Transport Research Laboratory
Creating the future of transport

Oxfordshire Minerals and Waste Local Plan: Core Strategy

Sustainability Appraisal Report Addendum

April 2016
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Prepared for: Oxfordshire County Council, Minerals and Waste Policy Team

Author: R Gardner and K Millard

Quality approved: C Beaumont
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1  Background
This document is an Addendum to the Sustainability Appraisal (SA) Report (August 2015) that was prepared to accompany the Publication of the Oxfordshire Minerals and Waste Local Plan Core Strategy.

The purpose of the Addendum is to provide information in relation to the representations that were received on the SA Report during the period of consultation that ended on 30th September 2015 and to provide information relating to the issues raised during that consultation. The Addendum also provides clarification in relation to some other issues that were raised in correspondence from the inspector (Examination document EX1).

This Addendum does not add any new assessment or findings to those previously published in the SA documents that have been produced at the stages in the process that have been undertaken to date (see Section 2.3).

This Addendum should be read alongside the SA Report (August 2015) (Examination document no. 2.2 & 2.3).

2  Consultation
2.1  Introduction
The SEA Directive requires consultation at various stages of the SA process. Consultation on the SA has been undertaken at various stages during the preparation of the Core Strategy and reported in each subsequent stage of the SA. Most recently, the August 2015 SA Report provided information on the responses received during the consultation on the Draft Core Strategy in February 2014 and how they were taken into account.

A further round of consultation has now been undertaken, this time on the Publication Core Strategy from 19th August to 30th September 2015. This was accompanied by the SA Report (August 2015).

2.2  Representations on the SA Report
As a result of the consultation on the Publication Core Strategy four representations were made in relation to the SA Report. These were all received from Suzi Coyne Planning on behalf of the following companies:

- Sheehan Haulage and Plant Hire Ltd (Representation no. 113);
- M & M Skip Hire Ltd (Representation no. 114);
- David Einig Contracting Ltd (Representation no. 115); and
- Mckenna Environmental Ltd (Representation no. 116).

The content of the four representations was identical with respect to the SA Report and so for the purposes of this Addendum have been treated as a single response.

The issues raised in the representation related to the following main areas:

- The SA not adequately appraising the likely environmental effects of the Plan;
- The SA not properly evaluating reasonable alternatives; and
- The SA not outlining the reasons why the proposals being put forward have been selected.
2.3 Response to the representation

During the development of the Minerals and Waste Local Plan (Core Strategy) a wide range of options has been considered for delivering the plan objectives across the full range of planning issues within the scope of the Core Strategy. At each stage the SA has undertaken an assessment of the likely effects of the plan against the framework of SA Objectives that was developed at the beginning of the process and updated to take account of consultation comments. The findings of the SA have been taken into consideration at each subsequent stage of plan development. Where minor changes were made to policies between different stages and where it was considered that the findings of the previous round of assessment remained unchanged, the previous assessment was carried forward to the next stage of SA.

The key stages of the SA/SEA process and development of the Plan during which options have been considered and assessed are as follows:

- Preparation and consultation on Minerals and Waste Core Strategy (Issues and Options). June 2006 (Examination document no. 9.1);
- Preparation and consultation on the Interim SA Report. June 2006 (Examination document no. 9.2);
- Preparation and consultation on the Minerals and Waste Core Strategy (Preferred Options). February 2007 (Examination document no. 9.3);
- Preparation and consultation on the SA of the Minerals and Waste Core Strategy (Preferred Options). February 2007 (Examination document no. 9.4);
- Preparation and consultation on the SA of the Minerals Spatial Strategy Options. May 2010 (Examination document no. 9.5);
- Preparation and consultation on the SA of the Revised Minerals Spatial Strategy Options. September 2010 (Examination document no. 9.6);
- Preparation and consultation on the SA of the Aggregates Apportionment Options. July 2011 (Examination document no. 9.7);
- Preparation and consultation on the SA of the Minerals Preferred Strategy. August 2011 (Examination document no. 9.8);
- Preparation and consultation on the Minerals Planning Strategy Consultation Draft. September 2011 (Examination document no. 9.9);
- Preparation and consultation on the SA of the Waste Spatial Strategy Options. August 2011 (Examination document no. 9.10);
- Preparation and consultation on the SA of the Draft Waste Planning Strategy. September 2011 (Examination document no. 9.11);
- Preparation and consultation on the Waste Planning Strategy Consultation Draft. September 2011 (Examination document no. 9.12);
- Preparation and consultation on the SA of the Aggregates Apportionment Options – Addendum Report. March 2012 (Examination document no. 9.13);
- Preparation and consultation on the SA Report of the Proposed Submission Core Strategy. March 2012 (Examination document no. 9.14);
- Preparation and consultation on the Core Strategy Proposed Submission Document May 2012 (Examination document no. 9.15);
- Preparation and consultation on the Consultation Draft Core Strategy. February 2014 (Examination document no. 9.16);
- Preparation and consultation on the SA Report of the Consultation Draft Local Plan. February 2014 (Examination document no. 9.17);
- Preparation and consultation on the Local Plan Proposed Submission Document August 2015 (Examination document no. 1.1);
- Preparation and consultation on the SA Report of the Proposed Submission Local Plan August 2015 (Examination document no. 2.2 & 2.3); and
- Preparation of the SA Report Addendum, April 2016 (this addendum).

There has been extensive consideration of options during Stage B of the SA/SEA process, with further consideration of Stage B issues during the development of the SA Reports during Stage C.

Section 5 of the SA Report (August 2015) (Examination document no. 2.2) provides a summary of each of the stages of Core Strategy Development that commenced with the consideration of Minerals and Waste Core Strategy Issues and Options in 2005/06. Greater detail for each stage is provided in Appendix C of the SA Report (August 2015) (Examination document no. 2.3c).

Given the large amount of information provided in the various SA Reports that have been prepared since 2006 it has not been possible to provide all that information in the Publication SA Report (August 2015) (Examination document no. 2.2 & 2.3). Instead, cross-referencing has been made to previous SA documents, with web-links for where they could be accessed being provided.

In relation to the issues identified in the representation received (Section 2.2), Section 5.1 of the SA Report provides the most notable of these cross-references. That cross-reference is to Appendix B of the Pre Submission SA Report (March 2012) (Examination document no. 9.14) which provides a summary of the options considered throughout the plan development up to 2012, with reasons being provided for selecting the preferred options/rejecting alternative options. It also provides a summary of the appraisal undertaken on the minerals spatial options (2010), the aggregates apportionment options (2011 and 2012), the waste spatial options (2011), other spatial options considered, and the minerals and waste preferred policies (2011).

In order to provide greater clarity as to how alternatives have been dealt with, Section 4 of this Addendum along with Appendices 1 to 3 provide a summary of how alternatives have been considered during the development of the Core Strategy, and include an outline of the reasons why the proposals being put forward have been selected. This addendum does not add any new assessment or findings.

### 3 Pre-Examination Hearing Questions

In addition to the representations received during the pre-submission stage discussed above, following the Submission of the Core Strategy and supporting documents for Examination, the Inspector appointed by the Secretary of State has raised some queries relating to the process of developing the Core Strategy and undertaking the Sustainability Appraisal (Inspector’s letter 22 January 2016 (EX1)). These queries are summarised in Table 1 below.
### Table 1: Summary of Inspector’s Queries

<table>
<thead>
<tr>
<th>Inspector’s Query</th>
<th>Response / Clarification</th>
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<tbody>
<tr>
<td>Para.28.</td>
<td>Minerals</td>
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<tr>
<td></td>
<td>In effect, the alternatives considered for minerals are broadly the same between the withdrawn Core Strategy (March 2012) and the Submission Core Strategy. Options are limited by the fact that minerals can only be worked where they are found. The Key Diagram for the Submission Core Strategy identifies the full extent of the resource areas within the confines of the constraints and strategy decisions taken during the development of the Strategy. This approach differs from that taken for the withdrawn Core Strategy (May 2012) in which the Key Diagram identified more geographically distinct preferred strategy areas in a diagrammatic way. However, as can be seen in the summary sheets in Appendix 2 the details of the strategies for sand and gravel, soft sand and crushed rock have not fundamentally changed between March 2012 and Submission. Section 4 of this Addendum provides additional information to that provided in the SA Report (August 2015) on how alternatives were considered and why the strategies being pursued were selected.</td>
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<tr>
<td></td>
<td>Waste</td>
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<td></td>
<td>Following support for the principle in the withdrawn Core Strategy (May 2012) of locating facilities close to the main source of waste, little change was made to the approach taken in the 2014 consultation draft. In the Submission Core Strategy the waste spatial strategy is now effectively covered by policies W3, W4 and W5 and is broadly in line with the previous stages. The SA has assessed the strategies at each stage of the plan development. As for minerals, Section 4 of this Addendum provides additional information to that provided in the SA Report (August 2015) on how alternatives were considered and why the strategies being pursued were selected.</td>
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<tr>
<td>Para.29.</td>
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<td></td>
<td>Whilst it was not made clear in Section 5.6/Table 5-1, the assessment at that stage in the planning process also considered the broad areas for sharp sand and gravel along with three spatial options for how to deliver the different apportionment options. The details were provided in Section C.5 of Appendix C to the SA Report but were not included in the summary of that stage that was provided in Section 5.6 of the SA Report.</td>
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<tr>
<td>Para.30.</td>
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<td></td>
<td>It is not the case that the strategy did not begin to emerge until the final options addendum. The Topic Paper ‘Development of the Minerals Spatial Strategy’ provides a summary of the process to develop the Minerals Planning</td>
</tr>
</tbody>
</table>
final options addendum. This was when reduced working in West Oxfordshire was first considered as a response to consultation. It is not clear which of the three options (1a, 1b and 1c) was chosen and it is not clear what option 1a is. It is also not clear whether what is in the Plan is any of these in any event since the names given to what are now strategic resource areas as different to those used in the March 2012 addendum.

Strategy from 2007 through to Publication in 2015. The sheets provided in Appendix 2 of this Addendum provide summaries of how the Strategy was developed.

Option 1a was based on working in the existing areas of LWV, ECY, Caversham and Sutton Courtenay. The Sutton Courtenay area is expected to cease production around 2020. The Cholsey area would be brought into production post 2020 but working would continue at the same rate from the sites in West Oxfordshire.

The option that was taken forward in the May 2012 plan was based on Option 1b.

The strategy in the published plan is a development of Option 1b – the strategy areas have been expanded to include all potentially workable sand & gravel resource and combined (LWV + ECY) but the individual elements of Option 1b are included.

Para. 31

For waste there does not appear to have been different spatial strategies for all the principal waste streams.

Section 5.7 of the SA Report and Section C.6 of Appendix C to the SA Report summarise the contents of the SA Report produced in August 2011 that considered spatial strategy options for all of the key waste streams.

The Topic Paper ‘Development of the Waste Spatial Strategy’ provides detailed information on how the spatial strategies for the different waste streams have been developed. The sheets in Appendix 2 of this Addendum provide summaries of how the strategies for the principal waste streams have developed.

4 Consideration of Alternatives

4.1 Introduction

Government guidance for SA of Local Plans\(^1\) states that "it is the role of the SA Report to outline the reasons the alternatives were selected, the reasons the rejected options were not taken forward and the reasons for selecting the preferred approach in light of the alternatives". However it should be noted that it is the plan making authority which is the primary decision-maker in relation to identifying what is to be regarded as a ‘reasonable alternative’.

This section is designed to supplement the information provided in Section 5 and Appendix C of the SA Report (August 2015) (Examination document no. 2.2 & 2.3c) and not to repeat the information included therein. It has been prepared to provide more detail on how options were selected, appraised and then either rejected or taken forward.

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\(^1\) National Planning Practice Guidance
4.2 Core Strategy Options

The policies that are included in the Submission Core Strategy are listed in Table 2 along with, where applicable, a summary of the options that were considered and the reasons for selecting the policy over the alternatives that were considered.

In relation to the development of the minerals strategy, during the initial consideration of options in 2009, the Council used British Geological Survey mapping to identify potential areas of sand and gravel, soft sand and crushed rock. Some areas were discounted for reasons such as those relating to quality of the resource or deliverability issues. The remaining areas were taken forward for further consideration. The details of this sieving process are provided in Appendix 1 of this Addendum. Whilst the SA did not provide input at this stage, it can be considered that the selection process that was undertaken determined whether an area could or could not be considered as a ‘reasonable alternative’. The work undertaken in 2009 does not therefore form part of the SA, but has been included here as information to explain how the original options for SA were arrived at.

Detailed Topic Papers have been produced to provide information on how the minerals and waste strategies have been developed up to the Publication stage. As part of that documentation, a series of summary sheets have been developed to help aid the understanding of how the strategies have evolved and to summarise the findings of the SA at each stage. These sheets are reproduced in Appendix 2.

