourses is unknown. It is assumed that the current conditions will prevail and it is likely to be poor or bad in the urban areas (Bradford and the becks to the south of the District) but better quality within the River Aire catchment.</p> <p>With regards to soils the future baseline is considered to be stable, although soils could be lost through greenfield development for housing, employment uses and infrastructure.</p> |
| To conserve, restore, expand and enhance the | Northern and western parts of the District are considered to be of international nature conservation value, namely Rombald's Moor | It is difficult to determine the future baseline with regards to biodiversity and nature conservation sites |

| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
|--|--|---|
| internationally, nationally and locally valued wildlife species and habitats. | <p>(comprising Ilkley Moor, Burley Moor and Bingley Moor) and the other South Pennine Moors (Oxenhope Moor, Haworth Moor, Stanbury Moor, Oakworth Moor and Keighley Moor) have been designated as SPAs and SACs for their moorland breeding birds and their upland habitats. The uplands support a wide range of bird species: red grouse; raptors; peregrine; buzzard; hen harrier; merlin. These are located away from centres of population.</p> <p>In addition, Bradford has:</p> <ul style="list-style-type: none"> • Four SSSIs; • Twenty-one Sites of Ecological or Geological Importance (SEGIs); • Sixteen Regionally Important Geological / Geomorphological Sites (RIGS); and • Over one hundred sites of local nature conservation value (Bradford Wildlife Areas, BWAs). <p>Only 4.6% of Bradford District is woodland, comprising remnants of ancient woodlands and conifer plantations.</p> <p>The River Wharfe supports a variety of fish, including brown trout, salmon and grayling, and, together with the Leeds and Liverpool, is designated a Site of Ecological or Geological Importance (SEGI).</p> <p>Field boundaries mostly consist of dry-stone walls and provide cover for stoats, weasels, mice, voles and invertebrates.</p> | <p>in the absence of the plan as there is little trend information available. On a national scale, certain species are under threat from various sources such as loss of habitat to development and farming practices, loss of food sources, predation, pollution, recreation damage, disease and climate change. The future baseline is therefore considered to be unknown but potentially declining. A Waste Management DPD could affect biodiversity through development, contributions to emissions to air, soil and water and through restoration of used waste sites for biodiversity gain.</p> |
| Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP | <p>Within the Bradford LBAP, the following habitats and species have action plans to protect and enhance their status:</p> <ul style="list-style-type: none"> ▪ Upland oak woodland; ▪ River edges/ings/scrapes; | <p>No monitoring information is available in relation to the Bradford BAP on the Biodiversity Action Reporting System website http://www.ukbap-reporting.org.uk/.</p> |

| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
|---|---|--|
| targets. | <ul style="list-style-type: none"> ▪ In bye grassland; ▪ Ancient and/or species rich hedgerows; ▪ Otter; ▪ Water vole; ▪ Pipistrelle; ▪ Brown hare; ▪ Freshwater White-clawed Crayfish; ▪ Common Frog/Toad and Palmate/Smooth Newt; ▪ White Letter hairstreak butterfly; ▪ Green hairstreak butterfly; ▪ Bluebell; ▪ Twite; ▪ Yellowhammer; ▪ Lapwing; ▪ Lesser twayblade. <p>There are two Natura 2000 sites within close proximity to Bradford, South Pennine Moors SAC and SPA and the North Pennine Moors SAC and SPA.</p> | <p>As mentioned above, it is therefore difficult to determine the future baseline in the absence of the plan as there is little trend information available. On a national scale, certain species are under threat from various sources such as loss of habitat to development and farming practices, loss of food sources, predation, pollution, recreation damage, disease and climate change. The future baseline is therefore considered to be unknown but potentially declining. A Waste Management DPD could affect biodiversity through development, contributions to emissions to air, soil and water and through restoration of used waste sites for biodiversity gain.</p> |
| To maintain, restore and enhance the character, value and diversity of natural and man-made landscapes. | <p>The character of the District's landscape is very varied, ranging from the rugged open moorland of the South Pennine uplands to rolling farmland, and open river valleys to wooded hillsides. There are ten specific, distinct and unique landscape character areas within the District.</p> <p>Much of the District's countryside is designated Green Belt, however, two areas of open countryside, one to the west of Stanbury and the other to the north-west of Silsden, fall beyond the outer edge of the Green Belt.</p> | <p>There is no baseline data that suggests that landscapes are under threat or declining, however, it cannot be assumed that landscapes are not under threat from development and climate change. The future baseline is unknown but possibly not stable due to influences such as climate change.</p> |

| Table 4.1: SA Baseline Summary and Future Baseline (current state and trends) | | |
|--|--|---|
| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
| | These areas consist of open moorland and are part of the Pennine Upland and Rombalds Ridge character areas, and lie directly south of the Yorkshire Dales National Park. There are no Areas of Outstanding Natural Beauty in Bradford District, although the Nidderdale AONB lies adjacent to the northern boundary of the Bradford District, near to the town of Ilkley. | |
| Increase proximity of waste management infrastructure to current and future centres of population in order to reduce mileage travelled and encouraging waste segregation in new development. | <p>Around one third of the District is built up. The urban areas of the District comprise Bradford/ShIPLEY/Baildon, the free-standing towns of Keighley, Ilkley, Bingley and the small towns of Silsden and Queensbury. The rural areas include many villages ranging from the larger ones, such as Wilsden and Addingham, to small ones, including Esholt and Stanbury, which serve as commuter settlements.</p> <p>Household waste recycling centres are currently well spread across the settlements in the District. However there are only two waste transfer stations (in Bradford to the south of the District and Keighley to the north), then transported by road to landfill sites in Wakefield and Skipton.</p> | Without the Waste Management DPD, waste arisings may increase with population increase and housing development, meaning that more waste will need to be transported across the District for transfer and disposal. The future baseline without the plan is therefore declining. However, it should be recognised that even with the DPD in place waste arisings will increase. However, with a waste planning framework in place, the waste arisings will be dealt with more sustainably. |
| Reduce nuisance caused to communities by waste transport. | Bradford is relatively well connected, with Junction 26 of the major east-west M62 artery only three miles from the city centre, connected directly by the M606. | Major regeneration projects, particularly in the city centre itself, are likely to lead to increased traffic movements on inner and outer ring roads. Employment growth in the M606 corridor is likely to lead to increased congestion on the M606-A6177-A650 junction and the A650. Future growth in the numbers of jobs and housing in the Airedale Corridor is expected to put increased pressure on road and rail capacity in the Airedale Line, where the topography concentrates local movements and through movements to north Yorkshire. The future baseline is therefore considered to be declining. |
| Encourage a modal shift away from road | Rail access to the District is good, with direct passenger services via the Airedale Line and Wharfedale to Leeds and Skipton. Direct passenger rail | Non-road transport infrastructure within the District is expected to remain stable in the future and will |

| Table 4.1: SA Baseline Summary and Future Baseline (current state and trends) | | |
|---|---|--|
| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
| freight. | links are also available to Manchester and York from Bradford Interchange via the Caldervale Line. | remain the same with or without the Waste Management DP. However, without the plan, there may not be an increase in the amount of waste that is transported via non-road modes. The future baseline is therefore stable / declining. |
| Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land. | <p>Bradford District has over 5,800 buildings of special architectural or historic interest, ranging from large industrial mill complexes to weaver's cottages and from agricultural farmsteads to stately halls and manor houses.</p> <p>According to the LDF Annual Monitoring Report (2009) over 86% of development has taken place on Previously Developed Land (PDL), in 2008-2009, which is in excess of the former 65% Regional Spatial Strategy target. However, the impact of the economic downturn has significantly reduced development activity generally and, therefore, making effective use of PDL has been reduced.</p> | It is very difficult to predict the future baseline with regards to the quality of the built environment and efficient use of land as the future will depend largely on new development, investment and maintenance. At the current time, investment in property and new developments are not coming forward rapidly, due to the recent global economic downturn. The future baseline with regards to this issue is therefore uncertain. |
| Avoid, protect and enhance historic assets. | <p>The District has:</p> <ul style="list-style-type: none"> • Over 5000 Listed Buildings; • Fifty-six designated Conservation Areas; • Ten historic parks and gardens; • Two hundred and two Scheduled Ancient Monuments; • One historic battlefield, at Adwalton Moor; and • One World Heritage Site at Saltaire. | The key threats to historic assets include loss due to development, damage from climate / natural events, lack of maintenance and factors affecting their setting such as inappropriate development or traffic. The risk of any of these factors affecting the historic assets within the District is unknown and therefore the future baseline is unknown. |
| Improve the quality and range of services available within | Access to health services and to education facilities is generally very good. 96.9% and 99.8% of all households are within fifteen and thirty minutes of a GP by public transport. 90.5% and 99.7% of all households | There is no baseline data which suggests that access to facilities and services will change in the future. With regards to household waste recycling |

| Table 4.1: SA Baseline Summary and Future Baseline (current state and trends) | | |
|---|--|---|
| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
| communities and connections to wider networks. | are within 30 and 60 minutes of a hospital by public transport. 92.2% and 99.7% of 12-17 years are within twenty and forty minutes of a secondary school by public transport. Figures are similar for access to primary schools. 97.5% and 99.8% of people of working age are within twenty and forty minutes of an employment centre by public transport, defined as Super Output Areas with more than 499 jobs. | centres, these are widespread across the District. It is therefore assumed that the future baseline will remain stable. |
| Ensure local communities (both residents and the business community) take more responsibility for their own waste | The majority of waste generated in Bradford is delivered directly to the two waste transfer stations (in Bradford to the south of the District and Keighley to the north), then transported by road to distant landfill sites in Wakefield and Skipton. According to the Bradford Waste Strategy (2005), c.255,000 tonnes per year of waste is transported to landfill sites, which are outside of the District. | The future baseline without the plan is expected to get worse. In the absence of the plan there will be no planning framework to protect important existing waste management facilities that are delivering the Bradford Waste Hierarchy. |
| Avoid impacts on open space, cultural, leisure and recreation opportunities | The District has thirty-four urban parks, twenty-seven woodlands and one hundred and three recreation grounds. Recreation open space encompasses a range of sites; land used for informal recreation and amenity, also parks and recreation grounds, including equipped children's playgrounds and playing fields formally laid out for team sports. | It is assumed that the future baseline without the plan will remain stable. |
| Reduce the impact of waste management on people's safety and security, health and quality of life | Please note that there are no data available on how waste management specifically affects people's safety and security, health and quality of life. The data below sets out generic information about safety and security, health and quality of life in Bradford. Bradford is the fifth most deprived local authority in England in terms of income deprivation and the sixth most deprived for employment deprivation. Overall Bradford District has 128 SOAs that are ranked in the 20% most deprived SOAs nationally (IMD, 2004 data). The majority of the deprived SOAs are concentrated in Bradford city and to a lesser degree in | The future baseline without the plan is expected to remain the same. |

| Table 4.1: SA Baseline Summary and Future Baseline (current state and trends) | | |
|--|---|--|
| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
| | <p>Keighley. 204,000 people, representing 44% of the population, live in these 128 SOAs that are ranked in the 20% most deprived in England.</p> <p>Unemployment levels vary widely across the District, with wards around the centre of Bradford, for example Bradford Moor, Bowling, Undercliffe and Little Horton, having the highest rates of unemployment.</p> <p>Life expectancy figures for Bradford are lower than the national and sub-regional averages, although there are large variations in health outcomes across the District.</p> <p>Bradford District's overall crime rate, while slightly higher than the average for England and Wales, was lower than average compared to similar authorities. The number of recorded crimes in the District fell in 2003-4 by 5% compared to the number recorded in 2002-3, a greater decrease than that experienced by similar authorities. Crime rates tend to be higher in the inner urban areas and lowest in the rural villages.</p> | |
| Support employment in the waste industry for local people. | <p>Although Bradford has lost many jobs in the last decade, mainly in manufacturing sectors, the economy has been growing since 1995 with steadily falling levels of unemployment and steadily increasing GVA. The most recent forecasts produced for Yorkshire Futures indicate a positive economic future for Bradford. The forecasts are for average annual rate of growth of 0.9% pa in employment and 3.0% pa in GVA. These rates of growth are significantly faster than any other part of the region.</p> <p>However, due to the global economic downturn in more recent years, unemployment in Bradford rose sharply in 2008 and is currently higher than the regional and national rates. Bradford's Jobseekers Allowance claimant rate is 5.1% of the working age population, higher than the Yorkshire & Humber regional rate (4.8%) and the national rate (4.1%). A total of 15,659 people were claiming Job Seekers Allowance (JSA) in Bradford in April 2010, but this is down by 343 claimants since March</p> | <p>Most recent jobseekers allowance claimant figures available on the Bradford Economy website (www.bradfordeconomy.com) indicate that unemployment has fallen in Bradford between January and April 2010. However, with public sector cuts announced recently by the coalition Government, the future economic outlook for Bradford is uncertain. With regards to employment in the waste industry, this is largely provided through private companies and may not be affected by public sector cuts and could potentially therefore remain more stable.</p> |

