Gloucestershire
COUNTY COUNCIL

Waste Core Strategy

Issues & Options

Sustainability Appraisal Report

July 2006

Contents:

Appendices:

NOTE ON THE USE OF ACRONYMS:

The only acronyms used within this report are the following:

- **SA** – Sustainability Appraisal.
- **SEA** – Strategic Environmental Assessment.
- **WCS –** Waste Core Strategy.

All other terms are written out in full.

Environmental Report requirements[1]	Section of this or other report
a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes.	Context Report / Scoping Report (For original reports and all updates see): http://www.gloucestershire.gov.uk/index.cfm?articleid=11577
b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.	Context Report / Scoping Report
c) the environmental characteristics of areas likely to be significantly affected.	Context Report / Scoping Report.
d) 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.	Context Report / Scoping Report.
e) the environmental protection objectives, established at international, Community or Member State 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.	Context Report / Scoping Report.
f) the likely significant effects[2] on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	Context Report / Scoping Report, Appendices 1 – 5 of this Report and Section 5 of this Report.
g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.	Section 5 of this Report.
h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Section 2, 4 & 5 of this Report.
i) a description of the measures envisaged concerning monitoring in accordance with Article 10.	Not required at this stage, to be included in subsequent SA Reports.
j) a non-technical summary of the information provided under the above headings.	Section 1 of this Report.

1 As listed in Annex I of the SEA Directive (Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment).

2 These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Section1. Summary and outcomes

1.1 Non - technical summary: background

New Planning Laws – The Planning & Compulsory Purchase Act 2004
The planning system has changed. Under new planning laws, Gloucestershire's Waste Local Plan and Minerals Local Plan are being replaced by the Gloucestershire Minerals and Waste Development Framework. This Framework will contain a suite of documents containing policies relating to minerals and waste development in the County. Work on these documents will continue over a 10 year period. The South West Regional Spatial Strategy is due to be adopted in 2007and the Minerals & Waste Development Framework is required to be in general conformity with it.

Sustainable Development
The United Kingdom Government is committed to Sustainable Development. Its aim is to "enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations." (Securing the Future – delivering UK sustainable development strategy – 2005).

More Sustainable Plans
It is a statutory requirement for the Minerals & Waste Development Framework to undergo a Sustainability Appraisal (SA) whereby potential social, economic and environmental impacts of plans are identified and carefully considered. The SA should inform and influence the development of plans early in the process with the aim of making them more sustainable. SA as a process incorporates the rigorous requirements of European law, (the Strategic Environmental Assessment (SEA) Directive), which ensures that certain plans and programmes are assessed for their potential environmental impact.

The Initial stages of the SA
The initial stages of SA involve gathering evidence and building a framework against which relevant plans, within the suite of the Minerals & Waste Development Framework, can be tested. Gloucestershire County Council has completed these initial stages with the publication of a Context Report and a Scoping Report which should be read in conjunction with this SA Report.

1.2 Non – technical summary: Waste Core Strategy Issues & Options Paper

◘ The content and objectives of the Waste Core Strategy Issues & Options Document and how it links to other plans.

This report is the Sustainability Appraisal Report for Gloucestershire County Council's Waste Core Strategy Issues & Options Paper. It is issued along with the issues and options for pre-submission public participation and it presents information on the likely effects of the plan. The process of appraisal has been carried out in accordance with Office of the Deputy Prime Minister Guidance, namely – *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents – November 2005.*

The aim of the Waste Core Strategy Issues & Options Paper is to set out issues and options for managing waste in Gloucestershire and to generate discussion about what sustainable waste management means for the County. The Waste Core Strategy (WCS) will provide the framework for sustainable waste management over the next ten years, and will contain a spatial vision for managing waste in Gloucestershire over the next

ten to twenty years. It will contain objectives which will form the basis for preparing policies and a framework for identifying sites for waste management facilities.

The WCS covers different types of controlled waste: Municipal Solid Waste (collected by the Local Authority and includes waste produced by households); Commercial & Industrial waste; and Construction & Demolition waste. In addition, there are hazardous wastes, which are likely to come from the three main waste 'streams', and agricultural wastes, which are in the process of coming under planning control but will ultimately comprise part of the commercial waste stream.

The key issues as set out in the Waste Core Strategy Issues & Options Paper are as follows:

◆ **W1.** Setting an appropriate spatial vision and objectives for the WCS;

◆ **W2.** Determining the time period over which the WCS operates;

◆ **W3.** Implementing the waste hierarchy – reducing the amount of all types of waste we produce, but where waste does arise to increase recycling and divert it from landfill;

◆ **W4.** Adopting a strategy for making appropriate provision for waste management facilities;

◆ **W5.** Setting out a spatial strategy – selecting criteria to use for identifying suitable sites for waste management operations;

◆ **W6.** Implementing the Joint Municipal Waste Management Strategy for Gloucestershire's household waste;

◆ **W7.** Determining what factors should be used in assessing the cumulative impact on local communities;

◆ **W8.** Making an appropriate contribution to local, regional and national hazardous waste management requirements;

◆ **W9.** The appropriateness of proposals for new waste management facilities in the Green Belt;

◆ **W10.** Policies for dealing with proposals for new waste management facilities in other nationally designated areas;

◆ **W11.** The SA Report;

◆ **W12.** Any other key issues that need to be included?

The current Waste Local Plan and the developing Waste Core Strategy have connections and links with numerous other plans and programmes. In order to examine these in more detail, and to see an extensive list of these related plans, (with a commentary) please refer to the SA Context and Scoping Reports.

◘ Gloucestershire's state of the environment and the potential impact of the Waste Core Strategy.

Gloucestershire is an attractive rural county, with the Royal Forest of Dean and Wye Valley Area of Outstanding Natural Beauty to the west, the Cotswold Area of Outstanding Natural Beauty and Cotswold Water Park to the east, and the Stroud valley to the south of the County. Running down the middle is the Severn Vale, containing Gloucester and Cheltenham, which are divided by Green Belt land as well as the M5 motorway. The County has a rich natural and historic heritage, which needs to be protected, but which is increasingly under pressure from various forms of development. Every year in Gloucestershire around 1.37 million tonnes of controlled waste is managed and levels of waste produced and managed in the County have been increasing in recent years with the majority of it still going to landfill. Without a robust strategy for the future management of waste, this situation is unlikely to improve with resulting negative social, economic and environmental repercussions.

◘ What areas of Gloucestershire are likely to be affected?

Everyone in the County produces waste and it is to everyone's benefit that issues surrounding waste are properly planned and managed. The issues which are raised in the issues and options paper will potentially affect the whole of Gloucestershire and possibly surrounding counties.

◘ Environmental problems in Gloucestershire.

There are a number of existing environmental problems in Gloucestershire including:

- increasing levels of traffic congestion;
- the increased potential for flooding;
- rising levels of waste being produced;
- the decline in certain bird species; and
- some incidents of serious pollution.

The detail on these issues, including their relationship to areas of particular environmental importance and sensitivity, is available in the SA Context and Scoping Reports.

◘ Ways in which the environment is already protected.

Gloucestershire contains a wide range of natural and man-made environmental assets, which are considered to be of international, national or local importance, and protected accordingly. For example:

▪ Nature Conservation Assets: The County has 6 Special Areas of Conservation covering 2,739 ha and 2 Ramsar* sites covering 8,450 ha. (*Wetlands of International Importance under the 1971 Ramsar Agreement);

▪ Landscape Assets: Gloucestershire has 3 Areas of Outstanding Natural Beauty covering 51% of the County;

▪ The Historic Environment: There are over 400 Scheduled Ancient Monuments in the County.

The environmental protection measures (at all levels) which are relevant to the WCS are included in detail in the SA Context and Scoping Reports.

◘ The likely significant effects on the environment and reducing harmful effects.

The purpose of the WCS is to provide a framework for sustainable waste management over the next ten years. It will contain objectives based on government guidance and principles of sustainability which will form the basis for preparing policies and a framework for identifying sites for waste management facilities. Ideally waste should be prevented and minimised, but the waste that is produced by society needs to be effectively managed. There is no doubt that waste management facilities can and do have significant effects on the environment; landfill sites produce leachates and methane gas, energy from waste facilities produce emissions and toxic ash residues. Many other waste management facilities such as waste transfer stations, scrap yards, recycling centres and composting facilities have associated heavy lorry traffic which is detrimental to the environment and to local communities. Through a policy framework, the WCS will aim to mitigate against and reduce harmful effects and, if favoured as an option, identify sites that are most appropriate for the effective and sustainable management of waste.

◘ Choosing and testing alternative options.

The SA process requires a consideration of alternative options. Out of the 12 key issues presented in the document, a number of options, contained within these issues, were tested. Essentially these issues and options are an early attempt to stimulate involvement and to promote public discussion about the way in which waste is managed in Gloucestershire. Some of the options presented, (within each issue) are there to be compared, in terms of their favourability in sustainability terms. Other options are not comparable, in the sense that they may *all* be used as an important part of a particular strategy. To give an example, for the options for Issue W3, a focus on recycling would not necessarily exclude the waste minimisation option or recovering value from waste – they may all contribute. For each issue there is a 'business as usual' option as, in line with Office of the Deputy Prime Minister Guidance on SA, the plan or Development Plan Document should aim to improve on the existing situation.

Through consultation and public involvement (e.g. through forum events) alternative options may come forward and these may be tested at a later stage. Government guidance suggests that "broad strategic options are considered as opposed to detailed policy wording variants." Bearing this in mind, the following is the list of the strategic options tested and a non- technical summary of the broad sustainability of each option when tested against the SA Objectives. See Section 5 and Appendix 1- 5 of this report for more detailed comparisons and tests of these options and their potential effects.

Issue W1: The Spatial vision.

■ **Option 1:** (Business as usual) Current vision in the adopted Waste Local Plan.

■ **Option 2:** "A sustainable and educational waste management system for Gloucestershire that reduces waste produced from businesses and households as a priority and diverts waste from landfill."

Sustainability summary:
The two visions, the current one, and the proposed vision are broadly sustainable when tested against the SA Objectives. However Option 2 is favoured as the current vision is based on Best Practical Environmental Option criteria – an approach which does not reflect current government guidance contained in Planning Policy Statement 10 – *Planning for Sustainable Waste Management.*

Issue W2: Determining the time period over which the WCS operates.

■ **Option 1:** (Business as usual) Gloucestershire Waste Local Plan to 2012.

■ **Option 2:** Up to the year 2018.

■ **Option 3:** Up to the year 2020.

■ **Option 4:** Up to the year 2026.

Sustainability summary:
In general there are uncertainties over the options with longer timescales, given that waste is a rapidly changing field in terms of technological advancement. Options 2 and 3 are broadly similar and are clearly favoured over Option 4.

Issue W3: Implementing the waste hierarchy.

■ **Option 1:** (Business as usual) Proactively minimising waste generation.

■ **Option 2:** Focus on recycling.

■ **Option 3:** Recovering value (energy) from waste.

Sustainability summary:
These options are not mutually exclusive. Both Options 1 and 2 score highly against the SA Objectives whilst there are some uncertainties over Option 3.

Issue W4: Making appropriate provision.

- **Option 1:** (Business as usual)
- **Option 2:** Identifying sites in a DPD.
- **Option 3:** Not identifying sites – having a criteria based policy.
- **Option 4:** A mix of identifying some sites and also using criteria based policies.

Sustainability summary:
The option over which there is considerable uncertainty is Option 3. Options 1 & 2 are identically scored as identifying sites in the plan is the current practice. Option 4 is the most positive option in terms of the tests against the SA Objectives.

Issue W5: Setting out a spatial strategy.

- **Option 1:** Town locations.
- **Option 2:** Edge of town locations.
- **Option 3:** Rural locations.
- **Option 4:** Centralised facilities.
- **Option 5:** Dispersed facilities.
- **Option 6:** A combination of facilities. (Business as usual).

Sustainability summary:
The test of the options against the SA Objectives highlights some sustainability concerns over Option 3, primarily related to the proximity of potential sites to the places where the majority of waste is produced. There are related uncertainties over the dispersed option (Option 5). Option 6 is the most positive.

Issue W6: Implementing the Joint Municipal Waste Management Strategy.

- **Option 1:** (Business as usual)
- **Option 2:** A flexible criteria based approach.
- **Option 3:** A prescriptive approach with particular facility types at particular locations.
- **Option 4:** A combination approach.

Sustainability summary:
In the test of options against the SA Objectives there are some uncertainties over Option 2. Option 4, a combination approach, comes out as the most positive option.

Issue W7a: Cumulative impact.

■ **Option 1:** Having a policy framework against which cumulative impact can be assessed.

■ **Option 2:** Having a policy framework where cumulative impacts are not a specific consideration.

Issue W7b: Safeguarding sites.

■ **Option 3:** (Business as usual) Safeguarding sites.

■ **Option 4:** Not safeguarding sites.

Sustainability summary:
In the test of options against the SA Objectives Options 1 and 3 are the most positive in sustainability terms and are clearly favoured.

Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements.

■ **Option 1:** (Business as usual).

■ **Option 2:** Safeguarding current hazardous waste management capacity if deemed to be environmentally acceptable.

■ **Option 3:** Minimising hazardous waste at source.

Sustainability summary:
These options are not mutually exclusive. Minimising hazardous waste at source scores very highly against the SA Objectives as would be expected. The cumulative impact (when looking at the scores against all the SA Objectives) is positive for Options 1 & 2.

Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt.

■ **Option 1**: (Business as usual)

■ **Option 2:** New waste management facilities in the Green Belt.

■ **Option 3:** No new waste management facilities in the Green Belt.

■ **Option 4:** Redefining the Green Belt.

Sustainability summary:
Apart from Options 2 & 3, which clearly cannot be pursued together, these options are not necessarily mutually exclusive. Option 4 is the most positive in terms of test against the SA Objectives.

Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas.

■ **Option 1:** (Business as usual) Rolling forward current policies.

■ **Option 2:** Amending and adding to currently saved policies.

Sustainability summary:
In the test of the options against the SA Objectives Option 2 is the most positive and is favoured.

Issue W11: SA Report.

Not applicable.

Issue W12: Other issues.

Not applicable at this stage.

◘ Proposal for monitoring.

At the Issues & Options stage detailed monitoring proposal are not necessary. These issues will be fully considered at the Preferred Option and Submission stages. Any specific monitoring proposals will be linked to the general and waste specific monitoring objectives in Gloucestershire County Council's Minerals & Waste Annual Monitoring Report. The waste specific objectives are currently:

- To ensure all new waste management facilities make a positive contribution towards developing an integrated and sustainable waste management system;
- To facilitate the development of a strategic and local network of waste management facilities in line with the provision identified in the Waste Local Plan;
- To facilitate the development of a range of waste management facilities that will contribute towards an integrated waste management system.

Full details are contained in the current Annual Monitoring Report 2004 –2005 which is available to be viewed on the County Council's website at the following address:
http://www.gloucestershire.gov.uk/index.cfm?articleid=10582

1.3 Statement of the likely significant effects of the plan

The purpose of the WCS is to provide a framework for sustainable waste management in Gloucestershire over the next ten (or more) years. It will contain objectives based on government guidance and principles of sustainability which will form the basis for preparing policies and a framework for identifying sites for waste management facilities. Ideally waste generation should be prevented and minimised, but the waste that is produced by society needs to be managed effectively. There is no doubt that waste management facilities can, and do have significant effects on the environment. However, not having facilities in place to manage the waste that arises will have an even greater environmental impact. The predicted likely significant effects of the options presented are detailed in Section 5 of this report and in Appendices 1 – 5. The following table provides a brief non-technical summary of these results:

SEA Directive Article 5 (1) Annex 1 (f) Statutory Instrument 2004 No.1633 Schedule 2 (6)	SA Objectives	Likely significant effects of the plan as a whole – depending on option(s) taken
Biodiversity	9	Possible impacts on biodiversity (depending very much on site specifics) which will require mitigation.
Population	1, 2, 5, 6, 8	Impacts on the amenity of certain communities in Gloucestershire, particularly those close to sites or on lorry routes.
Human health	4, 5	For some options there are some uncertainties and the tests have highlighted that having a policy framework that allows for an assessment of cumulative impact will be important in protecting and promoting human health.
Fauna	9, 11, 13	Possible impacts which will require mitigation.
Soil	9, 11, 13	Possible impacts which will require mitigation.
Water	9, 10, 11, 13	Possible impacts which will require mitigation.
Air	9, 11, 13	Increased air pollution.
Climatic factors	15,	Increased contribution to climate change.
Material Assets	3, 5, 7, 10	Possible impacts on mineral site restoration.
Cultural heritage including architectural and archaeological heritage	9	Possible impacts depending on sites.
Landscape	9, 13	Possible impacts depending on sites and potential impact on the character and extent of the Green Belt.

1.4 Statement on the difference the process has made to date

The Waste Core Strategy Issues and Options Paper presents options that are likely to change and evolve as a result of consultation and public participation in the process. The SA process has also influenced the development of issues and options to date in terms of the following:

- Recommending that the original options within Issue W5: 'Setting out a spatial strategy' be reduced in number and simplified e.g. the term 'urban' was dropped for 'town' locations;
- Recommending that the original options presented within Issue W8: 'Making an appropriate contribution to local, regional and national hazardous waste management requirements' should be simplified, as issues about the validity of the import and export of hazardous waste were confusing and not entirely relevant;
- The original (proposed) vision was also amended as it was considered to be more of a statement of intent rather than a genuine vision.

Eventually, as the WCS progresses, a preferred option or preferred options will emerge. In relation to assessing developing options, Government guidance on SA states that "The development and appraisal of options will be an iterative process, with the options being revised to take account of the appraisal findings and consultation responses. This will inform the selection, refinement and publication of preferred options for consultation at Local Development Regulation 26 stage." Thus, in general, a fuller 'statement on the difference the process has made so far' will be more relevant in the next SA Report which will be issued at preferred options stage, and also with the Development Plan Document at submission stage.

1.5 How to comment on the report

We welcome your comments and observations on this SA Report. If you have any comments on any aspect, including the various tests of the options in the Appendices, please see the questions for Issue W11 on the response form that accompanies the Waste Core Strategy Paper. The end date for the consultation is Friday the 15th September 2006.

Section 2. Appraisal Methodology

2.1 Developing and appraising options

As part of the process of continually involving the public and seeking consensus on minerals and waste issues, a series of newsletters have been published and sent to stakeholders, keeping people informed of the progress of Gloucestershire's Minerals and Waste Development Framework. Newsletter No. 4 (November 2005) specifically asked for involvement in the setting out of issues and options for both the Minerals and Waste Core strategies.

The SA process requires a consideration of alternative options. Out of the 12 key issues presented in the document, a number of options, contained within these issues, were tested. Essentially these issues and options are an early attempt to stimulate involvement and to promote public discussion about the way in which waste is managed in Gloucestershire. Some of the options presented, (within each issue) are there to be compared, in terms of their favourability in sustainability terms. Other options are not comparable, in the sense that they may *all* be used as an important part of a particular strategy. To give an example, for the options for Issue W3, a focus on recycling would not necessarily exclude the waste minimisation option or recovering value from waste – they may all contribute. For each issue there is a 'business as usual' option as, in line with Government guidance on SA, the plan or Development Plan Document should aim to improve on the existing situation.

It is expected that through the required processes of consultation and public involvement (e.g. through forum events) alternative options may come forward and these can be tested at a later stage. Government guidance on SA suggests that "broad strategic options are considered as opposed to detailed policy wording variants." Bearing this in mind the strategic options that have been tested are as follows:

Issue W1: The Spatial vision. ■ **Option 1:** (Business as usual) Current vision in the adopted Waste Local Plan. ■ **Option 2:** "A sustainable and educational waste management system for Gloucestershire that reduces waste produced from businesses and households as a priority and diverts waste from landfill."
Issue W2: Determining the time period over which the WCS operates. ■ **Option 1:** (Business as usual) Gloucestershire Waste Local Plan to 2012. ■ **Option 2:** Up to the year 2018. ■ **Option 3:** Up to the year 2020. ■ **Option 4:** Up to the year 2026.
Issue W3: Implementing the waste hierarchy. ■ **Option 1:** (Business as usual) Proactively minimising waste generation. ■ **Option 2:** Focus on recycling. ■ **Option 3:** Recovering value (energy) from waste.
Issue W4: Making appropriate provision. ■ **Option 1:** (Business as usual) ■ **Option 2:** Identifying sites in a DPD. ■ **Option 3:** Not identifying sites – having a criteria based policy. ■ **Option 4:** A mix of identifying some sites and also using criteria based policies.
Issue W5: Setting out a spatial strategy. ■ **Option 1:** Town locations.

■ **Option 2:** Edge of town locations.

■ **Option 3:** Rural locations.

■ **Option 4:** Centralised facilities.

■ **Option 5:** Dispersed facilities.

■ **Option 6:** A combination of facilities. (Business as usual).

Issue W6: Implementing the Joint Municipal Waste Management Strategy.

■ **Option 1:** (Business as usual)

■ **Option 2:** A flexible criteria based approach.

■ **Option 3:** A prescriptive approach with particular facility types at particular locations.

■ **Option 4:** A combination approach.

Issue W7a: Cumulative impact.

■ **Option 1:** Having a policy framework against which cumulative impact can be assessed.

■ **Option 2:** Having a policy framework where cumulative impacts are not a specific consideration.

Issue W7b: Safeguarding sites.

■ **Option 3:** (Business as usual) Safeguarding sites.

■ **Option 4:** Not safeguarding sites.

Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements.

■ **Option 1:** (Business as usual).

■ **Option 2:** Safeguarding current hazardous waste management capacity if deemed to be environmentally acceptable.

■ **Option 3:** Minimising hazardous waste at source.

Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt.

■ **Option 1**: (Business as usual)

■ **Option 2**: New waste management facilities in the Green Belt.

■ **Option 3:** No new waste management facilities in the Green Belt.

■ **Option 4:** Redefining the Green Belt.

Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas.

■ **Option 1:** (Business as usual) Rolling forward current policies.

■ **Option 2:** Amending and adding to currently saved policies.

Issue W11: The SA Report.

Issue W12: Other issues.

Appraising options: an overview of the methodology
The detailed assessments of the options and their potential significant effects are contained in Appendix 1 - 5. The assessments are based on a symbol based scoring system which indicates the degree to which there will be positive or negative effects in relation to the 15 SA Objectives. In the case of Appendix 2, the symbols relate to the degree to which the option promotes the Key Planning Objectives of government guidance as contained in Planning Policy Statement 10 - Planning for Sustainable Waste Management. The following are the scoring systems used in this SA Report:

Key	
++	The Aim / Objective directly promotes the SA Objective
+	The Aim / Objective indirectly promotes the SA Objective
0	The Aim / Objective has no clear link to the SA Objective
-	The Aim / Objective indirectly contradicts the SA Objective
--	The Aim / Objective directly contradicts the SA Objective
?	Uncertain

The scoring system used for the test in Appendix 1.

Key	
++	The Option directly promotes the Key Planning Objective.
+	The Option indirectly promotes the Key Planning Objective.
0	The Option has no clear link to the Key Planning Objective.
-	The Option indirectly contradicts the Key Planning Objective.
--	The Option directly contradicts the Key Planning Objective.
?	Uncertain

The scoring system used for the test in Appendix 2.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

The scoring system used for the tests in Appendix 3, 4 & 5.

Appendix 1: Is a test of the 14 aims and objectives of the Waste Core Strategy against the SA Objectives.
Appendix 2: Is a test of the Waste Core Strategy options against the key planning objectives of Planning Policy Statement 10.
Appendix 3: Tests the options against the 15 SA Objectives and provides a brief commentary explaining and expanding on the scoring. Effects are examined in terms of the short, medium and long-term.
Appendix 4: Is a more detailed prediction or assessment of effects: cumulative impacts and secondary & synergistic effects.
Appendix 5: Is a consideration of the need for an Appropriate Assessment of the Waste Core Strategy Issues and Options under Article 6 of the Habitats Directory.

2.2 When the SA was carried out?

The following table from Office of the Deputy Prime Minister Guidance *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents (2005)* details the various SA stages and tasks.

Development Plan Document Stage	Progress
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope	⬇
A1: Identifying other relevant policies, plans and programmes, and sustainability objectives.	Complete

A2: Collecting baseline information.	Complete / ongoing
A3: Identifying sustainability issues and problems.	Complete
A4: Developing the SA framework.	Complete
A5: Consulting on the scope of the SA.	Complete
Stage B: Developing and refining options and assessing effects	
B1: Testing the Development Plan Document objectives against the SA framework.	Complete for issues & options
B2: Developing the Development Plan Document options.	Complete for issues & options
B3: Predicting the effects the Development Plan Document.	Complete for issues & options
B4: Evaluating the effects of the Development Plan Document.	Complete for issues & options
B5: Considering ways of mitigating adverse effects and maximising beneficial effects.	Complete for issues & options
B6: Proposing measures to monitor the significant effects of implementing the Development Plan Document.	Complete for issues & options
Stage C: Preparing the Sustainability Appraisal Report	
C1: Preparing the SA Report.	Complete for issues & options
Stage D: Consulting on the preferred options of the Development Plan Document and SA Report	
D1: Public participation on the preferred options of the Development Plan Document and the SA Report.	Forthcoming
D2 (i): Appraising significant changes.	Forthcoming
D2 (ii): Appraising significant changes resulting from representations.	Forthcoming
D3: Making decisions and providing information.	Forthcoming
Stage E: Monitoring the significant effects of implementing the Development Plan Document	
E1: Finalising aims and methods for monitoring.	Forthcoming
E2: Responding to adverse effects.	Forthcoming

The following table indicates in more detail the timeframe in which the SA was developed:

Stage of the SA	**Date**
Collection of baseline and collection and initial reviews of other plans and programmes.	April – August 2005.
Original Context Report & Scoping Report out to consultation with The Countryside Agency / English Heritage / English Nature / The Environment Agency and other stakeholders.	25th August – 29th September 2005.
Changes and amendments made to Context Report & Scoping Report following consultation and Response Report produced. Letters and Response Reports sent out to consultees.	October 2005.
Updated versions of Context Report & Scoping Report as well as Response Report posted on the website.	8th November 2005.
Consultants review of the Context & Scoping Report – Levett-Therivel Appropriate changes made – additions to baseline etc.	18th – November 2005.
Newsletter 4. sent out to stakeholders giving people information and the opportunity to contribute to option development on core strategies. The newsletter contained an update on the SA process and links to specific SA information on the Council website.	Mid – November 2005.
Initial Draft Issues & Options Paper on Waste Core Strategy made available to be tested.	2nd Dec 2005.
Updated and amended Issues and Options Core Strategy made available to be tested.	23rd Jan 2006.
Updated Context & Scoping Report published and posted on website.	April 2006.
Waste Core Strategy Issues & Options Paper and SA Report produced for public consultation.	May 2006.

In relation to baseline data Government guidance on SA (Page 44, Paragraph 3.2.5) states: "Baseline information provides the basis for predicting and monitoring effects and helps to identify sustainability problems and alternative ways of dealing with them….To get the best value from baseline information, it needs to be kept up to date rather than being merely a snapshot of the situation at a particular tome." Bearing this in mind, since the publication of the original SA Context and Scoping Reports in August 2005, updates have been made (a) following the consultation period, and (b) following recommendations made by independent consultants reviewing the process. The updated versions of the SA Context and Scoping Reports are on the County Council's website at the following address: http://www.gloucestershire.gov.uk/index.cfm?articleid=11577

2.3 Who carried out the SA?

The SA was carried out by members of Gloucestershire County Council's Minerals & Waste Planning Policy Team working iteratively with the plan authors. The process was reviewed by Levett –Therivel consultants. The specific tests were carried out by members of Gloucestershire's Minerals and Waste Planning Policy Team through a series of roundtable workshops / meetings. It is fully recognised that such tests are reliant on qualitative viewpoints, but the judgments made are based on expert opinion and knowledge of the County and its waste managements sites and operations. As a result of the large number of issues and options presented at this stage of the plan making process, using a working group or wider expert group for scoring options would have been a very long and possibly conflictual process. When the preferred options are tested and an SA Report produced, it is envisaged that a working group or a 'sounding board' will be set up to score the options, or at least to review the judgments made by the policy team.

2.4 Who was consulted, when and how?

Consultation on the initial stages of the SA i.e. the Context Report and the Scoping Report was carried out for 5 weeks (in accordance with Government guidance) from 25th August to the 29th September. 48 consultees were sent copies of the reports, including internal consultees within the County Council, and 12 responses were received, the majority being reasonably supportive, providing constructive comments and additional baseline data. This list of consultees was produced in line with Office of the Deputy Prime Minister SA Guidance and Planning Policy Statement 12. The reports were also made available on the County Council's website, for information purposes, and as a result, two groups (Forest of Dean Friends of the Earth and Friends of the Forest), who were not on the original consultation list, made representations which were considered. Following the amendments that were made to the initial Context and Scoping Reports a Response Report was produced and sent to all those who had made comments. The revised Context and Scoping Reports as well as the Response Report were then placed on the County Council's website.

Following the publication of Office of the Deputy Prime Minister guidance on SA (November 2005) and a review of the process by Levett-Therivel consultants, (also in November 2005), further amendments and additions were made to the baseline data contained in the reports. In April 2006 (Update 2) of the Context and Scoping Report were published and placed on the Council's website. A letter was sent to all the consultees who had received the original reports informing them that the update was available.

2.5 Difficulties encountered in compiling information or carrying out the assessment

There were no *significant* problems or difficulties in carrying out the appraisal, although one issue was the way in which the issues and options were phrased – as questions – which made drawing the strategic options out slightly problematic. Also data on waste in the County is better for some waste streams than others. Municipal data tends to be fairly comprehensive, whereas Commercial & Industrial and Construction & Demolition data is less so.

Section 3. Background

3.1 Purpose of the SA and the SA report

According to Government guidance on SA: "Sustainable development is central to the reformed planning system." The purpose of Sustainability Appraisal is to promote sustainable development through the integration of social, environmental and economic considerations into the preparation of revisions of Regional Spatial Strategies and for new or revised Development Plan Documents and Supplementary Planning Documents. SA essentially broadens the concept of SEA which involves the systematic identification and evaluation of the environmental impacts of a strategic action (e.g. a plan or programme). In 2001, the European Union adopted Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the 'SEA Directive'). The Directive entered into force in the UK on 21 July 2004 and applies to a range of English plans and programmes including Minerals & Waste Development Frameworks.

Under the Planning and Compulsory Purchase Act Planning Authorities must undertake SA for Development Plan Documents and Supplementary Planning Documents included in their Local Development Frameworks including Minerals and Waste Development Frameworks. The Government's approach is to incorporate the requirements of the SEA Directive into a wider SA process and, to this end; it has published guidance on undertaking combined SEA / SA for development frameworks. The specific purpose of this SA report is to ensure that the issues and options presented are tested in terms of their sustainability. This will help in the process of producing preferred options at a later date.

3.2 Plan objectives and outline of contents

The objective of the Waste Core Strategy Issues & Options paper is to set out issues and options for managing waste in Gloucestershire and to generate discussion about what sustainable waste management means for the County. The Waste Core Strategy will provide the framework for sustainable waste management over the next ten years and will contain a spatial vision for managing waste in Gloucestershire over the next ten to twenty years. It will contain objectives which will form the basis for preparing policies and a framework for identifying sites for waste management facilities. The WCS covers different types of controlled waste: Municipal Solid Waste is waste collected by the Local Authority and includes waste produced by households; Commercial & Industrial waste; and Construction & Demolition waste. In addition, there are hazardous wastes, which are likely to come from the three main waste 'streams', and agricultural wastes, which are in the process of coming under planning control.

The document covers the following areas:
Section 1: is an introductory section which provides background information and introduces the following key issues:

◆ **W1.** Setting an appropriate spatial vision and objectives for the WCS.

◆ **W2.** Determining the time period over which the WCS operates.

◆ **W3.** Implementing the waste hierarchy – reducing the amount of all types of waste we produce, but where waste does arise to increase recycling and divert it from landfill.

◆ **W4.** Adopting a strategy for making appropriate provision for waste management facilities.

◆ **W5.** Setting out a spatial strategy – selecting criteria to use for identifying suitable sites for waste management operations.

◆ **W6.** Implementing the Joint Municipal Waste Management Strategy (JMWMS) for Gloucestershire's household waste.

◆ **W7.** Determining what factors should be used in assessing the cumulative impact on local communities.

◆ **W8.** Making an appropriate contribution to local, regional and national hazardous waste management requirements.

◆ **W9.** The appropriateness of proposals for new waste management facilities in the Green Belt.

◆ **W10.** Policies for dealing with proposals for new waste management facilities in other nationally designated areas.

◆ **W11.** The SA Report.

◆ **W12.** Any other key issues that need to be included?

Section 2: provides a spatial portrait of Gloucestershire.
Section 3: provides the policy context for sustainable waste planning.
Section 4: is an overview of Gloucestershire's waste operations.
Section 5: introduces the issues and options.

3.3 Compliance with the SEA Directive / Regulations

This SA Report and the accompanying Context and Scoping Reports are in compliance with the SEA Directive (2001/42/EC) *'on the assessment of the effects of certain plans and programmes on the environment'* and with the Environmental Assessment of Plans and Programmes Regulations 2004 (Statutory Instrument 2004 No.1633). The table on page 4. details where the material required for the purposes of Article 5(1) of the SEA Directive (2001/42/EC) may be found, both within this document and within the supporting SA Context and Scoping Reports.

Section 4. Sustainability objectives, baseline and context

4.1 Links to other policies, plans and programmes and sustainability objectives and how these have been taken into account

Stage A1 of the process of conducting the SA involved identifying other relevant policies, plans and programmes and sustainability objectives. A large number of relevant plans and programmes were reviewed, the full details of which, along with detailed commentaries, are contained in the SA Context Report. (Please see the following website address for the most up to date versions of both the SA Context and Scoping Reports): http://www.gloucestershire.gov.uk/index.cfm?articleid=11577

The list of plans and programmes ranges from those at the International / European level e.g. various European Union Directives, to plans at a County & Local level. They have been taken into account in that the relevant issues they highlight have fed into the identification of key issues and problems in the County and consequently into the process of formulating SA Objectives. The key plans and programmes that relate specifically to the WCS include:

- EU Landfill Directive
- EU Waste Framework and Hazardous Waste Directives
- EU Waste Electrical and Electronic Equipment Directives
- EU Packaging and Packaging Waste Directive
- EU Incineration Directive
- EU End of Life Vehicles Directive
- EU Animal By-Products Regulation
- PPG10: Planning and Waste Management
- PPS10: Planning for Sustainable Waste Management (Adopted)
- PPS23: Planning and Pollution Control (plus annexes)
- Waste Strategy 2000
- Changes to Waste Strategy 2000
- Waste not, Want not – A Strategy for Tackling the Waste Problem in England
- Planning for Waste Management Facilities
- Regional Waste Strategy for the South West
- Municipal Waste Management Strategy for Gloucestershire
- Gloucestershire Waste Partnership Joint Strategy Statement
- The Community Strategies of the six districts within Gloucestershire

4.2 Description of the social, environmental and economic baseline characteristics and the predicted future baseline

A study of the baseline related to key aspects of Gloucestershire has been undertaken as part of the SA process. A brief summary of the baseline is provided here, but further detail and the bulk of this information is supplied in the Context and Scoping Reports, particularly in Section 6 and Appendix 3 of the Scoping Report. It should be noted that the baseline table (Appendix 3) is one that is being regularly updated.

Population

The County has a population of approximately 565,000; the two largest urban areas are Gloucester and Cheltenham. At the last census in 2001 the population of Gloucester was 109,885 and the figure for Cheltenham was 110,013. The population of the County grew by 29,000 between 1991 and 2001 and work undertaken as part of the emerging Regional Spatial Strategy for the South West suggests a possible increase in population of approximately 69,000 in Gloucestershire between 2006 – 2026, most of which will be from net-migration. (Source: ONS Sub-National Population Projections 2003 & Chelmer Net Migration Led Model produced on behalf of the South West Regional Assembly).
Predicted future baseline: Population increase in Gloucestershire of c.69,000 in the next 25 years due primarily to in–migration.

Gloucestershire's environment

Gloucestershire is a substantially rural county with the main urban focus in Gloucester and Cheltenham. The County supports a wealth of International, National and Locally important environmental assets. It is divided between the Royal Forest of Dean in the west, the Cotswolds to the east, and the Stroud valley to the south.

Running down the middle is the Severn Vale, containing Gloucester and Cheltenham which are divided by land designated as Green Belt as well as the M5 motorway. The Cotswolds Area of Outstanding Natural Beauty is one of the UK's largest Area of Outstanding Natural Beauty designations and is a popular draw for tourists from all over the country and from abroad.
Predicted future baseline: Continued pressure on the environment from an increasing population with associated housing and employment needs.

Minerals planning in Gloucestershire
Gloucestershire has a diverse geological base with significant deposits of economic value. The County may be conveniently subdivided into the following resources areas:

Resource Area	Mineral Type
Forest of Dean	Limestone (Carboniferous), Sandstone, Clay, Iron Ore, Coal
Cotswolds	Limestone (Jurassic)
Upper Thames Valley	Sand and Gravel, Clay, Cornbrash (Jurassic Limestone)
Vale of Moreton	Sand and Gravel
Severn Vale	Sand and Gravel, Clay

There are 36 operational minerals sites in the County (2003 figures). 18 are within the Cotswolds and the Forest of Dean, extracting limestone both for aggregate and non-aggregate purposes. Ten sites, primarily located in the Upper Thames Valley are extracting sand and gravel. There are a further 8 sites in the County extracting either sandstone or clay. Additionally there are a number of inactive and dormant sites where minerals may potentially be worked in the future.

Waste Planning in Gloucestershire
A large percentage of waste produced in Gloucestershire is still disposed of in landfill or landraising sites. Approximately 1.37 million tonnes of waste is handled in the County each year. In 2002/3 around three quarters was disposed of in landfill and landraising. Every year the amount of waste produced in the County rises, for example, Municipal Solid Waste produced in the County has increased by 35% since 1994, an average of 3.2% per annum. In 2003/04 the production of household waste in Gloucestershire was 51kg per head of population higher than the national average. However, there have been increases in recycling / composting in the County in recent years, but further progress needs to be made in this area to meet national targets.

The Waste Local Plan has identified twenty-one preferred sites for future waste management facilities throughout Gloucestershire. These are classified as 'Strategic Sites' and 'Local Sites'. The following table gives an indication of the range and number of waste management facilities within Gloucestershire. It should be noted that there are also a large number (over 400) of 'exempt' waste sites throughout the County.

Waste management operations by facility type as of February 2003 (Source: Gloucestershire Waste Local Plan & updated data from Gloucestershire County Council Development Control.)
Materials Recycling / Recovery and Treatment Facilities = 5
Composting Facilities = 4
End-of Life Vehicle Dismantling & Metal Facility =27
Household Recycling Centre = 6
Waste Transfer Stations = 31
Sewage Treatments Works / Operations = 87
Hazardous Waste Treatment Facilities = 1
Thermal treatment / pet cremation = 2
Landfill/Landraise Operations Hazardous = 1, Non-Haz – Bio-degradable = 4, Non-Haz – Inert = 12

Industry and commerce
Gloucestershire has historically been a significant location for commerce primarily due to its location at a crossroads of trade routes between Wales and London and the Midlands and the South West. These locational factors continue to make the County attractive as a business location today. There has been a historic concentration of defense and aerospace contractors in the County and Gloucestershire continues to have a significant manufacturing presence. Particular strengths are in advanced engineering, including companies such as Spirax Sarco, Invista (formerly Dupont), Kohler Mira and Messier-Dowty. The County is also a major centre for banking, insurance and business services and has a number of headquarters functions located here, including Cheltenham & Gloucester plc, Zurich, the Stroud & Swindon Building

Society and Endsleigh Insurance. Gloucestershire is also home to a number of government departments including Government Communications Headquarters, the United Kingdom's government intelligence centre.

Economic indicators and prospects
Key economic indicators generally portray Gloucestershire in a favourable light, with low levels of unemployment and gross value added per head similar to the national average. At a sectoral level the growth in the service sector and the decline in manufacturing over the last 10 years are likely to continue up to 2015. Unemployment in Gloucestershire is low at 1.8% in August 2003, well below the national average at 2.3%. The average income in the County was £19,857 in 2003, almost £1000 lower than the national average. However average incomes vary considerably between Gloucestershire's districts. While average earnings in the county rose by 18.6% between 1999 and 2003, average property prices rose by 81.5% in the same period.

4.3 Main social, environmental and economic issues and problems identified

The following are considered to be key sustainable issues/problems for Gloucestershire. In keeping with the principles of SEA and SA social, economic and environmental issues are taken into account. It is a general list and certain issues are likely to have greater significance to the development of minerals and waste policy in Gloucestershire. This list was amended slightly following comment resulting from the consultation on the Context and Scoping Report (25th August – 29th September 2005). The detailed list can be viewed in the SA Scoping Report.

1. High house prices.	11. Recycling / composting rates (Poor in comparision with some areas / authorities).
2. Low average income.	12. Minerals restoration (A potential lack of inert materials).
3. Crime levels (High in certain areas).	13. Protecting Gloucestershire's environment whilst providing minerals needed by society (Potential conflicts of interests).
4. Health (Poor for certain segments of the population).	14. Renewable energy (A relatively low proportion of renewable energy generated in Gloucestershire).
5. Traffic impacts and congestion.	15. The general state of Gloucestershire's biodiversity, the condition of SSSIs, sites protected under the Habitat's Directive and locally designated sites.
6. Rural economy (Certain areas in need of support).	16. Decline in species biodiversity (In particular of certain bird species in Gloucestershire).
7. Areas of deprivation and social exclusion.	17. Increases in serious pollution incidents.
8. Potential for flooding (High in certain areas of the County).	18. Possible damage to the historic environment.
9. Waste to landfill (Increasing levels).	19. Detrimental changes to landscape character.
10. Growing levels of waste in Gloucestershire.	/

The following is a summary of the sustainability issues and problems that are particularly related to the WCS Issues and Options Paper. For a full and detailed list of baseline see the SA Scoping Report, particularly Section 6 and Appendix 3.

▶ Issue 9. Waste to landfill
Biodegradable Municipal Waste
In recent years there have been increasingly effective efforts to divert Biodegradable Municipal Waste from landfill and the trends are fairly encouraging. However as levels of municipal waste continue to rise by about 3% per year, more needs to be done if Gloucestershire is to meet Best Value targets and Landfill Allowance Trading Scheme requirements. In 2005 the tonnage of Municipal Solid Waste arising in Gloucestershire was 309,403. The biodegradable component was 210,394 tonnes, that is 68%. In order to meet the 2010 target, 131,763 tonnes of Biodegradable Municipal Waste will have to be diverted from landfill, including through composting and recycling. More needs to be done in terms of the source segregated collection of biodegradable waste (e.g. garden waste, kitchen waste, paper, textiles and cardboard as well as dry recyclables through kerbside collections, household recycling centres and bring banks.