In addition, Appendix 3 provides details of how options were considered at various stages (2010–2012) during the development of the Core Strategy. The information in that appendix replicates the information that was provided in Appendix B of the Pre Submission Minerals and Waste Core Strategy SA Report (March 2012) (Examination document no. 9.14), although it is set out in a different order to report the information by plan topic/policy area and not by the stage in the planning process.

It should be noted that during the development of the Core Strategy the policy names and numbers have not remained the same throughout. In some cases policies have been amalgamated, with one of them being deleted, whilst in other cases new policies have been introduced with knock-on effects for the numbering of the policies that follow. This makes it difficult in some cases to provide a simple summary of a particular policy’s evolution and the options that have been considered during its development.

Table 2: Outline of reasons for selecting preferred policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>Summary of options considered and reason for selecting final policy</th>
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<tbody>
<tr>
<td>Minerals</td>
<td>Options considered&lt;br&gt;Two options for the target for the provision of recycled and secondary aggregates were considered during the period from 2006 – 2012. In the Draft Core Strategy (February 2014) the target was removed as it was considered that a target was no longer appropriate (following the revocation of the SE plan from which the target was taken) but rather Policy M1 should seek to maximise provision for recycled and secondary aggregates. Final policy&lt;br&gt;The final policy has been selected as it encourages and enables the contribution of recycled and secondary aggregates, to help meet the demand for aggregate mineral in Oxfordshire, to be maximised.</td>
</tr>
<tr>
<td>Policy M2: Provision for working aggregate minerals</td>
<td>Options considered</td>
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<td>--------------------------------------------------</td>
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<tr>
<td>Sharp sand and gravel: A range of options for sharp sand and gravel apportionment have been considered, these changing over time to reflect the findings of subsequent Local Aggregate Assessments and the changing contexts and circumstances in which these have been developed.</td>
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<tr>
<td>Soft sand: Different sub-regional apportionment levels have been considered.</td>
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<tr>
<td>Crushed rock: Different apportionment levels have been considered.</td>
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</tr>
<tr>
<td><strong>Final policy</strong></td>
<td></td>
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<tr>
<td>The final policy approach has moved away from providing specific figures for apportionment and instead provides for land-won aggregate supply from Oxfordshire in accordance with the most recent Local Aggregate Assessment (as required by the NPPF) and provides for landbanks of reserves with planning permission to be maintained, based on the most recent Local Aggregate Assessment. This enables the policy to remain flexible in responding to changes in demand.</td>
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<thead>
<tr>
<th>Policy M3: Principal locations for working aggregate minerals</th>
<th>Options considered</th>
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<tbody>
<tr>
<td>Sharp sand and gravel: During the initial consideration of options in 2009 17 potential resource areas for sand and gravel were identified. One area (RAS 12 – Sutton Courtenay) was subsequently subdivided along the River Thames to create an 18th area (Culham/Clifton Hampden). Of these, 7 were discounted for reasons relating to the poor quality of the resource and deliverability issues. The reasons for including or discounting the areas from the subsequent planning stages are provided in Appendix 1.</td>
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<tr>
<td>During the development of this policy a range of options were then considered, including the concentration on different new and existing working areas across the county, as well an option for dispersed working.</td>
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<tr>
<td>Soft sand: There are more limited options for the locations of soft sand than for sharp sand and gravel and in 2009 only one potential area was identified (South West Oxfordshire). In response to consultation comments noting the presence of soft sand resources at Duns Tew, this was added as a second area, and both were considered for inclusion in the subsequent planning stages. Within these limitations different options have been considered, including a single South West Oxfordshire resource area and different options for multiple resource areas.</td>
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<tr>
<td>Crushed rock: In 2009, four crushed rock resource areas were identified. The Cotswolds AONB and the ironstone resource were excluded and from the remaining two areas, three amended areas were taken forward for further consideration. There are more limited options for the locations for crushed rock than for sharp sand and gravel, however within these limitations different options have been considered.</td>
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<tr>
<td><strong>Final policy</strong></td>
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<tr>
<td>The final policy has been chosen as it includes strategic resource areas that are well located in terms of proximity to the markets and avoids areas with the greatest environmental constraints; and provides flexibility for suitable sites for mineral working to be selected in the Site Allocations Document.</td>
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<tr>
<th>Policy M4: Sites for working aggregate minerals</th>
<th>Final policy</th>
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<tr>
<td>This policy replaces and incorporates relevant parts of policy M4 in the Core Strategy Consultation Draft February 2014 and draws on elements of other minerals and core policies in that and earlier versions of the Core Strategy, to now provide a series of criteria that will be used when allocating sites in the Minerals &amp; Waste Plan: Part 2 – Site Allocations Document. It does not identify specific sites.</td>
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<tr>
<td>The policy aims to balance the production capacity for sharp sand and</td>
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</table>
gravel between the strategic resource areas to more closely reflect the distribution of demand within the county (as included in policy M2 in the Core Strategy Consultation Draft February 2014).

| Policy M5: Working of Aggregate Minerals | This is a new policy. Due to its largely procedural nature no options have been considered for this policy.  
**Final policy**  
Policy M5 provides for permission to be granted for applications for aggregate mineral working within identified sites. It also sets out the circumstances under which permission may exceptionally be granted for mineral working in locations that are not identified. |

| Policy M6: Aggregate rail depots | This was policy M5 in the Core Strategy Consultation Draft February 2014 and policy M4 in the Core Strategy Proposed Submission Document May 2012. No alternatives were put forward. The preferred policy takes its lead from national policy (in the NPPF) to safeguard rail depots, to enable import of aggregates by rail. Also there are no alternative locations for rail depots as they can only be located where road and rail coincide and none have been nominated.  
**Final policy**  
Policy M6 provides for existing aggregate rail depots and any new depot sites to be safeguarded and for new depots to be permitted at suitable locations. |

| Policy M7: Non-aggregate mineral working | This was policy M6 in the Core Strategy Consultation Draft February 2014 and policy M5 in the Core Strategy Proposed Submission Document May 2012; and it was included within policy M3 in the Consultation Draft Minerals Planning Strategy September 2011. The proposed submission policy is in line with national policy and no alternatives have been put forward.  
**Final policy**  
Policy M7 provides for the working, including exploration and appraisal, of the non-aggregate minerals that occur in Oxfordshire subject to the particular criteria that are relevant to each mineral. |

| Policy M8: Safeguarding mineral resources | Options considered  
This was policy M7 in the Core Strategy Consultation Draft February 2014, policy M6 in the Core Strategy Proposed Submission Document May 2012 and policy M5 in the Consultation Draft Minerals Planning Strategy September 2011. Different options were considered for safeguarding mineral resources, including the safeguarding of the entire resource, or limiting safeguarding to certain areas – with sub-options being considered within this option.  
**Final policy**  
The final policy approach is to broadly identify the mineral resources that will be safeguarded but to define Mineral Safeguarding Areas in the Site Allocations Document. These will cover the Strategic Resource Areas identified in Policy M3 for sharp sand and gravel, soft sand and limestone, as well as other areas of proven sand and gravel resource and fuller’s earth resources in the Baulking – Fernham area. |

| Policy M9: Safeguarding mineral infrastructure | This is a new policy. No options were considered for this policy  
**Final policy**  
The policy provides for the infrastructure that supports the supply of minerals to be safeguarded (as required by the NPPF), but the actual sites to be safeguarded will be identified in the Site Allocations Document. |

| Policy M10: Restoration of mineral workings | This was policy M8 in the Core Strategy Consultation Draft February 2014, policy M7 in the Core Strategy Proposed Submission Document May 2012 and policy M6 in the Consultation Draft Minerals Planning Strategy September 2011. The preferred policy is in line with national |
policy and no alternatives have been put forward.

**Final policy**
The final policy provides for mineral workings to be restored to a high standard and in a timely and phased manner to an after-use appropriate to the location and that delivers a net gain in biodiversity; and sets out the criteria to be taken into account.

### Waste

<table>
<thead>
<tr>
<th>Policy</th>
<th>Options considered</th>
<th>Final policy</th>
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<tbody>
<tr>
<td><strong>Policy W1: Oxfordshire waste to be managed</strong></td>
<td>Options for where to source appropriate estimates for the amount of waste to be provided for three different waste streams (MSW, C&amp;I and CDE) were considered.</td>
<td>The final policy approach has moved away from providing specific figures for waste to be managed and instead provides for Oxfordshire to be self-sufficient in the management of its principal waste streams – based on the most up to date evidence that provides the amounts of waste that need to be managed. This enables the policy to remain flexible in responding to changes in these needs.</td>
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<tr>
<td><strong>Management of waste from other areas</strong></td>
<td>Management of waste imported from outside Oxfordshire was covered in policy W2 in the Core Strategy Consultation Draft February 2014 and earlier versions of the Core Strategy. Three options were considered. The final policy approach is for this to be covered within policies W3 (Provision for waste management capacity) and W6 (Landfill), to provide a more integrated policy approach, and the former policy W2 has therefore been deleted.</td>
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<tr>
<td><strong>Policy W2: Oxfordshire waste management targets</strong></td>
<td>Options for the targets to be used were considered. These covered targets derived from the South East Plan or national policy and more locally derived targets. The targets for Municipal Waste and Commercial &amp; Industrial Waste remained unchanged between the 2012 and 2015 versions of the Plan. The recycling target for Construction, Demolition and Excavation waste was increased between 2012 and 2014 but was changed back to the earlier figure in 2015 in order to reflect what is practically achievable.</td>
<td>The final policy accords with the requirements of the European Waste Framework Directive and the targets included in the policy are considered to be achievable.</td>
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<tr>
<td><strong>Policy W3: Provision for waste management capacity</strong></td>
<td>NB: This policy now covers the management of waste from other areas that was previously in a separate policy (Policy W2 in the 2012 and 2014 versions of the Core Strategy). This was policy W4 in the Core Strategy Consultation Draft February 2014 and earlier versions of the Core Strategy. This policy provides a mechanism to respond to the requirements identified in other policies, in order to enable provision of the waste management capacity and facilities that will be required. Given the largely procedural nature of the policy no alternatives have been considered.</td>
<td>The final policy has been chosen as it provides the flexibility to respond to changes in the assessed capacity requirements for different types of waste management facility over the life of the Plan. The prescription of the additional capacity requirements, that was included in the 2012 version of the Core Strategy, would not allow the necessary flexibility.</td>
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<tr>
<td>Policy W4: Locations for facilities to manage the principal waste streams</td>
<td>Options considered</td>
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<tr>
<td>This was policy W5 in the Core Strategy Consultation Draft February 2014 and earlier versions of the Core Strategy. Various spatial strategy options for the location of facilities for C&amp;I recycling, C&amp;I residual waste treatment and CDE recycling were considered. For MSW, as new facilities are being provided in accordance with the Joint Municipal Waste Management Strategy and the Household Waste Recycling Centre Strategy, no alternative options were considered.</td>
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<tr>
<td><strong>Final Policy</strong></td>
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<td>The final policy identifies broad locations for future strategic and non-strategic waste management facilities that are well located in terms of proximity to the main sources of waste and transport routes and avoid areas with the greatest environmental constraints and the Green Belt. This provides flexibility for sufficient suitable specific sites to meet requirements to be allocated through the Site Allocations Document.</td>
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<thead>
<tr>
<th>Policy W5: Siting of waste management facilities</th>
<th>Options considered</th>
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<tbody>
<tr>
<td>This was policy W6 in the Core Strategy Consultation Draft February 2014 and earlier versions of the Core Strategy. The policy is based on previous regional and national policy and so no alternatives were put forward during its development. During the development of the policy the requirements have been updated to provide greater clarity and to reflect changes in national policy, in particular on locations in the Green Belt. The policy now includes active mineral and landfill sites as suitable for siting waste management facilities.</td>
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<tr>
<td><strong>Final Policy</strong></td>
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<tr>
<td>The final policy is seen as the most appropriate approach for siting of waste management facilities, having taken account of consultation responses relating to previous policy versions and in line with national policy.</td>
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<tr>
<th>Policy W6: Landfill</th>
<th>Options considered</th>
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<tr>
<td>NB: This policy now covers the waste from other areas that was previously in a separate policy (Policy W2 in the 2012 and 2014 versions of the Core Strategy). This was policy W7 in the Core Strategy Consultation Draft February 2014 and earlier versions of the Core Strategy. No options were considered for this policy as it was established that there was no need for additional non-hazardous landfill. A need for additional disposal capacity for inert waste was identified but no options were put forward, provision being made through a permissive policy for disposal in quarries requiring restoration.</td>
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<tr>
<td><strong>Final policy</strong></td>
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<tr>
<td>The final policy has been expanded to make clearer the separate requirements for 'non-hazardous waste disposal facilities' and 'inert waste disposal facilities'; and to include that sites required to ensure sufficient provision for disposal of inert waste will be identified through the Site Allocations Document.</td>
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<tr>
<th>Policy W7: Management and disposal of hazardous waste</th>
<th>Options considered</th>
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<tbody>
<tr>
<td>This was policy W8 in the Core Strategy Consultation Draft February 2014 and earlier versions of the Core Strategy. Options were considered for meeting the required provision for landfill of hazardous waste.</td>
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<tr>
<td><strong>Final policy</strong></td>
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<tr>
<td>The policy approach put forward takes its lead from previous regional policy that for some types of facility there will be a need to serve wider than County areas.</td>
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<tr>
<th>Policy W8: Management of agricultural waste</th>
<th>Options considered</th>
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<tbody>
<tr>
<td>New policy introduced in the 2015 Publication version to provide policy detail on how Oxfordshire’s agricultural waste should be managed. No options were considered for this policy.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Policy W9: Management and</th>
<th>Options considered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options were considered for the management of ‘intermediate legacy</td>
<td></td>
</tr>
<tr>
<td>disposal of radioactive waste</td>
<td>waste’ and the management of ‘low level waste’.</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td><strong>Final policy</strong></td>
</tr>
<tr>
<td></td>
<td>The final policy identifies the locations at which radioactive waste produced in Oxfordshire will be managed. The policy also now includes a policy approach to facilities that would take low level radioactive waste from outside Oxfordshire. It will be through the Site Allocations Document that specific sites will be allocated.</td>
</tr>
</tbody>
</table>

**Policy W10: Management and disposal of waste water/sewage**

This policy was introduced in the 2014 Draft. Options around this policy area have not been considered as no alternative approaches have been identified.