| Table 4.1: SA Baseline Summary and Future Baseline (current state and trends) | | |
|--|---|---|
| SA Objective | Summary of Baseline Data | Future Baseline without the Waste Management DPD |
| | 2010. | |
| Ensure the provision of adequate waste management capacity. | <p>The preferred forecast projections for each waste stream are as follows:</p> <p>Municipal Solid Waste: By 2026 there is an identified requirement to accommodate 345,617 tonnes of MSW waste. When existing facilities and recycling targets are taken into account, this equates to a maximum requirement of 34,562 tonnes of new landfill capacity for MSW.</p> <p>Commercial and industrial waste: By 2026 it is forecast that this will have decreased to 542,156 tonnes. By 2026, a minimum of 363,245 tonnes per annum of treatment capacity will be required for C&I waste in Bradford.</p> <p>Construction, demolition and excavation waste: By 2026, it is forecast that 531,135 tonnes of CDEW arisings will need to be managed within Bradford District. The majority of this waste will be dealt with in-situ at sites not requiring a waste operator's licence.</p> <p>Hazardous waste: Arisings in Bradford (2008 figures) are estimated to be 21,821 tonnes per annum. The best available evidence indicates that this annual figure will not increase by 2026. The RSS identifies the need for additional capacity across the Yorkshire and Humber Region to replace existing facilities which Bradford may be expected to contribute to as the Region seeks to increase treatment capacity and reduce land filling of Hazardous waste.</p> <p>Agricultural and 'Other' Types of Waste: Legislation established in 2006 requires Agricultural waste to be managed on site where possible, or off-site subject to licensing. As such therefore there is no identified requirement for facilities to deal with this type of waste arising.</p> | Without the plan, capacity for the management and disposal of waste will not be provided within Bradford and waste will continue to be sent outside of the District for disposal in landfill. |

| Table 4.2: SA Framework | | | |
|--|---|---|---|
| <i>(NB. Text in red italic is added as a result of consultation comments received on the original Scoping Report. Text in green italic is added as a result of consultation comments received on the amended Scoping Report)</i> | | | |
| Topic | Core Strategy Sustainability Appraisal Objectives | Draft Waste DPD Sustainability Appraisal Objectives | Appraisal Questions. Will the plan... |
| Energy and Resources | <p>Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.</p> <p>Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered.</p> | <p>SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy.</p> <p>SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered.</p> | <p><i>Encourage the use of sustainable materials (with low embodied carbon) or materials with low environmental impacts in the construction of waste management facilities?</i></p> <p>Lead to a reduction of the amount of waste that will require treatment?</p> <p><i>Minimise any adverse impacts on water resources at all stages of waste management?</i></p> <p>Put in place adequate and sustainable treatment facilities?</p> <p>Help the District to meet its recovery and recycling targets?</p> <p>Help the authority meet its quota under the LATS?</p> <p><i>Encourage the use of and markets for waste derived products? (e.g. use of Incinerator Bottom Ash Aggregate in civil construction projects where it is displacing the consumption of new quarried materials).</i></p> |
| Response to Climate Change | Reduce the District's impact on climate change and vulnerability to its effects | SA3: Reduce the District's impact on climate change and vulnerability to its effects. | Reduce the potential for greenhouse gas emissions caused by waste management and <i>reduce vulnerability of waste management facilities to the effects of climate change:</i> |

| Table 4.2: SA Framework | | | |
|--|---|--|---|
| <i>(NB. Text in red italic is added as a result of consultation comments received on the original Scoping Report. Text in green italic is added as a result of consultation comments received on the amended Scoping Report)</i> | | | |
| Topic | Core Strategy Sustainability Appraisal Objectives | Draft Waste DPD Sustainability Appraisal Objectives | Appraisal Questions. Will the plan... |
| | | | <i>(including increased flooding)?</i> Encourage the development of renewables and energy efficiency within the waste sector? |
| Air, Soil & Water Quality | Safeguard and improve air, water and soil resources. | SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites. | Change the amount of pollution and nuisance caused by waste management? <i>Guide waste management towards areas that help to improve the land resource (for example, towards previously used land and away from valuable agricultural land)?</i> |
| Natural Assets | To conserve and enhance the internationally, nationally and locally valued wildlife species and habitats. Maintain and enhance the character of natural and man-made landscapes. | SA5: To conserve, <i>restore, expand</i> and enhance the <i>internationally</i> , nationally and locally valued wildlife species and habitats. SA6: To maintain, <i>restore</i> and enhance the character, <i>value and diversity</i> of natural and man-made landscapes. SA7: Ensure restoration to biodiversity end use for waste (landfill) sites and contribute to realising local and national BAP targets. | Include actions that directly or indirectly affect Natura 2000 sites, SSSIs, <i>RIGS</i> or other designated sites? Include actions that will cause habitat loss or fragmentation <i>or restoration, expansion or enhancement of wildlife networks or habitats?</i> Include actions that help to reach targets or compromise targets of BAPs? Include actions to ensure restoration to biodiversity is a priority where appropriate? Protect, <i>restore</i> and enhance the landscape? |
| Housing | Provide the opportunity for everyone to live in quality housing which reflects individual needs, preferences and | SA8: Increase proximity of waste management infrastructure to current and future centres of population in order to | Include actions that change mileage travelled per tonne of waste? |

| Table 4.2: SA Framework | | | |
|--|---|--|--|
| <i>(NB. Text in red italic is added as a result of consultation comments received on the original Scoping Report. Text in green italic is added as a result of consultation comments received on the amended Scoping Report)</i> | | | |
| Topic | Core Strategy Sustainability Appraisal Objectives | Draft Waste DPD Sustainability Appraisal Objectives | Appraisal Questions. Will the plan... |
| | resources. | reduce mileage travelled <i>and encouraging waste segregation in new development.</i> | <i>Allow residents in new developments to segregate their waste, both inside and outside their homes by provision of sufficient space for separate storage and collection systems?</i> |
| Transport | Develop and maintain an integrated and efficient transport network which maximises access whilst minimizing detrimental impacts. Reduce congestion and pollution by increasing transport choice and by reducing the need to travel by lorry / car. | SA9: Reduce nuisance caused to communities by waste transport. SA10: Encourage a modal shift away from road freight | Cause a change in traffic flows or the nature of traffic (an increase in HGVs for example) that affects communities or areas valued for their environmental importance? Include actions that would encourage a shift from road freight to rail freight? |
| Land use | Improve the quality of the built environment and make efficient use of existing land and buildings. | SA11: Improve the quality of the built environment, protect and enhance historic assets and make efficient use of land. | Reduce the impact of waste management on the quality of the built environment? <i>Maximise use of previously developed land where possible.</i> |
| Historic Environment | Protect and enhance historic assets. | <i>SA12: Avoid, protect and enhance historic assets.</i> | Preserve and where relevant enhance sites of built and archaeological heritage <i>and their settings?</i> Aim to steer development away from archaeologically sensitive sites? Preserve, manage or enhance the historic environment character and opportunity areas? |
| Accessibility & Local | Improve the quality and range of services | SA13: Improve the quality and range of | Improve the accessibility of waste |

| Table 4.2: SA Framework | | | |
|--|--|---|--|
| <i>(NB. Text in red italic is added as a result of consultation comments received on the original Scoping Report. Text in green italic is added as a result of consultation comments received on the amended Scoping Report)</i> | | | |
| Topic | Core Strategy Sustainability Appraisal Objectives | Draft Waste DPD Sustainability Appraisal Objectives | Appraisal Questions. Will the plan... |
| Needs | available within communities and connections to wider networks. | services available within communities and connections to wider networks. | management and treatment services to centres of population? |
| Communities | Promote social cohesion, encourage participation and improve the quality of deprived neighbourhoods. | SA14; Ensure local communities take more responsibility for their own waste | Reduce the amount of waste that is treated outside of the District? |
| Culture, Leisure and Recreation | Create good cultural, leisure and recreation activities available to all. | <i>SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities</i> | <i>Ensure that open space, cultural, leisure and recreation opportunities are not affected by waste management?</i> |
| Safety and Security / Health and Social Welfare | Improve safety and security for people and property. Provide the conditions and services to improve health and well being and reduce inequality to access to health and social care. | SA16: Reduce the impact of the waste industry on people's safety and security , health and quality of life | Cause a change in the number of people directly affected by waste management (living in close proximity to a site or an access route) whose impact cannot be mitigated? Cause a cumulative impact on certain communities? |
| Education and Training/ Local Economy and Employment | Promote education and training opportunities which build the skills and capacity of the population. Increase the number of high quality job opportunities suited to the needs of the local workforce. Support investment and enterprise that respects the needs of a local area. | SA17: Support employment in the waste industry for local people. SA18: Ensure the provision of adequate waste management capacity. | Include actions that change the number of local people directly employed in <i>skilled jobs in</i> the waste industry? Include actions that ensure the plan contributes to sustainable levels of economic growth by maintaining an adequate provision of waste management capability? |

5 Options Assessment and the Reasons for Selecting Alternatives

5.1 Introduction

The SEA Regulations require that this report

“shall identify, describe and evaluate the likely significant effects on the environment of (a) implementing the plan or programme; and (b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme (Part 3 12.—(2)).

In addition post adoption procedures require “the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with” are explained (Part 4 16.—(4)).

This involves setting out the alternative options (both for policies and for sites) that were considered by the council, what the sustainability effects of those options were and how these effects have been taken into account in the selection of the final preferred approach (both the approach to sites and to policies).

5.2 Developing the options

The alternative options for the DPD were set out in a document called the Bradford Waste Management DPD Issues and Options Paper, which was published in November 2009. This options paper included the following elements:

Policy options

- Issue 1: Internal Waste Management:
 - Issue 1 Option 1: Focus on consolidating and increasing capacity at existing facilities across the District, and recognise that some waste will need to be managed outside Bradford;
 - Issue 1 Option 2: Provide additional sites and capacity to manage growing waste arisings within the District;
 - Issue 1 Option 3: Provide additional sites and capacity to manage more waste than is produced in the District, allowing scope to import and handle waste from other places in the future?;
 - Issue 1 Option 4: Work with adjacent authorities to identify appropriate sites / facilities to accommodate waste arisings as closely as possible to their source?; and
 - Issue 1 Option 5: Minimise waste production / arisings across the District through appropriate planning policies, therefore minimising site allocations required.
- Issue 2: Location of Waste Sites:
 - Issue 2 Option 1: Concentrate waste management facilities in a small number of strategic sites; and

- Issue 2 Option 2: Identify a large number of small sites dispersed across the District for waste management purposes.
- Issue 3: Identifying Sites for Waste Management Facilities;
 - Issue 3 Option 1: Test all sites on the initial long list within the area of search, excluding those in the Green Belt other than existing facilities; and
 - Issue 3 Option 2: Test all sites on the initial long list, including new potential sites in the Green Belt.
- Issue 4: Locational Criteria for Municipal Solid Waste and Commercial and Industrial Waste Management Facilities, only one option is presented as follows:
 - Issue 4 Option 1: Test the long list of potential waste sites (appendix 1) against the Municipal Solid Waste and Commercial & Industrial waste facility location criteria as identified.
- Issue 5: Management of Construction and Demolition Waste;
 - Issue 5 Option 1: Include criteria based policies in the Waste Management DPD that require the maximisation of on-site recycling and re-use of construction and demolition waste as part of the development process to minimise waste arisings;
 - Issue 5 Option 2: Include a criteria based policy for locating new and expanded construction and demolition waste management facilities; and
 - Issue 5 Option 3: A combination of Options 1 and 2.
- Issue 6: Management of 'Other' Waste Streams:
 - Issue 6 Option 1: Identify potential new sites for managing hazardous waste now even though such capacity may not be required in the short term plan period;
 - Issue 6 Option 2: Do not identify potential new sites for managing hazardous waste as they are not required in the short term period;
 - Issue 6 Option 3: Develop a criteria based policy approach for locating 'other' waste management facilities, including hazardous and agricultural waste; and
 - Issue 6 Option 4: Develop a policy approach combining either Option 1 or 2 with Option 3.
- Issue 7: Management of Residual Waste:
 - Issue 7 Option 1: Through the inclusion of appropriate criteria based policies, encourage the use of alternative technologies for the treatment of residual waste through limiting landfill capacity within the District;
 - Issue 7 Option 2: Provide additional landfill capacity within the District through the identification of suitable sites within the Waste Management DPD;
 - Issue 7 Option 3: Provide a combination of both Options 1 and 2; and
 - Issue 7 Option 4: Utilise the existing sub-regional capacity in the first instance, but still provide additional landfill capacity within the District through the identification of suitable sites within the Waste Management DPD. Any identified additional landfill capacity only to be utilised when the sub-regional capacity nears exhaustion.