Municipal Solid Waste
In 2004/05 the people of Gloucestershire produced 309,500 tonnes of Municipal Solid Waste (this includes 8,500 tonnes of trade waste collected by local authorities from shops and businesses). This represents a 35% increase since 1994. Roughly 74% of this waste went to landfill, 7% was composted and 19% was recycled.

Commercial and Industrial Waste
During 2002/3 around 359,000 tonnes of Commercial & Industrial waste and 240,000 tonnes of Metal waste was managed in Gloucestershire. The amount of Commercial & Industrial waste managed (not including metals) has reduced slightly over the last five years. There has been a big reduction in the amount of this waste stream going to landfill, most probably attributable to the introduction of the Landfill tax.

Construction and Demolition Waste
In 2002/03 the split between landfill and recycling for Construction and Demolition waste was 312,000: 95:000 tonnes.

▶ Issue 10. Growing levels of waste in Gloucestershire
Municipal Solid Waste
Over recent years levels of Municipal Solid Waste have increased by around 3% per year, by around 35% since 1994. In 2003/4 Household waste produced per head in Gloucestershire was 490kg. The following figures show the increase since 1998: 1998/99 = 445kg / 1999/00 = 464kg / 2000/01 = 458kg / 2001/02 = 473kg / 2002/03 = 483kg.

In 2003/04 the production of Household waste in the County was 51kg per head of population higher than the national average. (All figures from Gloucestershire County Council Waste Management, 2005).

Construction and Demolition Waste
Most Construction & Demolition waste is assumed to be inert - materials such as brick, concrete, subsoils etc. The trend for the levels of Construction & Demolition waste managed in Gloucestershire has shown a steady increase in the past few years, as is demonstrated by the following figures: Total Inert & Construction & Demolition Managed: 1999/00 = 262,000 tonnes / 2000/01 = 279,000 tonnes / 2001/02 = 353,000 tonnes / 2002/03 = 418,000 tonnes.

Commercial and Industrial Waste
Like Construction & Demolition waste trends, the levels of Commercial & Industrial waste managed in the County has fluctuated in recent years as the following figures demonstrate: Total Commercial & Industrial Waste Managed: 1998/99 = 414,000 tonnes / 1999/00 = 457,000 tonnes / 2000/01 = 371,000 tonnes / 2001/02 = 344,000 tonnes / 2002/03 = 359,000 tonnes. Unlike Municipal waste, which is dealt with by Local Authorities, Commercial & Industrial waste is dealt with by private contractors. The majority is still landfilled, although in tonnage terms the amount going to landfill is decreasing. The situation with regards recycling is better in relation to metals due to the economic value of scrap metals.

▶ Issue 11. Recycling / composting rates
In 1993/04 Gloucestershire's household recycling rate (not including composting) was 10.2%. In 2004/05 it was 24.2% - (this is a combined figure for composting and recycling). Currently Gloucestershire has a household recycling/composting rate of 26% (The County recycling figure for the purposes of meeting the Best Value Performance Indicator was 24.3%). The 26% figure includes recycled DIY/hardcore. Initial indications from the Waste Management Unit are that the Best Value recycling target of 30% for 2005/06 will be met. The amount of household waste in the County that has been recycled/composted has increased year on year at an average of 15%.

In terms of the specific figures for recycling at Gloucestershire's six Household Recycling Centres, the total capacity tonnage in 2004/05 was 81,000 tonnes whilst the total throughput was 65,000 tonnes. This indicates that much more can be done to improve recycling / composting rates through greater use of the Household Recycling Centres by the general public.

4.4 Limitations of the information, assumptions made etc

The availability and quality of baseline data for Gloucestershire is generally good and this has been comprehensively detailed in the SA Scoping Report, in particular in Section 6 and Appendix 3. In terms of waste data, the County Council's Minerals & Waste Planning Policy Team works closely with the Municipal Waste Management Unit and consequently data on the municipal waste stream is current and generally robust. Complete data sets for Municipal Solid Waste are available for 2004/05. The data on other (non-municipal) waste streams, provided by the Environment Agency, is less comprehensive and less up to date. Data is compiled from waste management licensing returns sent by operators of waste management facilities. Information provided includes waste category types, input/output details and details on process mode and location. Returns allow an 'unknown' option to be entered for these latter categories. As a result, Environment Agency advice is that where 'unknown' is given in the return as a final destination this should be assumed to be Gloucestershire, and where the mode is 'unknown' this should be taken as being disposed of to landfill. The Environment Agency also have to trust that the returns are accurate.

Information on facility capacity is derived from a Waste Planning Authority assessment of planning permissions and waste management license data. Where the planning permission has not placed a limit on the tonnages of material that can be handled (usually those sites with older planning permissions), Environment Agency license returns were used to give an indicative capacity. In addition a survey of waste operators was undertaken to provide an industry perspective on the current situation.

Data has been prepared by the Waste Planning Authority following liaison with both Waste Disposal Authority and Environment Agency officers. It is considered by these three parties to represent the most up to date and accurate picture of waste management in Gloucestershire that is currently available and is consequently a robust basis for land-use planning purposes in the County.

4.5 The SA framework, including objectives, targets and indicators

The SA Framework consists of sustainability objectives which are distinct from the objectives of the plan, but may in some cases overlap with them. They provide a way of checking whether the Development Plan Document objectives are the best possible ones in sustainability terms, and can be seen as a methodological yardstick against which the social, environmental and economic effects of the plan can be tested.

The SA Framework objectives were developed on the basis of:
- The objectives / priorities for action contained in the Government's national sustainability strategies – 1999 and 2005.
- The objectives in "Just Connect" the Integrated Regional Strategy for the South West 2004 –2026.
- Identifying other relevant plans and programmes, resulting key messages and the identification of sustainability issues.
- Office of the Deputy Prime Minister guidance on SA.
- Changes were made to a small number of SA Objectives following the statutory 5 week period of consultation on the Context and Scoping Reports.

The SA Framework objectives are as follows:

1. To promote development that is socially, economically and environmentally sustainable.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the County.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.
6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste

development.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.
8. To provide employment opportunities in both rural and urban areas of the County, promoting diversification in the economy.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.
12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.
15. To reduce contributions to and to adapt to Climate Change.

Section 5. Plan issues and options

5.1 Main strategic options considered and how they were identified

The Issues and Options Paper represents an early attempt to present options and ideas about the way in which waste is currently managed in Gloucestershire and how it should be managed in the future. The main strategic options were identified by members of Gloucestershire Minerals and Waste Planning Policy Team. In November 2005 Minerals & Waste Newsletter 4. was sent to stakeholders specifically asking for input and ideas in terms of issues and options for minerals and waste planning in Gloucestershire. There was a limited response from external stakeholders and it is hoped that there will be more involvement through consultation on the Issues and Options Paper. On March 22nd 2006 a forum event was hosted jointly by the Waste Planning Authority and the Waste Disposal Authority in which broad strategic options for future waste management in Gloucestershire were considered. The outcomes of the forum were collated by *Entec* (the consultants facilitating the event) and views and ideas were incorporated, for example changes were made to the vision and to the key objectives. In terms of internal County Council input, there has been significant input from the Waste Management Unit in terms of options and data relating to municipal waste management.

5.2 Comparison of the social, environmental and economic effects of the options

The detailed assessment of social, environmental and economic effects of the options is provided in Appendix 1 – 5. A summarised commentary is provided here.

Issue W1: The Spatial vision.

- **Option 1:** (Business as usual) Current vision in the adopted Waste Local Plan.
- **Option 2:** "A sustainable and educational waste management system for Gloucestershire that reduces waste produced from businesses and households as a priority and diverts waste from landfill."

The two visions, the current one, and the proposed vision are broadly sustainable when tested against the SA Objectives. However Option 2 is favoured as the current vision is based on Best Practical Environmental Option criteria which does not reflect current government guidance in Planning Policy Statement 10 – *Planning for Sustainable Waste Management.*

Issue W2: Determining the time period over which the WCS operates.

- **Option 1:** (Business as usual) Gloucestershire Waste Local Plan to 2012.
- **Option 2:** Up to the year 2018.
- **Option 3:** Up to the year 2020.
- **Option 4:** Up to the year 2026.

In general there are some uncertainties over the options with longer timescales. This is due to the fact that waste is a rapidly changing field in terms of technological advancement. Options 2 and 3 are very similar and are clearly favoured over Option 4.

Issue W3: Implementing the waste hierarchy.

- **Option 1:** (Business as usual) Proactively minimising waste generation.
- **Option 2:** Focus on recycling.
- **Option 3:** Recovering value (energy) from waste.

These options are not mutually exclusive; they may all be part of an effective strategy aimed at implementing the waste hierarchy. All of these options would reduce waste to landfill in line with the proposed vision. Both Options 1 and 2 score very highly against the SA Objectives, as would be expected, whilst there are a number of uncertainties over Option 3.

Issue W4: Making appropriate provision.

- **Option 1:** (Business as usual).
- **Option 2:** Identifying sites in a DPD.
- **Option 3:** Not identifying sites – having a criteria based policy.
- **Option 4:** A mix of identifying some sites and also using criteria based policies.

The option over which there is considerable uncertainty is Option 3. Options 1 & 2 are identically scored, as identifying sites in the plan is the current practice. Option 4 would appear to represent the balanced approach and is the most positive option in terms of the tests against the SA Objectives.

Issue W5: Setting out a spatial strategy.

- **Option 1:** Town locations.
- **Option 2:** Edge of town locations.
- **Option 3:** Rural locations.
- **Option 4:** Centralised facilities.
- **Option 5:** Dispersed facilities.
- **Option 6:** (Business as usual). A combination of facilities.

In terms of a proposed spatial strategy, the test of the options against the SA Objectives highlights some concerns over Option 3: Rural locations and also significant uncertainties over the Dispersed facilities option (Option 5). Option 6 is the business as usual option, but it is also the most positive option out of the six presented.

Issue W6: Implementing the Joint Municipal Waste Management Strategy.

- **Option 1:** (Business as usual).
- **Option 2:** A flexible criteria based approach.
- **Option 3:** A prescriptive approach with particular facility types at particular locations.
- **Option 4:** A combination approach.

In the test of options against the SA Objectives there are some uncertainties over Option 2. Option 4, a combination approach comes out as the most positive option.

Issue W7a: Cumulative impact.

- **Option 1:** Having a policy framework against which cumulative impact can be assessed.
- **Option 2:** Having a policy framework where cumulative impacts are not a specific consideration.

Issue W7b: Safeguarding sites.

- **Option 3:** (Business as usual) Safeguarding sites.
- **Option 4:** Not safeguarding sites.

In the test of options against the SA Objectives Options 1 and 3 are the most positive in sustainability terms and are clearly favoured.

Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements.

- **Option 1:** (Business as usual).
- **Option 2:** Safeguarding current hazardous waste management capacity if deemed to be environmentally acceptable.

■ **Option 3:** Minimising hazardous waste at source. These options are not mutually exclusive. Minimising hazardous waste at source scores very highly against the SA Objectives. The cumulative impact of the option (against all the SA Objectives) is positive for Options 1 & 2.
Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt. ■ **Option 1**: (Business as usual) ■ **Option 2**: New waste management facilities in the Green Belt. ■ **Option 3:** No new waste management facilities in the Green Belt. ■ **Option 4:** Redefining the Green Belt. Apart from Options 2 & 3, which clearly cannot be pursued together, these options are not necessarily mutually exclusive. Option 4 is the most positive in terms of test against the SA Objectives.
Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas. ■ **Option 1:** (Business as usual) Rolling forward current policies. ■ **Option 2:** Amending and adding to currently saved policies. In the test of options against the SA Objectives Option 2 is the most positive; reflecting recent government policy and the requirements of the European Union Waste Framework Directive.
Issue W11: SA Report.
Issue W12: Other issues.

5.3 How social, environmental and economic issues were considered in choosing the preferred options

A wide range of social, environmental and economic issues relating to the management of waste in Gloucestershire have been considered in the SA Framework, i.e. the Context & Scoping Reports. The Waste Management Core Strategy Issues and Options Paper presents a wide range of issues and options for consultation, thus as yet, the *preferred* option or options are yet to emerge. Social, economic and economic issues have been considered in assessing the issues and options; the detailed assessments are provided in the Appendices.

5.4 Other options considered, and why these were rejected

A large range of issues and options have been considered. At this stage no options have been rejected. It may be that following the consultation period further options emerge that it is appropriate to test. This in turn could result in some options being rejected.

5.5 Possible mitigation measures

As we are dealing with issues and options at this stage it is not appropriate to look in detail at proposed mitigation measures. These will be considered in more detail when testing and considering preferred options. However some generic mitigation measures may potentially include:

■ Mitigation through appropriate and sensitive design measures or landscaping which may enable waste management facilities to function with less visual impact and less detrimental impact of amenity;

■ The co-location of facilities helping to minimise the number of areas where new impacts will be introduced;

■ The possible use of in-vessel or tunnel composting technology in order to limit odour and dust problems particularly for urban facilities, should these come forward;

■ The effective pre-treatment and management of wastes in storage leading to the prevention of contamination by dust, leachate, and run-off of materials such as nitrates from biodegradable and agricultural wastes in store;

■ The effective use of planning conditions imposing appropriate design and operational controls on new facilities;

■ The continued screening and scoping of proposals to assess the need for an Environmental Impact Assessment;

■ Making the best use of existing waste management infrastructure with current permissions to reduce the number of areas affected by new impacts.

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Appendix 1. Testing the plan aims & objectives against the SA objectives

Waste Core Strategy Objectives → / **SA Objectives** ↓	**1.** To reduce the amount of waste produced in Gloucestershire.	**2.** To make the best use of the waste produced within Gloucestershire through increased re-use and recovering value from waste.	**3.** To encourage sensitive waste management practices within Gloucestershire to preserve/enhance the overall quality of the environment and avoid risks to human health.	**4.** To achieve a sustainable waste management system by minimising waste as a priority and encouraging communities to take responsibility for the waste they produce through better education about waste issues.	**5.** To assist in creating economic prosperity and employment for Gloucestershire by encouraging competitiveness, meeting the needs of business, and encouraging markets for goods made from recycled materials.	**6.** To ensure that waste management issues are properly considered and incorporated into new development proposals.
Objective 1 To promote development that is socially, economically and environmentally sustainable	++	++	++	++	+	+
Objective 2 To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home	?	?	?	?	?	+
Objective 3 To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development	?	?	+	+	+	+

Objective 4 To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county	++	++	++	++	?	+
Objective 5 To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds	+	+	+	+	++	+

Objective 6 To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development	++	+	++	++	?	?
Objective 7 To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society	?	+	+	+	?	+
Objective 8 To provide employment opportunities in both rural and urban areas of the County, promoting diversification in the economy	?	+	?	?	++	0
Objective 9 To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment	++	++	++	++	?	+

Objective 10 To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply	**0**	**0**	**0**	**0**	**0**	**0**
Objective 11 To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle	**++**	**++**	**++**	**++**	**-**	**++**

Objective 12 To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations	**++**	**++**	**++**	**++**	**-**	**++**
Objective 13 To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits	**?**	**+**	**?**	**?**	**?**	**?**

Objective 14 To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste	++	++	++	++	?	++
Objective 15 To reduce contributions to and to adapt to Climate Change	+	+	+	+	-	+

Key	
++	The Aim / Objective directly promotes the SA Objective
+	The Aim / Objective indirectly promotes the SA Objective
0	The Aim / Objective has no clear link to the SA Objective
-	The Aim / Objective indirectly contradicts the SA Objective
--	The Aim / Objective directly contradicts the SA Objective
?	Uncertain

Waste Core Strategy Objectives  **SA Objectives** 	**7.** To reduce undesirable environmental impacts resulting from the handling, processing, transport and disposal of waste and meet legal requirements.	**8.** To protect communities from negative impacts of waste management and to protect designated landscapes and sites of nature conservation value from inappropriate development	**9.** To make the best use of land by re-using previously developed sites in preference to undesignated green-field locations.	**10.** To reduce the environmental impacts of transporting waste by encouraging waste disposal to take place at the closest appropriate facility and to use more sustainable means of transporting waste.	**11.** To provide a strategy for managing the majority of the County's waste in reasonable distance from its source of arising.	**12.** To safeguard sites suitable for the location of waste management facilities from other proposed development.
Objective 1 To promote development that is socially, economically and environmentally sustainable.	**++**	**++**	**++**	**++**	**++**	**?**
Objective 2 To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	**?**	**?**	**?**	**?**	**?**	**?**
Objective 3 To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	**?**	**?**	**?**	**?**	**++**	**++**

Objective 4 To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	++	++	+	++	+	?
Objective 5 To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	++	+	+	+	?

Objective 6 To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	++	++	++	++	++	?
Objective 7 To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	?	?	?	?	?	++
Objective 8 To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	?	?	?	?	0	?
Objective 9 To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	++	++	++	++	++	?

Objective 10 To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	?	?	?	?	++	?
Objective 11 To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	++	++	++	++	++	?

Objective 12 To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	++	++	?	++	++	?
Objective 13 To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	?	?	?	?	?	?

Objective 14 To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	++	++	+	?	++	?
Objective 15 To reduce contributions to and to adapt to Climate Change.	+	+	+	++	?	?

Key	
++	The Aim / Objective directly promotes the SA Objective
+	The Aim / Objective indirectly promotes the SA Objective
0	The Aim / Objective has no clear link to the SA Objective
-	The Aim / Objective indirectly contradicts the SA Objective
--	The Aim / Objective directly contradicts the SA Objective
?	Uncertain

Waste Core Strategy Objectives → **SA Objectives** ↓	**13.** To provide a strategy for assessing the appropriateness of waste management facilities in the Green Belt, and of the Green Belt boundaries themselves.	**14.** To set out a framework for monitoring and reviewing waste development plan documents.	/	/	/	/
Objective 1 To promote development that is socially, economically and environmentally sustainable.	**+**	**+**				
Objective 2 To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	**?**	**?**				
Objective 3 To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	**++**	**++**				

Objective 4 To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+	+				
Objective 5 To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	?	?				

Objective 6 To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	+	+				
Objective 7 To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0				
Objective 8 To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	?	?				
Objective 9 To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+	+				

Objective 10 To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	**?**	**0**				
Objective 11 To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	**+**	**+**				

Objective 12 To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	**0**	**0**				
Objective 13 To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	**0**	**0**				

Objective 14 To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	**+**	**+**				
Objective 15 To reduce contributions to and to adapt to Climate Change.	**0**	**0**				

Key	
++	The Aim / Objective directly promotes the SA Objective
+	The Aim / Objective indirectly promotes the SA Objective
0	The Aim / Objective has no clear link to the SA Objective
-	The Aim / Objective indirectly contradicts the SA Objective
--	The Aim / Objective directly contradicts the SA Objective
?	Uncertain

Appendix 2. Conformity of the Waste Core Strategy Options with the Key Planning Objectives of Planning Policy Statement 10

1. Help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be adequately catered for.
2. Provide a framework in which communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet the needs of their communities.
3. Help implement the national waste strategy, and supporting targets, are consistent with obligations required under European legislation and support and complement other guidance and legal controls such as those set out in the Waste Management Licensing Regulations 1994.
4. Help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations.
5. Reflect the concerns and interests of communities, the needs of waste collection authorities, waste disposal authorities and business, and encourage competitiveness.
6. Protect green belts but recognise the particular locational needs of some types of waste management facilities when defining detailed green belt boundaries and, in determining planning applications, that these locational needs, together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission.
7. Ensure the design and layout of new development supports sustainable waste management.

Key Planning Objectives of PPS10 ➔ **Waste Core Strategy Options ⬇**	Key Planning Objective 1	Key Planning Objective 2	Key Planning Objective 3	Key Planning Objective 4	Key Planning Objective 5	Key Planning Objective 6	Key Planning Objective 7
Issue W1: The spatial vision. ■ **Option 1:** (Business as usual). Current vision in the adopted Waste Local Plan.	+	+	++	++	+	+	+
■ **Option 2:** The proposed vision: "A sustainable and educational waste management system for Gloucestershire that reduces waste produced from businesses and households as a priority and diverts waste from landfill."	++	++	++	++	++	++	+
Issue W2: Determining the time period over which the WCS operates. ■ **Option 1:** (Business as usual) Gloucestershire Waste Local Plan to 2012.	++	+	+	++	+	+	+
■ **Option 2:** Up to the year 2018.	++	++	++	++	++	++	+
■ **Option 3:** Up to the year 2020.	++	++	++	++	++	++	+
■ **Option 4:** Up to the year 2026.	+	+	?	+	?	+	+

Issue W3: Implementing the waste hierarchy. ■ **Option 1:** (Business as usual) Proactively minimising waste generation.	++	++	++	++	++	++	++
■ **Option 2:** Focus on recycling.	++	++	++	++	++	0	?
■ **Option 3:** Recovering value (energy) from waste.	++	+	++	++	?	0	?
Issue W4: Making appropriate provision. ■ **Option 1:** (Business as usual).	++	++	++	++	?	++	+
■ **Option 2:** Identifying sites in a DPD.	++	++	++	++	?	++	+
■ **Option 3:** Not identifying sites – having a criteria based policy.	++	++	++	++	0	++	+
■ **Option 4:** A mix of identifying some sites and also using criteria based policies.	++	++	++	++	++	++	+
Issue W5: Setting out a spatial strategy. ■ **Option 1:** Town locations.	++	++	++	++	?	++	+
■ **Option 2:** Edge of town locations.	++	++	++	++	?	?	+
■ **Option 3:** Rural locations.	++	-	++	-	?	?	+
■ **Option 4:** Centralised facilities.	++	?	++	++	?	?	+
■ **Option 5:** Dispersed facilities.	?	++	?	++	?	?	+
■ **Option 6:** (Business as usual). A combination of facilities.	++	++	++	++	?	?	+
Issue W6: Implementing the Joint Municipal Waste Management Strategy. ■ **Option 1:** (Business as usual).	+	++	++	++	++	+	?
■ **Option 2:** A flexible criteria based approach.	++	++	++	++	++	?	+
■ **Option 3:** A prescriptive approach with particular facility types at particular locations.	++	++	++	++	0	++	+
■ **Option 4:** A combination approach.	++	++	++	++	++	++	+
Issue W7a: Cumulative impact. ■ **Option 1:** Having a policy framework against which cumulative impact can be assessed.	?	++	?	+	+	?	?
■ **Option 2:** Having a policy framework where cumulative impacts are not a specific consideration.	?	-	-	-	--	-	?
Issue W7b: Safeguarding sites. ■ **Option 3:** (Business as usual). Safeguarding sites.	++	++	++	++	++	++	?
■ **Option 4:** Not safeguarding sites.	-	-	-	-	-	-	?

Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements. ■ **Option 1:** (Business as usual).	+	+	+	+	?	?	?
■ **Option 2:** Safeguarding existing hazardous waste management facilities provided that they are environmentally acceptable.	+	+	+	+	+	?	?
■ **Option 3:** Minimising hazardous waste at source.	++	++	++	++	++	++	+
Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt. ■ **Option 1:** (Business as usual).	+	+	+	+	?	?	0
■ **Option 2:** New waste management facilities in the Green Belt.	+	++	++	++	?	?	0
■ **Option 3:** No new waste management facilities in the Green Belt.	-	-	-	-	?	++	0
■ **Option 4:** Redefining the Green Belt.	++	++	++	++	?	?	0
Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas. ■ **Option 1:** (Business as usual) Rolling forward current policies.	++	++	++	++	?	0	0
■ **Option 2:** Amending and adding to currently saved policies.	++	++	++	++	++	0	0
Issue W11: SA Report.	Na.	Na.	Na.	Na.	Na.	Na.	Na.
Issue W12: Other issues.	/	/	/	/	/	/	/

Key	
++	The Option directly promotes the Key Planning Objective.
+	The Option indirectly promotes the Key Planning Objective.
0	The Option has no clear link to the Key Planning Objective.
-	The Option indirectly contradicts the Key Planning Objective.
--	The Option directly contradicts the Key Planning Objective.
?	Uncertain

Appendix 3. Testing the options

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W1: The spatial vision. Option 1: (Business as usual) Current vision in the adopted Waste Local Plan. " *…The County Council's objective for sustainable waste management is to seek to achieve appropriate implementation of the concept in Gloucestershire having regard to the best practical environmental option for a particular waste stream."***				**Issue W1: The spatial vision. Option 2: The proposed vision: *"A sustainable and educational waste management system for Gloucestershire that reduces waste produced from businesses and households as a priority and diverts waste from landfill."***			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+	+	In general the vision, or the 'aim' of the current Waste Local Plan accords with this objective.	+ +	+ +	+ +	If the principles of the waste hierarchy are followed this should lead to social, economic and environmental sustainability in terms of the management of waste, but this will require a culture change in society focused on the reduction of waste.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	?	?	?	The specific link between the current vision / aim and this housing focused objective is unclear.	?	?	?	The specific link between the proposed vision and this objective is unclear.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	+ +	+ +	+ +	The vision / aim is very positive in terms of the safeguarding of sites.	+ +	+ +	?	It is possible that in the long term there are uncertainties over the allocation and safeguarding of sites. In the future there may be less sites needed with communities increasingly taking responsibility for the waste they produce. However, in the short to medium term – sites are needed in order to provide for the needs of society for effective waste management.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+	+	+	The vision / aim is positive in terms of protecting and improving health and well-being.	+	+	+	The vision is positive in this regard.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+	+	The vision / aim is generally positive.	+ +	+ +	+ +	The vision is very positive in this regard.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	+ +	+ +	+	The vision / aim is generally very positive.	+	+ +	+ +	If the principles of the waste hierarchy are followed this should lead to a reduction in the adverse impacts of minerals and waste development.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	+	+	+	The vision / aim is generally positive.	+	+ +	+ +	If the principles of the waste hierarchy are followed this should lead to an increased use of recycled and secondary aggregates thus conserving primary resources.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	?	?	?	The employment issues are unclear / not specified in the vision.	?	?	?	The employment issues are unclear in the vision. In the longer term there may be reduced employment in certain waste management facilities but there may be positive spin-offs in other areas. The 'recycling industry' may be a major growth area of the future.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+	+	+	The vision / aim is generally positive in terms of the promotion of this objective.	+	+ +	+ +	The vision would promote this objective.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	+	+	+	The vision / aim is generally positive in terms of the promotion of this objective. No negative effects are likely in terms of flooding / water supply issues.	+	+	+ +	The vision would promote this objective.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	+ +	+	+	The vision / aim is generally positive in terms of the promotion of this objective.	+	+ +	+ +	In the longer term, it is likely that effects will be positive particularly should efforts be aimed at the reduction of waste – the top of the waste hierarchy.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	+	+	+	In general, the vision / aim is positive in terms of broadly promoting sustainable transport.	+	+	+ +	The vision would promote this objective – a reduction in waste produced should reduce the need to travel. However more attention needs to be focused on the promotion of sustainable fuels in vehicles transporting waste. This is a somewhat neglected issue.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	?	?	?	Mineral sites need large volumes of inert materials for successful restoration schemes. It is unclear how the vision / aim will impact on minerals restoration.	?	?	?	Mineral sites need large volumes of inert materials for successful restoration schemes. It is unclear how the promotion of the waste hierarchy (possibly reducing levels of inert waste) will impact on minerals restoration.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	+ +	+ +	+	In general, the vision / aim promotes the waste hierarchy and sustainable waste management.	+ +	+ +	+ +	The vision fully accords with this objective.
15. To reduce contributions to and to adapt to Climate Change.	+	+	+	In general terms the vision / aim promotes this objective.	+	+	+ +	The vision would have a positive effect particularly in the longer term.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W2: Determining the time period over which the WCS operates. Option 1: (Business as usual) Gloucestershire Waste Local Plan to 2012.**			**Issue W2: Determining the time period over which the WCS operates. Options 2, 3 & 4: 2018, 2020, 2026.**			
SA Objective ↓	**WLP to 2012 ↓**		**Comments / Explanation**	**2018**	**2020**	**2026**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+		Generally positive effects likely in terms of the promotion of this broad objective.	+	+	?	2026 fits with Regional Spatial Strategy timescales and would possibly be more attractive for industry investment, but this may stifle innovation and waste technology is a rapidly changing field. The plan should be flexible enough to keep up with these changes in order for waste to be diverted up the hierarchy.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	?		Uncertain effects in terms this housing focused objective.	?	?	?	Uncertain, but the same comments for 2026 apply.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	++		Very positive effects in terms of the safeguarding of sites to 2012.	++	?	-	In the long term there may be uncertainties over the allocation and safeguarding of sites. In the future there may be less sites needed with communities increasingly taking responsibility for the waste they produce. Planning to 2026 may stifle innovation.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+		Positive in relation to this objective.	+	+	?	Generally positive. However planning for the longer term is uncertain – waste technology is a rapidly changing field. The plan should be able to keep up with these changes in order for waste to be diverted up the hierarchy.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	++		Very positive in the general sense of 'contributing to a sustainable Gloucestershire', although specific effects in terms of education, economic development, employment and recreation are not clear.	++	++	?	Similar comments as above for Objective 4.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.		+		Positive in relation to this objective.	+	+	+	Generally positive.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.		+		Positive in relation to this objective.	+	+	?	Positive in the short to medium term. In the longer term the effects are uncertain.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.		?		The effects in relation to the provision of employment opportunities are uncertain.	?	?	?	The employment issues are unclear in relation to the options for timescales. Possibly a shorter plan period would be favourable.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.		+		Positive effects in terms of this objective.	+	+	?	It is likely that a shorter timeframe for the WCS will be beneficial in terms of this objective. If there are negative impacts on the natural environment, tourist assets, historic environment – including archaeology in the county, a shorter / more flexible plan period is preferable. 2026, for all its potential benefits in terms of Regional Spatial Strategy synergy is a long way off – and thus uncertain.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.		++		Very positive.	++	++	?	Unclear in the longer term, very positive to 2018, 2020.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.		++		Very positive against this objective.	++	++	?	Similar comments as for objective 10.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.		+		Generally positive effects in terms of aiming to reduce the impacts of lorry traffic. Unclear on promoting the use of sustainable alternative fuels.	+	+	?	Possibly a shorter timeframe for the plan in favourable – as e.g. alternative fuel technologies may be a rapidly changing area. The plan should not be left behind by technological advances – because it is tied into a long timeframe.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.		?		Uncertain effects.	?	?	?	Unclear how the options on the plan timeframe relate to mineral site restoration.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.		+ +		The vision is generally very positive in promoting this objective.	+ +	+ +	?	Unclear in the longer term, very positive to 2018, 2020.
15. To reduce contributions to and to adapt to Climate Change.		+		Generally positive effects.	+	+	?	Generally positive in the short to medium term. Unclear / uncertain effects in the longer term.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W3: Implementing the waste hierarchy. Option 1: (Business as usual) Proactively minimising waste generation.**				**Issue W3: Implementing the waste hierarchy. Option 2: Focus on recycling.**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+ +	+ +	Very positive effects for Gloucestershire, particularly in the longer term.	+	+ +	+ +	A focus on recycling is very positive. However the resources and energy needed to recycle should not be overlooked. In the longer term strategies should aim at a higher point in the waste hierarchy i.e. re-use and reduction. There are issues in terms of finding markets for end products.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	+	+ +	+ +	Very positive effects in terms of this objective.	+	+	+ +	Houses and related infrastructure require a huge amount of mineral resources. Increased use of recycled aggregates may, in the longer term, become increasingly important for the house building industry and may result in more sustainably designed and constructed homes.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	0	0	0	Neutral effect.	?	?	?	Logically a focus on recycling will reduce the need for certain kinds of sites in the longer term. However there may be a need for more sites handling and sorting recyclable materials. It is unclear what these trends may have on the need to safeguard sites from other development.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+ +	+ +	+ +	Very positive effects for Gloucestershire through proactively minimising waste generation.	+ +	+ +	+ +	A focus on recycling should have a positive effect on the health and well-being of Gloucestershire's residents and visitors. Recycling is a very positive move towards re-use and reduction which would have even more positive effects.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+ +	+ +	Very positive effects for Gloucestershire, particularly in the longer term.	+	+	+ +	It is clear that in general, on the environmental front, a focus on recycling will contribute to 'a sustainable Gloucestershire.' It is also a consideration that if recycling targets are not met and authorities are fined as a result, local taxes may rise, or there could be cut backs in service provision in important areas. This would have a detrimental effect on many in Gloucestershire – but possibly most on those who are least able to support them selves or who are already disadvantaged.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	+	+ +	+ +	Very positive effects against this objective. With waste being minimised, there will be less of a need for minerals and waste development with associated impacts.	+	+	+	Increased recycling will reduce the need for landfill sites, although there is always the issue of residual wastes (including certain hazardous wastes) which cannot be recycled. Increased use of recycled aggregates will also reduce the need for extensions to quarries and thus lessen the impacts of minerals and waste development.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	+	+ +	+ +	Very positive in conserving minerals.	+	+ +	+ +	Increased recycling of aggregate and the use of other materials (such as crushed glass) as a road base will help to conserve mineral resources. The more material that is re-used the less primary material will have to be quarried.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	0	0	0	Neutral effect.	?	?	?	This issue is somewhat unclear. In the longer term, with a focus on recycling, jobs may be lost in quarrying / landfilling activities, but there may be many positive spin-offs in other areas. It is possible that in the longer term emerging recycling industries may become significant employers in both urban and rural areas.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+ +	+ +	+ +	Major positive effects for Gloucestershire.	+ +	+ +	+ +	Increased recycling will help to protect Gloucestershire's environment (and the national / global environment) as less primary resources will be used. Ideally, in the longer term the focus should shift to reuse and reduction.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	0	0	0	Neutral effect.	0	0	0	Neutral effect.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	+ +	+ +	+ +	Major positive effects for Gloucestershire.	+ +	+ +	+ +	A focus on recycling would be very positive in the short to medium term in particular. However considerable resources and energy are used to recycle and in the longer term strategies should aim at a higher point in the waste hierarchy i.e. re-use and reduction. But it is likely that recycling will remain a very important element in future waste management strategies.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	++	++	++	Major positive effects for communities.	+	+	+	A focus on recycling should reduce the need to travel particularly with the recycling and reuse of construction & demolition waste on building sites. Construction & Demolition waste is a very significant waste stream and progress in this area would be very environmentally beneficial. Increased recycling of Construction & Demolition waste would also reduce the need for primary minerals – thus reducing quarry traffic and associated adverse impacts.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	-	-	?	Possibly negative in the short to medium term. Uncertain in the longer term. Mineral sites need large volumes of inert materials for successful restoration schemes and waste minimisation, reducing levels of inert waste, may compromise such schemes.	?	?	?	Mineral sites need large volumes of inert materials for successful restoration schemes. It is unclear how a focus on recycling – possibly reducing levels of inert waste – will impact on mineral restoration schemes.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	++	++	++	Major positive effects for Gloucestershire.	++	++	+	Very positive in the short to medium term. In the longer term – prevention, reduction and re-use should be a focus. The issue of end – markets for recycled products is a problematic issue. Recycling activities and industries in the long term need to be economically sustainable.
15. To reduce contributions to and to adapt to Climate Change.	++	++	++	Major positive effects for Gloucestershire.	++	++	+	A focus on recycling could be very positive in the short to medium term. In the longer term strategies should aim at a higher point in the waste hierarchy i.e. re-use and reduction. There needs to be a realistic assessment regarding the energy used to recycle in relation to impacts on climate change.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W3: Implementing the waste hierarchy. Option 3: Recovering value (energy) from waste.**				**Issue W4: Making appropriate provision. Option 1: (Business as usual)**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	**0**	**+**	**++**	Neutral in the short term. Generally positive in the longer term as waste is moved up the hierarchy in line with government guidance. Commentary on Policy 15 of the Waste Local Plan states that it is desirable to have front-end recovery of the maximum amount of compostable and recyclable material.	**+**	**+**	**+**	Making appropriate provision through identifying sites in a Development Plan Document can provide a degree of certainty for developers and communities.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	**0**	**0**	**+**	Neutral in the short to medium term. More positive in the long term with the possible utilisation of heat and power schemes etc.	**?**	**?**	**?**	Uncertain effects against this objective.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	**0**	**?**	**?**	Neutral in the short term. Uncertain effects in the medium to long term.	**++**	**++**	**++**	Clearly very positive against this objective.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	**?**	**?**	**?**	Uncertain effects.	**+**	**+**	**?**	The considered identification of appropriate sites can protect public health and well-being as these sites go through a rigorous process identifying them as suitable on a whole range of criteria.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	**?**	**?**	**?**	Uncertain effects.	**+**	**+**	**?**	Making appropriate provision through allocated sites in the plan can provide clarity and certainty, which may contribute to sustainable economic development.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	?	?	?	Uncertain effects.	+	+	+	Making appropriate provision can protect and safeguard the amenity of local communities, as sites will go through a rigorous process identifying them as suitable on a whole range of criteria.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	?	0	0	Uncertain effects in the short term. Neutral effects in the medium to long term.	0	0	0	Neutral.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	?	?	?	Uncertain effects in terms of employment.	0	0	0	Neutral.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	?	?	?	Uncertain effects.	+	++	++	Making appropriate provision of sites for waste management can help to protect biodiversity, the natural environment, the landscape, tourist assets and the historic environment as these sites will go through a rigorous process identifying them as suitable on a whole range of criteria.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	0	?	+	Neutral effects in the short term and uncertain in the medium term. Effects may be positive in the longer term as waste is diverted from landfill sites that are on the floodplain.	+	++	++	The detailed process of the identification of sites should ensure that flooding is not an issue and that any potential development on the sites will not compromise water supplies.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	0	?	+	Neutral effects in the short term and uncertain in the medium term. In the longer term Energy from Waste may prove to be a cleaner and more stringently regulated option for the disposal of residual waste than landfill.	+	++	++	The detailed process of the identification of sites should ensure that these sites are appropriate for waste management. The logical conclusion of this is that more sensitive areas of the County will be protected.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	?	?	?	Uncertain. It depends on the specific location of the Energy from Waste plant. If it is directly proximate to a landfill site, or part of a landfill complex, then the residual waste will not have to travel. If it is a 'stand alone' plant then the effects are potentially negative against this objective.	+	+ +	+ +	For strategic sites in particular, sites are clearly identified bearing in mind traffic considerations.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral against this objective.	0	0	0	Neutral effects.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	+	+	+	Energy from Waste technology diverts waste from landfill and thus moves waste up the hierarchy.	+	+	+	Generally positive.
15. To reduce contributions to and to adapt to Climate Change.	?	?	?	Uncertain.	?	?	?	Uncertain effects in terms of reducing contributions to and adapting to Climate Change.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W4: Making appropriate provision. Option 2: Identifying sites in a DPD.**				**Issue W4: Making appropriate provision. Option 3: Not identifying sites – having a criteria based policy.**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+	+	Identifying sites in a Development Plan Document can provide a degree of certainty for developers and communities.	?	?	?	Uncertain effects in the short, medium and long term.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	?	?	?	Uncertain effects against this objective.	?	?	?	Uncertain effects in the short, medium and long term.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	+ +	+ +	+ +	Clearly very positive against this objective.	-	-	-	Negative effects on safeguarding sites.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+	+	?	The considered identification of appropriate sites can protect public health and well-being as these sites go through a rigorous process identifying them as suitable on a whole range of criteria.	?	?	?	Uncertain effects.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+	?	Allocated sites in the plan provide clarity and certainty, which may contribute to sustainable economic development.	?	?	?	Uncertain effects.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	+	+	+	The considered identification of appropriate sites for waste management can protect and safeguard the amenity of local communities, as these sites will go through a rigorous process identifying them as suitable on a whole range of criteria.	?	?	?	Uncertain effects.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Neutral.	0	0	0	Neutral.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	0	0	0	Neutral.	0	0	0	Neutral.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+	++	++	The considered identification of appropriate sites for waste management can help to protect biodiversity, the natural environment, the landscape, tourist assets and the historic environment as these sites will go through a rigorous process identifying them as suitable on a whole range of criteria.	?	?	?	Uncertain effects.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	+	++	++	The detailed process of the identification of sites should ensure that flooding is not an issue and that any potential development on the sites will not compromise water supplies.	?	?	?	Uncertain effects.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	+	++	++	The detailed process of the identification of sites should ensure that these sites are appropriate for waste management. The logical conclusion of this is that more sensitive areas of the County will be protected.	?	?	?	Uncertain effects.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	+	+ +	+ +	For strategic sites in particular, sites are clearly identified bearing in mind traffic considerations.	?	?	?	Uncertain effects.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral effects.	0	0	0	Neutral effects.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	+	+	+	Generally positive.	+	+	+	A likely positive effect in terms of increasing the number of small sites (local sites) in the County for recycling and composting. This would reduce the levels of waste to landfill and help to meet targets.
15. To reduce contributions to and to adapt to Climate Change.	?	?	?	Uncertain effects in terms of reducing contributions to and adapting to Climate Change.	?	?	?	Uncertain effects.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W4: Making appropriate provision. Option 4: A mix of identifying some sites and also using criteria based policies.**				**Blank**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+	+	Generally positive effects in terms of promoting sustainable development.				
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	?	?	?	Uncertain effects in terms of this objective.				
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	?	?	?	Uncertain effects in terms of safeguarding sites.				
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+	+	?	Uncertain in the longer term, generally positive effects likely in the short to medium term.				
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+	?	Similar comments as for Objective 4.				

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	+	+	+	Generally positive effects in terms of the safeguarding of the amenity of local communities.				
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Neutral impact.				
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	0	0	0	Neutral impact.				
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+	++	++	Generally very positive effects particularly in the longer term.				
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	+	++	++	Generally very positive effects in terms of flood prevention and sustainable water supply issues, particularly in the longer term.				
11.To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	+	++	++	Generally very positive particularly in the longer term.				

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	+	+ +	+ +	Generally positive effects in terms of reducing the adverse impacts of lorry traffic. Very positive in the longer term.				
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral impact.				
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	+ +	+ +	+ +	Generally very positive effects in terms of this objective.				
15. To reduce contributions to and to adapt to Climate Change.	?	?	?	Uncertain impact.				