**Final policy**

The policy provides the strategic approach to ensure that there is enough capacity to enable planned development in the County to be taken forward.

**Policy W11: Safeguarding waste management sites**

This was policy W10 in the 2012 version of the Core Strategy. No options have been considered for this policy.

**Final policy**

The policy was developed from former regional policy. It provides for the safeguarding of the existing and planned facilities and waste management capacity that are needed to deliver the other plan policies.

### Core Policies

<table>
<thead>
<tr>
<th>Policy C1: Sustainable Development</th>
<th>New policy introduced in the Consultation Draft Core Strategy (February 2014). The policy was updated for the 2015 Publication to include a footnote providing examples of the policies in the NPPF that would be taken into consideration. This policy aligns with the NPPF and therefore no options for it were considered.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy C2: Climate Change</td>
<td>New policy introduced in the Consultation Draft Core Strategy, February 2014. This policy aligns with the NPPF and therefore no options for it were considered.</td>
</tr>
<tr>
<td>Policy C3: Flooding</td>
<td>This was policy C1 in the 2012 version of the Core Strategy. The policy was updated in the Consultation Draft Core Strategy (February 2014) to encourage opportunities to be taken to increase flood storage capacity in the flood plain, particularly through the restoration of sand and gravel workings. This policy aligns with the NPPF and therefore no options for it were considered.</td>
</tr>
<tr>
<td>Policy C4: Water Environment</td>
<td>This was policy C2 in the 2012 version of the Core Strategy. The policy has changed very little from the version in the 2011 Consultation Draft. This policy aligns with the NPPF and therefore no options for it were considered.</td>
</tr>
<tr>
<td>Policy C5: Local environment, amenity and economy</td>
<td>This was policy C3 in the 2012 version of the Core Strategy. This policy has been expanded between the 2012, 2014 and 2015 versions to now cover a wider variety of factors (e.g. human health and safety, and the local economy) and potential impacts. It also considers the introduction of separation distances or buffer zones between minerals and waste developments and sensitive receptors, which was previously only included in the supporting text. This policy aligns with the NPPF and no options were considered for it during its evolution.</td>
</tr>
<tr>
<td>Policy C6: Agricultural land and soils</td>
<td>This was policy C4 in the 2012 version of the Core Strategy; but it was not included in the 2011 Consultation Draft. The policy provides for the need to protect best and most versatile agricultural land and soil quality to be taken into account in line with national policy. This policy aligns with the NPPF and therefore no options for it were considered.</td>
</tr>
<tr>
<td>Policy C7: Biodiversity and Geodiversity</td>
<td>This was policy C5 in the 2012 version of the Core Strategy. The policy was updated between the 2012 and 2014 versions to provide greater detail and certainty on how biodiversity would be protected and enhanced as part of minerals and waste developments. The policy was further strengthened and amended to accord with national policy for the 2015 Publication. This policy aligns with the NPPF and therefore no options for it were considered.</td>
</tr>
<tr>
<td>Policy C8: Landscape</td>
<td>This was policy C6 in the 2012 version of the Core Strategy. The policy was updated for the 2015 Publication to accord with the NPPF to provide “great weight” to AONBs and to cover impacts on AONBs from developments outside the AONB. In addition a new paragraph was added on compensation to be provided where impacts cannot be avoided or mitigated. This policy aligns with the NPPF and therefore no options for it were considered.</td>
</tr>
<tr>
<td>Policy C9: Historic environment and archaeology</td>
<td>This was policy C7 in the 2012 version of the Core Strategy. The policy was updated between the 2012 and 2014 versions to provide greater protection to heritage assets. It was further updated for the 2015 Publication version, to accord with national policy, including the addition of a reference to prior investigation where necessary and the addition of a requirement that proposals for mineral working and landfill contribute to the conservation and enhancement of the historic environment. This policy aligns with the NPPF and therefore no options for it were considered.</td>
</tr>
<tr>
<td>Policy C10: Transport</td>
<td>This was policy C8 in the 2012 version of the Core Strategy. The policy was updated for the 2015 Publication to include a requirement for transport assessments/statements to be submitted, including mitigation measures where applicable. This policy aligns with the NPPF and therefore no options for it were considered.</td>
</tr>
<tr>
<td>Policy C11: Rights of way</td>
<td>This was policy C9 in the 2012 version of the Core Strategy and has only been changed slightly from that document. This policy aligns with the NPPF and therefore no options for it were considered.</td>
</tr>
</tbody>
</table>

There has been extensive and detailed consideration of options throughout the development of the Minerals and Waste Local Plan Core Strategy. The SA has provided continual input into this process, through helping to develop and refine options and emerging strategies and policies and by reporting the findings of the assessments undertaken at each stage of the plan making process. These assessments have provided the decision makers with information on the likely sustainability implications of pursuing one option over another and have therefore been an important part of both the evidence base and the decision making process itself, when deciding the preferred options for including in the Core Strategy.

It should be noted however that the reasons for taking forward some options and rejecting others are not restricted to the findings of the SA but also cover wider planning...
issues such as national planning policy, deliverability, views of the local community and stakeholders, and infrastructure availability/constraints.

The options that have been selected for inclusion in the Submission Core Strategy are those that are considered to be the most appropriate, based on studies and assessments, to deliver the objectives of the Plan, whilst the options that have not been taken forward are those that have not performed as well against the criteria in the studies and assessments that have been undertaken to inform the development of the Plan.

All of the detailed Sustainability Appraisal documents that have been prepared during the development of the Submission Core Strategy can be found on the OCC Minerals and Waste Policy website page:

https://www.oxfordshire.gov.uk/cms/content/minerals-and-waste-core-strategy
## Appendix 1: Resource areas included or discounted from minerals spatial strategy options (2009)

In 2009 the Council used British Geological Survey mapping to identify potential areas of sand and gravel, soft sand and crushed rock. The table below sets out the reasons why each of the resource areas was either included in or discounted from the strategy options that were subsequently considered.

NB: This table does not form part of the SA, but has been included here as information to explain how the original options for SA were arrived at.

<table>
<thead>
<tr>
<th>Resource Area</th>
<th>Name of resource area</th>
<th>Reason for discounting or including</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand and gravel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS-1</td>
<td>Cotswolds</td>
<td>Discount: Remote area with thin, unproven deposits with poor vehicular access, no nominations received</td>
</tr>
<tr>
<td>RAS-2</td>
<td>North Cherwell</td>
<td>Discount: Thin deposits, low likelihood of deliverability, no nominations received</td>
</tr>
<tr>
<td>RAS-3</td>
<td>North East Oxfordshire</td>
<td>Include: Extensive deposits although remote from much of the county</td>
</tr>
<tr>
<td>RAS-4</td>
<td>West Oxfordshire</td>
<td>Include: Significant resource in this area but investment would be needed in road network to improve access</td>
</tr>
<tr>
<td>RAS-5</td>
<td>Lower Windrush Valley</td>
<td>Include: Extensive sand and gravel resources but cumulative impact of working needs to be taken into account</td>
</tr>
<tr>
<td>RAS-6</td>
<td>Eynsham/Kidlington</td>
<td>Include: Extensive sand and gravel resources but cumulative impact of working needs to be taken into account</td>
</tr>
<tr>
<td>RAS-7</td>
<td>Kidlington/Bicester</td>
<td>Discount: Resource unproven, unlikely to be deliverable in the plan period.</td>
</tr>
<tr>
<td>RAS-8</td>
<td>Faringdon</td>
<td>Discount for sand and gravel: Limited resource, unlikely to make strategic contribution over plan period</td>
</tr>
<tr>
<td>RAS-9</td>
<td>Oxford/Abingdon</td>
<td>Include: Resources with some historic environment constraints.</td>
</tr>
<tr>
<td>RAS-10</td>
<td>Upper Thame Valley</td>
<td>Discount: Unproven resource, unlikely to be deliverable in the plan period.</td>
</tr>
<tr>
<td>RAS-11</td>
<td>Marcham/Grove</td>
<td>Discount: Resource extensive but thin and unproven. Unlikely to be deliverable in the plan period.</td>
</tr>
<tr>
<td>RAS-12</td>
<td>Sutton Courtenay</td>
<td>Include: Significant resource but need to take account of cumulative impact of continued working on local environment and communities.</td>
</tr>
<tr>
<td>--------</td>
<td>------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>RAS-13</td>
<td>Dorchester/Wallingford</td>
<td>Include: extensive resources although some heritage assets and located entirely within an airfield safeguarding zone</td>
</tr>
<tr>
<td>RAS-14</td>
<td>Cholsey</td>
<td>Include: deliverable resources, albeit potentially constrained by environmental designations</td>
</tr>
<tr>
<td>RAS-15</td>
<td>Ewelme/Chilterns</td>
<td>Discount: mineral resources unproven, Chilterns AONB</td>
</tr>
<tr>
<td>RAS-16</td>
<td>Caversham</td>
<td>Include: deliverable resources which serve an established market</td>
</tr>
<tr>
<td>RAS-17</td>
<td>Chilterns</td>
<td>Discount; thin and variable resource entirely within the Chilterns AONB</td>
</tr>
<tr>
<td>RAS-18</td>
<td>Culham/Clifton Hampden</td>
<td>Include: Plentiful resource with few environmental constraints</td>
</tr>
</tbody>
</table>

**Soft sand**

| RAS-8 | South West Oxfordshire | Include: One strategic area identified for soft sand extraction to meet the need for soft sand over the Plan period. |

**Crushed rock**

<table>
<thead>
<tr>
<th>RAR-1</th>
<th>Cotswolds</th>
<th>Discount: Extensive but variable quality of resource in Cotswolds AONB</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAR-2</td>
<td>North Oxfordshire</td>
<td>Include: Limestone resource. Discount: Extensive ironstone resources; no ironstone required over plan period because of permitted reserves in ROMP applications.</td>
</tr>
<tr>
<td>RAR-3</td>
<td>SW Oxfordshire</td>
<td>Include: limestone resource associated with soft sand extraction.</td>
</tr>
<tr>
<td>RAR-4</td>
<td>Central Oxfordshire</td>
<td>Discount; small area with variable and unproven resource.</td>
</tr>
</tbody>
</table>
Appendix 2: Spatial Strategy Summary Sheets

This Appendix provides Summary Sheets that describe the development of the Spatial Strategies for the Minerals and Waste Spatial Strategies. The following sheets are included:

- Sharp Sand and Gravel;
- Soft Sand;
- Crushed Rock;
- Principal Waste Streams – Part A; and
- Principal Waste Streams – Part B.

The Summary Sheets are also included in the Topic Papers that have been prepared by OCC to describe the development of the spatial strategies for both minerals and waste.
Development of the strategy for Sharp Sand and Gravel

**Minerals Spatial Strategy Initial Options – March May 2010:**
- Option 1: concentration
  - 1a NW of Oxford
  - 1b SE of Oxford
  - 1c Combination of 1a & 1b
- Option 2: Dispersal
- Option 3: Phased
  - Short term extensions to existing areas + 1 or more new areas at:
    - Clenfield-Bampton;
    - Culham;
    - Dorchester, Warborough, Benson
    - Wallingford-Cholsey

The SA highlighted that concentrating all working in one area could lead to unacceptable impacts on local communities, as the potential for flooding in local areas and on congestion on the transport network. This led to the identification of several areas for proposed working in the revised options, rather than just one area.