Site options

As highlighted under Issue 4 above, a long list of potential sites was developed and tested by the council. The Issues and Options Paper considered that there was no other realistic option other than to use a set of locational criteria for the location of Municipal Solid Waste and Commercial and Industrial Waste Management Facilities. The process of identifying sites at which to locate waste management facilities is a hierarchical three-stage process. This hierarchical process 'sieves' the sites identified, removing sites from consideration as the process is undertaken.

The first task of this process is to identify all potential sites. The second task involves identifying which of these are reasonable sites to be considered based on a number of criteria. Thirdly, the suitability of the remaining sites was evaluated in relation to certain waste management technologies on the basis of a more detailed consideration of environmental and social constraints. This process is set out in more detail in the Bradford Waste Management DPD Issues and Options Paper (November 2009).

5.3 Assessing the sustainability effects of the options

The sustainability effects of the options were assessed and reported in the following report: *Bradford Local Development Framework, Waste Development Plan Document Sustainability Appraisal of the Issues and Options Paper (ENVIRON, May 2010)*.

Policy options

The policy options put forward in the Issues and Options paper were assessed for their sustainability effects. This assessment has been undertaken in assessment matrices which are broadly consistent with the matrices used to assess the Bradford Core Strategy. The appraisal of the Waste Management DPD Issues and Options Paper has taken place following consultation and has taken into account the responses of consultees in relation to each issue and the options.

The full assessment of the issues and options is available in the *Bradford Local Development Framework, Waste Development Plan Document Sustainability Appraisal of the Issues and Options Paper (ENVIRON, May 2010)*. However, the results are summarised in Section 5.4 below.

Site options

In order that the site selection and assessment process incorporates important sustainability issues identified as a part of the SA, the SA team has been involved in developing the site assessment methodology which is being undertaken as part of the development of the DPD. The SA team have prepared a commentary on the site assessment methodology with suggested enhancements to the method, as appropriate.

The SA team has also had an input into the site assessment process by providing a sustainability commentary of each site in the short list, commenting on constraints identified, the risk of adverse sustainability effects and the opportunities for positive sustainability effects. The SA team has focused on the following issues in providing the SA commentary:

- Flood Risk;

- Biodiversity and Nature Conservation, including presence of habitats and/or vegetation on the sites;
- Heritage assets;
- Water quality, air quality and soils;
- Proximity to a railway; and
- Public rights of way located nearby.

The SA commentary has been guided by the SA Framework used to assess the options listed above and the Waste Management DPD: Preferred Approach. Matrices were created based on the SA Framework and all objectives and appraisal questions which were considered to be not relevant to the SA commentary were blocked out. Comments were made with regards to each of the relevant objectives within the SA Framework and a summary of the key points, which provide additional information to the findings of the site assessment process, was provided for each site. Each matrix was used to appraise up to five sites.

Once the findings of the SA Commentary were summarised for each site a conclusion was reached regarding whether the site fell into one of the following three categories:

| | |
|--|--|
| | No significant constraints have been identified in the assessment |
| | Some constraints have been identified in the assessment. Environmental Impact Assessment is likely to be required of planning applications in order to determine potential impacts and put forward appropriate mitigation. |
| | Some significant constraints have been identified in the assessment. Due to the nature of the constraints it is questionable whether potential impacts could be mitigated. |

The conclusions have been made on the basis of a worst case scenario.

The conclusions provided Bradford Metropolitan District Council and their consultants with an indication of the risks associated with taking each site forward with regards to the sustainability issues identified. For example, a 'red' conclusion does not indicate that a site should not be taken forward but indicates that there are significant risks associated with taking that site forward which it may not be possible to mitigate.

5.4 How the SA Report influenced the development of the plan

With relation to the site assessment, the summary of the site assessment (showing all sites assessed) is shown in Annex B. The overall performance of the sites to be taken forward as preferred sites is shown in Table 5.2.

56 sites were tested as part of the SA process. Very few of these sites had no significant constraints. None of the sites that registered a score of red (high risk) were taken forward. In terms of the amber and green sites, the information from the SA with relation to the sites assessment was taken into account by the plan team when selecting the short list of sites.

For each type of waste facility a shortlist of sites has been created based on site size and the proportion of positive (green) scores against the criteria long list. Please note that site size was an important factor in the selection of sites meaning that some sites which had an overall score of orange have had to be chosen.

| Site number | Commentary | Conclusion |
|--------------------|--|-------------------|
| 1 | Environment Agency flood mapping shows the site to be located in an area of flood risk equivalent to Flood Zone 3. It is close to some sensitive receptors (a stream, and a cycle path) and there is no railway nearby. The site will therefore not encourage a shift from road freight. | |
| 11 | There is a railway and rail freight facility within 200m and no nature conservation or heritage designations in the site surrounds. However, there is residential land uses in the vicinity of the site. | |
| 29 | This site is close to some sensitive receptors (a stream, and a cycle path) and there is no railway nearby. The site will therefore not encourage a shift from road freight. | |
| 56 | This site is suburban and Greenfield, therefore development of the site will result in the loss of soil resources. It is located in a mixed residential and industrial suburban area and there is no railway in the site surrounds. The site will therefore not encourage a shift from road freight. | |
| 57 | This site is brownfield and close to sensitive receptors - a Bradford Wildlife Area lies immediately north-east and, depending on the type of waste management technology selected, development of the site could have adverse air quality impacts on this wildlife site. | |
| 71-74 | These sites have been grouped together in the site assessment. Three major constraints are identified. The sites are located predominantly in Environment Agency Flood Zone 3. Site 71 is outside of a flood zone but is approximately 20m from flood zone 2 and flood risk could potentially be an issue in the future with climate change. The size of the site and, therefore, the likely scale of development would be likely to have a significant adverse effect on residential uses to the north, in Silsden. Also, a Conservation Area lies directly north of the site and development of the site would be likely to affect its setting. | |
| 92 | No constraints have been identified in relation to this site. | |
| 102 | Runoff will need to be controlled on this site as it is next to a washlands area and the River Aire and the site should not increase flood risk elsewhere in the catchment. The site is within an area at risk from flooding but benefits from flood defences. Run-off will also need to be controlled to avoid water pollution in the river. There is a Bradford Wildlife Area across the river from this site, approximately 100m away on the other side of the River Aire. Whether the redevelopment of this site could affect the wildlife site may need to be assessed and mitigation put in place, particularly during construction. The site is not near to a railway line and therefore will not help to shift any freight from roads. | |

In addition to the sites assessment the SA provided information for each identified issue. Table 5.3 summarises their effects and outlines how the SA has influenced the development of the plan. Please note that we have not included copies of the full options assessment or the site assessment in this report but these are available in the following report *Bradford Local Development Framework, Waste Development Plan Document Sustainability Appraisal of the Issues and Options Paper (ENVIRON, May 2010)*.

| Table 5.3: How the SA influenced the Preferred Option | |
|--|--|
| SA results | Development of the preferred option |
| Issue 1: Internal waste management | |
| <p>Option 1 has a mixed performance against the SA Objectives; it could result in increased mileage per tonne of waste and give rise to transport-related impacts on air quality, however, it does not propose new waste management sites and, hence, performs well in relation to some SA objectives, such as safeguarding water and soil resources and protecting and enhancing biodiversity, landscape quality and historic assets.</p> <p>Option 2 proposes increased provision of waste management sites and performs well with regard to waste transportation, access to waste management facilities and ensuring that local areas take responsibility for their own waste. This option should also provide new jobs within the waste industry in the District. However, it would not necessarily assist in minimising waste arisings or increasing the amount of reused, recycled or recovered waste. Also, it has potential to result in nuisance to local communities from transport, dust and noise and adverse environmental impacts.</p> <p>Option 3 performs similarly to Option 2, but effects would be greater given that it intends to identify more sites and create a greater waste management capacity.</p> <p>It is uncertain whether Option 4 will require new waste management facilities to be located within the District, therefore, there is uncertainty regarding its potential impacts. It could result in waste being managed outside of the District, directly in conflict to the stated aspiration for self-sufficiency, and impacts would be dependent upon the nature and location of any new waste sites required. This option will not help to minimise waste arisings or encourage reuse, recycling or recovery of waste. This option may see an increase in waste management facilities sub-regionally with resulting increase in the number of jobs within the sector, although potentially not directly within the District.</p> <p>Option 5 should help to minimise the amount of waste that will require treatment and should therefore help to minimise energy demand and greenhouse gas emissions associated with waste treatment and transport. However, it is unclear whether Option 5 will result in the identification of additional waste management facilities, therefore, its potential environmental impacts are uncertain. It is also uncertain as to whether the option will improve the accessibility of waste management sites, or whether it will create new employment opportunities.</p> | <p>The preferred policy approach will be a combination of Options 2, 3 and 4 in order to reflect consultation and SA findings and the need to ensure that the Waste DPD has sufficient flexibility and adaptability to respond to future circumstances and approaches to waste management.</p> <p>On this basis, the preferred policy approach will identify a range of suitable waste management sites capable of accommodating Bradford's MSW and C&I waste arisings with a further contingency allowance to ensure that the District can contribute to meeting wider sub-regional waste management needs where appropriate and to ensure flexibility in supply over the plan period.</p> <p>A criteria based approach will be adopted for the identification and provision of sites for CDEW, Agricultural, Hazardous and landfill residual waste arisings. This will support the range of choices available to waste operators in delivering future waste management facilities.</p> |

| Table 5.3: How the SA influenced the Preferred Option | |
|---|--|
| SA results | Development of the preferred option |
| Issue 2: Location of waste sites | |
| <p>The two options had a mixed performance against the identified SA Objectives and neither was found to meet a majority of those considered.</p> <p>The appraisal of Option 1 has assumed that the option makes use of existing waste management sites and it would, therefore, limit the effects of waste management sites in relation to environmental SA objectives, through development on greenfield land. However, it may result in more waste related trips around the District and would not improve the accessibility of waste management sites or lead to waste management/treatment near to or at source. It could result in greater mileage per tonne of waste and greater emissions of greenhouse gases and other pollutants from transport, although some technologies which require small sites could potentially be co-located or combined. It is unclear whether Option 1 would limit the capacity of waste management within the District, and whether any waste would need to be managed outside of the District.</p> <p>Option 2 should reduce trips and mileage per tonne of waste by locating a larger number of sites across the District, although this could also spread the adverse environmental effects of waste sites across the District. Option 2 would provide a range of waste sites which are easily accessible to the public, but could also create waste-related traffic in areas which are currently unaffected by traffic and HGV's.</p> <p>It is unclear which of the two options would result in a greater job generation across the District.</p> | <p>The preferred policy approach to the location of potential waste sites for MSW and C&I combine both Options 1 and 2 to make provision for both small and large sites, including potential to accommodate a combination of waste technologies and offer sufficient choice to the waste operators on the market.</p> <p>The preferred policy will need to recognise that a range of site sizes will be required to ensure an adequate reflection of the nature, location and type of waste arisings in the District. The policy will state the need to treat different waste streams in individual ways using the drivers of their particular requirements and location preferences relevant to the individual types of waste facility.</p> <p>Potential site selection criteria will be established to include juxtaposition and proximity to the established settlement hierarchy, and the broad areas of search defined in the Waste Core Strategy, as key drivers for locating sites. This approach takes account of the consultation and SA findings for this issue.</p> |
| Issue 3: Identifying sites for waste management facilities | |
| <p>There is a significant degree of uncertainty within the SA assessment of options presented in response to this issue. It is assumed that there is a greater likelihood of habitats and wildlife corridors being adversely affected by development in the Green Belt and, therefore, Option 1 performs better in this context. Option 1 is also considered to have lower potential adverse effect on landscape quality, and to guide development away from versatile agricultural land. This option may not help minimise the mileage per tonne of waste, however, since it limits waste management sites and so would require longer journey lengths through the District.</p> <p>Option 2 may create a greater flexibility to locate waste management facilities across the District</p> | <p>The Council's preferred policy approach will adopt Option 2 both on the basis of the findings of consultation and SA but also on the basis of ensuring effective, proactive and robust evidence underpins the identification and selection of Waste Management sites. All sites on the pre-eligibility list will be taken into account. All will be considered with the Green Belt designation applied as an additional site assessment filter following the assessment of all sites. This is to ensure an objective and robust site assessment process is capable of</p> |