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W5: Setting out a spatial strategy. Option 1: Town locations.**				**Issue W5: Setting out a spatial strategy. Option 2: Edge of town locations.**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+	+	Urban locations are generally likely to be closer to the main sources of waste arisings. Urban areas produce proportionally more waste then rural areas.	+	+	+	Urban locations are generally likely to be closer to the main sources of waste arisings. Urban areas produce proportionally more waste then rural areas. Semi – urban locations may have the added advantage of having less impact on communities in terms of those people living in close proximity to sites and facilities.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	?	?	?	This issue is uncertain. Waste sites will compete with housing for available urban land. An increasing proportion of housing development is on previously developed land, sites that may be considered as suitable for waste management.	?	?	?	This issue is uncertain. Waste sites will compete with housing for available urban land. An increasing proportion of housing development is on previously developed land, sites that may be considered as suitable for waste management.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	?	?	?	Uncertain. Sites for waste management can be safeguarded in rural, urban and edge locations. These sites have differing pressures on them.	?	?	?	Uncertain. Sites for waste management can be safeguarded in rural, urban and edge locations. These sites have differing pressures on them.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+	+	+	In terms of the transportation of waste urban locations are broadly more sustainable and will lessen adverse traffic impacts. As long as sites are well managed / with conditions imposed and enforced and under appropriate regulatory regimes – there should be no significant health issues in urban environments.	+	+	+	In terms of the transportation of waste, urban or edge of urban locations are broadly more sustainable and will lessen adverse traffic impacts. As long as sites are well managed / with conditions imposed and enforced and under appropriate regulatory regimes – there should be no significant health issues in urban / edge of urban environments.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+	+	Generally positive effects.	+	+	+	Generally positive effects.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	?	?	?	Uncertain effect.	?	?	?	Uncertain effect on this objective.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Neutral effect on this objective.	0	0	0	Neutral effect on this objective.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	0	0	0	Neutral effect on this objective.	0	0	0	Neutral effect on this objective.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+	+	+	In general it is likely that the natural environment including areas of rich biodiversity and quality landscape will be better protected should waste sites be located in urban or semi-urban areas. This follows the same rationale as government targets to build on more previously developed land. However urban tourist assets, including valuable architectural and archaeological sites may be at risk from an urban waste sites focus.	0	0	0	Neutral effect on this objective.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	+	+	+	Generally positive effects.	+	+	+	Generally positive effects.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	+	+	+	Urban locations are broadly more sustainable in terms of lessening adverse traffic pollution impacts. Urban waste sites may be easier to monitor, as there is a higher density of population to report potential amenity or pollutions problems. Some urban land may already be degraded or of low environmental quality and the reuse of this sort of site would help to protect more vulnerable areas.	0	0	0	Neutral.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	++	++	++	In terms of the transportation of waste, urban locations are broadly more sustainable and will lessen adverse traffic pollution impacts. Urban areas produce proportionally more waste then rural areas and government guidance states that waste should be managed in one of the nearest appropriate installations. If progress can be made in introducing sustainable alternative fuels for lorry traffic, this would be of major environmental benefit.	+	+	+	In terms of the transportation of waste, urban and semi-urban locations are broadly more sustainable and will lessen adverse traffic pollution impacts. Urban areas produce proportionally more waste then rural areas. If progress can be made in introducing sustainable alternative fuels for lorry traffic, this would be of major environmental benefit.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral effect on this objective.	0	0	0	Neutral effect.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	0	0	0	Neutral effect on this objective.	0	0	0	Neutral effect.
15. To reduce contributions to and to adapt to Climate Change.	++	++	++	Major positive effect.	+	+	+	Generally positive.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W5: Setting out a spatial strategy. Option 3: Rural locations.**				**Issue W5: Setting out a spatial strategy. Option 4: Centralised facilities.**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	**?**	**?**	**?**	Uncertain effects.	**+**	**+**	**?**	In the short to medium term there are benefits in terms of economies of scale, a restriction of impacts to fewer areas and the potential for increased industry innovation. Longer term effects are less clear. With larger facilities there may be risks of shortfalls in capacity if they fail to come forward.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	**?**	**?**	**?**	This issue is uncertain.	**0**	**0**	**0**	Neutral.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	**?**	**?**	**?**	Uncertain. Sites for waste management can be safeguarded in rural, urban and edge locations. These sites have differing pressures on them.	**+**	**+**	**+**	It is likely that opting for larger centralised facilities would lead to a safeguarding of suitable strategic sites.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	**?**	**?**	**?**	In general rural locations are unlikely to be as sustainable as urban or edge of urban ones. To some degree the health and well-being of people will not depend on where waste sites are located but on how well they are run and the quality of mitigation measures and conditions.	**?**	**+**	**+**	Uncertain effects in the short term, but more positive effects in the medium to long term.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	**?**	**?**	**?**	Uncertain effects.	**?**	**?**	**?**	The issues are not clear. In terms of employment opportunities it is likely that larger facilities will not provide as many jobs as smaller facilities at the higher end of the waste hierarchy. Smaller localised facilities may better provide job opportunities for people from all social and ethnic backgrounds.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	?	?	?	Uncertain effects.	+	+	+	Generally positive but the issues are not clear cut. It is likely that opting for larger scale centralised facilities will restrict impacts to fewer areas. Impacts will be concentrated rather than dispersed. However the concentrated impacts on those communities that are affected should be very carefully considered. It is also the case that large facilities require a network of bulking up facilities which can have negative impacts that need to be mitigated.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Probable neutral effect against this objective, although there could potentially be mineral sterilisation issues with sites in rural locations.	0	0	0	Neutral effect on this objective.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	0	0	0	Neutral effect on this objective.	?	?	?	Not clear. In terms of employment opportunities it is likely that larger centralised facilities may not provide as many jobs as smaller facilities at the higher end of the waste hierarchy. Smaller localised facilities may provide more job opportunities and promote diversification in both the rural and the urban economies.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	-	-	-	Potential negative impacts on sensitive rural environments and designations.	+	+	-	Negative in the longer term as Gloucestershire must aim to reduce, reuse and recycle and large facilities may not encourage this. However in the short to medium term large facilities or sites may confine the negative impacts to appropriate areas thus protecting valued and sensitive environments.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	+	+	+	Generally positive.	?	?	?	Uncertain effects.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	-	-	-	Negative against this objective. Rural areas are generally less sustainable locations for waste sites due to the fact that waste is transported greater distances. Also sensitive rural environments may suffer negative impacts from certain waste operations and may be at greater risk from pollution.	+	+	-	The same comments apply as for Objective 9 – Negative in the longer term as Gloucestershire must aim to reduce, reuse and recycle and large facilities may not encourage this. However in the short to medium term large facilities or sites may confine negative impacts to appropriate areas where they can be mitigated and controlled.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	-	-	-	Negative against this objective due to greater haulage distances. Although it should be noted that facilities which manage waste higher up the waste hierarchy might make greater haulage distances more acceptable. It is dependent to a large degree on the nature of the facility.	?	?	?	This is a complicated issue and it is not easy to predict effects. The issues are those of the intensification vs. the spreading of impacts. On the one hand centralised facilities would generate large amounts of vehicle movements concentrated in one area. This would clearly benefit other areas where there are no sites. In the longer term communities need to take more responsibility for the waste that they produce and this may not be achieved by hauling it a to a large facility. Progress needs to be made on sustainable alternative fuels.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral effect on this objective.	0	0	0	Neutral effect on this objective.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	0	0	0	Neutral effect on this objective.	?	?	?	Unclear. It depends on the type of facility. Centralised facilities may have a positive roll in terms of moving waste up the waste hierarchy, but this is likely to have to be in combination with smaller facilities and a number of technologies, giving communities the opportunity to take more responsibility for the waste that they produce. It is possible that in the longer term, larger facilities lower in the hierarchy may discourage activities higher up the hierarchy.
15. To reduce contributions to and to adapt to Climate Change.	-	-	-	Negative against this objective due to greater haulage distances from the main source of arisings.	?	?	?	Uncertain – depends on the technology.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W5: Setting out a spatial strategy. Option 5: Dispersed facilities.**				**Issue W5: Setting out a spatial strategy. Option 6: A combination of facilities. (Business as usual)**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+	+	Generally positive against this objective. Government guidance seeks to encourage communities to take responsibility for the waste they produce and a network of smaller dispersed sites/facilities would facilitate this.	+	+ +	+ +	Generally, a combination approach would appear to be a pragmatic option and is very positive in the medium to long term.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	0	0	0	Neutral.	+	+	+	Positive effects against this objective in the short, medium and long term.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	?	?	?	Uncertain but dispersed sites throughout the County might favour an approach based on a criteria based policy, rather than safeguarding sites.	+	+	+	Positive effects against this objective in the short, medium and long term.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	?	?	?	Uncertain effects.	+	+	+ +	Positive effects against this objective particularly in the longer term.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+	+	A network of dispersed facilities may engender greater community involvement and responsibility in the management of waste. Local facilities e.g. focused on recycling, may provide local employment opportunities and cut down on waste haulage distances.	+	+ +	+ +	Generally positive in contributing to 'a sustainable Gloucestershire', particularly in the longer term.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	?	?	?	Uncertain. With dispersed facilities the impacts of waste management are spread wider rather than being concentrated in certain locations. This has benefits in terms of communities taking more responsibility for waste but there may be sustainability issues in relation to transportation and the fact that smaller sites may not benefit from economies of scale.	+	+	+	Generally positive effects likely in terms of safeguarding the amenity of local communities.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Neutral.	0	0	0	Neutral impact.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	?	?	?	Uncertain impact on employment, but it is possible that smaller scale dispersed facilities (i.e. focusing on recycling) may provide more employment opportunities than larger ones.	+	+	+	In general effects are likely to be positive in terms of the provision of employment.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	?	?	?	Uncertain effects in relation to this objective.	+	+	++	A combination approach is likely to be generally positive.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	?	?	?	Uncertain effects in relation to this objective.	?	?	?	Uncertain in terms of the impacts on flooding and water supply in Gloucestershire.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	?	?	?	Uncertain effects in relation to this objective.	+	+	++	A combination approach is likely to be positive and particularly so in the longer term.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	?	?	?	Uncertain effects in relation to this objective.	?	?	?	Uncertain effects in relation to this objective.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral impact.	0	0	0	Neutral impact on minerals sites.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	?	?	?	Uncertain effects in relation to this objective.	+	+	++	Generally positive in terms of reducing waste to landfill and promoting the waste hierarchy.
15. To reduce contributions to and to adapt to Climate Change.	?	?	?	Uncertain impact.	+	+	+	Generally positive effects.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W6: Implementing the Joint Municipal Waste Management Strategy. Option 1: (Business as usual).**			**Issue W6: Implementing the Joint Municipal Waste Management Strategy. Option 2: A flexible criteria based approach.**			
SA Objective ↓	**WLP to 2012 ↓**		**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.		**+**	In general the business as usual approach to implementing the JMWMS is positive in terms of the general objective to promote sustainable development.	**?**	**?**	**?**	Uncertain effects in the short, medium and long term.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.		**?**	Uncertain effects in terms of this objective.	**?**	**?**	**?**	Uncertain effects in the short, medium and long term.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.		**+**	Positive in terms of the safeguarding of sites suitable for waste management.	**-**	**-**	**-**	Negative effects on the safeguarding of sites.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.		**0**	Neutral impact.	**?**	**?**	**?**	Uncertain effects.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.		**0**	Neutral impact.	**?**	**?**	**?**	Uncertain effects.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.		+		Positive effects in terms of safeguarding the amenity of local communities.	?	?	?	Uncertain effects.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.		0		Neutral impact.	0	0	0	Neutral.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.		0		Neutral impact.	0	0	0	Neutral.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.		+		Positive effects in terms of this objective.	?	?	?	Uncertain effects.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.		?		Uncertain effects.	?	?	?	Uncertain effects.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.		+		Generally positive effects in terms of this objective.	?	?	?	Uncertain effects.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.		?		Uncertain effects in terms of reducing the adverse impacts of lorry traffic.	?	?	?	Uncertain effects.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.		0		Neutral impact on the restoration of minerals sites.	0	0	0	Neutral impact.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.		+		Positive impact.	+	+	+	A likely positive effect in terms of increasing the number of small sites in the County for recycling and composting – reducing levels of waste to landfill and helping to meet targets.
15. To reduce contributions to and to adapt to Climate Change.		?		Uncertain impact.	?	?	?	Uncertain.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W6: Implementing the Joint Municipal Waste Management Strategy. Option 3: A prescriptive approach with particular facility types at particular locations.**				**Issue W6: Implementing the Joint Municipal Waste Management Strategy. Option 4: A combination approach.**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+	+	Positive in terms of providing certainty for industry and communities.	+	+	+	Generally positive effects in terms of promoting sustainable development.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	?	?	?	Uncertain against this objective.	?	?	?	Uncertain effects in terms of this objective.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	+ +	+ +	+ +	Clearly very positive against this objective.	?	?	?	Uncertain effects in terms of safeguarding sites.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+	+	?	The considered identification of appropriate sites can protect public health and well-being as these sites go through a rigorous process identifying them as suitable on a whole range of criteria.	+	+	?	Uncertain in the longer term, generally positive effects likely in the short to medium term.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+	?	Particular facilities at particular locations provide clarity and certainty, which may contribute to sustainable growth and economic development.	+	+	?	Similar comments as for Objective 4.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	+	+	+	The considered identification of appropriate sites for waste management can protect and safeguard the amenity of local communities, as these sites will go through a rigorous process identifying them as suitable on a whole range of criteria.	+	+	+	Generally positive effects in terms of the safeguarding of the amenity of local communities.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Neutral impact.	0	0	0	Neutral impact.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	0	0	0	Neutral impact.	0	0	0	Neutral impact.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+	+ +	+ +	The considered identification of appropriate sites for waste management can help to protect biodiversity, the natural environment, the landscape, tourist assets and the historic environment as these sites will go through a rigorous process identifying them as suitable on a whole range of criteria.	+	+ +	+ +	Generally very positive effects particularly in the longer term.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	+	+ +	+ +	Generally positive. The detailed process of site identification should ensure that flooding is not a significant issue and that water supplies are not compromised.	+	+ +	+ +	Generally very positive effects in terms of flood prevention and sustainable water supply issues, particularly in the longer term.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	+	+ +	+ +	The detailed process of the identification of sites should ensure that they are appropriate for waste management. The logical conclusion of this is that more sensitive areas of the County will be protected.	+	+ +	+ +	Generally very positive particularly in the longer term.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	+	++	++	For major / strategic sites, sites will be identified clearly bearing in mind traffic considerations.	+	++	++	Generally positive effects in terms of reducing the adverse impacts of lorry traffic. Very positive in the longer term.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral impact on the restoration of mineral sites.	0	0	0	Neutral impact.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	+	+	+	Generally positive effects on this objective.	++	++	++	Generally very positive effects in terms of this objective.
15. To reduce contributions to and to adapt to Climate Change.	?	?	?	Uncertain impact.	?	?	?	Uncertain impact.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [broadly up to 5 years] **M** = Medium term effects [broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W7a: Cumulative impact. Option 1: Having a policy framework against which cumulative impact can be assessed.**				**Issue W7a: Cumulative impact. Option 2: Having a policy framework where cumulative impacts are not a specific consideration.**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+ +	+ +	Having a policy framework against which cumulative impacts can be assessed is clearly positive (very positive in the longer term) in terms of promoting sustainable development.	-	-	--	Not having a framework against which cumulative impact or impacts can be assessed is negative in terms of general sustainability and very negative in the longer term.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	?	?	?	Uncertain effects in terms of this housing focused objective.	?	?	?	Uncertain effects in terms of this housing focused objective.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	+	+	+	Generally positive in terms of the safeguarding of sites in Gloucestershire.	-	-	-	Negative effect in the short, medium and long term.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+ +	+ +	+ +	Very positive in terms of this objective; fully accords with it.	-	--	--	Negative effects likely in terms of health and well-being, particularly in the medium to long term.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	?	?	?	Probably positive in terms of general sustainability (see Objective 1) but uncertain in terms of the effects on the specifics of Objective 5 – education, economic development, employment & recreation for all.	?	?	?	Uncertain.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	+ +	+ +	+ +	Very positive in terms of this objective; fully accords with it.	--	--	--	Major negative effects likely in terms of the amenity of local communities.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Neutral impact against this objective	0	0	0	Neutral impact against this objective
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	?	?	?	Uncertain impacts in terms of employment opportunities.	?	?	?	Uncertain impacts in terms of employment opportunities.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+	+ +	+ +	Very positive in terms of the protection, conservation and enhancement of the natural environment / historic environment.	-	--	--	Major negative effects in terms of this objective, particularly in the longer term.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	+	+ +	+ +	Very positive in terms of the prevention of flooding and sustainable use of water.	-	--	--	Major negative effects in terms of the prevention of flooding and the protection of water supplies in the County.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	+	+ +	+ +	Very positive in terms of this objective.	-	--	--	Major negative effects in the longer term.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	+	++	++	Likely very positive effects, particularly in the longer term.	-	--	--	Major negative effects in the longer term in terms of the impacts of lorry traffic on communities if cumulative impacts of waste development are not carefully considered.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral impact against this objective	0	0	0	Neutral effects.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	?	?	?	Uncertain impact on reducing waste to landfill.	?	?	?	Uncertain what the impact will be on the objective to reduce waste to landfill.
15. To reduce contributions to and to adapt to Climate Change.	?	?	?	Uncertain impact.	?	?	?	Uncertain impact in terms of addressing Climate Change.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W7b: Safeguarding sites. Option 3: (Business as usual) Safeguarding sites.**				**Issue W7b: Safeguarding sites. Option 4: Not safeguarding sites.**			
SA Objective ↓	**S**	Akin to WLP	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+	+	The business as usual (current) approach to safeguarding sites is generally positive in terms of broadly promoting sustainable development.	-	-	-	Likely negative effects in general sustainability terms.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	?	?	?	Unclear / uncertain effects in terms of this objective, but it could be argued that safeguarding sites for waste management means that these are not available for housing use.	?	?	?	Uncertain effects in terms of this objective.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	+ +	+ +	+ +	Clearly 'major' positive effects in terms of this objective.	--	--	--	Clearly (and obviously) major negative effects on the safeguarding of sites.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+	+	+	Generally positive in terms of protecting and improving people's health and well-being.	-	-	-	Likely negative effects on health and well-being.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+	+	This option is generally positive against this objective.	-	-	-	Likely negative impacts in terms of this objective