**Minerals Spatial Strategy Revised Options – July - Sept 2010:**
- Option 1: concentration on existing areas:
  - Lower Windrush Valley (LWV)
  - Eynsham Cassingtom Yarnton (ECY)
  - Radley
  - Sutton Courtenay
- Option 2: concentration on new areas:
  - Clenfield-Bampton
  - Warborough, Benson, Shillingford
  - Cholsey
  - Sutton/Courtney Harcourt
  - Culham/Clifton Hampden/Wittenham
- Option 3: Dispersal

The SA of the revised options noted the economic advantages of making efficient use of existing plant, infrastructure, and labour force, although it noted the potential for cumulative negative effects on local communities.

**July 2011 – Aggregate Apportionment Options:**
- Option 1: 1.01 mtpa
- Option 2: 1.24 mtpa
- Option 3: 1.46 mtpa

**Minerals Spatial Strategy Revised Options:**
- Spatial assumptions provided
  - The higher the level of extraction the greater would be the adverse environmental and social effects.

**July 2011 – Aggregate Apportionment Options:**
- Option 1: 1.01 mtpa
- Option 2: 1.24 mtpa
- Option 3: 1.46 mtpa

**Mar 2012 – Aggregate Apportionment Options – SA Addendum Report:**
- Option 1a: from September 2011 M2 and M3.
- Option 1b: reduced working in West Oxon v1
- Option 1c: reduced working in West Oxon v2

Note: Table 2.2. in the SA Addendum Report should have ‘1b and 1c’ post-2020 and not ‘1a and 1b’.

**Policy M2: 1.01 mtpa**
- Policy M2: Existing areas at: *LWV*;
  - EECY*;
  - Sutton Courtenay;
  - Culham;
  - Dorchester, Warborough, Benson
  - Wallingford-Cholsey

Some positive effects were also identified, as the extraction of minerals in these areas could offer opportunities to increase flood storage capacity, thereby reducing flood risk. The SRAs are also well located in terms of proximity to the markets and provide potential for investment and job creation which supports economic objectives.

The extraction of minerals from the SRAs will inevitably result in some adverse effects on local communities, particularly through transportation effects. However, minerals can only be worked where they exist in the ground and therefore there is not the possibility of dispersing extraction across the county. The other policies in the Plan will help to mitigate adverse effects of extraction and will also seek to enhance the environment wherever possible, particularly through restoration activities.
Development of the strategy for Soft Sand

March-May 2010: Minerals Spatial Strategy Initial Options
Plan for 0.309 mtpa from a single soft sand resource in the SW of the County.
SA: No significant effects identified.

July-Sept 2010: Minerals Spatial Strategy Revised Options
Plan for 0.309 mtpa from two smaller resource areas in the SW of the County and a third area at Duns Tew.
SA: No significant effects identified. Identifying two areas of working in the south of the county and one in the north of the county will help minimise traffic impacts as well as spread the effects of soft sand working more equitably.

July 2011: Soft Sand Apportionment Options
Option 1: 0.25 mtpa
Option 2: 0.31 mtpa
Option 3: 0.36 mtpa
Concentrate production in the three existing areas as follows:
• South east of Faringdon
• Tubney/Marcham/Hinton Waldrist
• Duns Tew
SA: No significant differences identified between the apportionment options. However lower levels of production are likely to be associated with fewer environmental impacts compared with higher production levels.

September 2011: Minerals Planning Strategy Consultation Draft
Policy M2: 0.25 mtpa
Policy M3: Existing areas at:
• East and south east of Faringdon;
• North and south of the A420 to the west of Abingdon;
• Duns Tew.
SA: Identifying areas of working in the south and north of the county will help minimise traffic impacts as well as spread the effects of soft sand working more equitably. However, there will be some cumulative effects on local communities.

May 2012: Publication/Submission (withdrawn)
Policy M2: 0.25 mtpa
Policy M3: Existing areas at:
• East and south east of Faringdon;
• North and south of the A420 to the west of Abingdon*;
• Duns Tew.
* caveat relating to SAC
SA: Identifying two areas of working in the south of the county and one in the north of the county will help minimise traffic impacts as well as spread the effects of soft sand working more equitably. However, there will be some cumulative effects on communities living close to existing sites and careful consideration should be given when identifying specific sites and permitting further extraction, so as to minimise the overall effects of continued working in these areas.
The two areas in the south west of the county have different quality sands and the policy appropriately allows for the working of the two types of sand. Continuing with the existing pattern provides certainty to industry and also takes advantage of existing infrastructure.

February 2014: Consultation Draft
Policy M2: volume based on most recent LAA (2013 = 0.19 mtpa). At least 7 years reserve for Soft sand.
Policy M3: Areas of Search:
• Corallian Ridge between Oxford and Faringdon*;
• Duns Tew
* An amalgamation of the 2 south west areas from previous stages, to encompass the whole of the potential soft sand resource.
SA: The SA Report provided the same findings as those for the withdrawn submission stage in May 2012.

August 2015: Publication
Policy M2: volume based on most recent LAA (2014 = 0.189 mtpa). At least 7 years reserve for Soft sand.
Policy M3: Principle locations:
• The Corallian Ridge area from Oxford to Faringdon;
• The Duns Tew area
SA: In relation to Policy M2 the SA identified significant positive effects in the medium and long term for the ‘self-sufficiency’ SA objective. The effects on the environmental objectives were generally uncertain as they cannot be judged on the LAA provision figure alone. They depend on the location and distribution of mineral working sites which make up the provision.
A significant positive effect was also identified for this policy in the medium to long term for self-sufficiency (SA11), as the policy (like M2) makes provision to enable the supply of aggregate minerals from land-won sources within Oxfordshire in order to meet the requirement identified in the most recent Local Aggregate Assessment. Adverse effects (not significant) were identified in relation to the population and transport objectives due to the effects on local communities from the extraction and transportation of soft sand.
Development of the strategy for Crushed Rock

**March - May 2010: Minerals Spatial Strategy Initial Options**
Meeting the apportionment by allowing crushed rock extraction in strategic areas in the:
- Witney-Burford area; and
- Chipping Norton - Bicester area
- South west of county in conjunction with soft sand
SA: No significant effects identified

**July - Sept 2010: Minerals Spatial Strategy Revised Options**
Meeting the apportionment by allowing crushed rock extraction in the:
- South of Burford area;
- East of River Cherwell, North of Bicester; and
- East/south east of Faringdon
SA: No significant effects identified

**July 2011: Crushed Rock Apportionment Options**
- Option 1: 0.63 mtpa
- Option 2: 0.81 mtpa
- Option 3: 1.00 mtpa
Meeting apportionment from working in the three existing areas as follows:
- North of Bicester to the east of the River Cherwell
- South of the A40 near Burford
- South east of Faringdon
SA: Higher apportionment assumed to have potential for greater environmental and community effects – however not considered significant.

**September 2011: Minerals Planning Strategy Consultation Draft**
Policy M2: 0.63 mtpa
Policy M3: Principle locations for crushed rock working will be:
- North of Bicester to the east of the River Cherwell;
- South of the A40 near Burford;
- East and south east of Faringdon
SA: The revised crushed rock policy would lead to a distribution of effects of crushed rock working in the county therefore potentially preventing adverse effects on a single locality.

**May 2012: Publication/Submission (withdrawn)**
Policy M2: 0.63 mtpa
Policy M3: Principle locations for crushed rock working will be:
- North of Bicester to the east of the River Cherwell;
- South of the A40 near Burford;
- East and south east of Faringdon
SA: The policy would lead to a distribution of effects of crushed rock working in the county therefore potentially preventing adverse effects on a single locality. This policy takes advantage of existing infrastructure as well as continuing to provide local employment. This has positive economic benefits. In the long term, there is potential for adverse cumulative effects on the communities living near the identified areas.

**February 2014: Consultation Draft**
Policy M2: volume based on most recent LAA (2013 = 0.47 mtpa).
At least 10 years reserve for crushed rock.
Policy M3: Areas for crushed rock working:
- North West of Bicester;
- South of the A40 near Burford
- East and south east of Faringdon
SA: The SA Report provided the same findings as those for the withdrawn submission stage in May 2012. Careful consideration should be given to the exact location of sites and works, relative to housing and other sensitive receptors to mitigate potential additional adverse effects.

**August 2015: Publication**
Policy M2: volume based on most recent LAA (2014 = 0.584 mtpa). At least 10 years reserve for crushed rock.
Policy M3: Principle locations will be within the following strategic resource areas, as indicated on the Minerals Key Diagram:
- The area north west of Bicester
- The Burford area south of the A40
- The area east and south east of Faringdon
SA: In relation to Policy M2 the SA identified significant positive effects in the medium and long term for the ‘self-sufficiency’ SA objective. The effects on the environmental objectives were generally uncertain as they cannot be judged on the LAA provision figure alone. They depend on the location and distribution of mineral working sites which make up the provision.
A significant positive effect was also identified for this policy in the medium to long term for self-sufficiency (SA11), as the policy (like M2) makes provision to enable the supply of aggregate minerals from land-won sources within Oxfordshire in order to meet the requirement identified in the most recent Local Aggregate Assessment. Adverse effects (not significant) were identified in relation to the population and transport objectives due to the effects on local communities from the extraction and transportation of crushed rock.
Development of the strategy for Locations for facilities to manage the principal waste streams – Part A

March 2010
In March 2010 the Minerals and Waste Plan Working Group considered the development of spatial strategy options based on the location of new waste facilities within 5 kilometres of the periphery of the larger towns and 2 kilometres of the smaller towns.

The Working Group also discussed whether there was benefit in sub-dividing the county, with areas focussed on one or more of the large towns, with a view to apportioning waste needs equitably by area.

Waste Spatial Strategy Options – August 2011 (SA Report)
Spatial strategy options for all the principal waste streams.

- **MSW:** New recycling facility to serve Banbury. The proposed locations of the two residual transfer stations are south (Abingdon/Didcot/Wantage and Grove) and west (Witney/Carterton) areas of the county.

- **C&D:** 3 options for recycling C&D waste:
  - Option A: concentrate additional provision at or close to Oxford
  - Option B: make additional provision at or close to the large towns in the north and south of the county
  - Option C: additional capacity to be made at or close to large and smaller towns in the north (Bicester) and south (Abingdon, Didcot, Faringdon, Henley and Thame).

  2 options for residual treatment of C&D waste
  - Option A: provision of a single large facility in the Abingdon/Didcot/Wantage and Grove area
  - Option B: provision of 2 smaller facilities in the Abingdon/Didcot/Wantage and Grove area; and in the Witney area

- **CD&E:** 3 options for recycling CD&E waste:
  - Option A: concentrate additional permanent provision at or close to Bicester, Didcot and Wantage and Grove and temporary facilities at landfill quarry sites across Oxfordshire
  - Option B: provide for dispersed additional permanent CD&E recycling capacity at or close to Oxford and large and smaller towns as well as make use of temporary facilities at landfill sites and quarry sites where opportunities arise across the county
  - Option C: additional permanent provision at or close to Oxford and large and smaller towns in the county

  Options were also included for landfill, hazardous and radioactive waste.

SA: The SA identified the effects of each of the options against the sustainability objectives. In relation to the principal waste streams the only significant effects that were identified were positive effects for the following options:

- For ‘Recycling of MSW’ related to SA11 ‘waste hierarchy’, as the option makes additional provision for recycling;
- For ‘Residual Treatment of C&D waste’, Option 1 in relation to SA12 ‘economic growth’ as the option provides for economies of scale that would attract investment by the private sector.

The SA did not make recommendations as to which option should be taken forward.

Waste Planning Consultation Draft - Sept 2011
The Consultation Draft presented a preferred spatial strategy in policies W5 and W6. This envisaged that sites for new facilities would be located within 5 kilometres of large towns or 2 kilometres of small towns. Policy W5 (Provision of additional waste management facilities) provided for new facilities in specific locations and these were illustrated on a Key Diagram:

- a new household waste recycling centre at Banbury;
- a waste transfer stations in the Witney/Carterton area;
- a waste transfer station in the Didcot/Abingdon/Wantage&Grove area;
- recycling facilities (largely for C&D waste) in Bicester, Abingdon, Didcot, Faringdon, Henley and Thame;
- a residual waste treatment facility for C&D waste in the Abingdon/Didcot/Wantage&Grove area;

Policy W6 (Sites for waste management facilities) was introduced to guide the identification of suitable sites. This specified appropriate land uses to which priority would be given for additional waste development and set a general presumption against development on green field land.

Policy W6 also addressed the approach to be taken to waste management in the Areas of Outstanding Natural Beauty and the Green Belt. In AONBs, development was expected to only be small scale (supporting text suggested 20,000 tpa throughput). In Green Belt provision was made for facilities serving Oxford where the need could be shown to be over-riding and no other alternative sites were available.

The approach to landfill (W7) confirmed that new non-hazardous waste facilities were not required but existing voids were to be safeguarded for on-going disposal needs. Inert waste that could not be recycled was to be used only for quarry restoration unless disposal elsewhere could demonstrate an environmental benefit.