| Table 5.3: How the SA influenced the Preferred Option | |
|---|--|
| SA results | Development of the preferred option |
| <p>in a manner which reduces the amount of distance travelled, however this option may also introduce waste traffic into areas which are not currently affected (albeit this would depend on the location of suitable sites outside of and within the Green Belt). There are a number of watercourses running through the Green Belt, although all sites will be tested individually in relation to their flood risk potential.</p> | <p>being undertaken to select the most appropriate waste management sites for MSW and C&I waste</p> |
| Issue 4: Locational Criteria for Municipal Solid Waste and Commercial and Industrial Waste Management Facilities | |
| <p>The SA suggests the following with regard to the site search and assessment methodology and criteria:</p> <ul style="list-style-type: none"> • Sites that have been discounted on the basis of the broad location criteria should be reintroduced to the site assessment process at the end of the process if there are insufficient sites to meet identified need. The location constraints could then be considered in order to identify whether a detrimental impact would be caused by development. • <i>Policy alignment:</i> the assessment should consider whether a site is brownfield or greenfield land and contains, or is proximate to, scheduled monuments and/or listed buildings. • <i>Policy alignment:</i> the assessment should consider Sites of Ecological and Geological Importance and information relating to environmental designations should be noted. • <i>Physical constraints and delivery:</i> information on Flood Risk Zones (1, 2, & 3) should be noted. Sensitivity of nearby watercourses should be noted. • <i>Site surveys:</i> proforma should include consideration of: any nearby Public Rights of Way with views into the site; any surface water features on the site or visible within the surrounding environment; the presence of mature trees, belts of trees or woodland areas, hedges or grassland which would need to be removed for development of the site; any derelict buildings on the site; any nearby rail freight access; and the presence of any historical buildings within the site surroundings. | <p>The Council's preferred policy approach will adopt Option 1 both on the basis of the findings of consultation and SA but also on the basis of ensuring effective, proactive and robust evidence underpins the identification and selection of Waste Management sites. All sites on the pre-eligibility list will be taken into account. All will be considered with the Green Belt designation applied as an additional site assessment filter following the assessment of all sites. This is to ensure an objective and robust site assessment process is capable of being undertaken to select the most appropriate waste management sites for MSW and C&I waste.</p> |
| Issue 5: Management of construction and demolition waste | |
| <p>Option 1 encourages efficient use of natural resources, reduces the amount of waste that needs to be managed within the District, reduces the amount of waste being moved within the District</p> | <p>The Council's preferred policy approach is to adopt Option 3. This is on the basis that there is strong consultee support</p> |

| Table 5.3: How the SA influenced the Preferred Option | |
|--|---|
| SA results | Development of the preferred option |
| <p>and avoids potential negative environmental effects of developing new or expanded waste management sites to deal with CDEW waste. Option 1 may not be able to accommodate waste arisings from small CDEW sites.</p> <p>Option 2 enables the waste that comes from small construction sites (of which it is noted there could be a considerable number across the District) to be re-used, recycled and recovered via waste management sites rather going straight to landfill, or being tipped across the District.</p> <p>Option 3 comprises a combination of Options 1 and 2 and performs the best of the three against the SA Objectives. However, as Option 3 includes the development of new or expanded waste sites it poses a higher risk that it will directly impact upon some of the environmental SA Objectives, including biodiversity, landscape, nuisance and reduction in waste mileage and transport emissions. This is because of the risk of direct land take issues and the risk of increased waste transport, for example.</p> <p>By developing waste management sites for CDEW waste, Options 2 and 3 could enable the sale of CDEW waste products, with potential economic benefits and job creation within the District.</p> | <p>provided the policy distinguishes between CDEW generated through large-scale demolition and development projects and those on small-scale sites where on-site recycling is often impractical or not possible. It is further supported by the SA findings provided the generation of further CDEW waste is minimised in accordance with Bradford's established waste hierarchy. A criteria based approach will be established with additional policy wording emphasising the preference for re-use / adaptation of existing buildings where viable as an initial policy imperative. Detailed matters of the environmental, transport, energy generation on waste sites and site restoration will be dealt with through separate Waste Development Management policies.</p> |
| <p>Issue 6: Management of 'other' waste streams</p> <p>None of the options presented promote renewable energy generation or reduce hazardous waste arisings. The SA has found it difficult to identify environmental effects of hazardous waste facilities, as such facilities will need to meet specific compliance criteria in order to gain an Environmental Permit. However, there is much uncertainty in the SA since it cannot be assumed that no environmental effects will occur through development or operation of hazardous waste management facilities.</p> <p>Option 1 identifies sites for hazardous waste in the short term and would support job creation, although it is assumed that waste management sites would not actually be developed until the capacity was required within the District or the sub-region, as appropriate.</p> <p>Option 2 does not identify new hazardous waste management sites as they are not identified to be required within the short term. Therefore, this option is likely to involve the transportation of hazardous and agricultural waste arisings outside of the District and it performs poorly in relation to reducing waste mileage and transport emissions. It is uncertain whether communities would be adversely affected by traffic associated with the transportation of hazardous waste. Option 2</p> | <p>The Council's preferred policy approach is to take forward Option 3 including the development of a criterion based policy for locating agricultural waste and for hazardous waste streams.</p> <p>Detailed matters of environmental impacts, transport, energy generation and site restoration will be dealt with through separate Waste Development Management policies This is on the basis of the need to ensure flexibility and choice in the District's approach to handling other waste streams. It also reflects the balance of waste management facilities and forecast need identified in the Waste Management DPD.</p> <p>The preferred policy approach will respond to comments made relating to the appropriateness of encouraging on-site treatment of agricultural waste in accordance with GAEC</p> |

| Table 5.3: How the SA influenced the Preferred Option | |
|--|---|
| SA results | Development of the preferred option |
| <p>does not secure long term capacity for the treatment of hazardous waste and, therefore, does not ensure provision of adequate waste management capacity or support employment in the waste industry for local people.</p> <p>Option 3 identifies potential hazardous waste facilities in the short term and should provide the necessary capacity to avoid waste being transported outside of the District for treatment. It should also support the generation of local employment opportunities. This option includes a criteria-based approach for the location of 'other' waste management facilities (including for agricultural and hazardous waste arisings) and therefore it is assumed that the criteria within the policy would include the consideration of potential environmental effects.</p> <p>Option 4 has been difficult to appraise because it involves the combination of potentially conflicting policy approaches. It is suggested that this option should have been considered as two separate options, one which combined Options 1 and 3 and one which combined Options 2 and 3. For the purposes of the SA it has been assumed that Option 4 will involve the identification of hazardous waste facilities in the short or long term and should provide the necessary capacity in order to avoid waste being transported out of the District for its treatment. This option also includes a criterion based approach for the location of 'other' waste facilities and, therefore, it has a similar performance to Option 3.</p> | <p>requirements in the Common Agricultural Policy.</p> <p>Hazardous waste must be considered in conjunction with neighbouring local authorities across the sub-region. The Council will put in place a plan to manage and monitor approach which will consider the need for a hazardous waste site in the sub-region within the short, medium and long term.</p> <p>With regard to other possible waste streams that might be included within the DPD, the preferred approach is not to specifically include any other streams on the basis that there is a lack of identifiable, robust and accurate data.</p> <p>The preferred policy will be positively worded to resolve the perceived negative approach to other waste streams in the Issues and Options Report.</p> |
| Issue 7: Management of residual waste | |
| <p>Option 1 generally performs well against the SA Objectives but there is uncertainty regarding the potential effects of the alternative methods of dealing with residual waste. It is assumed that these alternative methods would not require as large a land take as landfill and therefore a lower risk of adverse environmental effects is assumed.</p> <p>Option 2 does not perform well against many of the SA Objectives because it may result in new and/or expanded landfill sites within the District and does not limit waste arisings or encourage waste re-use, recycling, and recovery. It is likely to increase the amount of greenhouse gases released from landfill sites and would be associated with nuisance effects on communities, land take, loss of soils and adverse environmental effects. A monitor and manage approach to landfill capacity, combined with technological advances over the Plan's lifetime, may mitigate the need to utilise additional landfill site capacity within the District. However, this option will support the creation of local employment opportunities. It will also help ensure that local communities take</p> | <p>The Council's preferred approach is to identify where additional residual waste capacity within existing facilities can be used alongside a criteria-based policy for the identification of any new residual waste facilities in the District in the medium and long term, subject to future monitoring and identified need.</p> <p>This approach accords with and emphasises the need to support alternative technologies for treating residual waste and reflects the need to (co)locate facilities in close proximity to waste arisings. This approach supports other preferred policies to emphasise reduction, re-use and recycling of waste; supports moves towards the District improving its self-</p> |

Table 5.3: How the SA influenced the Preferred Option

| SA results | Development of the preferred option |
|---|--|
| <p>more responsibility for their own waste and should minimise the mileage per tonne of waste.</p> <p>Option 3 represents a combination of Options 1 and 2. It will, therefore, provide limited additional capacity for landfill and will encourage the use of alternative treatment of residual waste. The SA records a mixed performance by this option as both the pro's and con's of Options 1 and 2 combine but do not cancel each other out. Option 3 supports more of the SA Objectives than Option 2 but not as many as Option 1. It will support the creation of local employment opportunities, help to ensure local communities take more responsibility for their own waste and should minimise the mileage per tonne of waste.</p> <p>Option 4 does not propose any additional landfill capacity so could result in increased mileage per tonne of residual waste, with waste travelling greater distances as the sub-regional capacity reduces and individual landfill sites are closed. Therefore, this option performs badly in relation to reducing emissions of greenhouse gases. In the long term, Option 4 may result in new landfill sites within the District, although a monitor and manage approach to landfill capacity combined with technological advances over the Plan's lifetime may mitigate the need to utilise additional landfill site capacity. New landfill sites could result in nuisance effects on communities, land take, loss of soils, and potentially negative environmental effects. Option 4 supports the long term creation of employment opportunities within the District, although this is not the case in the short term, resulting in a mixed performance against the relevant SA Objective.</p> | <p>sufficiency in handling waste but also contributing to sub-regional and cross-boundary working. The preferred policy approach will reflect the role of the waste management PFI, the provision of residual waste capacity through existing, extant planning permissions and the role of effective management and monitoring of residual waste generation and existing site capacities.</p> <p>The specific identification of new landfill residual waste sites is not considered necessary in view of:</p> <ul style="list-style-type: none"> • the current permitted landfill supply, which is in excess of 12 years for the Bradford sub-region; • the extant planning permissions for residual waste; • the Bradford-Calderdale joint PFI programme; and • the need to achieve recycling and treatment targets, as set out in the RSS. |

6 Results of the Appraisal of the Waste Management DPD: Preferred Approach Policies

6.1 Introduction

The full results of the Preferred Approach appraisal are reported in Annex C to this report. Within this report, the results of the assessment have been summarised in two ways. Section 6.1 outlines the significant negative and positive effects that were identified. Tables 6.1 and 6.2 then presents a summary of the findings of the assessment for each policy and for each site respectively. This summary also outlines the mitigation and enhancement measures proposed for each policy.