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	+	+	+	Generally positive in terms of safeguarding amenity.	-	-	-	Negative impacts envisaged.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	A neutral impact is likely.	0	0	0	Neutral impact.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	?	?	?	It is uncertain how employment opportunities are affected by the safeguarding of sites either in the short, medium or longer term.	?	?	?	Uncertain effects on employment opportunities in Gloucestershire.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+	+	+	Generally positive in terms of this objective.	0	0	0	Likely neutral impact.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	?	?	?	Uncertain impacts in terms of the prevention of flooding and the protection of water supplies.	?	?	?	Uncertain impacts in terms of the prevention of flooding and the protection of water supplies.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	+	+	+	Akin to Objective 9, generally positive effects against this objective.	0	0	0	Likely neutral impact.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	+	+	+	Generally positive effects in that safeguarded sites will have been selected (in part) in terms of their suitability in transport terms.	0	0	0	Likely neutral impact.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral impact.	0	0	0	Likely neutral impact on the restoration of minerals sites.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	++	++	++	Major positive effects in the short medium and long term. Sites are selected in order to provide for sustainable waste management.	-	-	-	Generally negative effects envisaged in terms of reducing waste to landfill and promoting the waste hierarchy. With no safeguarded sites this may be very difficult to achieve.
15. To reduce contributions to and to adapt to Climate Change.	+	+	+	Generally positive in terms of reducing contributions to Climate Change. Unclear in terms of adaptation.	-	-	-	Likely negative impact.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements. Option 1: (Business as usual). WLP Policy 16.**			**Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements. Option 2: Safeguarding existing hazardous waste management facilities provided that they are environmentally acceptable.**			
SA Objective ↓	**WLP to 2012 ↓**		**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.		**+**	Everyone (to some degree) is responsible for the production of hazardous wastes (e.g. through our use of batteries, cars, TVs, fridges etc). The ideal is that this waste should not be produced in the first place, or that it should be minimised. But the reality at the current time is that it is being produced and needs to be managed. Thus the current approach is generally positive in terms of social, economic and environmental sustainability.	**+**	**+**	**+**	Generally positive provided that existing hazardous waste management facilities are environmentally acceptable.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.		**0**	Likely neutral impact on this objective.	**0**	**0**	**0**	Likely neutral impact on this objective.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.		**0**	Neutral impact in terms of safeguarding sites.	**+**	**+**	**+**	Generally positive effects.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.		**+**	Generally positive impact. Policy 16 stipulates that facilities have to be part of a sustainable waste management system & meet the relevant policies and criteria of the Development Plan. Special waste (or 'hazardous waste' as it is now referred to) is also subject to the strict regulatory controls of the Environment Agency.	**+**	**+**	**+**	Generally positive effects provided that facilities are efficiently managed and regulated and that they are environmentally acceptable.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.		**0**	Likely neutral impact on this objective.	**0**	**0**	**0**	Likely neutral impact on this objective.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.		+		Generally positive effects.	+	+	+	Generally positive effects provided that facilities are efficiently managed and regulated and that they are environmentally acceptable.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.		0		Likely neutral impact on this objective.	0	0	0	Likely neutral impact on this objective.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.		?		Uncertain of the links between the 'business as usual' approach and employment opportunities.	0	0	0	Likely neutral impact on this objective.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.		+		Generally positive effects against this objective.	+	+	+	Generally positive effect in terms of this objective.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.		+		Generally positive effects in terms of flood prevention and the sustainable use of water.	+	+	+	Generally positive effect in terms of this objective.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.		+		Generally positive effects against this objective.	+	+	+	Generally positive effect in terms of this objective.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.		+		Generally positive effects against this objective.	+	+	+	Generally positive effect in terms of this objective.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.		0		Neutral impact.	0	0	0	Neutral impact.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.		-		Negative impact. Most hazardous waste managed in Gloucestershire goes to landfill and thus a business as usual approach does not 'reduce waste to landfill'.	?	?	?	Uncertain or possibly negative impacts in terms of reducing waste to landfill.
15. To reduce contributions to and to adapt to Climate Change.		?		Uncertain in terms of the impacts in relation to climate change.	?	?	?	Uncertain impact.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements. Option 3: Minimising hazardous waste at source.**				**Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt. Option 1: (Business as usual)**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+ +	+ +	Clearly very positive particularly in the long term in terms of social, economic and environmental sustainability.	+	+	+	Generally positive against this broad objective, due to the fact that the waste management sites in the Gloucester and Cheltenham Green Belt are relatively close to major sources of waste arisings.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	+	+ +	+ +	Very positive particularly in the longer term. Minimising hazardous waste at source may include the use of fewer hazardous materials in the construction of homes.	0	0	0	Neural impact in terms of this objective.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	0	0	0	Likely neutral impact in terms of safeguarding sites.	+	+	+	Positive effects in terms of the safeguarding of sites for waste management.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+ +	+ +	+ +	Very positive effects in the short, medium and long term.	0	0	0	Neutral impact.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+ +	+ +	Very positive effects.	0	0	0	Neutral impact.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	+	+ +	+ +	Very positive effects in terms of the amenity of local communities in Gloucestershire.	?	?	?	Uncertain.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	+	+ +	+ +	Very positive effects. In general terms mineral resources will be conserved if waste is minimised.	0	0	0	Neutral impact in terms of this objective. Minerals are generally not found (or won) in the Cheltenham / Gloucester Green Belt.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	0	0	0	Neutral impact.	+	+	+	Generally positive impact in terms of employment given that there are some major waste operators in the Green Belt, including operators involved in the management of Gloucestershire's municipal waste.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	+ +	+ +	+ +	Very positive effects in the short, medium and long term.	?	?	?	Uncertain effects, although it could be argued that by continuing to utilise Green Belt sites, areas of the County which are more environmentally sensitive / or richer in landscape character, biodiversity or archaeological/historic significance may be protected.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	0	0	0	Neutral impact.	0	0	0	Neutral impact.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	+ +	+ +	+ +	Very positive effects in the short, medium and long term.	?	?	?	Similar comments apply as for Objective 9.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	++	++	++	Very positive effects in the short, medium and long term.	+	+	+	Generally positive, due to the fact that the waste management sites in the Gloucester and Cheltenham Green Belt are relatively close to the major sources of waste arisings in Gloucestershire.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Likely neutral impact on mineral site restoration.	0	0	0	Likely neutral impact on mineral site restoration.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	++	++	++	Very positive effects in the short, medium and long term.	0	0	0	Neutral.
15. To reduce contributions to and to adapt to Climate Change.	++	++	++	Very positive effects in the short, medium and long term.	0	0	0	Neutral.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt. Option 2: New waste management facilities in the Green Belt.**				**Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt. Option 3: No new waste management facilities in the Green Belt.**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+	+	Generally positive given that a significant factor is that sites in the Green Belt are relatively close to the major sources of waste arisings in Gloucestershire. It can also be argued that Green Belt land is significantly less rich in terms of landscape character / value and biodiversity than many other areas of Gloucestershire – a large proportion of which is designated Area of Outstanding Natural Beauty.	-	-	-	Broadly negative due to the fact that sites in the Green Belt are close to major sources of waste arising and on land that is (in general terms) of less environmental value than many other areas of the County.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	0	0	0	Neutral in terms of this housing focused objective.	0	0	0	Neutral in terms of this housing focused objective.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	+	+	+	Generally positive.	-	-	-	Generally negative effects in terms of the safeguarding of sites.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	0	0	0	Likely neutral impact.	0	0	0	Likely neutral impact.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	0	0	0	Likely neutral impact.	0	0	0	Likely neutral impact.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	?	?	?	Uncertain. Clearly communities in proximity to new waste sites may potentially experience adverse impacts, but this has to be weighed against the potential impacts on communities e.g. in more densely populated areas.	?	?	?	Uncertain. Given a scenario of 'no new sites for waste management in the Green Belt', alternative sites elsewhere could have adverse impacts on communities in other parts of the County. These other areas may potentially be more densely populated and thus the impacts will extend to a greater number of people?
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Neutral effects in terms of conserving mineral resources.	0	0	0	Neutral effects in terms of conserving mineral resources.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	+	+	+	Generally positive impact in terms of employment given that there are some major waste operators in the Green Belt, including operators involved in the management of Gloucestershire's municipal waste.	-	-	-	Generally negative given that there are major waste operators (employers) operating in the Green Belt.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	?	?	?	Uncertain effects, although it could be argued that by locating new sites in the Green Belt, areas of the County which are more environmentally sensitive / or richer in landscape character, biodiversity or archaeological / historic significance may be protected.	?	?	?	Uncertain effects, a counter argument applies to Issue W9, Option 2, Objective 9.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	0	0	0	Neutral effects in terms of the prevention of flooding and the sustainable use of water resources.	0	0	0	Neutral effects in terms of the prevention of flooding and the sustainable use of water resources.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	?	?	?	Uncertain. Similar comments apply as for Objective 9.	?	?	?	Uncertain effects, a counter argument applies to Issue W9, Option 2, Objective 11.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	+	+	+	Generally positive given that a significant factor is that waste sites in the Green Belt are relatively close to the major sources of waste arisings in Gloucestershire.	-	-	-	Generally negative effects given that waste sites in the Green Belt are relatively close to the major sources of waste arisings in Gloucestershire and thus score highly in sustainability terms.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral effects in terms of the restoration of minerals sites in the County.	0	0	0	Neutral effects in terms of the restoration of minerals sites in the County.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	0	0	0	Likely neutral impact given that disposal by landfill is the predominant form of waste disposal in the Green Belt.	0	0	0	Uncertain or likely neutral impact.
15. To reduce contributions to and to adapt to Climate Change.	0	0	0	Likely neutral impact in terms of reducing contributions to and adapting to Climate Change, although it could be argued that the impacts may be positive due to the fact that waste sites in the Green Belt are relatively close to the major sources of waste arisings in Gloucestershire – reducing emissions from vehicles.	0	0	0	Likely neutral impact, but possibly negative effects given that alternative sites in the County (to those in the Green Belt) may not be as close to major sources of waste arisings in Gloucestershire and that as a result emissions from vehicles may increase.

Key	
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+	Positive effect
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?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt. Option 4: Redefining the Green Belt.**				**Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas. Option 1: (Business as usual) Rolling forward current policies.**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	+	+	+	The option to redefine the Green Belt would generally be positive in terms of the broad objective to promote sustainable development.	+	+	+	The current policies for dealing with proposals for new waste management facilities in other nationally designated areas are broadly sustainable and promote sustainable development.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	0	0	0	Likely neutral impact against this objective.	0	0	0	Likely neutral impact against this objective.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	+	+	+	Generally positive effects.	+	+	+	Generally positive effects.
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	+	+	+	Generally positive effects likely in terms of health and well-being.	+	+	+	Positive effects in terms of health and well-being. Policies not only protect and enhance the environment for its own sake, but also for people's enjoyment, which promotes well-being.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	+	+	+	Positive effects generally in terms of contributing to a sustainable Gloucestershire. May increase employment opportunities. Unclear impact on opportunities for recreation.	+	+	+	Positive effects generally in terms of contributing to a sustainable Gloucestershire.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	0	0	0	Likely neutral impact in terms of safeguarding the amenity of local communities.	0	0	0	Likely neutral impact in terms of safeguarding the amenity of local communities.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Neutral impact against this objective.	0	0	0	Neutral impact against this objective.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	++	++	++	Potentially very positive effects in terms of providing employment opportunities.	0	0	0	Likely neutral impact.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	?	?	?	Uncertain effects.	++	++	++	Very positive effects in terms of this objective. Policies are designed to protect, conserve and enhance Gloucestershire's environment.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	0	0	0	Neutral impact against this objective.	+	+	+	Positive effects in terms of flood prevention and sustainable water supply issues.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	?	?	?	Uncertain effects.	++	++	++	Very positive effects in terms of this objective.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	++	++	++	Potentially very positive effects in terms of reducing the need to travel, depending on the specifics of the Green Belt boundary changes.	0	0	0	Likely neutral impact.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	0	0	0	Neutral impact in terms of the restoration of minerals sites.	0	0	0	Neutral impact in terms of the restoration of minerals sites.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	+	+	+	Generally positive effects likely in terms of reducing waste to landfill.	0	0	0	Neutral impact.
15. To reduce contributions to and to adapt to Climate Change.	++	++	++	Potentially very positive if vehicle emissions are reduced due to shorter distances from the source of waste arisings to sites of management / disposal.	0	0	0	Neutral impact.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

S = Short term effects [Broadly up to 5 years] **M** = Medium term effects [Broadly 5 to 10 years] **L** = Long term effects [Broadly 10 or more years]	**Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas. Option 2: Amending and adding to currently saved policies.**			
SA Objective ↓	**S**	**M**	**L**	**Comments / Explanation**
1. To promote development that is socially, economically and environmentally sustainable.	**+**	**+**	**+**	The proposed amendments and additions are broadly in line with this objective and significant negative effects are unlikely.
2. To give the opportunity to everyone to live in an affordable and sustainably designed and constructed home.	**0**	**0**	**0**	Likely neutral impact.
3. To safeguard sites suitable for the location of waste management facilities, or future mineral development from other proposed development.	**+**	**+**	**+**	Generally positive effects
4. To protect and improve the health and well-being of people living and working in Gloucestershire as well as visitors to the county.	**+**	**+**	**+**	Similar comments as for Issue W10 Option 1. Positive effects in terms of health and well-being. The proposed policies not only protect and enhance the environment for its own sake, but also for people's enjoyment which promotes well-being.
5. To contribute to a sustainable Gloucestershire which provides excellent opportunities for education, economic development, employment and recreation to people from all social and ethnic backgrounds.	**+**	**+**	**+**	The proposed amendments and additions are broadly in line with this objective and significant negative effects are unlikely in terms of the detail of the objective.

6. To safeguard the amenity of local communities from the potential adverse impacts of minerals and waste development.	0	0	0	Likely neutral impact in terms of this objective.
7. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	0	0	0	Likely neutral impact.
8. To provide employment opportunities in both rural and urban areas of the county, promoting diversification in the economy.	0	0	0	Likely neutral impact in terms of employment opportunities.
9. To protect, conserve and enhance Gloucestershire's biodiversity, natural environment, landscape and tourist assets including the historic environment.	++	++	++	Generally very positive effects.
10. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that development does not compromise sustainable sources of water supply.	++	++	++	Very positive effects particularly in terms of a policy (or policies) furthering the objectives of the European Union Water Framework Directive.
11. To protect and enhance Gloucestershire's environment – (the land, the air and water) from pollution and to apply the precautionary principle.	++	++	++	Similar comments apply as for Objective 9 – generally very positive effects likely in terms of the protection and enhancement of Gloucestershire's environment.

12. To reduce the adverse impacts of lorry traffic on communities, through reducing the need to travel, promoting more sustainable means of transport (including through sensitive routing and the use of sustainable alternative fuels) and to promote the management of waste in one of the nearest appropriate installations.	**0**	**0**	**0**	Likely neutral impact.
13. To restore mineral sites to a high standard in order to achieve the maximum environmental and nature conservation benefits.	**0**	**0**	**0**	Likely neutral impact.
14. To reduce waste to landfill and in dealing with all waste streams to actively promote the waste hierarchy (i.e. Prevent, Reduce, Reuse, Recycle, Dispose) to achieve the sustainable management of waste.	**0**	**0**	**0**	Likely neutral impact.
15. To reduce contributions to and to adapt to Climate Change.	**0**	**0**	**0**	Likely neutral impact.

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

Appendix 4. Predicting effects including cumulative, secondary & synergistic impacts

Component of Plan / Option ⬇	SA Objectives															Cumulative Impact of Option against Objectives	Geographic Scale	Temporary or Permanent Effect	Significance & Likelihood of Effects
	1. Sustainable development	2. Housing needs	3. Safeguarding sites	4. Health & well-being	5. Education, economic dev	6. Amenity	7. Conserve / provide minerals	8. Employment	9. Biodiversity/landscape/tourism/hist'	10. Flooding	11. Pollution	12. Sustainable transport	13. Mineral site restoration	14. Reduce waste	15. Climate change				
Issue W1: The spatial vision. ■ **Option 1:** (Business as usual) Current vision in the adopted Waste Local Plan.	+	?	+ +	+	+ +	+ +	+	?	+ +	+	+	+	?	+ +	+	+	Countywide & potentially bordering Counties.	The current WLP is to 2012.	Significant – High likelihood.
■ **Option 2:** The proposed vision: "A sustainable and educational waste management system for Gloucestershire that reduces waste produced from businesses and households as a priority and diverts waste from landfill."	+ +	?	+ +	+	+ +	+ +	+ +	?	+ +	+	+ +	+	?	+ +	+	++	Countywide & potentially bordering Counties.	Effects may be long term – if not permanent.	Significant – High likelihood.
Issue W2: Determining the time period over which the WCS operates. ■ **Option 1:** (Business as usual) Gloucestershire Waste Local Plan to 2012.	+	?	+ +	+	+ +	+	+	?	+	+ +	+ +	+	?	+ +	+	+	Countywide & potentially bordering Counties.	The current WLP is to 2012.	Significant – High likelihood.

Component of Plan / Option ⬇	SA Objectives															Cumulative Impact of Option against Objectives	Geographic Scale	Temporary or Permanent Effect	Significance & Likelihood of Effects
	1. Sustainable development	2. Housing needs	3. Safeguarding sites	4. Health & well-being	5. Education, economic dev	6. Amenity	7. Conserve / provide minerals	8. Employment	9. Biodiversity/landscape/tourism/hist'	10. Flooding	11. Pollution	12. Sustainable transport	13. Mineral site restoration	14. Reduce waste	15. Climate change				
■ **Option 2:** Up to the year 2018.	+	?	+ +	+	+ +	+	+	?	+	+ +	+ +	+	?	+ +	+	+	Countywide & Potentially bordering Counties.	Effects may be long term – if not permanent.	Significant – High likelihood.
■ **Option 3:** Up to the year 2020.	+	?	?	+	+ +	+	+	?	+	+ +	+ +	+	?	+ +	+	+	Countywide & potentially bordering Counties.	Effects may be long term – if not permanent.	Significant – Medium likelihood.
■ **Option 4:** Up to the year 2026.	?	?	-	?	?	+	?	?	?	?	?	?	?	?	?	?	Countywide & potentially bordering Counties.	Effects may be long term – if not permanent.	Significant – Low likelihood.
Issue W3: Implementing the waste hierarchy. ■ **Option 1:** (Business as usual) Proactively minimising waste generation.	+ +	+ +	0	+ +	+ +	+ +	+ +	0	+ +	0	+ +	+ +	-	+ +	+ +	++	Countywide & possibly further afield.	Possibly long term effects.	Significant – High likelihood.
■ **Option 2:** Focus on recycling.	+ +	+	?	+ +	+	+	+ +	?	+ +	0	+ +	0	?	+ +	+ +	++	Countywide & further afield.	Long term positive effects.	Significant – High likelihood.
■ **Option 3:** Recovering value (energy) from waste.	0 + + +	0	?	?	?	?	0	?	?	0 ? +	0 ? +	?	0	+	?	?	Specific strategic locations within the County.	Possibly long term effects.	Significant – Low likelihood.

Component of Plan / Option ⬇	SA Objectives															Cumulative Impact of Option against Objectives		Geographic Scale	Temporary or Permanent Effect	Significance & Likelihood of Effects
	1. Sustainable development	2. Housing needs	3. Safeguarding sites	4. Health & well-being	5. Education, economic dev	6. Amenity	7. Conserve / provide minerals	8. Employment	9. Biodiversity/landscape/tourism/hist'	10. Flooding	11. Pollution	12. Sustainable transport	13. Mineral site restoration	14. Reduce waste	15. Climate change					
Issue W4: Making appropriate provision. ■ **Option 1:** (Business as usual)	+	?	+ +	+	+	+	0	0	+ +	+ +	+ +	+ +	0	+	?	+	++	Countywide.	Possibly long term effects.	Significant – High likelihood.
■ **Option 2:** Identifying sites in a DPD.	+	?	+ +	+	+	+	0	0	+ +	+ +	+ +	+ +	0	+	?	+	++	Countywide.	Possibly long term effects.	Significant – High likelihood.
■ **Option 3:** Not identifying sites – having a criteria based policy.	?	?	-	?	?	?	0	0	?	?	?	?	0	+	?	?		Countywide.	Possibly long term effects.	Significant – Low likelihood.
■ **Option 4:** A mix of identifying some sites and also using criteria based policies.	+	?	?	+	+	+	0	0	+ +	+ +	+ +	+ +	0	+ +	?	++		Countywide.	Possibly long term effects.	Significant – High likelihood.
Issue W5: Setting out a spatial strategy. ■ **Option 1:** Town locations.	+	?	?	+	+	?	0	0	+	+	+	+ +	0	0	+ +	+		Countywide & potentially bordering Counties.	Possibly long term effects.	Significant – High likelihood.
■ **Option 2:** Edge of town locations.	+	?	?	+	+	?	0	0	0	+	0	+	0	0	+	0	+	Countywide & potentially bordering Counties.	Possibly long term effects.	A high number of neutral scores – High likelihood.
■ **Option 3:** Rural locations.	?	?	?	?	?	?	0	0	-	+	-	-	0	0	-	?		Countywide & potentially bordering Counties.	Possibly long term effects.	Significant – Low likelihood.

Component of Plan / Option ⬇	SA Objectives															Cumulative Impact of Option against Objectives	Geographic Scale	Temporary or Permanent Effect	Significance & Likelihood of Effects
	1. Sustainable development	2. Housing needs	3. Safeguarding sites	4. Health & well-being	5. Education, economic dev	6. Amenity	7. Conserve / provide minerals	8. Employment	9. Biodiversity/landscape/tourism/hist'	10. Flooding	11. Pollution	12. Sustainable transport	13. Mineral site restoration	14. Reduce waste	15. Climate change				
■ **Option 4:** Centralised facilities.	+	0	+	+	?	+	0	?	+	?	+	?	0	?	?	? +	Countywide & potentially bordering Counties.	Possibly long term effects.	Significant – Low to medium likelihood.
■ **Option 5:** Dispersed facilities.	+	0	?	?	+	?	0	?	?	?	?	?	0	?	?	?	Countywide & potentially bordering Counties.	Possibly long term effects.	Significant – Low likelihood.
■ **Option 6:** A combination of facilities. (Business as usual)	++	+	+	+	++	+	0	+	+	?	+	?		+	+	+	Countywide & potentially bordering Counties.	Possibly long term effects.	Significant – High likelihood.
Issue W6: Implementing the Joint Municipal Waste Management Strategy. ■ **Option 1:** (Business as usual)	+	?	+	0	0	+	0	0	+	?	+	?	0	+	?	+	Countywide.	Possibly long term effects.	Significant – High likelihood.
■ **Option 2:** A flexible criteria based approach.	?	?	-	?	?	?	0	0	?	?	?	?	0	+	?	?	Countywide.	Possibly long term effects.	Significant – Low likelihood.
■ **Option 3:** A prescriptive approach with particular facility types at particular locations.	+	?	++	+	+	+	0	0	++	++	++	++	0	+	?	++	Countywide.	Possibly long term effects.	Significant – High likelihood.

Component of Plan / Option ⬇	SA Objectives															Cumulative Impact of Option against Objectives	Geographic Scale	Temporary or Permanent Effect	Significance & Likelihood of Effects
	1. Sustainable development	2. Housing needs	3. Safeguarding sites	4. Health & well-being	5. Education, economic dev	6. Amenity	7. Conserve / provide minerals	8. Employment	9. Biodiversity/landscape/tourism/hist'	10. Flooding	11. Pollution	12. Sustainable transport	13. Mineral site restoration	14. Reduce waste	15. Climate change				
■ **Option 4:** A combination approach.	+	?	?	+	+	+	0	0	+ +	+ +	+ +	+ +	0	+ +	?	++	Countywide.	Possibly long term effects.	Significant – High likelihood.
Issue W7a: Cumulative impact. ■ **Option 1:** Having a policy framework against which cumulative impact can be assessed.	+ +	?	+	+ +	?	+ +	0	?	+ +	+ +	+ +	+ +	0	?	?	++	Countywide & potentially bordering Counties.	Possibly long term effects.	Significant – High likelihood.
■ **Option 2:** Having a policy framework where cumulative impacts are not a specific consideration.	-	?	-	--		--	0	?	--	--	--	--	0	?	?	--	Countywide & potentially bordering Counties.	Possibly long term effects.	Significant – High likelihood.
Issue W7b: Safeguarding sites. ■ **Option 3:** (Business as usual) Safeguarding sites.	+	?	+ +	+	+	+	0	?	+	?	+	+	0	+	+	+	Countywide & potentially bordering Counties.	Possibly long term effects.	Significant – High likelihood.
■ **Option 4:** Not safeguarding sites.	-	?	--	-	-	-	0	?	0	?	0	0	0	-	-	-	Countywide & potentially bordering Counties.	Possibly long term effects.	Significant – High likelihood.