Policies were also put forward for hazardous waste and radioactive waste. There was a general presumption in favour of facilities to manage hazardous waste, although a means test was to apply to facilities taking waste from outside Oxfordshire. Provision was made for the management of radioactive waste at Harwell and Culham (where facilities already existed) but there was a presumption against the development of facilities elsewhere.

SA: Identified strengths and weaknesses of strategic options and the need to carefully assess impacts in more detail at site selection. No options specifically ruled out at this stage.

Significant positive effects were identified for policy W1 against SA11 ‘self-sufficiency’ as the policy directly supports this objective, and Policy W3 against SA10 ‘waste hierarchy’ as the policy seeks to make provision for additional recycling, composting and recovery of resources and minimise disposal.

No significant adverse effects were identified.
Development of the strategy for Locations for facilities to manage the principal waste streams – Part B

Policy W5: Provision of additional waste management facilities
It was considered necessary to differentiate between locations for larger strategic facilities and smaller facilities, focussing strategic facilities close to the largest concentration of population and where most growth would take place. Bicester, Oxford, Abingdon and Didcot, closely linked by the A34, were thought to form a logical focus for such facilities. Smaller facilities did not need to be confined to this area, however, and if non-strategic facilities were focussed on the other main towns (Banbury, Witney and Wantage/Grove) a reasonable distribution of capacity should result. Much smaller facilities might be acceptable in more rural areas as these were more likely to meet local needs and need not be restricted to the immediate confines of the small towns.

The revised spatial strategy was shown in a revised Key Diagram (below) that defined an broad area within which strategic facilities should be located and key towns to which other non-strategic facilities should generally be steered. Policy W5 confirmed that strategic facilities would be defined as handling more than 50,000 tonnes annually and also made specific provision for: a household waste recycling centre to serve Banbury; Municipal waste transfer stations to serve the south and west of the county; and recycling plants for commercial and industrial waste and for construction and demolition and excavation waste (to produce recycled aggregates and soils).

Policy W6: Sites for waste management facilities

The approach previously taken by policy W6 was repeated, setting out types of land where facilities would normally be found acceptable and confirming the approach for sites located in Green Belt and AONB.

Policy W5 continued to list land uses likely to be suitable for new waste management facilities but for facilities located at mineral workings or landfill sites the stipulation that they be related to those operations was dropped. The provisions relating to Green Belt were not changed; the provisions for AONB were moved to policy CB (Landscape).

The draft plan took the same approach to landfill (W7), and hazardous waste (W8). The policy on radioactive waste (W9) was broadened to include a general presumption in favour of proposals for management or disposal of radioactive waste where they would make a significant contribution to the management or disposal of Oxfordshire waste. An additional policy (W10) was introduced to make provision for facilities for waste water and sewage sludge at existing facilities.

Policy W6 continued to list land uses likely to be suitable for new waste management facilities but for facilities located at mineral workings or landfill sites the stipulation that they be related to those operations was dropped. The provisions relating to Green Belt were not changed; the provisions for AONB were moved to policy CB (Landscape).

The draft plan took the same approach to landfill (W7), and hazardous waste (W8). The policy on radioactive waste (W9) was broadened to include a general presumption in favour of proposals for management or disposal of radioactive waste where they would make a significant contribution to the management or disposal of Oxfordshire waste. An additional policy (W10) was introduced to make provision for facilities for waste water and sewage sludge at existing facilities.

Policy W6 continued to list land uses likely to be suitable for new waste management facilities but for facilities located at mineral workings or landfill sites the stipulation that they be related to those operations was dropped. The provisions relating to Green Belt were not changed; the provisions for AONB were moved to policy CB (Landscape).

The draft plan took the same approach to landfill (W7), and hazardous waste (W8). The policy on radioactive waste (W9) was broadened to include a general presumption in favour of proposals for management or disposal of radioactive waste where they would make a significant contribution to the management or disposal of Oxfordshire waste. An additional policy (W10) was introduced to make provision for facilities for waste water and sewage sludge at existing facilities.

SA: The SA identified significant positive effects for Policy W6 in relation to the objective on land and soil quality. No significant negative effects were identified for any of the policies.

SA: For Policy W3 a significant positive effect has therefore been identified against this objective on self-sufficiency (SA11). Effects upon the majority of SA objectives are dependent upon where this provision is located. This issue is addressed by Policies W4, W5 and the common core policies and the effects are more likely in the medium to long term when further capacity may be required.

For Policy W4, provision of facilities close to waste arisings of the County’s future growth areas is likely to have positive effects as it should minimise adverse effects associated with waste transportation. However, it is recognised that there will be differing effects according to the exact location and type of facilities.

The SA identified significant positive effects for Policy W6 in relation to the objective on land and soil quality. Other positive effects were identified. No significant negative effects were identified for any of these policies.

This Appendix includes the information on how options have been considered during the development of the Core Strategy, that was provided in Appendix B of the Pre Submission Minerals and Waste Core Strategy SA Report (March 2012) (Examination document no. 9.14).

The information provided here is the same as that in the March 2012 report. The tense used in the text is therefore representative of the stage in the SA process that it was written – it has not been updated to bring it into the context of the 2016 Submission. The information has however been restructured so that all the stages relating to each of the specific minerals and waste policy topic areas are grouped together, rather than having them distributed by reporting stage as was the case in the March 2012 Appendix B document.

Minerals Policies

<table>
<thead>
<tr>
<th>Policy topic area</th>
<th>Options considered and reasons for selecting preferred option / rejecting alternatives</th>
</tr>
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<tbody>
<tr>
<td>Sharp Sand and Gravel</td>
<td>Two options were considered based on various methods outlined in the Atkins Local Assessment of Aggregates Supply and the South East Plan (SEP) apportionment. Option 2 (0.9mtpa) was chosen as the preferred option which reflected the Atkins study method 3 and Policy M2 in the South East Plan which has itself been the subject of sustainability appraisal. Local data on sources of secondary and recycled aggregates also show that this is an aspirational yet potentially deliverable target over the plan period. The SA report concluded that option 2 (0.9mtpa) would have a greater beneficial effect on promoting efficient use of natural resources.</td>
</tr>
<tr>
<td>Proposed Submission Core Strategy policy (2012) Policy M1: Provision for secondary and recycled aggregates</td>
<td>The Atkins Local Assessment of Aggregates Supply suggested a range of alternative levels of provision for sand and gravel and crushed rock. Three overall options were considered for sharp sand and gravel, soft sand and crushed rock. The</td>
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**Policy topic area** | **Options considered and reasons for selecting preferred option / rejecting alternatives**
---|---
be made for working aggregate minerals | SA/SEA of the options (July 2011) found that option 1 for each aggregate type would have the least impact in terms of impact on road infrastructure and on requiring new areas of working and this has been chosen as the preferred option. All options were based on continuing the existing level of production in West Oxfordshire. Options for the reduction of working in this area have now been considered in response to West Oxfordshire’s response to the preferred strategy consultation in September 2011 and the SA of these options is reported in an Addendum to the Aggregates Apportionment SA Report and summarised below. The proposed submission policy proposes to maintain the level of working in West Oxfordshire.

**Proposed submission Core Strategy policy (2012) Policy M3: Locations for working aggregate minerals** | Spatial options for sharp sand and gravel, soft sand and crushed rock were put forward in May 2010 and revised in September 2010 following consultation.
Considering the outcome of the SA, the preferred approach option (September 2011) seeks to make the most efficient use of existing working areas without increasing the rate of working in these areas. It also seeks to locate mineral working close to planned development to reduce the impact of mineral working on transport infrastructure and communities. The SA of the strategy notes that continuing working in existing areas presents opportunities for coordination of large scale restoration projects but that there is potential for negative effects on local communities.

**May 2010 SA Report Minerals Options - Sharp sand and gravel**

1. **The Concentration Strategy**
   This option is further broken into the following three options:
   1a) Concentrate working to the north west of Oxford, in the Lower Windrush Valley, Stanton Harcourt, Eynsham and Cassington areas;
   1b) Concentrate working to the south east of Oxford, in Radley, Sutton Courtenay, Culham, Dorchester, Warborough and Benson areas; or
   1c) A combination of options 1a and 1b, concentrating working in both.

   **Option 1a)** - This option would lead to concentration of working in the north west and west of Oxford. This area already experiences mineral extraction and further working in this broad location would lead to negative cumulative effects with regard to amenity for the local communities. Other cumulative effects include landscape and visual impacts for example in the Lower Windrush Valley where the landscape has already been extensively modified by mineral extraction. Given that most of the sand and gravel currently worked in this area is transported by road and that the road network is already experiencing congestion a significant increase in working in this area would have negative cumulative effects on the road network (in particular the A40) leading to increased congestion, continued greenhouse gas emissions and air and noise pollution associated with Heavy Goods Vehicle (HGV) movements.

   There are also important nature conservation designations in close proximity to area 1. The location of these sites close to potential mineral works would restrict the exact location of working within the broad area. Working in this area would therefore require mitigation measures to be in place to avoid adverse negative effects on the nature conservation sites including creating the creation of buffer zones and other measures. Some of the area covered by option 1a (e.g. the Lower Windrush Valley) lie within the Conservation Target Areas (CTAs) identified by the Oxfordshire Nature Conservation Forum. The main aim within CTAs is to restore biodiversity at a landscape-scale through maintenance, restoration and creation of BAP priority habitats.

   Further working in this area would therefore contribute positively to the planned restoration and habitat creation in this area at a large scale which combined with existing restoration plans would have significant beneficial cumulative effects for the local community as well as on nature conservation. However, such benefits would be in the long-term as mineral works are likely to take years before the restoration plans are implemented.

   Although the area is generally well located in terms of proximity to markets, some sites may not be close to the markets thereby increasing distances materials are moved. This further contributes to the negative effect of increasing GHG emissions where road transport is used as well as the negative effects associated with HGV movements including noise, air pollution and congestion.

   **Option 1b)** – Option 1b seeks to concentrate working in the south east of Oxford. This option would lead to a concentration of impacts on communities living within or in close proximity to the identified resource areas. The broad location is in close
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<td>proximity to most of the main areas of demand - Oxford, Didcot, Wantage, Grove as well as the centres of employment (apart from Bicester). Although it could lead to some sites not being as close to main areas of demand, the general location is judged to be well located for serving most of the demand areas. Restoration following working would lead to beneficial effects for biodiversity as well as creating recreational opportunities for the local communities. Working resource area 13 could have negative effects on archaeology as significant archaeological remains have been identified here. However, it is expected that mitigation measures would be required prior to planning permission being granted therefore reducing potential adverse impacts. The southern area of this option also lies close to the AONB which would present constraints to mineral working in this part. Option 1c) – This option divides the sand and gravel requirement equally between the resource areas in option 1a and 1c (with the exception of RAS 9). This division would lead to a distribution of impacts of mineral working on a small number of local communities in both areas as opposed to more communities in one area as options 1a and 1b would lead to. This has the benefit of relieving some communities especially in areas where communities have already experienced mineral working in the past. Compared to options 1a and b, this option performs better in terms of proximity to markets as it covers a wider area as opposed to the north west/west in option 1a or south east in option 1b. However, this option is also characterised by some of the effects and constrains identified for options 1a (cumulative effects on some communities, road network and nature conservation constraints) as well as those identified for option 1b (landscape and archaeology constraints). Ultimately, the significance of impact will depend on the exact location of sites within the broad areas and the mitigation measures put in place through the planning application process.</td>
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2. The Dispersal Strategy
This option seeks to spread working areas across a number of areas to maximise the proximity of mineral supply to markets:
Lower Windrush Valley, Stanton Harcourt, Eynsham, Cassington, Faringdon, Radley, Sutton Courtenay, Culham, Dorchester, Warborough, Benson, Wallingford, Chelsey and Caversham areas.