Mitigation measures are measures outlined to prevent, reduce or offset effects. Where a draft policy has a significant adverse effect measures should be implemented to prevent, reduce or offset these effects. This may take the form of compensatory measures to be implemented prior to the policy itself being implemented or it can take the form of a change in wording of policy laid out in the plan. In addition, any uncertain effects should have mitigation suggested in order to reduce uncertainty and the potential for this to give rise to a significant negative effect.

Where possible enhancement measures have been suggested to enhance the positive or neutral effects of policies.

6.2 Significant effects identified

6.2.1 Effects of the policies

With relation to the assessment of the plan policies, the sustainability assessment has not identified the potential for significant negative effects. However a number of uncertainties were identified:

- *Preferred Policy W1: Vision and Waste Objectives* in relation to the following SA objective: SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats,
- *Preferred Policy W2: Cross Boundary Working* in relation to the following SA objectives: SA10: Encourage a modal shift away from road freight, SA16: Reduce the impact of the waste industry on people's safety and security, health and quality of life
- *Preferred Policy W3: Bradford's Approach to Future Waste Arisings* in relation to the following SA objectives: SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.
- *Preferred Policy W4: Waste Management Sites in Bradford District* in relation to the following SA objectives: SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.
- *Preferred Policy W5: Location of Waste Management Facilities and Sites* in relation to the following SA objectives: SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.

- *Preferred Policy W6: MSW and C&I Waste Site Assessment* in relation to the following SA objectives: SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.
- *Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste* in relation to the following SA objectives: SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.
- *Preferred Policy: W9: Hazardous Waste* in relation to the following SA objective: SA3: Reduce the District's impact on climate change and vulnerability to its effects and SA17: Support employment in the waste industry for local people.
- *Preferred Policy: W10: Sites for Residual Waste* in relation to the following SA objectives: SA5: To conserve, restore, expand and enhance the internationally, nationally and locally valued wildlife species and habitats.
- *Preferred Policy: WDM2: Assessing all applications for New, Expanded and Residual Waste Management Facilities* in relation to the following SA objectives: SA10: Encourage a modal shift away from road freight, SA15: Avoid impacts on open space, cultural, leisure and recreation opportunities
- *Preferred Policy: WDM4: Waste Management within Development* in relation to the following SA objectives: SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites
- *Preferred Policy: WDM5: Landfill Development for Residual Waste* in relation to the following SA objectives: SA10: Encourage a modal shift away from road freight.

The assessment identified the following significant positive effects:

- *Preferred Policy W1: Vision and Waste Objectives* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered, SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites, SA9: Reduce nuisance caused to communities by waste transport, SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14: Ensure local communities take more responsibility for their own waste, SA17: Support employment in the waste industry for local people and SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy W2: Cross Boundary Working* in relation to the following SA objectives: SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy W3: Bradford's Approach to Future Waste Arisings* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered, SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14: Ensure local communities take more responsibility for their own waste, SA17: Support employment in the waste industry for local people, and SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy W4: Waste Management Sites in Bradford District* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered, SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14:

Ensure local communities take more responsibility for their own waste and SA18: Ensure the provision of adequate waste management capacity;

- *Preferred Policy W5: Location of Waste Management Facilities and Sites* in relation to the following SA objectives: SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14: Ensure local communities take more responsibility for their own waste, SA17: Support employment in the waste industry for local people and SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy W6: MSW and C&I Waste Site Assessment* in relation to the following SA objectives: SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14: Ensure local communities take more responsibility for their own waste, SA17: Support employment in the waste industry for local people and SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered, SA14: Ensure local communities take more responsibility for their own waste and SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy: W8 Agricultural Waste* in relation to the following SA objectives: SA4: Safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites, SA14: Ensure local communities take more responsibility for their own waste and SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy: W9: Hazardous Waste* in relation to the following SA objective: SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy: W10: Sites for Residual Waste* in relation to the following SA objectives: SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14: Ensure local communities take more responsibility for their own waste and SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy: WDM1: Unallocated Sites* in relation to the following SA objectives: : SA13: Improve the quality and range of services available within communities and connections to wider networks, SA14: Ensure local communities take more responsibility for their own waste and SA18: Ensure the provision of adequate waste management capacity;
- *Preferred Policy: WDM3: Applications resulting in the loss of a proposed or existing waste management facility* in relation to the following SA objectives: SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered;
- *Preferred Policy: WDM4: Waste Management within Development* in relation to the following SA objectives: SA1: Ensure the prudent and efficient use of energy and natural resources and the promotion of renewable energy, SA2: Minimise the growth in waste and increase the amount of waste which is re-used, recycled and recovered; and

- *Preferred Policy: WDM5: Landfill Development for Residual Waste* in relation to the following SA objectives: SA18: Ensure the provision of adequate waste management capacity.

6.2.2 Effects of the sites

The assessment identified the following significant negative effects with relation to the assessment of the preferred sites:

- *Site 1* in relation to vulnerability to flooding (see also Table 6.2 for a discussion on the potential cumulative effects of these sites on flooding);
- *Site 29* in relation to vulnerability to flooding (see also Table 6.2 for a discussion on the potential cumulative effects of these sites on flooding),
- *Sites 71-74* in relation to vulnerability to flooding (see also Table 6.2 for a discussion on the potential cumulative effects of these sites on flooding);
- *Site 102* in relation to potential for nuisance to neighbours, potential for water pollution and lack of access to sustainable modes of transport.

In addition, the following uncertain effects have been identified which have the potential to give rise to significant negative effects:

- *All of the sites in relation to BAP targets;*
- *Site 1 in relation to effects on habitats;*
- *Site 11 in relation to effects on habitats;*
- *Site 29 in relation to effects on habitats;*
- *Site 102 in relation to effects on flooding;*
- *Site 92 in relation to effects on habitats; and*
- *Site 102 in relation to the effects on landscape and the built environment and historic assets.*

The assessment identified the following significant positive effects:

- *Site 1* in relation to effects on landscape and making efficient use of land;
- *Site 11* in relation to safeguarding air, water and soil resources, encouraging model shift and making efficient use of land; and
- *Site 29* in relation to effects on landscape.

| Policy | Summary of the effects | Mitigation and enhancement measures |
|---|---|---|
| Preferred Policy W1: Vision and Waste Objectives | <p>This is a positive visioning type policy that commits the plan to self sufficiency, waste reduction, the proximity principle, protecting the environment and appropriate expansions to new facilities. Significant positive impacts have been identified in relation to several SA objectives. These include objectives to minimise the growth in waste, increase the amount which is reused, recycled and recovered, the potential to safeguard and improve air, water and soil, reducing the number of people affected by noise and dust, reducing the transport of waste and adverse effects of this on communities, improving accessibility to waste infrastructure, supporting the development of local jobs in this sector and importantly ensuring adequate waste management capacity.</p> <p>Minor positive impacts are identified related to the reduction of greenhouse gas emissions caused by waste management, avoiding impacts on protected landscapes, historic assets, ensuring that open space, cultural, leisure and recreation opportunities are not affected by waste management and maximising use of previously developed land.</p> <p>There are some uncertainties of impacts against objectives which seek to drive modal shift away from road transport , as well as specific appraisal questions which aim to promote biodiversity, Natura 2000 sites and BAP targets, climate change adaptation and also enhance (as well as protect) the environment. Suggestions to mitigate and enhance the policy to address these uncertainties have been included opposite.</p> <p>Preferred Policy W1 will have no significant negative impacts or minor negative impacts.</p> | <p>Mitigation measures</p> <p>The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.</p> <p>Amend policy so bullet three reads “<i>To ensure that expansions to existing facilities where appropriate and new waste facility developments support the planned growth and waste needs of the Bradford community and are delivered in a manner which protects and enhances the District’s environmental assets and safeguards human health</i>”</p> <p>Enhancement measures</p> <p>Include explicit reference to how measures of self sufficiency, promotion of waste hierarchy and the proximately principle which are embedded in the policy also support climate mitigation and to a degree adaptation.</p> <p>Include commitment to modal shift in vision and objectives.</p> |
| Preferred Policy W2: Cross Boundary Working | <p>The policy provides an approach which seeks to minimise waste, plan for local management and follow a criteria based approach to identification of sites. Though this approach the policy does attempt</p> | <p>Mitigation measures</p> <p>Include pursuit of modal shift as an aim of cross boundary working as this cannot be achieved in isolation from</p> |

| Policy | Summary of the effects | Mitigation and enhancement measures |
|---|---|---|
| | <p>to tackle some of the key waste planning issues highlighted in the SA scoping report.</p> <p>Significant positive effects have been identified in relation to minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered, improving the quality and range of services available within communities and connections to wider networks, ensuring local communities take more responsibility for their own waste, and ensuring the provision of adequate waste management capacity. Minor positive impacts were identified in relation to ensuring the prudent and efficient use of energy and natural resources, reducing the District's impact on climate change, safeguarding air, water and soil resources and reducing the number of people affected by noise and dust from waste management sites, achieving the proximity principle, reducing nuisance caused to communities by waste transport and supporting employment in the waste industry for local people.</p> <p>No negative effects were identified but neutral impacts were noted in relation to landscape, efficient use of land, historic assets, open space and recreation opportunities, health and quality of life. For these impacts it was considered that the effects are tested as part of the site assessments. Therefore, the scoring here has been listed as neutral. An uncertain effect has been noted in relation to modal shift.</p> | <p>neighbouring authorities.</p> <p>Enhancement measures</p> <p>No enhancement measures.</p> |
| Preferred Policy W3: Bradford's Approach to Future Waste Arisings | <p>The policy supports the Vision and objectives in relation to self sufficiency, proximity principle and moving up the waste hierarchy. As a result the policy has many associated benefits in respect to economic, social and environmental objectives. In particular, potential economic gains should be particularly positive.</p> <p>Significant positive impacts are identified for minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered, improving the accessibility of waste management and treatment services, reducing the amount of waste that is treated</p> | <p>Mitigation measures</p> <p>The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.</p> <p>Enhancement measures</p> |

| Policy | Summary of the effects | Mitigation and enhancement measures |
|--|---|---|
| | <p>outside of the District, ensuring the provision of adequate waste management capacity as well as supporting employment in the waste industry for local people. Minor positive impacts are noted in relation to the potential to mitigate against climate change, reducing the amount of pollution and nuisance caused by waste management and transport and increasing proximity of waste management infrastructure to current and future centres of population.</p> <p>Neutral impacts were identified against objectives to conserve, enhance designated sites, species and habitats, maintain and restore landscapes, improve the quality of the built environment, protect and enhance historic assets and make efficient use of land, avoid impacts on open space and recreation opportunities and reducing the impact of the waste industry on people's quality of life. It is considered that the impacts on these be tested as part of the site assessment criteria and development control policies. Encouraging a modal shift away from road freight was also considered as neutral. This is best addressed in other policies in the document so this has been scored as neutral for this policy.</p> <p>No negative effects have been identified for this policy. An uncertain effect was recorded in relation to effects on Natura 2000 sites.</p> | No enhancement measures. |
| Preferred Policy W4: Waste Management Sites in Bradford District | <p>The policy provides an approach which seeks to minimise waste, plan for local management and follow a criteria based approach to identification of sites. Though this approach the policy does attempt to tackle some of the key waste planning issues highlighted in the SA scoping report.</p> <p>Significant positive effects have been identified in relation to minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered, improving the quality and range of services available within communities and connections to wider networks, ensuring local communities take more responsibility for their own waste, and ensuring the provision of adequate waste</p> | <p>Mitigation measures</p> <p>The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.</p> <p>Enhancement measures</p> <p>For the sake of clarity, change the beginning of the policy to <i>"To effectively plan and manage Bradford's forecast in waste</i></p> |