Component of Plan / Option ⬇	SA Objectives															Cumulative Impact of Option against Objectives	Geographic Scale	Temporary or Permanent Effect	Significance & Likelihood of Effects
	1. Sustainable development	2. Housing needs	3. Safeguarding sites	4. Health & well-being	5. Education, economic dev	6. Amenity	7. Conserve / provide minerals	8. Employment	9. Biodiversity/landscape/tourism/hist'	10. Flooding	11. Pollution	12. Sustainable transport	13. Mineral site restoration	14. Reduce waste	15. Climate change				
Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements.	+	0	0	+	0	+	0	?	+	+	+	+	0	-	?	+	Local, Regional & National.	Effects may be long term – if not permanent.	Significant – High likelihood.
■ **Option 1:** (Business as usual)																			
■ **Option 2:** Safeguarding existing hazardous waste management facilities provided that they are environmentally acceptable.	+	0	+	+	0	+	0	0	+	+	+	+	0	?	?	+	Local, Regional & National.	Possibly long term effects.	Significant – High likelihood.
■ **Option 3:** Minimising hazardous waste at source.	++	++	0	++	++	++	++	0	++	0	++	++	0	++	++	++	Local, Regional & National.	Long term positive impacts.	Significant – High likelihood.
Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt.	++	0	+	0	0	?	0	+	?	0	?	+	0	0	0	0	Countywide & potentially bordering Counties.	Possibly long term effects.	A high number of neutral scores – High likelihood.
■ **Option 1**: (Business as usual)																			
■ **Option 2**: New waste management facilities in the Green Belt.	+	0	+	0	0	?	0	+	?	0	?	+	0	0	0	0	Countywide & potentially bordering Counties.	Possibly long term effects.	A high number of neutral scores – High likelihood.

Component of Plan / Option ⬇	SA Objectives															Cumulative Impact of Option against Objectives	Geographic Scale	Temporary or Permanent Effect	Significance & Likelihood of Effects
	1. Sustainable development	2. Housing needs	3. Safeguarding sites	4. Health & well-being	5. Education, economic dev	6. Amenity	7. Conserve / provide minerals	8. Employment	9. Biodiversity/landscape/tourism/hist'	10. Flooding	11. Pollution	12. Sustainable transport	13. Mineral site restoration	14. Reduce waste	15. Climate change				
■ **Option 3:** No new waste management facilities in the Green Belt.	-	0	-	0	0	?	0	-	?	0	?	-	0	0	0	0	Countywide & potentially bordering Counties.	Possibly long term effects.	A high number of neutral scores – High likelihood.
■ **Option 4:** Redefining the Green Belt.	+	0	+	+	+	0	0	+ +	?	0	?	+ +	0	+	+ +	0 +	Countywide & potentially bordering Counties.	Possibly long term effects.	A high number of neutral scores – High likelihood.
Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas. ■ **Option 1:** (Business as usual) Rolling forward current policies.	+	0	+	+	+	0	0	0	+ +	+	+ +	0	0	0	0	0	Countywide.	Long term effects.	A high number of neutral scores – High likelihood.
■ **Option 2:** Amending and adding to currently saved policies.	+	0	+	+	+	0	0	0	+ +	+ +	+ +	0	0	0	0	0	Countywide.	Long term effects.	A high number of neutral scores – High likelihood.
Issue W11: SA Report	/																		
Issue W12: Other issues	/																		

Key	
++	Major positive effect
+	Positive effect
0	Neutral effect
-	Negative effect
--	Major negative effect
?	Uncertain

Cumulative, secondary & synergistic effects explanation

Definitions from *(Office of the Deputy Prime Minister 2005) Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents.*

Cumulative effects arise, for instance, where several developments each have insignificant effects but together have a significant effect; or where several individual effects (e.g. noise, dust and visual) have a combined effect.

Secondary or indirect effects are effects that are not a direct result, but occur away from the original effect or as a result of a complex pathway. Examples of secondary effects are a development that changes a water table and thus affects the ecology of a nearby wetland; and construction of one project that facilitates or attracts other developments.

Synergistic effects interact to produce a total effect greater than the sum of the individual effects. Significant synergistic effects often occur as habitats, resources or human communities get close to capacity. For example, a wildlife habitat can become progressively fragmented with limited effects on a particular species until the last fragmentation makes the areas too small to support the species at all. On the other hand, beneficial synergistic effects may occur when a series of major transport, housing and employment developments in a sub-region, each with their own effects, collectively reach a critical threshold so that both the developments as a whole and the community benefiting from them become more sustainable.

Note: Column 3 of the above table considers intre-plan cumulative impacts for each of the options considered. At the preferred options stage, when there is substantially more detail provided, cumulative impacts will be considered e.g. on the climate (SA Objective 15) within each option. At this stage performing this test (down the above table) for all the options would not produce a meaningful result.

Cumulative, secondary & synergistic effects table

Issue / Option	Potential cumulative / secondary / synergistic effects of the option	Potential cumulative impact receptors & past / present / future human activities that have affected or will possibly affect these receptors	Predicted impacts on the receptor as a result of the plan in combination with other human activities, and the significance of the impacts	Possible mitigation measures & management suggestions and pointers for other plans & strategies
Issue W1: The spatial vision. ■ **Option 1:** (Business as usual) Current vision in the adopted Waste Local Plan.	Waste generated traffic in combination with increasing general levels of traffic & congestion. A positive secondary effect could be a contribution to the general attractiveness of the County as a tourist destination / place to live or work as a result of the efficient & sustainable management of waste.	• Communities in Gloucestershire, particularly those in close proximity to current waste sites or on lorry routes. • Gloucestershire's natural & historic environment. • Users of the highway network in the County. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	Potentially significant impacts on certain communities in terms of loss of amenity due to noise, dust, vibration, emissions and potential danger to pedestrians and other road users. Residents and visitors to the County experiencing frustration and time wasted as a result of congestion leading to long journey times.	Sensitively route waste generated vehicle movements. Reduce unnecessary trips –taking 'back loads'. Consider and promote the use of sustainable alternative fuels. Ensure that new housing building does not compromise the effectiveness of allocated sites for waste management.
■ **Option 2:** The proposed vision: "*A sustainable waste management system for Gloucestershire that reduces waste production as a priority and diverts waste from landfill.*"	Waste generated traffic in combination with increasing general levels of traffic & congestion. A positive secondary effect could be a contribution to the general attractiveness of the County as a tourist destination / place to live or work as a result of the reduced waste production and the efficient & sustainable management of waste.	• Communities in Gloucestershire, particularly those close to current waste sites or on lorry routes. • Gloucestershire's natural & historic environment. • Users of the highway network in the County. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	As above. & Significant potential positive impacts in terms of well-being on residents and visitors to the County in terms of their enjoyment of e.g. cleaner urban areas due to reduced waste production and efficient management. Reduced costs to Local Authorities in terms of the collection and disposal of waste.	Similar comments as for Option 1.
Issue W2: Determining the time period over which the WCS operates. ■ **Option 1:** (Business as usual) Gloucestershire Waste Local Plan to 2012.	Na. This will be considered in more detail at Preferred Options stage.	Na. – to be considered at Preferred Options stage.	Na. – to be considered at Preferred Options stage.	Na. – to be considered at Preferred Options stage.
■ **Option 2:** Up to the year 2018.	Na. This will be considered in more detail at Preferred Options stage.	Na. – to be considered at Preferred Options stage.	Na. – to be considered at Preferred Options stage.	Na. – to be considered at Preferred Options stage.
■ **Option 3:** Up to the year 2020.	Na. This will be considered in more detail at Preferred Options stage.	Na. – to be considered at Preferred Options stage.	Na. – to be considered at Preferred Options stage.	Na. – to be considered at Preferred Options stage.

Issue / Option	Potential cumulative / secondary / synergistic effects of the option	Potential cumulative impact receptors & past / present / future human activities that have affected or will possibly affect these receptors	Predicted impacts on the receptor as a result of the plan in combination with other human activities, and the significance of the impacts	Possible mitigation measures & management suggestions and pointers for other plans & strategies
■ **Option 4:** Up to the year 2026.	Na. apart from synergy with the Regional Spatial Strategy timescale?	Na. – to be considered at Preferred Options stage.	Na. – to be considered at Preferred Options stage.	Na.
Issue W3: Implementing the waste hierarchy. ■ **Option 1:** (Business as usual) Proactively minimising waste generation.	Positive secondary effects may include energy and cost savings for Local Authorities and tax payers / a cleaner environment / increased well-being for communities. Possible negative secondary impacts on quarry restoration schemes.	• All communities in Gloucestershire. • The natural environment. • Mineral sites. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	Positive impacts may include: Possible reduced costs to Local Authorities meaning that Council Tax may be allocated to other areas of need. A cleaner environment both in urban areas and the countryside – promoting health and well-being. Potentially more visitors to the County to experience and enjoy a high quality environment – boosting the local economy. Impacts on mineral sites – potentially problems completing restoration schemes due to lack of inert materials.	Positive effects – mitigation not necessary. Other plans and strategies should actively promote waste minimisation for all waste streams.
■ **Option 2:** Focus on recycling.	Similar positive secondary impacts as for minimising waste generation. There may be spin-off employment opportunities, both with higher numbers of people being employed in the recycling process as well as in new 'green' industries or companies utilising recycled materials.	• All communities in Gloucestershire. • The natural environment. • Mineral sites. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	As above.	Positive effects – mitigation not necessary. Other relevant plans and strategies (in particular Community Strategies, and the Joint Municipal Waste Management Strategy) should actively promote recycling for all waste streams.
■ **Option 3:** Recovering value (energy) from waste.	Potential visual impacts in combination with other built development. Waste generated traffic in combination with increasing general levels of traffic & congestion. Various (potentially positive) cumulative and secondary impacts related to the fact that reduced levels of waste will go to landfill.	• Communities in Gloucestershire, particularly those in proximity to sites or on lorry routes. • The natural environment – in particular landscape character? Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased	Potentially significant impacts. Reductions in levels of waste to landfill, but this balanced against emissions and production of hazardous waste (small relative levels) that will have to be treated and landfilled. Negative impacts on the landscape character of	Various mitigation measures required and stringent controls / monitoring regimes by planning and pollution control authorities.

Issue / Option	Potential cumulative / secondary / synergistic effects of the option	Potential cumulative impact receptors & past / present / future human activities that have affected or will possibly affect these receptors	Predicted impacts on the receptor as a result of the plan in combination with other human activities, and the significance of the impacts	Possible mitigation measures & management suggestions and pointers for other plans & strategies
		car use.	Gloucestershire depending of scale of any proposed facilities.	
Issue W4: Making appropriate provision. ■ **Option 1:** (Business as usual)	Waste generated traffic in combination with increasing general levels of traffic & congestion.	• Communities in Gloucestershire, particularly those in close proximity to current waste sites or on lorry routes. • Gloucestershire's natural & historic environment. • Users of the highway network in the County. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	Potentially significant impacts on certain communities in terms of loss of amenity due to noise, dust, vibration, emissions and potential danger to pedestrians and other road users. Residents and visitors to the County experiencing frustration and time wasted as a result of congestion leading to long journey times.	Promote sensitive routing of HGVs. Introduce appropriate design and screening measures for waste sites.
■ **Option 2:** Identifying sites in a DPD.	Generally similar comments as for Option 1 but cumulative impacts will need to be assessed at the site level.	• Communities living near to sites or on lorry routes. Cumulative impacts will need to be assessed at the site level.	Cumulative impacts will need to be assessed at the site level.	Cumulative impacts will need to be assessed at the site level.
■ **Option 3:** Not identifying sites – having a criteria based policy.	Various cumulative secondary & synergistic effects could arise from not identifying sites. There may be significant impacts relating to the effectiveness of Gloucestershire's sustainable management of waste.	• Communities in the County near to sites where waste management facilities may be proposed through the use of criteria based policies. • Gloucestershire's natural & historic environment. • Users of the highway network in the County. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	Potentially significant impacts on certain communities in terms of loss of amenity due to noise, dust, vibration, emissions and potential danger to pedestrians and other road users. Residents and visitors to the County experiencing frustration and time wasted as a result of congestion leading to long journey times.	There may be a need for more detailed mitigation measures under a system of criteria based policies, as sites will not previously have been tested and allocated as suitable for waste management.
■ **Option 4:** A mix of identifying some sites and also using criteria based policies.	Cumulative impacts will need to be assessed at the site level.	Cumulative impacts will need to be assessed at the site level.	Cumulative impacts will need to be assessed at the site level.	Cumulative impacts will need to be assessed at the site level.
Issue W5: Setting out a spatial strategy. ■ **Option 1:** Town	Depends to a large degree on the location and specifics of the sites but general cumulative impacts could include: the effects of waste generated traffic in	• Communities in towns in the County near to sites where waste management facilities may be proposed.	Potentially significant impacts on certain communities in terms of loss of amenity due to noise,	Promote sensitive routing of HGVs. Introduce appropriate design and screening measures

Issue / Option	Potential cumulative / secondary / synergistic effects of the option	Potential cumulative impact receptors & past / present / future human activities that have affected or will possibly affect these receptors	Predicted impacts on the receptor as a result of the plan in combination with other human activities, and the significance of the impacts	Possible mitigation measures & management suggestions and pointers for other plans & strategies
locations.	combination with increasing general levels of traffic & congestion in towns. Various amenity issues for householders.	• Gloucestershire's natural & historic environment. • Users of the highway network in the County. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	dust, vibration, emissions and potential danger to pedestrians and other road users. Residents and visitors to the County experiencing frustration and time wasted as a result of congestion leading to long journey times.	for waste sites as well as other mitigation and amelioration measures.
■ **Option 2:** Edge of town locations.	Depends to a large degree on the location and specifics of the sites but general cumulative impacts could include: the effects of waste generated traffic in combination with increasing general levels of traffic & congestion in edge of town areas. Various amenity issues associated with waste management.	Broadly similar comments to 'Town locations'.	Similar comments to 'Town locations'. Impacts dependent on location and site specifics.	Similar comments regarding mitigation and management to 'Town locations'.
■ **Option 3:** Rural locations.	Waste related traffic in combination with other vehicles including farm traffic. Potential visual impacts in combination with other development in the open countryside.	• Gloucestershire's open countryside. • Rural communities. • Users of the highway network in the County. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	Potential changes to landscape character. Potential loss of amenity for certain affected communities. Increased contributions to global climate change as a result of longer haulage distances for waste.	Various mitigation measures to protect the amenity of rural communities, including sensitive routing, effective design and screening. Other plans and strategies e.g. rural economic strategies should be aware of the potential contribution of waste management facilities in terms of rural employment / diversification.
■ **Option 4:** Centralised facilities.	Waste related traffic in combination with other vehicles – particularly HGVs & commercial vehicles. Potential pollution / amenity issues.	Similar comments and issues associated with 'Town locations.'	Similar comments and issues associated with 'Town locations.' Many impacts on receptors will be concentrated rather than dispersed.	Similar comments and issues associated with 'Town locations.'
■ **Option 5:** Dispersed facilities.	Waste related traffic in combination with other vehicles – particularly HGVs & commercial vehicles. Cumulative impact on the climate as a result of increased emissions.	• With a dispersed strategy – a larger number of communities in the County. • Both rural and urban communities. • The natural and built environment. • Users of the highway network in the	Potentially significant impacts on certain communities in terms of loss of amenity due to noise, dust, vibration, emissions and potential danger to pedestrians	Various mitigation measures to protect the environment and the well-being and amenity of rural communities.

Issue / Option	Potential cumulative / secondary / synergistic effects of the option	Potential cumulative impact receptors & past / present / future human activities that have affected or will possibly affect these receptors	Predicted impacts on the receptor as a result of the plan in combination with other human activities, and the significance of the impacts	Possible mitigation measures & management suggestions and pointers for other plans & strategies
		County. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	and other road users. Residents and visitors to the County experiencing frustration and time wasted as a result of congestion leading to long journey times. Increased contributions to global climate change as a result of longer haulage distances for waste.	
■ **Option 6:** A combination of facilities. (Business as usual)	Depends to a large degree on the location and specifics of the sites but general cumulative impacts could include: the effects of waste generated traffic in combination with increasing general levels of traffic & congestion in the County. Various amenity and pollution issues.	• Users of the highway network in the County. • Both rural and urban communities. • The natural and built environment. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	Potentially significant impacts on certain communities in terms of loss of amenity. Increased contributions to global climate change as a result of longer haulage distances for waste. Residents and visitors to the County experiencing frustration and time wasted as a result of congestion leading to long journey times.	Various mitigation measures to protect the environment and the well-being and amenity of rural communities.
Issue W6: Implementing the Joint Municipal Waste Management Strategy. ■ **Option 1:** (Business as usual)	Depends to a large degree on the location and specifics of the sites, but general cumulative impacts could include: the effects of waste generated traffic in combination with increasing general levels of traffic & congestion in towns. Various amenity issues.	Similar comments for Issue W4 Options 1 & 2.	Similar comments for Issue W4 Options 1 & 2.	Similar comments for Issue W4 Options 1 & 2.
■ **Option 2:** A flexible criteria based approach.	Various cumulative secondary & synergistic effects could arise from a flexible criteria based approach. Various amenity issues?	Similar comments and issues as for Issue W4 Option 3.	Similar comments for Issue W4 Option 3.	Similar comments for Issue W4 Option 3.
■ **Option 3:** A prescriptive approach with particular facility types at particular locations.	Depends to a large degree on the location and specifics of the sites.	Similar comments for Issue W4 Options 1 & 2.	Similar comments for Issue W4 Options 1 & 2.	Similar comments for Issue W4 Options 1 & 2.
■ **Option 4:** A combination approach.	Depends to a large degree on the location and specifics of the sites and the degree of flexibility with the criteria based approach. Possibly various amenity issues for local communities.	Similar comments and issues as for Issue W4 Option 4.	Similar comments and issues as for Issue W4 Option 4.	Similar comments and issues as for Issue W4 Option 4.
Issue W7a: Cumulative impact.	Na.	Na.	Na.	Na.

Issue / Option	Potential cumulative / secondary / synergistic effects of the option	Potential cumulative impact receptors & past / present / future human activities that have affected or will possibly affect these receptors	Predicted impacts on the receptor as a result of the plan in combination with other human activities, and the significance of the impacts	Possible mitigation measures & management suggestions and pointers for other plans & strategies
■ **Option 1:** Having a policy framework against which cumulative impact can be assessed.				
■ **Option 2:** Having a policy framework where cumulative impacts are not a specific consideration.	Na.	Na.	Na.	Na.
Issue W7b: Safeguarding sites. ■ **Option 3:** (Business as usual) Safeguarding sites.	There may be cumulative or secondary impacts on areas adjacent to sites safeguarded for waste management. Impacts on house prices / the general desirability of certain areas in proximity to sites.	• Communities in proximity to safeguarded sites. • Users of the highway network in the County. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	Potentially significant impacts on certain communities in terms of loss of amenity requiring mitigation. The natural, built and historic environment in proximity to sites.	Other plans and strategies e.g. those contained within Local Development Frameworks should be aware of sites that are safeguarded and these should be indicated in plans and on proposals maps.
■ **Option 4:** Not safeguarding sites.	Various cumulative secondary & synergistic effects could arise from not identifying sites. There may be significant impacts relating to the effectiveness of Gloucestershire's sustainable waste management system.	• Communities and the environment throughout the County if, through not safeguarding sites, there is an impact on the effectiveness of Gloucestershire's sustainable waste management system.	Potentially significant impacts on the amenity of the residents of Gloucestershire should sites not be safeguarded and subsequent problems of finding suitable sites for waste management arise.	Safeguard some sites, particularly those of strategic importance.
Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements. ■ **Option 1:** (Business as usual)	Waste related traffic in combination with other vehicles – particularly HGVs & commercial vehicles. Various amenity issues that require robust mitigation measures and controls.	• Communities in proximity to hazardous waste sites. • The local environment – near to sites. • Users of the highway network in the County. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use, a national increase in the use of Energy from Waste as a preferred waste management method as this will increase the production of certain hazardous wastes.	Potentially significant impacts on certain communities in terms of loss of amenity – requiring mitigation and strict pollution control and monitoring.	Various mitigation measures to protect the environment and the well-being and amenity of communities in proximity to sites. Related plans and strategies, e.g. at a regional level, should strongly promote the minimisation of hazardous waste. The use of hazardous materials in construction / housebuilding should be targeted.
■ **Option 2:** Safeguarding existing hazardous waste	Waste related traffic in combination with other vehicles – particularly HGVs & commercial vehicles. Various	Similar comments as above.	Similar comments as above.	Similar comments as above. The more hazardous waste can be