This option seeks to disperse mineral extraction close to the main areas of demand in a way that minimises the effects of mineral extraction in any one area of the County. Although it does not eliminate the negative effects associated with mineral extraction, distributing them would have positive effects on communities where extraction has previously taken place as well as minimising the overall negative effects felt by any single community. This option would however lead to more communities being affected by mineral working as more areas would be brought forward for extraction (although the effects are likely to be reduced compared to concentration based options). Distributing extraction also has the advantage of reducing distances aggregates are moved thereby minimising emissions and mitigating against climate change. Reducing the distances travelled would have the added benefit of minimising other negative impacts associated with HGV movements including impact on air quality and noise. Moving minerals for shorter distances would also lead to positive financial effects on industry through cost savings on transport. However, this option would also have a negative economic effect by requiring new investment in infrastructure on new sites as opposed to taking advantage of existing infrastructure. It would also lead to job losses although new jobs would be created elsewhere in the County. As with all options, the dispersal option offers opportunities for beneficial restoration although it does not offer the potential to contribute to large scale habitat creation as works would be spread in different parts of the County. Overall, although this option has some beneficial environmental effects (distributing effects and reducing distances travelled), it also has some draw backs in economic and restoration factors (social) and this needs to be balanced against the environmental benefits. |

3. The Phased Strategy
This option seeks to allow short term extensions to existing sites in the Lower Windrush Valley, Eynsham, Cassington, Faringdon, Radley, Sutton Courtenay and Caversham areas as

This option has a balanced effect on most of the SA objectives in that although it reduces mineral working in areas that have historically experienced extraction, it also introduces new areas of working and so transfers the impacts to other communities including some more remote areas and a stretch of the River Thames valley that has not been previously worked. The phasing approach adopts a long term approach which will allow time for the phasing and introduction of new areas and it also seeks to adopt a master planning approach. This has potential benefits in facilitating a co-ordinated restoration and after-use plan in current areas of working as well as ensuring that potential adverse effects identified in the proposed new areas of working are adequately addressed and mitigation measures put in place to minimise negative
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<td>well as long term planning for one or more new strategic sand and gravel working areas in one or more of the following areas: Clanfield – Bampton Culham Dorchester, Warborough, Benson Wallingford – Cholsey</td>
<td>Seeking to concentrate extraction in areas where working is currently taking place or has taken place recently has the economic advantages of using existing infrastructure as well as labour force. It also presents opportunities for coordinated large-scale restoration projects which would in the longer term lead to beneficial effects for the local communities (through recreation and leisure opportunities) as well as for wildlife. However, this option has potential to lead to cumulative negative effects on the local communities especially with regard to traffic and amenity issues. The long-term nature of mineral works means that communities within/close to the identified areas will continue to experience the effects of mineral working for the foreseeable future.</td>
</tr>
<tr>
<td>September 2010 Revised Options SA report - Summary of SA for sharp sand and gravel</td>
<td>Opening up new areas for working has the positive benefit of relieving communities that have experienced mineral working for long periods in the past therefore distributing the impacts of mineral working to other parts of the county. This option transfers impacts to other communities although these are judged to be less significant compared to option 1 due to the cumulative nature of option 1 effects. This option would require some extensions to some existing sites and so there would still be some cumulative effects in these areas although these would be for a shorter period, compared with the long-term nature of option 1 cumulative effects. Option 2 would lead to creation of new jobs in the identified areas but it would also require industry to re-locate or build new infrastructure and although this could lead to some negative economic effects in the short term, in the long term the economic benefits are judged to be positive.</td>
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Option 1: Concentration on Existing Working Areas
This option seeks to concentrate sand and gravel working in areas where working is currently taking place or has taken place recently. This is a refinement of the previous option 1c (May 2010) and includes areas both to the west / north west and south / south east of Oxford. However, these are now limited to areas around existing or recent sand and gravel working areas and include:
- Lower Windrush Valley (LWV);
- Eynsham/Cassington/Yarnton (ECY);
- Radley; and
- Sutton Courtenay.

Option 2: Concentration on New Working Areas
Many areas of existing working have experienced mineral extraction over a number of years, impacting on local communities and changing the local landscape. This option identifies new areas where working would be concentrated, to replace existing areas of working. In the short term, while the new areas are planned, some extensions to existing sites might be needed to maintain supply. The areas

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<td>included in this option are: • Clanfield/Bampton; • Warborough/Shillingford/Benson (WBS); • Cholsey; • Sutton/Stanton Harcourt; and • Culham/Clifton Hampden/Dorchester (CCD).</td>
<td>Dispersing extraction has both positive and negative effects. Positive effects include potentially reducing the distances materials are moved, creation of new jobs, distributing of impacts around the county and offering restoration opportunities that could benefit communities in the longer term. The negative effects include the fact that more communities would be affected by the effects of mineral working (including some cumulatively as in option 1). This option has potential not to deliver large-scale restoration projects as works would be distributed in different parts of the county. The need for investment in new areas may impact negatively on industry e.g. moving infrastructure etc., but this is likely to be a short-term effect.</td>
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**Option 3: Dispersed working**  
Working taking place within any of the areas of potential sand and gravel resource, so that it is a truly dispersed option. The areas included in this option are:  
• Finmere;  
• Clanfield/Bampton;  
• Lower Windrush Valley (LWV);  
• Eynsham/Cassington/Yarnton (ECY);  
• Faringdon;  
• Radley;  
• Sutton Courtenay;  
• Warborough/Shillingford/Benson (WBS);  
• Cholsey;  
• Caversham;  
• Culham/Clifton Hampden/Dorchester (CCD); and  
• Sutton/Stanton Harcourt.  
Dispersing extraction has both positive and negative effects. Positive effects include potentially reducing the distances materials are moved, creation of new jobs, distributing of impacts around the county and offering restoration opportunities that could benefit communities in the longer term. The negative effects include the fact that more communities would be affected by the effects of mineral working (including some cumulatively as in option 1). This option has potential not to deliver large-scale restoration projects as works would be distributed in different parts of the county. The need for investment in new areas may impact negatively on industry e.g. moving infrastructure etc., but this is likely to be a short-term effect.  

**July 2011 SA Report - Aggregates Apportionment Options**  
Option 1 is based on working 1.01mtpa in the existing areas of LWV, ECY, Caversham and Sutton Courtenay. The Sutton Courtenay area is expected to cease production around 2020. The Cholsey area would be brought in to production post 2020.  
Generally, the greater the level of provision for sand and gravel working, the greater the short term negative impact on the environment, particularly on landscape, biodiversity, water environment and air quality. As the level of provision increases, more areas in south Oxfordshire are identified to meet the greater level of need. This will have a negative local impact on the local environment in these areas. Working three areas in the south of the county may have a cumulative impact on road safety, congestion and road maintenance if HGV vehicles from three sites are all using the road network in south Oxfordshire. However, there are potentially two positive effects on the environment; these are that at a county scale, minerals will be
### Policy topic area

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<tr>
<td>Option 2 is based on working 1.24mtpa in the existing areas of LWV, ECY, Caversham and Sutton Courtenay. Post 2020, additional production would be required following the closure of Sutton Courtenay. This option proposes to either bring Clifton Hampden or Stadhampton into production during this period. Option 3 is based on working 1.46mtpa in the existing areas of LWV, ECY, Caversham, Sutton Courtenay and Cholsey. To meet the higher apportionment level, working in either Clifton Hampden or Stadhampton would be required before 2020 and both areas would be brought into production post 2020.</td>
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<tr>
<th>February 2012 SA Report Addendum - Aggregates Apportionment Options</th>
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<tr>
<td>Option 1a based on working in the existing areas of LWV, ECY, Caversham and Sutton Courtenay. The Sutton Courtenay area is expected to cease production around 2020. The Cholsey area would be brought in to production post 2020 but working would continue at the same rate from the sites in west Oxfordshire. Option 1b would result in reducing working in the LWV (0.25 mtpa) and ECY (0.18 mtpa), with the difference made up from sites from Cholsey, Clifton Hampden and Stadhampton. Option 1c would result in a reduced level of working in LWV (0.43mtpa), a cessation of working in ECY altogether (0.0mtpa), with the difference made up from sites in Cholsey, Clifton Hampden and Stadhampton.</td>
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<td>Policy topic area</td>
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**Soft sand**

**May 2010 SA Report Minerals Options - Soft sand**

| Plan for 0.309 million tonnes per annum (5.562 million tonnes to 2026) of soft sand (based on the current sub-regional apportionment) from a single soft sand resource area in the south west of the County | When assessed against the SA objectives, although the option will have some negative effects especially with regard to impacts on amenity and the environment, if working is to be carried out based on the current levels of production then these effects (on the natural and built environment) are judged to be neutral as the baseline will remain the same. However, given that working has been going in this locality for a long time, future working in the same area will have negative cumulative effects on some of the local communities. To mitigate against such cumulative effects becoming adverse, it will be important to ensure future extensions are located away from sensitive receptors e.g. settlements (Hatford and Tubney) as well as being located in close proximity to the strategic road network. This option has economic benefits as it takes advantage of existing infrastructure as well as providing certainty to industry and meeting local needs for soft sand. Overall, with adequate mitigation measures at the planning stage, this option has potential to continue meeting Oxfordshire's soft sand needs in a sustainable manner. |

**September 2010 Revised Options SA report - Summary of SA for soft sand**

| Plan for 0.309 million tonnes per annum (5.562 million tonnes to 2026) of soft sand (based on the current sub-regional apportionment) from soft sand resource areas in Duns Tew in the north of the county. and two small areas located close to the A420 in the south west of the county. | Identifying two areas of working in the south of the county and one in the north of the county will help minimise traffic impacts as well as spread the effects of soft sand working more equitably. However, there will be some cumulative effects on communities living close to existing sites and careful consideration should be given when identifying sites and allowing further extraction so as to minimise the overall effects of continued working in these areas. The two areas in the south west of the county have different quality sands and this option allows for the working of the two types of sand. Continuing with the existing pattern provides certainty to industry and also takes advantage of existing infrastructure. |

**July 2011 SA Report – soft sand options**

| For soft sand, three subregional apportionment levels have been identified (0.25mtpa, 0.31mtpa and 0.36mtpa). The Council has identified that the strategy for soft sand working will be to concentrate production in the three existing areas as follows: | The SA does not identify significant differences between the options as the overall difference in tonnage is not considered to be significant. However, generally, low levels of production are likely to be associated with fewer overall environmental impacts compared with higher production levels. Therefore the lowest apportionment option (0.25mtpa) is considered as likely to have lesser overall sustainability impacts compared to the higher options (0.31mtpa and 0.36mtpa). |
### Crushed Rock

**May 2010 SA Report Minerals Options - Crushed Rock**

Meeting the apportionment by allowing crushed rock extraction in strategic areas in the:
- Witney-Burford area; and
- Chipping Norton - Bicester area

When assessed against the SA objectives, this option is judged to have neutral effects on impacts against the natural and built environment (assuming future working was to be in line with current production levels and that any new working in the south west Bicester area would be small-scale). However, in the long term, there will be cumulative effects of continued working on the communities living near the identified areas. These may include cumulative effects on the landscape as well as on local amenity – air, noise, and dust and traffic impacts. Mitigation measures at the planning application stage can help ensure that such effects are adequately addressed before new permissions are granted. There are some economic advantages in retaining working in the identified areas including use of existing infrastructure and meeting Oxfordshire’s crushed rock needs in line with regional policy.

**September 2010 Revised Options SA report - Summary of SA for crushed rock**

Meeting the apportionment by allowing crushed rock extraction in the:
- South of Burford area;
- East of River Cherwell, North of Bicester; and
- East/south east of Faringdon

The revised crushed rock option would lead to a distribution of effects of crushed rock working in the county therefore potentially preventing adverse effects on a single locality. It also leads to a reduction in the area identified in the north of the county. This option takes advantage of existing infrastructure as well as continuing to provide local employment. This has positive economic benefits. In the long term, there is potential for negative cumulative effects on the communities living near the identified areas. Careful consideration should be given to the exact location of sites and works, relative to housing and other sensitive receptors to militate against potential negative effects.

**July 2011 SA Report – crushed rock options**

For crushed rock, the various apportionment levels (0.63mtpa, 0.81mtpa and 1mtpa) would be met from working in the three existing areas as follows:
- North of Bicester to the east of the River Cherwell
- South of the A40 near Burford
- South east of Faringdon

For the purposes of this appraisal, it has been assumed that a higher crushed rock production rate has potential for greater overall environmental and community effects compared to the lesser apportionment options (however, it should be noted that the overall difference is unlikely to be significant as the difference between the three options is not considered to be significant).
### Secondary and recycled aggregates

**July 2011 SA Report – secondary and recycled aggregates options**

| Two apportionment options for the provision of secondary and recycled aggregates of 0.67mtpa and 0.9mtpa. | Both options promote efficient use of natural resources with the higher option (0.9mtpa) judged to have a greater beneficial impact. There was uncertainty when assessing potential impacts on SA objectives relating to the natural and built environment (nature conservation, historic environment, landscape, air quality, water, flood risk and soil) due to the fact that it is currently not known where sites for aggregates recycling will be located in the County. It is expected however that the potential impacts on sensitive receptors would be adequately assessed at the planning application stage when more details on the location of sites is available. Both options supported the SA objective on promoting efficient use of natural resources with the higher option (0.9mtpa) judged to have a greater beneficial impact due to the high level of provision that would be provided. The two options would also be supportive of the local economy. |

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### Other mineral policy topic areas

**Appendix B of March 2012 SA Report**

<table>
<thead>
<tr>
<th>RAIL DEPOTS Proposed submission Core Strategy policy (2012) Policy M4: Aggregates rail depots</th>
<th>No alternatives were put forward. The preferred policy takes lead from national policy to import aggregates by rail. Also there are no alternative locations for rail depots as they can only be located where road and rail coincide and none have been nominated.</th>
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<tbody>
<tr>
<td>NON-AGGREGATE MINERAL WORKING Proposed submission Core Strategy policy (2012) Policy M5: Non-aggregate mineral working. (Previously part of Policy M3)</td>
<td>The proposed submission policy is in line with national policy and no alternatives have been put forward.</td>
</tr>
<tr>
<td>RESTORATION Proposed submission Core Strategy policy (2012) Policy M7: Restoration of mineral workings (formerly M6)</td>
<td>The preferred policy is in line with national policy and no alternatives have been put forward.</td>
</tr>
<tr>
<td>Safeguarding</td>
<td>Options for safeguarding mineral resources were considered and the minerals industry was consulted on these options. The proposed submission policy draws upon the results of this consultation.</td>
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</table>

**Other Spatial Options Considered in Appendix B of March 2012 SA Report**
### Sharp sand and gravel
#### Main river valleys: Thames, Lower Windrush, Lower Evenlode and Lower Thame

**Option 1** – Safeguard all these resources – regarded to be of significant commercial interest

**Option 2** – Safeguard only areas where nominations for extensions to existing sites or new sites have been made, where the resource is proven

**Option 3** – SE Plan policy approach – Policy M5 existing mineral sites, proposed sites and areas of search should be safeguarded

**Overall the effects of the three options are likely to be neutral with regards to the social and environmental SA objectives as safeguarding means there is no presumption that any areas will be extracted or environmentally acceptable for extraction.**

Safeguarding sharp sand and gravel in the main river valleys where reserves are regarded as strategically important is likely to help Oxfordshire meets it sub regional apportionment in the future with regards to the sharp sand and gravel required within the County for roads, house building etc.