| Policy | Summary of the effects | Mitigation and enhancement measures |
|--|--|---|
| | <p>management capacity. Minor positive impacts were identified in relation to ensuring the prudent and efficient use of energy and natural resources, reducing the District's impact on climate change, safeguarding air, water and soil resources and reducing the number of people affected by noise and dust from waste management sites, achieving the proximity principle, reducing nuisance caused to communities by waste transport and supporting employment in the waste industry for local people.</p> <p>No negative effects were identified but neutral impacts were noted in relation to landscape, modal shift, efficient use of land, historic assets, open space and recreation opportunities, health and quality of life. For these impacts it was considered that the effects are tested as part of the site assessments. Therefore, the scoring here has been listed as neutral. An uncertain effect has been noted in relation to effects on Natura 2000 sites.</p> | <p><i>arisings that will need to be dealt with within the District,...</i>"</p> |
| Preferred Policy W5: Location of Waste Management Facilities and Sites | <p>The policy will not have any significant negative effects or minor negative effects. The policy will have significant positive effects on improving the accessibility of waste management and treatment services to centres of population, reducing the amount of waste that is treated outside of the District, supporting employment in the waste industry for local people and ensuring the provision of adequate waste management capacity. This is because the policy aims to provide for a mix of different waste management facilities and sizes and this should help Bradford to become more self-sufficient in the management of its own waste.</p> <p>The policy will also have an uncertain effect on avoiding impacts on effects on Natura 2000 sites.</p> <p>The rest of the SA objectives have been scored as minor positive. This includes a number of environmental and social criteria where sites will be generally assessed against sustainability criteria before</p> | <p>Mitigation measures</p> <p>The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.</p> <p>Enhancement measures</p> <p>No enhancement measures.</p> |

| Table 6.1: Summary of the effects identified within the SA (Policies) | | |
|--|--|---|
| Policy | Summary of the effects | Mitigation and enhancement measures |
| | development is allowed to go ahead. | |
| Preferred Policy - W6: MSW and C&I Waste Site Assessment) | <p>The policy will not have any significant negative effects or minor negative effects. The policy will have significant positive effects on improving the accessibility of waste management and treatment services to centres of population, reducing the amount of waste that is treated outside of the District, supporting employment in the waste industry for local people and ensuring the provision of adequate waste management capacity. This is because the policy aims to provide for a mix of different waste management sites and sizes and this should help Bradford to become more self-sufficient in the management of its own waste.</p> <p>An uncertain effect was recorded in relation to effects on Natura 2000 sites. The rest of the SA objectives have been scored as minor positive. This is due to the inclusion of a wide range of environmental and social criteria in the criteria that have driven the selection of sites.</p> | <p>Mitigation measures</p> <p>The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.</p> <p>Enhancement measures</p> <p>No enhancement measures.</p> |
| Preferred Policy W7: Sites for Construction, Demolition and Excavation Waste | <p>This is a positive policy which helps deliver on the District Council's commitment to self sufficiency in managing its own waste. The requirement that the application demonstrate that CDEW cannot be reduced or processed at source should ensure a balance with the Council's commitment of moving up the waste hierarchy.</p> <p>Significant positive impacts are identified in relation to ensuring the provision of adequate waste management capacity, allowing the Council to meet all of their objectives in terms of recycling and re-use, and reducing the amount of waste that is treated outside of the District.</p> <p>Neutral impacts are identified for the potential for sites to help reach BAP targets and ensure biodiversity is a priority in site restoration as well as encourage a shift from road freight to rail freight. It is considered that this is best addressed in other policies in the document so this has been scored as neutral for this policy. Neutral</p> | <p>Mitigation measures</p> <p>The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.</p> <p>Enhancement measures</p> <p>No enhancement measures.</p> |

| Policy | Summary of the effects | Mitigation and enhancement measures |
|--------------------------------------|---|---|
| | <p>impacts are also recorded for improving the quality and range of services available within communities as this policy deals with the management of construction waste.</p> <p>No negative impacts have been recorded. The rest of the SA objectives have been scored as minor positive. An uncertain effect was recorded in relation to effects on Natura 2000 sites.</p> | |
| W8: Agricultural Waste | <p>Encouraging onsite treatment reduces the energy and emissions associated with transport, and the need for new facilities.</p> <p>The policy has significant positive impacts in terms of safeguarding and improving air, water and soil resources, allowing for the development of the necessary waste management capacity, and reducing the amount of waste that is treated outside of the District.</p> <p>Minor positive impacts are identified in relation to ensuring the prudent and efficient use of energy and natural resources, increasing the amount of waste which is re-used, recycled and recovered, reducing emissions related to transport of agricultural waste, and minimising adverse effects on biodiversity, landscape, historic assets, open space, people and the built environment. It should also support creation of local jobs in this sector. The criteria in Appendix 1 and the Waste Development Management policies should avoid potential adverse effects upon people and the environment through the location and siting of new agricultural waste facilities.</p> <p>Neutral scores have been identified for a number of objectives not directly related to the management of agricultural waste including improving the quality and range of services available within communities, encouraging a modal shift away from road freight, and reducing the nuisance caused to communities by waste transport.</p> | <p>Mitigation measures</p> <p>No mitigation measures.</p> <p>Enhancement measures</p> <p>If possible, the policy should address the use of agricultural waste as a fuel for renewable energy.</p> |
| Preferred Policy W9: Hazardous Waste | <p>The policy essentially maintains the status quo but acknowledges that there may be a need to identify additional sites in the future and</p> | <p>Mitigation measures</p> <p>No mitigation measures.</p> |

| Table 6.1: Summary of the effects identified within the SA (Policies) | | |
|--|---|--|
| Policy | Summary of the effects | Mitigation and enhancement measures |
| | <p>provides criteria to guide the decisions on these. Policy W9 will have no significant or slight negative impacts.</p> <p>Significant positive impacts have been identified in relation to ensuring the provision of adequate waste management capacity. The policy allows for consideration of, and delivery of new facilities if needed in the longer term. Minor positive impacts are identified in relation to making efficient use of land, in relation to the objective to increase the amount of waste which is re-used, recycled and recovered and specifically with regard to the question regarding provision of sustainable treatment facilities as the policy puts the council in a good position to deal with an application for hazardous waste in a sustainable way.</p> <p>The situation is uncertain regarding local skilled job creation. Hazardous waste is currently treated outside the District and in the future if new facilities are needed these are likely to be sub regional facilities. This may mean that hazardous waste will always be treated outside of the District. This makes the potential for job creation difficult to predict. However, this is difficult to mitigate unless the council takes the opinion that Bradford will be the location in the sub region that specifically manages hazardous waste (which will cause other impacts).</p> <p>Neutral impacts are identified for the remaining SA objectives. As the policy maintains the status quo, there will be little impact on SA objectives related to these topics. The criteria for protecting the environment when new facilities are considered should protect these assets.</p> | <p>Enhancement measures</p> <p>No enhancement measures.</p> |
| Preferred Policy W10: Sites for Residual Waste | Policy W10 outlines methods to handle residual waste, which continues to support provision of higher levels of waste treatment within the Bradford's waste hierarchy. The additional criteria, which require environmental improvement and restoration of sites, should contribute to a better environmental outcome related to residual | <p>Mitigation measures</p> <p>The policy focuses on dealing with residual waste through landfill. Alternative technologies for treating residual waste need to be better supported early on in the policy. The text</p> |

| Policy | Summary of the effects | Mitigation and enhancement measures |
|---|--|---|
| | <p>waste.</p> <p>Significant positive impacts are identified in relation to improving the accessibility of waste management and treatment services, reducing the amount of waste that is treated outside of the District and ensuring the provision of adequate waste management capacity. Minor positive impacts are noted for the emphasis on the continued need to reduce residual waste, protection of air, water and soil resources, biodiversity, landscape, historic assets, public open space, the promotion of the proximity principle and the reduction of the nuisance to communities from waste transport and waste management and encouraging modal shift. In the long term this should help increase number of local jobs in this sector so the appropriate objectives have also been scored as minor positive.</p> <p>Minor negative impacts have been identified in relation to objectives which put in place adequate and sustainable treatment facilities and reduce the potential for greenhouse gas emissions caused by waste management. The supporting text to the policy recognises that residual waste is capable of being managed by advanced treatment technologies (for example through gasification, EfW or autoclaving) rather than landfilling however this is not currently reflected in the policy. The policy will also have an uncertain effect on avoiding impacts on effects on Natura 2000 sites.</p> | <p>should first prompt an exploration of these before accepting the landfill option to managing residual waste.</p> <p>The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. Once this has been completed the uncertainty with regard to this objective within the SA should have been addressed.</p> <p>Enhancement measures</p> <p>No enhancement measures.</p> |
| Preferred Policy WDM1: Unallocated Sites | <p>The criteria included in the policy intend to ensure that the main drivers of delivering Bradford's waste hierarchy, the proximity principle and self-sufficiency are achieved. The site assessment criteria used to analyse any unallocated sites should avoid adversely affecting people through noise, nuisance dust and traffic and avoid creating other environmental impacts on biodiversity and sensitive areas. Hence minor positive impacts are identified for objectives that protect biodiversity, jobs, landscape, historic assets and public open space, seek to minimise the growth in waste and increase the</p> | <p>Mitigation measures</p> <p>No mitigation measures.</p> <p>Enhancement measures:</p> <p>No enhancement measures.</p> |

| Policy | Summary of the effects | Mitigation and enhancement measures |
|--|---|--|
| | <p>amount of waste which is re-used, recycled and recovered, seek to mitigate against climate change, safeguard and improve air, water and soil resources, encourage a modal shift away from road freight and reduce nuisance caused to communities by waste transport.</p> <p>Significant positive impacts are identified for objectives that seek to improve the accessibility of waste management and treatment services to centres of population, reduce the amount of waste that is treated outside of the District, and ensure the provision of adequate waste management capacity. The policy will provide further flexibility in the provision of waste management facilities in the District if there is a need in the local area and so will positively support the achievement of these objectives.</p> <p>There are no negative impacts identified.</p> <p>Neutral impacts are identified in relation to the prudent and efficient use of energy and natural resources and the promotion of renewable energy. The appraisal questions aren't directly applicable and not in conflict with this objective.</p> | |
| Preferred Policy WDM 2: Assessing All Applications for New, Expanded and Residual Waste Management | <p>This is a development control policy which includes the necessary criteria to meet the requirements of national legislation and most SA objectives. The policy will not have any significant negative or significant positive effects. Minor negative impacts are included for biodiversity and landscape. In terms of biodiversity, protection of designated sites is accounted for in the policy but Government guidance (in the form of PPS9) stresses the importance of enhancing biodiversity. The policy would be much stronger if this emphasis was changed. The policy does not address the effects of sites on habitat loss or fragmentation. For landscape the policy is clear that minimising adverse effects on the landscape is required. However, as with biodiversity it is felt that the policy should be focused on enhancement where possible. Minor positive impacts are recorded for climate mitigation, reducing the amount of pollution and nuisance</p> | <p>Mitigation measures</p> <p>The emphasis of the policy should be changed from minimisation of harm to enhancement of biodiversity. It would be useful if the policy addressed the effects of sites on habitat loss or fragmentation.</p> <p>The emphasis of the policy should be changed from minimisation of harm to enhancement of biodiversity (including of a long term nature through restoration) and this should include reference to development helping to meet targets outlined in BAPs.</p> <p>Opportunities for landscape enhancement (including of a long term nature through restoration) should be sought to</p> |

| Policy | Summary of the effects | Mitigation and enhancement measures |
|---|--|--|
| | <p>caused by waste management, and increasing proximity of waste management infrastructure to current and future centres of population. Neutral impacts are identified for objectives related to ensuring adequate waste management capacity, supporting job creation, improving accessibility, minimising the growth in waste and increasing waste treatment in the District.</p> <p>There is uncertainty regarding outcomes for open space and the effects on modal shift.</p> | <p>avoid cumulative negative effects.</p> <p>More emphasis should be given in the policy to supporting sites where non-road transport is a possibility.</p> <p>Make it clearer in the policy that areas of open space / recreation are protected within policy.</p> <p>Enhancement measures</p> <p>Climate change adaptation - The policy requires assessment of the facilities on the environment but not of the environment on the facilities. Future climate proofing could be a requirement to reduce the vulnerability of waste management facilities.</p> |
| Preferred Policy WDM3: Applications Resulting in the Loss of a Proposed or Existing Waste Management Facility | <p>A neutral impact has been identified for the majority of objectives as the policy is considered to have no effect. This is because the policy is very focused and relates only to the proposed loss of waste management sites. It is unlikely to have any direct impacts on environmental designations and sensitivities.</p> <p>Significant positive impacts were identified in relation to minimising the growth in waste and increase the amount of waste which is re-used, recycled and recovered. Whilst minor positive impacts were identified in relation to ensuring local communities take more responsibility for their own waste, supporting employment in the waste industry for local people and ensuring the provision of adequate waste management capacity. These positive scores all relate to the point that the strict criteria should appropriately safeguard sites and help ensure that there is an increase in capacity of waste management facilities in the District where and when needed.</p> | <p>Mitigation measures</p> <p>No mitigation measures.</p> <p>Enhancement measures</p> <p>No enhancement measures.</p> |
| Preferred Policy WDM4: | Significant positive impacts are recorded for ensuring the prudent | Mitigation measures |