Issue / Option	Potential cumulative / secondary / synergistic effects of the option	Potential cumulative impact receptors & past / present / future human activities that have affected or will possibly affect these receptors	Predicted impacts on the receptor as a result of the plan in combination with other human activities, and the significance of the impacts	Possible mitigation measures & management suggestions and pointers for other plans & strategies
management facilities provided that they are environmentally acceptable.	amenity issues requiring mitigation.			minimised the less need there will be for hazardous waste sites.
■ **Option 3:** Minimising hazardous waste at source.	Positive secondary effects may include energy and cost savings / a cleaner environment / increased well-being for communities.	• Communities and the environment throughout the County and further afield. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use, a national increase in the use of Energy from Waste as a preferred waste management method as this will increase the production of certain hazardous wastes.	Positive impacts may include: Possible reduced costs to Local Authorities meaning that Council Tax may be allocated to other areas of need. A cleaner environment both in urban areas and the countryside – promoting health and well-being. Potentially more visitors to the County to experience and enjoy a high quality environment – boosting the local economy.	Positive effects – mitigation not necessary. Other relevant and related plans and strategies should actively promote hazardous waste minimisation and the minimisation of all waste streams.
Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt. ■ **Option 1**: (Business as usual)	Potential cumulative impact of waste facilities in combination with other development (e.g. existing farm buildings) on the open character of the Green Belt.	• Communities close to sites currently in the Green Belt. • The landscape and natural environment in the Green Belt. • Users of the highway network in the County. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use. A national increase in Energy from Waste plants / facilities.	Impacts on communities near to sites and on lorry routes in terms of loss of amenity. Generally positive impacts in terms of the highway network and the global climate in that these sites are relatively close to major sources of waste arisings.	Various mitigation measures to protect the environment and the well-being and amenity of communities in proximity to sites.
■ **Option 2**: New waste management facilities in the Green Belt.	Potential cumulative impact of waste facilities in combination with other development (e.g. existing farm buildings) on the open character of the Green Belt.	Similar comments as above, but clearly impacts depend on the specifics of any proposed new facilities in terms of location and scale.	Similar comments as above.	Similar comments as above.
■ **Option 3:** No new waste management facilities in the Green Belt.	Cumulative impacts on the climate and air quality from increased waste generated traffic in combination with generally increasing levels of traffic & congestion in Gloucestershire.	• Communities living close to Green Belt land. • Users of the highway network in the County.	Communities living close to Green Belt land may see an improvement in amenity and well-being, or at least not a worsening	Various mitigation measures to protect the environment and the well-being and amenity of communities in proximity to

Issue / Option	Potential cumulative / secondary / synergistic effects of the option	Potential cumulative impact receptors & past / present / future human activities that have affected or will possibly affect these receptors	Predicted impacts on the receptor as a result of the plan in combination with other human activities, and the significance of the impacts	Possible mitigation measures & management suggestions and pointers for other plans & strategies
		• Other residents in Gloucestershire. • The global climate. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use. A national increase in Energy from Waste plants / facilities.	of the current situation. Generally negative impacts in terms of the highway network and the global climate in that Green Belt sites are relatively close to major sources of waste arising.	alternative sites i.e. to those that might have been allocated in the Green Belt.
■ **Option 4:** Redefining the Green Belt.	Depends on specifics of boundary redefinitions but in general terms there may be positive secondary impacts in terms of the creation of employment opportunities or reduced impacts on the climate – if the distance that waste is transported is reduced.	• Depends on the specifics of boundary redefinitions, but generally communities living close to Green Belt land. • The local environment, close to or within new boundaries. • Users of the highway network in the County. • The global climate.	Impacts on communities near to sites and on lorry routes – in terms of loss of amenity. Generally positive impacts in terms of the highway network and the global climate in that these sites are likely to be relatively close to major sources of waste arisings.	Various mitigation measures to protect the environment and the well-being and amenity of communities in proximity to any proposed sites.
Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas. ■ **Option 1:** (Business as usual) Rolling forward current policies.	Protecting and enhancing nationally designated areas may produce a number of positive secondary effects such as boosting visitor numbers to the County – which has a knock on effect on the local economy. Protecting the natural environment may positively contribute to people's health and general well-being.	• Internationally and Nationally Designated Sites for Nature Conservation. • Areas of Outstanding Natural Beauty. • Sites of National Archaeological Importance. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	Policies generally provide high levels of protection for various important sites and species.	Policies include mitigation measures.
■ **Option 2:** Amending and adding to currently saved policies.	Similar comments as for Option 1.	• Internationally and Nationally Designated Sites for Nature Conservation. • Areas of Outstanding Natural Beauty. • Sites of National Archaeological Importance. • The water environment. Human activities that have or will affect these receptors include: Waste development, minerals development, industry & commerce, retail park development, house building, increased car use.	Proposed amendments and additions generally provide high levels of protection for various sites and species and increased protection for the water environment through the application of the European Union Water Framework Directive.	Policies will include mitigation measures.
Issue W11: SA Report	Na.	Na.	Na.	Na.
Issue W12: Other issues	/	/	/	/

Appendix 5. The need for an Appropriate Assessment under Article 6 (3) and (4) of the Habitats Directive (92/43/EEC)

RAMSAR / Special Protection Area (SPA) / Special Area of Conservation (SAC)	Comments on whether the land-use plan would adversely affect the integrity of the site:
Rodborough Common **Designation:** (Special Area of Conservation) **District:** Stroud **Grid Reference:** SO849036 **Area:** 104.26ha **General Site Character:** Heath, Scrub, Maquis and Garrigue. Phygrana (10%) Dry grassland. Steppes (70%) Improved grassland (10%) Broad-leaved deciduous woodland (10%) **Source:** Joint Nature Conservation Committee	At this stage in the preparation of Gloucestershire's Waste Core Strategy i.e. the presentation of issues & options, it is unclear how the integrity of the sites listed in the left hand column of this table may be affected. When, through the process of consultation a preferred option emerges, and the site specifics related to it become clear, this option will be thoroughly tested in terms of its environmental impact, and specifically in terms of the need for an Appropriate Assessment under Article 6 (3) and (4) of the Habitats Directive (92/43/EEC).
Dixton Wood **Designation:** (Special Area of Conservation) **District:** Tewkesbury **Grid Reference:** SO979313 **Area:** 13.14ha **General Site Character:** Broad-leaved deciduous woodland (100%) **Source:** Joint Nature Conservation Committee	As above.
Wye Valley & Forest of Dean Bat Sites **Designation:** (Special Area of Conservation) **District:** Forest of Dean / Fynwy / Monmouthshire **Grid Reference:** SO605044 **Area** 142.7ha **General Site Character:** Broad-leaved deciduous woodland (26.2%) Other land (including towns, villages, roads, waste places, mines, industrial sites) (73.8%) **Source:** Joint Nature Conservation Committee	As above.
River Wye Sites **Designation:** (Special Area of Conservation) **District:** Forest of Dean / Fynwy / Monmouthshire / Herefordshire / Powys **Grid Reference:** S0109369 **Area:** 2234.89ha **General Site Character:** Tidal rivers. Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (9.5%) Salt marshes. Salt pastures. Salt steppes (1.5%) Inland water bodies (standing water, running water) (52.5%) Bogs. Marshes. Water fringed vegetation. Fens (3.1%) Heath. Scrub. Maquis and garrigue. Phygrana (1%) Dry grassland. Steppes (5.3%) Humid grassland. Mesophile grassland (2.4%) Improved grassland (10.4%) Broad-leaved deciduous woodland (12.3%) Inland rocks. Screes. Sands. Permanent snow and ice (0.2%) Other land (including towns, villages, roads, waste places,	As above.

mines, industrial sites) (1.8%) **Source:** Joint Nature Conservation Committee	
Wye Valley Woodlands **Designation:** (Special Area of Conservation) **District:** Forest of Dean / Monmouthshire / Herefordshire **Grid Reference:** SO530957 **Area:** 916.24 **General Site Character:** Heath, Scrub, Maquis and Garrigue. Phygrana (10%) Dry grassland. Steppes (0.2%) Broad-leaved deciduous woodland (87%) Coniferous woodland (0.7%) Inland rocks. Screes. Sands. Permanent snow and ice (0.6%) Other land (including towns, villages, roads, waste places, mines, industrial sites) (1.5%) **Source:** Joint Nature Conservation Committee	As above.
North Meadow & Clattinger Farm (Wiltshire Site) **Designation:** (Special Area of Conservation) **District:** Wiltshire **Grid Reference:** SU014934 **Area:** 104.88ha **General Site Character:** Inland water bodies (standing water, running water) (2%) Dry grassland. Steppes (15%) Humid grassland. Mesophile grassland (71%) Improved grassland (12%) **Source:** Joint Nature Conservation Committee	As above.
Walmore Common **Designation:** (Special Protection Area & Ramsar site) **District:** Forest of Dean **Grid Reference:** SO745150 **Area:** 52.85ha **General Site Character:** Walmore Common occupies a low lying area in the Severn Vale, which is subject to winter flooding. The site is a wetland overlying peat providing a variety of habitats including improved neutral grassland, unimproved marshy grassland and open water ditches. The common is part of a series of sites within the Severn Vale which, in winter, form an important refuge and feeding area for wildfowl. **Source:** Joint Nature Conservation Committee	As above.
Severn Estuary **Designation:** (Special Protection Area & Ramsar site) **District:** Stroud / Forest of Dean **Grid Reference:** 51 13 29N 03 02 57W **Area:** 24662.98 ha **General Site Character:** The estuary's classic funnel shape, unique in Britain, is a factor causing the Severn to have the second-largest tidal range in the world (after the Bay of Fundy, Canada). This tidal regime results in plant and animal communities typical of the extreme physical conditions of liquid mud and tide swept sand and rock. The species-poor invertebrate community includes	As above.

high densities of ragworms, lugworms and other invertebrates forming an important food source for passage and wintering waders. A further consequence of the large tidal range is the extensive intertidal zone, one of the largest in the UK, comprising mudflats, sand banks, shingle, and rocky platforms. Glassworts and annual sea-blite colonise the open mud, with beds of all three species of eelgrass occurring on more sheltered mud and sandbanks. Large expanses of common cord-grass also occur on the outer marshes. Heavily grazed saltmarsh fringes the estuary with a range of saltmarsh types present. The middle marsh sward is dominated by common saltmarsh-grass with typical associated species. In the upper marsh, red fescue and saltmarsh rush become more prominent. **Source:** Joint Nature Conservation Committee	
Cotswold Beechwoods **Designation:** (Special Area of Conservation) **District:** Cotswold **Grid Reference:** SO898134 **Area:** 585.85ha **General Site Character:** Inland water bodies (standing water, running water) (1%) Dry grassland. Steppes (1.5%) Broad-leaved deciduous woodland (82%) Coniferous woodland (5%) Mixed woodland (10%) Other land (including towns, villages, roads, waste places, mines, industrial sites) (0.5%). **Source:** Joint Nature Conservation Committee	As above.

Glossary of terms

ANNUAL MONITORING REPORT – Assesses the implementation of the LDS and extent to which the policies in LDDs are being achieved.

AREA OF OUTSTANDING NATURAL BEAUTY – A landscape area of high natural beauty, which has been designated under the National Parks and Access to the Countryside Act (1949).

BIODEGRADABLE – Materials which can be chemically broken down by naturally occurring micro-organisms into simpler compounds. In the context of this document it refers principally to waste containing organic material which can decompose giving rise to gas and leachate and other by-products.

COMMUNITY STRATEGY – The Local Government Act 2000 requires local authorities to prepare a Community Strategy. It sets out the broad vision for the future of the local authority's area and proposals for delivering that vision.

CONTROLLED WASTE – Comprised of household, industrial, commercial, hazardous and sewage waste which require a waste management license for treatment, transfer and disposal. The main exempted categories comprise mine, quarry and farm wastes. The government is currently consulting on the extension of controls to farm wastes. However, materials used for agricultural improvement, such as manure and slurry, will not become controlled. Radioactive and explosive wastes are controlled by other legislation and procedures.

CORE STRATEGY – Sets out the long-term spatial vision for the local planning authority area and the strategic policies and proposals to deliver that vision.

DEVELOPMENT PLAN DOCUMENT – These are spatial planning documents that are subject to independent examination. They will have 'development plan' status. See the definition of Minerals & Waste Development Plan Document below.

EU DIRECTIVE – A European Union legal instruction, which is binding on all Member States, but must be implemented through legislation of national governments within a prescribed timescale.

ENERGY RECOVERY – Includes a number of established and emerging technologies, though most energy recovery is through incineration technologies. Many wastes are combustible, with relatively high calorific values – this energy can be recovered through (for instance) incineration with electricity generation, gasification, pyrolysis or refuse derived fuel.

ENVIRONMENT AGENCY – Established in April 1996, combining the functions of former local waste regulation authorities, the National Rivers Authority and Her Majesty's Inspectorate of Pollution. Intended to promote a more integrated approach to waste management and consistency in waste regulation. The Agency also conducts national surveys of waste arising and waste facilities.

ENVIRONMENTAL REPORT – A document required by the SEA Directive as part of an environmental assessment, which identifies, describes and evaluates the likely significant effects on the environment of implementing a plan or programme.

GREEN BELT – Areas of land defined in Structure Plans and District Wide Local Plans that are rural in character and adjacent to urban areas, where permanent and strict planning controls apply in order to; check the unrestricted sprawl of built up areas; safeguard the surrounding countryside from further encroachment; prevent neighbouring towns from merging into one another; preserve the special character of historic towns and assist urban regeneration.

GREENHOUSE GASES – Gases such as methane and carbon dioxide that are believed to contribute to global warming by trapping heat between the earth and the atmosphere.

HOUSEHOLD RECYCLING CENTRES – Sites to which the public can bring domestic waste, such as bottles, textiles, cans and paper for free disposal. These sites may also accept bulky household waste and green waste. Where possible, the collected waste is recycled after sorting.

INCINERATION – The controlled burning of waste, either to reduce its volume, or its toxicity. Energy recovery from incineration can be achieved by utilising the calorific value of paper, plastic, etc to produce heat or power. Current flue-gas emission standards are very high. Ash residues still tend to be disposed of to landfill.

INERT WASTE – Waste which, when deposited into a waste disposal site, does not undergo any significant physical, chemical or biological transformations and which complies with the criteria set out in Annex 111 of the EC Directive on the Landfill of Waste.

KERBSIDE COLLECTION – Any regular collection of recyclables from premises, including collections from commercial or industrial premises as well as from households. Excludes collection services delivered on demand.

LANDFILL – The deposit of waste onto and into land in such a way that pollution or harm to the environment is prevented and, through restoration, to provide land which may be used for another purpose.

LANDRAISE – Where land is raised by the deposit of waste material above existing or original ground level.

LAND USE PLANNING – The Town and Country Planning system regulates the development and use of land in the public interest, and has an important role to play in achieving sustainable waste management.

LICENSED SITE – A waste disposal or processing facility which is licensed under the Environmental Protection Act for that function.

LOCAL DEVELOPMENT FRAMEWORK – Comprises a portfolio of local development documents that will provide the framework for delivering the spatial planning strategy for the area.

LOCAL DEVELOPMENT DOCUMENT – A document that forms part of the Local Development Framework. Can either be a Development Plan Document or a Supplementary Planning Document.

MATERIALS RECOVERY / RECYCLING FACILITY – A site where recyclable waste, usually collected via kerbside collections or from Household Recycling Centres, is mechanically or manually separated, baled and stored prior to reprocessing.

METHANE – A colourless, odourless gas formed during the anaerobic decomposition of putrescible waste. It is the major constituent of landfill gas.

MINERALS & WASTE DEVELOPMENT PLAN DOCUMENT – Spatial minerals and waste related planning documents that are subject to independent examination. There will be a right for those making representations seeking change to be heard at an independent examination.

MINERALS & WASTE DEVELOPMENT SCHEME – Sets out the programme for the preparation of the minerals and waste development documents. Must be submitted to Secretary of State for approval within six months of the commencement date of the Act regardless of where they are in terms of their current development plan.

MINERALS & WASTE DEVELOPMENT FRAMEWORK – Comprises a portfolio of minerals and waste development documents which will provide the framework for delivering the spatial minerals and waste planning strategy for the area.

OFFICE OF THE DEPUTY PRIME MINISTER – The Government department with responsibility for planning and local government. (As of May 2006 this department became the **DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT)**.

PLANNING POLICY GUIDANCE NOTES – Government policy statements on a variety of issues that are material considerations in determining planning applications.

PLANNING POLICY STATEMENT – Guidance documents which set out national planning policy. They are being reviewed and updated and are replacing PPGs.

PREFERRED AREA – Area within which waste management uses may be suitable in principle, subject to extensive consultation.

PROPOSALS MAP – Illustrates the policies and proposals in the development plan documents and any saved policies that are included in the local development framework.

PUBLIC CONSULTATION – A process through which the public is informed about proposals fashioned by a planning authority or developer and invited to submit comments on them.

PUTRESCIBLE WASTE – Organic waste which, when deposited at a landfill site, will decompose and give rise to potentially polluting by-products in the form of liquids or gases.

PYROLYSIS – The heating of waste in a closed environment (i.e. in the absence of oxygen) to produce a secondary fuel product.

RESTORATION – The methods by which the land is returned to a condition suitable for an agreed after-use following the completion of tipping operations.

RECOVERY – The process of extracting a product of value from waste materials, including recycling, composting and energy recovery.

RECYCLING – Involves the reprocessing of wastes, either into the same product or a different one. Many non-hazardous industrial wastes such as paper, glass, cardboard, plastics and scrap metal can be recycled. Hazardous wastes such as solvents can also be recycled by specialist companies, or by in-house equipment.

REDUCTION – Achieving as much waste reduction as possible is a priority action. Reduction can be accomplished within a manufacturing process involving the review of production processes to optimise utilisation of raw (and secondary) materials and recirculation processes. It can be cost effective, both in terms of lower disposal costs, reduced demand from raw materials and energy costs. It can be carried out by householders through actions such as home composting, re-using products and buying goods with reduced packaging.

REFUSE DERIVED FUEL – A fuel product recovered from the combustible fraction of waste, in either loose or pellet form.

REGIONAL SPATIAL STRATEGY – This document is being prepared by the South West Regional Assembly and will replace the Regional Planning Guidance for the South West. It will have statutory development plan status.

RE-USE – The reuse of materials in their original form, without any processing other than cleaning. Can be practiced by the commercial sector with the use of products designed to be used a number of times, such as re-useable packaging. Householders can purchase products that use refillable containers, or re-use plastic bags. The processes contribute to sustainable development and can save raw materials, energy and transport costs.

SAVED PLAN / POLICIES – Under the Planning and Compulsory Purchase Act 2004 the Gloucestershire Minerals and Waste Local Plans have been ‘saved’ for a period of three years (either from the date of adoption or September 2004 as appropriate).

SOUTH WEST REGIONAL ASSEMBLY – Body responsible for regional planning and waste strategy matters in the South West.

SPECIAL AREAS OF CONSERVATION – Designation made under the Habitats Directive to ensure the restoration or maintenance of certain natural habitats and species some of which may be listed as ‘priority’ for protection at a favourable conservation status.

SPECIAL PROTECTION AREA – Designations made under the EC Directive 79/409 on bird conservation (The Birds Directive), the aim of which is to conserve the best examples of the habitats of certain threatened species of bird the most important of which are included as priority species.

STAKEHOLDER – Anyone who is interested or may be affected by a proposal being considered.

STRATEGIC ENVIRONMENTAL ASSESSMENT – Local Planning Authorities must comply with European Union Directive 2001/42/EC which requires a high level, strategic assessment of local development

documents (DPDs and, where appropriate SPDs) and other programmes (e.g. the Local Transport Plan and the Municipal Waste Management Strategy) that are likely to have significant effects on the environment.

SUPPLEMENTARY PLANNING DOCUMENT – Policy guidance to supplement the policies and proposals in development plan documents. They will not form part of the development plan or be subject to independent examination. (Formally known as Supplementary Planning Guidance)

SUSTAINABILITY APPRAISAL – Local Planning Authorities are bound by legislation to appraise the degree to which their plans and policies contribute to the achievement of sustainable development. The process of Sustainability Appraisal is similar to Strategic Environmental Assessment but is broader in context, examining the effects of plans and policies on a range of social, economic and environmental factors. To comply with Government policy, Gloucestershire County Council is producing a Sustainability Appraisal that incorporates a Strategic Environmental Assessment of its Minerals and Waste Local Development Documents.

SUSTAINABLE DEVELOPMENT – Development which is sustainable in that which meets the needs of the present without comprising the ability of future generations to meet their own needs.

SUSTAINABLE WASTE MANAGEMENT – Means using material resources efficiently, to cut down on the amount of waste we produce. And where waste is generated, dealing with it in a way that actively contributes to economic, social and environmental goals of sustainable development.

VOIDSPACE – The remaining capacity in active or committed landfill or landraise sites.

WASTE – Is the wide ranging term encompassing most unwanted materials and is defined by the Environmental Protection Act 1990. Waste includes any scrap metal, effluent or unwanted surplus substance or article that requires to be disposed of because it is broken, worn out, contaminated or otherwise spoiled. Explosives and radioactive wastes are excluded.

WASTE ARISING – The amount of waste generated in a given locality over a given period of time.

WASTE HIERARCHY – Suggests that: the most effective environmental solution may often be to reduce the amount of waste generated – reduction. Where further reduction is not practicable, products and materials can sometimes be used again, either for the same or a different purpose – re-use. Failing that, value should be recovered from waste, through recycling, composting or energy recovery from waste. Only if none of the above offer an appropriate solution should waste be disposed.

WASTE LOCAL PLAN – A statutory land-use plan. Its purpose is set out detailed land-use policies in relation to waste management development in the County.

WASTE MANAGEMENT LICENSES – Licenses are required by anyone who proposes to deposit, recover or dispose of controlled waste. The licensing system is separate from, but complementary to, the land use planning system. The purpose of a license and the conditions attached to it is to ensure that the waste operation that it authorises is carried out in a way that protects the environment and human health.

WASTE MINIMISATION – Reducing the volume of waste that is produced. This at the top of the Waste Hierarchy.