All three options are supporting the local minerals and construction industry by safeguarding sharp sand and gravel for unknown future requirements for economic growth. Option 1 provides more flexibility for the minerals industry for the future as this sharp sand and gravel resource is regarded as of strategic importance.

Options 2 and 3 are likely to ensure non mineral development is not prevented unduly as these are sites have put forward by the mineral industry or are existing sites but do not provide flexibility for the minerals industry in the longer term.

### Sharp sand and gravel
#### Minor river valleys: Cherwell and Ock valleys and minor tributaries

**Option 1** – Safeguard the entire resource – variable, uncertain and often poor quality deposits

**Option 2** – Limit safeguarding to any economic resources that have been identified acceptable for extraction.

**Generally the effects of the two options are likely to be neutral with regards to the social and environmental SA objectives as safeguarding means there is no presumption that any areas will be extracted or environmentally acceptable for extraction.**

Safeguarding sharp sand and gravel in the minor river valleys where reserves are regarded as variable, uncertain and of poor quality is unlikely to help Oxfordshire meet its sub regional aggregates apportionment with regards to the sharp sand and gravel required within the County for roads and house building or support Oxfordshire’s economic growth. Option 1 would include safeguarding areas which may not be economically viable which may in turn prevent or hamper non minerals development unduly. Option 2 would safeguard economically viable resources but as they are expected to be of poor quality this is likely to have neutral effects with regards to support Oxfordshire’s economic growth.

### Sharp sand and gravel
#### Glaciofluvial sand and gravel

**Option 1** – Safeguard the entire resource

**Option 2** – Limit safeguarding to resources proven by industry

**The effects of the two options are likely to be neutral with regards to the social and environmental SA objectives as safeguarding means there is no presumption that any areas will be extracted or environmentally acceptable for extraction.**

Safeguarding glaciofluvial sand and gravel will ensure high quality reserves are not sterilised but currently these are not of any economic interest so this could have positive effects in the longer term if other areas prove more difficult to extract from therefore helping Oxfordshire to meet its self sustaining with regards to the sharp sand and gravel required within the County for roads and house building.

Both options are supporting the local minerals and construction industry by safeguarding glaciofluvial sand and gravel resources considered to be of high quality and potentially required in the longer term. Safeguarding all the resource in option 1 is unlikely to prevent or hamper non mineral development in the county unduly as some of the resource area is within the AONB where non mineral development would be unlikely(north east of the County is where the resource is unconstrained by the AONB) and the deposit is of limited spatial extent. Option 2 is likely to support Oxfordshire’s mineral industry particularly in the short term as these are areas currently of interest to the minerals industry and would be safeguarding proven high quality resources.
### Soft sand

**Option 1** – Safeguard all resources  
**Option 2** – Limit safeguarding to potential extensions to existing soft sand quarries, permitted reserves, and other locations where resources are proven or where the industry has indicated there are likely to be workable resources.

The effects of the two options are likely to be neutral with regards to the social and environmental SA objectives as safeguarding means there is no presumption that any areas will be extracted or environmentally acceptable for extraction. Safeguarding soft sand is likely to help Oxfordshire to be self-sustaining with regards to meeting the need for construction sand required within the County for house building. Both options are supporting the local minerals and construction industry by safeguarding soft sand resources. Compared with option 2, option 1 may prevent or hamper non mineral development unduly as some of the reserves are located east of Oxford. Option 2 identifies areas and sites of economic potential as identified by the industry.

### Crushed rock

**Limestone Aggregate**  
**Option 1** – Safeguard all of the limestone resource  
**Option 2** – Limit safeguarding to existing limestone quarries and permitted reserves, and new locations outside the Cotswolds AONB where there are proven resources

The effects of the two options are likely to be neutral with regards to the social and environmental SA objectives as safeguarding means there is no presumption that any areas will be extracted or environmentally acceptable for extraction. Safeguarding limestone is likely to help Oxfordshire to be self-sustaining with regards to its crushed rock requirements for construction and therefore would support Oxfordshire’s economic growth. Option 1 would include safeguarding areas which may not be economically viable however given its spatial extent within parts of the AONB it is unlikely to prevent or hamper non minerals development unduly. Option 2 would safeguard existing quarries permitted reserves and new locations outside the AONB which are proven which would support the minerals industry and Oxfordshire’s economy. However there is some uncertainty as it could potentially restrict the minerals industry as some economically viable resources may be located in the AONB.

### Crushed rock

**Ironstone aggregate**  
**Option 1** – Safeguard all of the ironstone resource  
**Option 2** – Limit safeguarding to existing ironstone quarries, permitted reserves, and areas subject to Reviews of Minerals Permissions

Overall the effects of the two options are likely to be neutral with regards to the social and environmental SA objectives as safeguarding means there is no presumption that any areas will be extracted or environmentally acceptable for extraction. Safeguarding ironstone is likely to help Oxfordshire meet its sub regional apportionment with regards to its crushed rock requirements and therefore would support Oxfordshire’s economic growth. Option 1 would include safeguarding areas which are economically viable given its location and the permitted reserves unworked, safeguarding other areas with no interest from the mineral industry may prevent or hamper non minerals development unduly. Option 2 would safeguard existing quarries and permitted reserves and areas subject to ROMPs where industry has proven resources. This would support economic growth.

### Building stone: Limestone and ironstone

**Option 1** – Safeguard all known building stone resources  
**Option 2** – No safeguarding because of the poor data on the resource

Effects of both options are expected to be neutral. For option 1 this is because safeguarding means there is no presumption that any areas will be extracted or environmentally acceptable for extraction. There are likely to be positive effects of option 1 upon SA objective 2 as it is known that the limestone and ironstone resource used for building stone has been used for local house building (cottages at Chipping Norton) in the past and therefore the distinctiveness of the stone to potentially be used in this area in the future would be protected. Effects for option 2 are expected to be neutral as building stone resources mainly occur in the Cotswolds AONB or other countryside locations which are unlikely to be at risk of sterilisation.

### Chalk

**Option 1** – no mineral safeguarding area

Overall the effects of this option are likely to be neutral for the majority of the SA objectives. Chalk in the County has previously been used in cement however chalk is no longer worked although there are permitted reserves at a quarry near Ewelme. It is understood that there is no further interest in working chalk from operators or landowners. Given its extent in the south of County not safeguarding chalk is likely to ensure non mineral development is not prevented or hampered unduly when there is no economic interest in working the mineral.
Clay
Option 1 – no mineral safeguarding area

In general the effects of this option are likely to be neutral for the majority of the SA objectives. Clay in the County has previously provided material for brick making however no brickworks exist and clay is now only worked in Oxfordshire for material used in engineering of landfill sites. Brickmaking is understood to be no longer economically viable and new landfilling capacity is to be limited given the need to divert waste from landfill. Not safeguarding clay is likely to ensure non mineral development is not prevented or hampered unduly.

Coal and Coal Bed Methane
Option 1 – no mineral safeguarding area

Overall the effects of this option are likely to be neutral for the majority of the SA objectives. A large area of the county is covered by the Oxfordshire-Berkshire coalfield. No coal has been mined and the seams are of no economic interest. Seams also have low coal bed methane gas content. Not safeguarding coal and coal bed methane is likely to ensure non mineral development is not prevented or hampered unduly therefore supporting Oxfordshire’s economic growth.

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Waste Policies

<table>
<thead>
<tr>
<th>Policy topic area</th>
<th>Options considered and reasons for selecting preferred option / rejecting alternatives</th>
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<tbody>
<tr>
<td>Waste Spatial Strategy, amount of waste; capacity requirements; and recycling targets</td>
<td>Options for where to source appropriate estimates for three different waste streams for the amount of waste to be provided for have been considered. For MSW four options were considered 1. Published forecasts in the Regional Spatial Strategy (the South East Plan - SEP); 2. Updated estimates using monitoring work from the South East Regional Assembly; 3. Published work undertaken by ERM for OCC (2008); 4. Updated estimates based on Oxfordshire Joint Municipal Waste Partnership’s strategy. Option 4, was preferred as it better reflected local circumstances, was consistent with other work published locally and was easily updated using reliable locally derived data. For Commercial &amp; Industrial (C&amp;I) waste: three options were considered 1. Published forecasts in SEP; 2. Published work undertaken by ERM for OCC (2008); 3. Work based on a study by the Environment Agency (2001), taking account of recent trends in national surveys. Option 3 was preferred as it was known that the basis for the South East Plan estimate (Option 1) had become outdated and the ERM study produced growth estimates that were too high (Option 2). For Construction Demolition and Excavation (CDE) waste two options were considered 1. Work undertaken by ERM consultants for OCC;</td>
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</tbody>
</table>
2. Further work using data available from EA and studies by Capita Symonds for Defra of waste composition and end use. Option 2 was preferred because it refined the work by ERM.

For the pre-submission consultation estimates have been updated but the same methodologies used.

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<tr>
<td>The policy addresses the fact that Oxfordshire is a significant importer of waste for disposal from London and elsewhere, but that this can be expected to decline as other areas become increasingly self-sufficient over the period of the plan (following the European Waste Directive). Options considered for future rates of disposal were to 1. Refuse to take further waste from London and elsewhere; 2. Take waste from London at rates set by SEP and waste from elsewhere at a locally derived rate; 3. Take waste from London and elsewhere at locally derived rates. Option 2 was preferred; option 1 would be difficult to implement (even if found sound) and option 3 would likely produce arbitrary results and would likely be found unsound. It is proposed this policy will continue to be based on option 2 in the proposed submission document, but more up to date estimates based on data in the more recent London Plan will be used: estimates of waste from elsewhere are also being revised from more up to date data now available. Oxfordshire is also the subject of pressure to take residual waste from elsewhere for treatment. The only option considered was to follow the approach taken by SEP for London imports (presumption against facilities designed to treat London’s residual waste) as this was in line with the European Waste Framework Directive and the approach to self sufficiency in PPS10.</td>
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<tr>
<th>Other Spatial Options Considered in Appendix B of March 2012 SA Report</th>
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<tbody>
<tr>
<td>Other Spatial Options Considered [RELATES TO PREVIOUS POLICY W2 ON IMPORTS OF WASTE]</td>
</tr>
<tr>
<td>Option 1: Refuse to take further waste from London and elsewhere; Option 2: Take waste from London and elsewhere at locally derived rates.</td>
</tr>
<tr>
<td>Both options could have potentially positive effects upon the environmental and social SA objectives as result of reducing or preventing waste imports for disposal and therefore the level of operations and their associated impacts at existing sites and the need for new sites to manage imported waste. However there is the potential for adverse effects upon SA objectives relating to biodiversity and landscape in particular in the medium to long term as a result of slowing down restoration proposals for existing landfill sites.</td>
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<tr>
<td>Both options are likely to assist Oxfordshire be self-sufficient (SA objective 11) with respect to their disposal needs for the future by husbanding landfill capacity within the County. This is likely to be significantly positive for option 1. Option 1 is likely to have significant adverse effects upon SA objective 12 as it could prevent cross boundary markets for waste disposal and the economic performance of the waste industry in Oxfordshire. Option 2 would still allow waste imports and therefore it is likely to support Oxfordshire’s waste industry.</td>
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<tr>
<td>Waste importation leads to waste travelling from outside Oxfordshire including London and further afield for disposal in Oxfordshire therefore producing greenhouse gas emissions as a result of transportation of waste. Reducing the amount of waste imported for disposal from current levels (option 2) or restricting it altogether (option 1) may reduce the greenhouse gases produced by landfills in Oxfordshire however it could send waste further from its source generating more greenhouse gases through transportation than it currently does. The effects are therefore uncertain upon SA objective 5.</td>
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<tr>
<th>Appendix B of March 2012 SA Report</th>
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<tr>
<td>For the September 2011 consultation options considered were 1. use of targets in SEP or national policy;</td>
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management targets

2. use of more locally derived targets.
For MSW: Reliable local information is available on which to base local targets for recycling, composting, residual waste treatment and waste to landfill, and these have been preferred. To be consistent with work on a review of the Oxfordshire Joint Municipal Waste Management Strategy, targets for the proposed submission document are being revised.
For C&I waste: SEP targets were initially preferred for recycling, but a more ambitious landfill diversion target was adopted, consistent with the Council’s approach to disposal as Waste Disposal Authority. For the proposed submission document a more ambitious recycling target is being proposed, in common with other Waste Planning Authorities and the higher recycling targets already being achieved for MSW.
For CDE waste: SEP targets for recycling are used no better alternatives have been found and studies on waste composition have helped to show that the target is robust and that a more challenging target is likely to fail.