| Table 6.1: Summary of the effects identified within the SA (Policies) | | |
|--|---|---|
| Policy | Summary of the effects | Mitigation and enhancement measures |
| Waste Management within Development | <p>and efficient use of energy and natural resources and the promotion of renewable energy as the policy requires re-use and recycling of construction materials for new development, and will lead to a reduction in total amount of waste that will require treatment from construction and demolition and promotes water efficient design. Significant positive effects are also recorded for minimising the growth in waste and increasing the amount of waste which is re-used, recycled and recovered as the policy should help to achieve target recovery and recycling rates for CDEW and as a result contribute to a reduction in total amounts going to landfill.</p> <p>Minor positive effects are identified for climate mitigation, allowing residents in new developments to segregate their waste, supporting employment in the waste industry for local people, and ensuring the provision of adequate waste management capacity.</p> <p>There is uncertainty regarding the assessment against the objective to safeguard and improve air, water and soil resources and reduce the number of people affected by noise and dust from waste management sites as it is uncertain whether the on-site use and recovery of CDEW will reduce nuisance especially for local people close to the development. Minimisation of transport of the waste would reduce nuisance and pollution but the implementation of specific on-site waste arrangements is needed to ensure no adverse effects.</p> <p>The remainder of the objectives have been scored as neutral as it is considered that this policy will have no effect on these objectives. This is because the policy is a very focused policy relating to the provision of waste management facilities within development. It is unlikely to have any direct impacts on environmental designations and sensitivities.</p> | <p>It will be important that measures are put in place (as part of planning application procedures) to ensure that the on-site use and recovery of CDEW does not cause undue nuisance.</p> <p>Enhancement measures</p> <p>No enhancement measures.</p> |
| Preferred Policy WDM5: Landfill | The criteria included within the policy have resulted in a positive minor impact for the assessment on the majority of objectives | Mitigation measures |

| Table 6.1: Summary of the effects identified within the SA (Policies) | | |
|--|---|--|
| Policy | Summary of the effects | Mitigation and enhancement measures |
| Development for Residual Waste | <p>including the prudent and efficient use of energy and natural resources and the promotion of renewable energy, climate change mitigation, effects on soil, water, air, landscape, use of PDL, historic assets, open space, quality of life and support of local employment. There are also significant positive impacts in relation to provision of adequate facilities into the future.</p> <p>Uncertainties remain for the achievement of modal shift from road to rail. It is not possible to assess whether the policy will lead to the achievement of the SA objective. This is difficult to achieve as transport by road is the principal means currently and sites with easy and cheap access to the rail and waterways network will be relatively rare. Therefore it needs to be strongly promoted.</p> <p>A negative impact has been identified with regard to biodiversity as the policy does not address habitat loss or fragmentation.</p> | <p>The policy needs to address the effects of sites on habitat loss or fragmentation.</p> <p>The emphasis of WDM2 should be changed from minimisation of harm to enhancement of biodiversity (including of a long term nature through restoration) and this should include reference to development helping to meet targets outlined in BAPs.</p> <p>More emphasis should be given in Policy WMD4 to supporting sites where non-road transport is a possibility.</p> <p>Enhancement measures</p> <p>The policy could go further in encouraging climate adaptation. Vulnerability to climate change, risks from extreme weather events, flooding hotter summers, etc. should be taken into account in the design and siting of these facilities.</p> |
| Table 6.2: Summary of the effects identified within the SA (sites) | | |
| Site | Summary of the effects | Mitigation measures |
| Site 1 | <p>Will have a significant negative effect on climate change vulnerability. The Environment Agency flood mapping shows the site to be located in an area of flood risk equivalent to Flood Zone 3. The site will have significant positive effects on landscape (due to its low visibility) and efficient use of land (the site is previously developed land). The effect on the rest of the SA objectives will be minor negative, minor positive or uncertain. The site is close to some sensitive receptors (a stream, and a cycle path) and there is no railway nearby. The site will therefore not encourage a shift from road freight. The site overall is scored as medium risk (amber).</p> | <p>All sites: Ensure appropriate ecological surveys are undertaken at planning application stage.</p> <p>Before site development takes place the following effects will need to be investigated and mitigated: flooding issues (as the site is located in Flood Zone 3), the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets), traffic effects (as there is no rail access to the site), effects on the local cycle route and protected recreation area that are near to the site.</p> |

| Policy | Summary of the effects | Mitigation and enhancement measures |
|---------------|--|---|
| Site 11 | Will have no significant negative effects. The site will have significant positive effects on efficient use of land (the site is previously developed land, modal shift (as the site can be accessible by rail). The effect on the rest of the SA objectives will be minor positive, uncertain or neutral. There is a railway and rail freight facility within 200m and no nature conservation or heritage designations in the site surrounds. However, there is residential land uses in the vicinity of the site. The site overall is scored as medium risk (amber). | <p>All sites: Ensure appropriate ecological surveys are undertaken at planning application stage.</p> <p>Before site development takes place the following effects will need to be investigated and mitigated: the potential on the site for habitat fragmentation and habitat enhancement (including helping to achieve BAP targets).</p> |
| Site 29 | Will have a significant negative effect on climate change vulnerability as the site is in Flood Zone 3. The site will have significant positive effects on landscape (due to its low visibility). The effect on the rest of the SA objectives will be minor negative, minor positive, neutral or uncertain. This site is close to some sensitive receptors (a stream, and a cycle path) and there is no railway nearby. The site will therefore not encourage a shift from road freight. The site overall is scored as medium risk (amber). | <p>All sites: Ensure appropriate ecological surveys are undertaken at planning application stage.</p> <p>Before site development takes place the following effects will need to be investigated and mitigated: flooding issues (as the site is located in Flood Zone 3), the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets), traffic effects (as there is no rail access to the site), effects on the local cycle route and protected playing fields that are near to the site.</p> |
| Site 56 | Will have no significant negative or significant positive effects. However, the site does have a large number of minor negative effects. This site is suburban and Greenfield, therefore development of the site will result in the loss of soil resources. It is located in a mixed residential and industrial suburban area and there is no railway in the site surrounds. The site will therefore not encourage a shift from road freight. The site overall is scored as medium risk (amber). | <p>All sites: Ensure appropriate ecological surveys are undertaken at planning application stage.</p> <p>Before site development takes place the following effects will need to be investigated and mitigated: effects on air quality that may affect the Wildlife Area located c.500m to the south, effects on the residential area near to the site, visual effects of the chimney, traffic effects (as there is no rail access to the site), effects on the cultural heritage (including the listed building north of the site) and North Bierley Cemetery, effects on the local cycle route and protected green space and protected playing field that are near to the site and the</p> |

| Table 6.1: Summary of the effects identified within the SA (Policies) | | |
|--|--|--|
| Policy | Summary of the effects | Mitigation and enhancement measures |
| | | potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets). |
| Site 57 | The site has no significant negative or significant positive effects. There are no nature conservation designations on the site. The effect on the rest of the SA objectives will be minor negative, minor positive, neutral or uncertain. This site is brownfield and is close to some sensitive receptors - a Bradford Wildlife Area lies immediately north-east and, depending on the type of waste management technology selected, development of the site could have adverse air quality impacts on this wildlife site. The site overall is scored as medium risk (amber). | <p>All sites: Ensure appropriate ecological surveys are undertaken at planning application stage.</p> <p>Before site development takes place the following effects in particular will need to be investigated and mitigated: effects on air quality that may affect the Wildlife Area located immediately south of the site, traffic effects (as the site does not have rail access), effects on the two listed buildings south-west and north-west of the site. The effect on the surrounding built environment, the effect on the area designated for new open space provision which is situated directly south of the site and the protected playing fields located beyond it, and the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets).</p> |
| Site 71-74 | These sites have been grouped together in the site assessment. The site will have a significant negative effect on climate change vulnerability. The sites are located predominantly in Environment Agency Flood Zone 3. Site 71 is outside of a flood zone but is approximately 20m from flood zone 2 and flood risk could potentially be an issue in the future with climate change. The site will have no significant positive effects. The rest of the effects are neutral, uncertain, minor positive or minor negative. The size of the site and, therefore, the likely scale of development would be likely to have a significant adverse effect on residential uses to the north, in Silsden. Also, a Conservation Area lies directly north of the site and development of the site would be likely to affect its setting. The site overall is scored as medium risk (amber). | <p>All sites: Ensure appropriate ecological surveys are undertaken at planning application stage.</p> <p>Before site development takes place the following effects in particular will need to be investigated and mitigated: flooding issues (as the site is located in Flood Zone 3), effects on air quality that may affect the Wildlife Area located directly north-east of the site, which follows the line of the Leeds and Liverpool Canal, effects on nearby residential areas (including adverse visual impacts), the effects on the many Listed Buildings in central Silsden, the effects on the quality of the surrounding built environment (including the effect of the chimney on the Conservation Area located directly to the north of the site, and the potential on the site for habitat</p> |

| Policy | Summary of the effects | Mitigation and enhancement measures |
|---------------|--|---|
| | | fragmentation, habitat enhancement (including helping to achieve BAP targets). |
| Site 92 | The site has no significant negative or significant positive effect. The rest of the effects are neutral, uncertain, minor negative or minor positive. The only negative effect identified is due to two listed buildings that are c.500m west of the site. The site overall is scored as low risk (green). | All sites: Ensure appropriate ecological surveys are undertaken at planning application stage. Before site development takes place the following effects in particular will need to be investigated and mitigated: effects on the two Listed Buildings west of the site, the effect on the quality of the surrounding built environment and the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets). |
| Site 102 | The site has two significant negative effects and no significant positive effects. The significant negative effects are related to location near to a residential area and the River Aire; and the lack of rail access. Runoff with need to be controlled on this site as it is next to a washlands area and the River Aire and the site should not increase flood risk elsewhere in the catchment. The site is within an area at risk from flooding but benefits from flood defences. Run-off will also need to be controlled to avoid water pollution in the river. The other effects are minor negative, uncertain or minor positive. There is a Bradford Wildlife Area across the river from this site, approximately 100m away on the other side of the River Aire. Whether the redevelopment of this site could affect the wildlife site may need to be assessed and mitigation put in place, particularly during construction. The site is not near to a railway line and therefore will not help to shift any freight from roads. The site overall is scored as medium risk (amber). | All sites: Ensure appropriate ecological surveys are undertaken at planning application stage. Before site development takes place the following effects in particular will need to be investigated and mitigated: The effect on the River Aire, the effects on the residential area to the south east of the site, the effect on the Wildlife Area across the river from this site, traffic effects (as the site is not near to a railway line), effects on the Listed Building which is to the south of the site and effects on the nearby Conservation Area, and the potential on the site for habitat fragmentation, habitat enhancement (including helping to achieve BAP targets). |

6.3 Cumulative assessment

The SEA Regulations require an assessment of cumulative effects. Cumulative effects arise, for instance, where several developments each have insignificant effects but together have a significant effect; or where several individual effects of the plan (e.g. noise, dust and visual) have a combined effect. The term can also be used to describe synergistic effects, which interact to produce a total effect greater than the sum of the individual effects.

A separate cumulative effects assessment has been undertaken following the assessment of the individual policies and sites. The cumulative effects assessment has considered potential cumulative effects of other programmes, plans, policies and projects with the effects of the Waste Management DPD.

Cumulative effects have been identified following the appraisal of individual policies and once the whole Waste Management DPD could be reviewed as one document. A number of programmes, plans, policies and projects have been identified as potentially having effects on receptors within the Bradford area. The programmes, plans, policies and projects have been identified on the basis of forthcoming activities / development which would occur within the plan period and relate only to published plans or related documents (such as options consultation documents).

The cumulative assessment is presented in Tables 6.3 (potential cumulative effects with other plans) and 6.4 (potential cumulative effects within the Bradford Waste DPD).

| Table 6.3: Potential cumulative effects (other plans and programmes) | | |
|---|--|---|
| Plan or programme | Potential cumulative effect | Mitigation / enhancement measures needed |
| Bradford Local Development Framework Core Strategy <i>Bradford Core Strategy Further Issues and Options</i> (January 2008) | <p>The spatial strategy outlined in the issues and options paper is to focus development within Bradford City but to continue to support larger settlements in Airedale, Wharfedale and on the urban fringe. It is important that waste management capacity is planned which supports planned growth by bringing waste management sites as near to centres of population as possible. The Waste DPD does this by allocating sites mainly in Bradford. However, the DPD does allocate some sites in other areas, for example site 102 in Airedale and sites 71-74 in Silsden. Therefore, the Core Strategy Issues and Options Report and the Waste DPD will have a positive cumulative effect through helping to reduce the transport of waste and re-enforce the proximity principle.</p> <p>No development sites have yet been allocated as part of the Core Strategy process so it has not been possible to analyse the cumulative effects of sites in the Core Strategy with sites in the Waste DPD.</p> | None. |
| West Yorkshire Local Transport Plan 2. 2006 - 2011 | There are no schemes included in the LTP that could have cumulative impacts with the Bradford Waste DPD. | None. |
| Leeds Natural Resources and Waste DPD - policy position (Leeds City Council, 2010) ¹ | <p>Within Leeds, a proposed municipal waste incinerator is planned at Cross Green. This will take up to 220K tonnes pa from within Leeds. There is also a proposed Commercial and Industrial Waste Incinerator at Cross Green taking 300K tonnes pa.</p> <p>There is also a large MRF for 200K tpa capacity approved at Gelderd Rd (Biffa) but this is not built yet. As none of the facilities</p> | None. |

¹ Please note that the information regarding sites being considered by other Waste Planning Authorities has been gained by reviewing the relevant documents and also from consultation responses sent by the authorities to BMDC.

| | | |
|---|--|-------|
| | are expected to take waste from outside of Leeds there is likely to be no cumulative effect in association with the Bradford Waste DPD. | |
| Kirklees Local Development Framework Core Strategy Options Consultation (Kirklees Council, 2009) | A strategic waste management site is planned at Bromley Farm Quarries, Huddersfield. This has a potential capacity of approximately 1,000,000 tonnes. As the facility is not expected to take waste from outside of Kirklees there is likely to be no cumulative effect in association with the Bradford Waste DPD. | None. |
| Calderdale Local Development Framework Issues and Options Report (Calderdale Council, 2008). | There are at present no proposed strategic waste facilities within Calderdale. There will be no cumulative effect of the Calderdale Waste DPD combined with the Bradford Waste DPD. | None. |
| Airedale Corridors: A Masterplan and Strategy for Airedale (Airedale Partnership) | <p>The Royd Ings is set out as an area which could contribute more to the economy of Airedale. It has been defined as a Business Improvement Area, with road access improvements connected to the dualling of this section of the A650.</p> <p>Site 102 (Stockbridge Depot) is within this area and will benefit from any road improvements that are included as part of the Business Improvement Area designation. This will be a positive cumulative impact.</p> | None |
| Big Plan 2008 – 2011 (Sustainable Community Strategy) (Bradford Metropolitan District Council, 2008). | The Big Plan is Bradford's Sustainable Community Strategy. The plan has as one of its priorities "reducing and managing waste sustainably". The plan has outlined actions that the council and its partners will take on the environment including taking action to reduce flytipping and littering, implement the council's waste strategy including a waste treatment contract. These positive actions in association with the Waste DPD will have a positive cumulative impact . | None. |

| Policies and Sites | Potential cumulative effect | Mitigation / enhancement measures needed |
|--|--|---|
| Effects of Sites 1, 29 and 71-74 in relation to vulnerability to flooding and water pollution. | <p>Sites 1 and 29 could particularly cause a negative cumulative effect on flooding and pollution as they are located in close proximity, are located close to a stream and are both located in Flood Zone 3.</p> <p>Sites 71-74 are also located close together as part of a large site complex and are all located in Flood Zone 3.</p> <p>Without mitigation, these sites could cause a significant cumulative negative effect on flooding</p> | If these sites go forward together a strategic flood management solution may be needed and should be considered before planning permission for any of the sites is granted. This drainage solution should also ensure that cumulative effects on water pollution are minimised. |
| Effects on environmental receptors of the various sites put forward in the plan. | <p>Where a number of sites are put forward there is the potential for a cumulative effect on certain types of habitats, species and other environmental receptors such as heritage assets and landscape.</p> <p>However, the cumulative effect of the sites on environmental receptors is likely to be neutral. All of the sites are in built up areas and this will minimise the risk of cumulative effects.</p> | None |
| Effects of Sites 1, 29 and 71-74 in relation to effects on communities. | Some of the sites have the potential to cause a cumulative impact on certain communities due to their proximity. For example, sites 71-74 and site 1 and site 29. However, all of these sites are in largely industrial areas and on land that has been of an industrial nature. Therefore, the effect is neutral as the sites will not cause an increase in the number of people affected by waste management or cause a cumulative impact on certain communities. | None |
| Effects of all of the sites in relation to effects on transport. | All of the sites, if implemented are likely to be taking waste from a large area within Bradford and this could cause negative cumulative effects on road transport. | Before sites go ahead the effects on road transport should be assessed as part of the planning application. This should assess the impacts in relation to other developments |

Table 6.4: Potential cumulative effects (Bradford Waste Management DPD)

| | | |
|--|---|---|
| | <p>Because the exact mix of sites that will come forward is uncertain (and whether sites will utilise alternative modes – even if they are available), the effect on transport is difficult to judge. To reduce the risk of cumulative negative effects on transport, mitigation has been suggested (see opposite).</p> | <p>(including waste development) that are reasonably foreseeable and that might cause cumulative impacts in association with the development.</p> |
|--|---|---|

7 Monitoring

The SEA Regulations (Regulation 17) require the significant environmental effects of plans and programmes to be monitored, in order to identify at an early stage unforeseen adverse effects, and to be able to take appropriate remedial action.

The monitoring undertaken on the Waste Management DPD will help to:

- Monitor the significant effects of the plan;
- Track whether the plan has had any unforeseen effects; and
- Ensure that action can be taken to reduce / offset the significant effects of the plan.

The requirements of the SEA Regulations focus on monitoring the effects of the plan. This equates to both the plan's significant effects and also unforeseen effects.

Monitoring will allow the Council to identify whether the recommended mitigation measures from the SA have been effective and develop further mitigation proposals that may be required where unforeseen adverse effects are identified. In some cases monitoring may identify the need for a policy to be amended or deleted, which could trigger a review of the Waste Management DPD, or for further policy guidance to be developed (for example an SPD).

The final monitoring programme will be included in the Updated Final SA Report (that will be published with the Submission Draft DPD) as at this stage the significant effects of the final adopted plan will have been identified. However, at this stage it is possible to outline a draft monitoring programme. Table 7.1 set outs this draft monitoring programme.

| Table 7.1: SA monitoring programme | |
|--|--|
| Significant / uncertain effect identified | Monitoring required |
| Significant effect: Sites 1, 29 and 71-74 in relation to vulnerability to flooding. | It will be important as part of the development of these sites to monitor their effect on flooding. This will be a requirement on the developer as part of the planning application process. |
| Significant effect: Site 102 in relation to potential for nuisance to neighbours and lack of access to sustainable modes of transport. | It will be important as part of the development of these sites to monitor their effect on traffic and complaints from neighbours. This will be a requirement on the developer as part of the planning application process. |
| Significant effect: Site 102 in relation to potential for water pollution. | It will be important as part of the development of these sites to monitor their effect on water pollution. This will be a requirement on the developer as part of the planning application process. |
| Uncertain effect: Preferred policy W1, W3, W4, W5, W6, W7, WMD2, W10 (sites for residual waste) will have an uncertain effect on Natura 2000 sites. The HRA screening assessment needs to conclude whether there are likely significant effects on the European Designated Sites and this needs to be agreed with Natural England. | Once the HRA screening report has been completed and agreed with Natural England the uncertainty with regard to this objective within the SA should have been addressed and no monitoring will be required. |
| Uncertain effect: Preferred Policy W2 will have an uncertain effect on modal shift. Cross boundary working provides a good opportunity to deliver on modal shift. However, this is not stated so the policy has been scored as uncertain. | If an amended policy includes consideration of modal shift then the uncertainty with regard to this objective within the SA should have been addressed and no monitoring will be required. |
| <p>Uncertain effect: Preferred Policy W2 will have an uncertain effect on reducing the impact of the waste industry on people's safety and security, health and quality of life. One potential outcome could be the focusing of waste management facilities in one location providing efficiencies but this could also have a potentially larger effect on certain communities. However, this is an uncertain effect.</p> <p>Uncertain effect: Preferred Policy W9 (on hazardous waste) will have an uncertain impact on climate emissions. This is because if</p> | As part of the DPD monitoring process the effects of sub regional waste facilities (including on employment and on the distance that waste in general and hazardous waste is travelling) should be monitored and an assessment made (at the next round of the Waste DPD) as to whether this is the most sustainable management of waste. |

| Table 7.1: SA monitoring programme | |
|---|---|
| Significant / uncertain effect identified | Monitoring required |
| <p>a sub regional facility is developed relatively far away from Bradford, transport (thus climate emissions) could rise.</p> <p>Uncertain effect: Preferred Policy W9 (on hazardous waste) will have an uncertain impact on supporting employment in Bradford.</p> | |
| <p>Uncertain effect: Preferred Policy WMD2 will have an uncertain effect on promoting modal shift. More emphasis should be given in the policy to supporting sites where non-road transport is a possibility.</p> | <p>If an amended policy includes consideration of modal shift then the uncertainty with regard to this objective within the SA should have been addressed and no monitoring will be required.</p> |
| <p>Uncertain effect: Preferred Policy WMD2 will have an uncertain effect on protecting open space. The policy should be clearer that areas of open space / recreation are protected within policy.</p> | <p>If an amended policy includes consideration of open space then the uncertainty with regard to this objective within the SA should have been addressed and no monitoring will be required.</p> |
| <p>Uncertain effect: Preferred Policy WDM4 will have an uncertain effect on minimising nuisance to communities. It will be important that measures are put in place (as part of planning application procedures) to ensure that the on-site use and recovery of CDEW does not cause undue nuisance.</p> | <p>Measures put in place to reduce nuisance to communities from CDEW sites needs to be monitored to ensure they are effective.</p> |
| <p>Uncertain effect: Preferred Policy WMD5 will have an uncertain effect on promoting modal shift. More emphasis should be given in the policy to supporting sites where non-road transport is a possibility.</p> | <p>If an amended policy includes consideration of modal shift then the uncertainty with regard to this objective within the SA should have been addressed and no monitoring will be required.</p> |

8 Next steps

Following consultation on the SA Report and the Preferred Approach Waste Management DPD, changes may be made to the Waste Management DPD and the SA in response to the consultation comments received. Changes may also be made in response to this SA. Following this, the Submission Waste Management DPD will be prepared which will be accompanied by an Updated Final SA Report. Significant changes to the Waste Management DPD will need to be reappraised as part of the SA and reflected in the Updated Final SA Report. In addition, the SA Report will include a final monitoring programme which will be used to monitor the significant effects of the Waste Management DPD.

A Sustainability Appraisal (SA) adoption statement will need to be published in accordance with the SEA Regulations (Statutory Instrument 2004 No. 1633 on The Environmental Assessment of Plans and Programmes). These regulations state that as soon as reasonably practicable after the adoption of the plan a statement should be produced and published setting out how environmental considerations and opinions expressed through consultation have been taken into account in the planning process.

The SEA Regulations set out the particulars that should be covered by the statement as follows:

- How environmental (sustainability) considerations have been integrated into the Waste Management DPD;
- How the Environmental (SA) Report has been taken into account;
- How opinions expressed in response to consultation have been taken into account;
- The reasons for choosing the Waste Management DPD as adopted, in the light of the other reasonable alternatives dealt with; and
- The measures that are to be taken to monitor the significant environmental (sustainability) effects of the implementation of the Waste Management DPD.

For further information on the timetable with regard to the next steps in the production of Waste Management DPD please contact the Planning Policy team on ldf.consultation@bradford.gov.uk or consult the following web site. http://www.bradford.gov.uk/bmdc/the_environment/planning_service/local_development_framework/bradford_waste_development_plan.htm.