Estimating the scale of possible capacity gaps involves an assessment of the capacity already provided by existing facilities. From a number of possible methods the Waste Needs Assessment (WNA) confirmed the approach that would be taken to assessing facility (site) capacity. The capacity gap will also be influenced by whether or not to take account of facilities that are the subject of planning permission but have not yet been built (commitments). The WNA work (with the exception of the capacity to be provided by the Ardley EFW permission) did not take account of commitments. The September 2011 consultation took account of all commitments. It is proposed the proposed submission document will take a more selective approach, taking account of guidance in Planning Policy Statement 10 (PPS10) 10 practice guide which suggests commitments can be relevant provided a proper view is taken on the likelihood of take up – which may differ on a case by case basis, or taking account of wider trends e.g. economic factors (typically the down turn at present).

Various pieces of work at officer level looked at the approach to be taken to spatial options: some were considered by a Member level Working Group. This work was refined and finally included in the September 2011 public consultation document, where options for the provision of facilities for C&I recycling, C&I residual waste treatment and CDE recycling were put forward (based on the capacity gaps identified in W4). For MSW no options were put forward as new facilities are being provided in accordance with the Joint Municipal Waste Management Strategy and the Household Waste Recycling Centre Strategy. From this work a proposal for a new HWRC at Banbury was put forward, and for two waste transfer stations at Abingdon/Dicot/Wantage and Witney/Carterton.

A re-assessment of waste needs for the proposed submission document has led to a conclusion that there is no requirement for further capacity for C&I waste treatment. Options were to confirm that no further provision should be made for this type of facility or allow favourable consideration of future proposals if a case of need could be made (the latter approach is preferred as it provides necessary flexibility).

The imminent procurement by the County Council of a contract for the provision of new MSW waste transfer stations has illustrated that it is too soon to be prescriptive on the number and location of facilities to be provided. The only reasonable option is to provide the necessary flexibility in revised policy wording.

Public comment has also identified a need for greater clarity in the definition of strategic locations, the role of the small towns in the strategy, the extent to which existing and committed facilities should influence strategy and the need to avoid stifling commercial freedom. This has led to a conclusion that the strategy should be revised by:
- removing the small towns from the strategy;
- amalgamating the large towns of Didcot, Abingdon, Oxford and Bicester to form a single core strategic area;
- confirming the remaining large towns (Banbury, Witney/Carterton, Wantage/Grove) as the main focus for facilities serving those parts of the County.

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**Recycling of MSW**
Provision of a new facility to serve Banbury

At present, the Council’s Waste Needs Assessment indicates that there is a surplus of MSW recycling provision in the county. However, there is a need to make provision for a new recycling facility to serve Banbury to replace the existing temporary facility at Alkerton. Making provision to meet local need in Banbury will ensure that waste is not transported far for recycling as it is dealt with closer to its source of arising. This has a positive effect reducing greenhouse gas emissions associated with transporting waste by road as well as reducing the potential for other negative transport related impacts like congestion on the county’s roads. Provision of recycling capacity also provides opportunities for further carbon savings as reprocessing of recycled material requires less energy than processing of raw materials.

Potential impacts related to the built and natural environment (and on amenity) will need to be assessed in detail at the site selection stage so as to ensure that there are no negative effects on sensitive receptors.

**Residual Waste Transfer Stations**
Two transfer stations to serve Ardley EfW incinerator: one in Abingdon/Didcot/Grove area and one in Witney/Carterton area

This option relates to the need to provide for bulking up and transfer stations of residual municipal waste from southern and western part of Oxfordshire for efficient transportation to the Ardley energy from waste facility to be built in 2015. Ardley is located in the north of the county. The Council has identified in its Waste Needs Assessment Report that the location of the plant in the north of the county may give rise to the need for up to two additional transfer stations to facilitate the effective delivery of waste to the plant. The proposed locations of the two residual transfer stations are south (Abingdon/Didcot/Wantage and Grove) and west (Witney/Carterton) areas of the county.

Providing for the residual transfer stations in the identified areas would facilitate the efficient transportation of waste to Ardley. This is assessed as having positive impacts on the SA objectives related to transport and climate mitigation as the transfer stations are likely to lead to less waste movement across the county from the south and west to the north, thereby reducing potential negative transport impacts (congestion, noise, vibration and air pollution) as well as minimising greenhouse gases (GHGs) associated with waste transportation.

Although the SA does not identify obvious reasons not to locate the proposed development within the identified broad areas, the potential impacts on the built and natural environment of the proposed facilities should be addressed at the site selection stage to ensure that development does not lead to adverse impacts on sensitive receptors including biodiversity, landscape, local amenity, the historic environment etc.

**Recycling of C&I Waste**

Option 1 - Concentration of additional provision at or close to Oxford
Option 2 - Additional provision at or close to large towns – Northern and southern
Option 3 – Additional provision at or close to large and smaller towns in northern, southern Oxfordshire

The Council estimates that there is a capacity gap of approximately 100,000 tonnes per annum (tpa) by 2030 for recycling C&I waste. This capacity is primarily needed to serve the large towns of Bicester, Abingdon and Didcot and their surrounding areas and the Council has identified 3 options for provision of this capacity. The appraisal findings for each of the options are provided below.

Option 1: This option seeks to concentrate additional provision at or close to Oxford. The Council does not identify the need for additional capacity in this part of the county. While this approach would allow for shorter distances to be travelled for waste originating from Oxford and surrounding areas, waste from further north and south would need to be transported for longer distances resulting in potential negative transport impacts as well as leading to increases in greenhouse gas emissions (GHGs). Other potential impacts on the built and natural environment and on amenity will be site specific and should be addressed in detail during the site selection process to ensure that further provision in this area does not lead to adverse effects on the environment and local communities.

Option 2: Option 2 seeks to make additional provision at or close to the large towns in the north and south of the county. This option would lead to capacity being provided close to the sources of waste arising for the large towns in the north and south of county but with waste from the surrounding areas being transported to these facilities. This has potential for some negative transport impacts (especially on local roads) and lead to increase in GHG emissions. However, these are likely to be minor due to the short distances travelled and it is also assumed that the smaller surrounding areas are likely to produce relatively small quantities of C&I waste compared to the larger areas.

To mitigate against potential adverse effects on the built and natural environment, the detailed assessment of environment
Recycling of C&D waste
Option 1: Concentration of additional permanent provision at or close to Bicester, Didcot and Wantage & Grove; and temporary facilities at landfill and quarry sites across Oxfordshire.

Option 2: Dispersal of additional permanent provision at or close to Oxford and large and smaller towns in: Northern Oxfordshire, Southern Oxfordshire and Western Oxfordshire and temporary facilities at landfill and quarry sites where opportunities arise across Oxfordshire.

The Council estimates that approximately 500,000 tpa by 2030 will be required for recycling of C&D waste and that this is likely to be needed mostly in Bicester, Didcot, Wantage and Grove, but with some requirement also at Oxford, Banbury, Witney, Carterton, Abingdon and the smaller towns in southern Oxfordshire. The Council has also identified that half of the required additional capacity could be provided at temporary facilities at landfill and quarry sites across the county.

Three options have been considered as follows.

Option 1: Option A seeks to concentrate additional permanent provision at or closer to Bicester, Didcot and Wantage and Grove and temporary facilities at landfill, quarry sites across Oxfordshire. This option does not make provision for other parts of the county that may require C&D recycling facilities. This would result in C&D waste from Oxford, Banbury, Witney etc. having to be transported further for management although allowing for use of temporary facilities in landfill and quarry sites and quarrries may reduce the distances travelled where such sites are closer to areas without adequate provision. This option therefore has some potential for negative transport and climate mitigation impacts.

Option 2: This option seeks to provide for dispersed additional permanent C&D recycling capacity at or close to Oxford and large and smaller towns as well as make use of temporary facilities at landfill and quarry sites where opportunities arise across the county. This option would ensure that provision is made as close to the sources of waste arising as possible.

Residual Treatment of C&I Waste

Option 1: 1 large facility in the Abingdon/Didcot/Wantage and Grove area

Option 2: 2 smaller facilities in the Abingdon/Didcot/Wantage and Grove area

The Council has identified an estimated gap in required provision for residual treatment of C&I waste of approximately 200,000 tpa by 2015. The existing consented sites are both located in northern Oxfordshire (Ardley and Finmere) and the council has identified that further provision is required in the south and western parts of the county and identified the following options.

Option 1: Option 1 proposes provision of a single large facility in the Abingdon/Didcot/Wantage and Grove area. This option would lead to waste from the western part of the county being transported further for treatment and could therefore have some potential negative effects on the local road network (congestion, air pollution and noise from HGV traffic). It would also lead to an increase in GHG emissions associated with road transportation of waste. However, due to its large scale, this option offers economy of scale making it more likely to be deliverable by the waste sector. This can have a positive effect on the local economy through bringing significant inward investment as well as providing job opportunities.

Option 2: This option proposes 2 smaller facilities in the Abingdon/Didcot/Wantage and Grove area; and in the Witney area. This would lead to waste being managed close to where it arises and supports SA objectives related to transport and climate mitigation. Although judged as having a positive economic impact due to potential for local job opportunities, this option may not be deliverable due to the small-scale nature of the proposed facilities. Facilities of this type are generally attractive to investors when they are of sufficiently large scale to be economical. Therefore this option is unlikely to be deliverable from an economic perspective.

In taking either option forward, the potential impact on the built and natural environment as well as on amenity will need to be considered during site selection to ensure that development does not lead to adverse effects on the environment and community.

and amenity issues including biodiversity, landscape, the historic environment, air, noise and water pollution should be considered when selecting sites and during the planning application process.

Option 3: Option C provides for additional capacity to be made at or close to large and smaller towns in the north (Bicester) and south (Abingdon, Didcot, Faringdon, Henley and Thame). From a transport and climate mitigation perspective, this option offers scope to provide for well-located facilities across the county that will lead to waste being managed as close as possible to where it arises, reducing impacts on the road network and minimising transport related GHG emissions. The potential impacts on the built and natural environment associated with Option 3 should be considered during site selection and planning application stages to mitigate against potential adverse effects.
Option 3 – Additional permanent provision only at or close to Oxford and large and smaller towns in: Northern Oxfordshire, Southern Oxfordshire and Western Oxfordshire

possible reducing travel distances and GHG emissions associated with transporting waste. Allowing for use of temporary facilities at landfills and quarries further enhances these benefits.

Option 3 – This option allows for additional permanent provision at or close to Oxford and large and smaller towns in the county. However, it does not allow for the use of temporary facilities at landfill and quarry sites. Although it makes provision for management of waste close to where it arises and is likely to have reduced transport impacts and GHG emissions, it fails to maximise these benefits by allowing some of the capacity to be met at temporary facilities where opportunities arise.

All the options are supportive of SA objectives 10, 11 and 12. Further analysis of potential impacts on the built and natural environment should be undertaken at the site selection stage to mitigate against adverse impacts.

**Sites for waste management facilities**

**Appendix B of March 2012 SA Report**


The policy is based on SEP policy W17 (which itself takes a lead from PPS10), so no significant alternatives have put forward.

Preferred strategy policy in September 2011 did not include ‘suitably located sites in temporary waste use’ amongst the list of types of favoured sites as this was considered to give rise to too much uncertainty and conflicted with the proposed approach to green field development. It is proposed this approach be retained in the proposed submission document, but adjustment to the policy is made to make clear that the favoured types of sites are not hierarchical. Other wording changes respond to public comment, including to the approach in Green Belt, but are not considered to be of major significance.

**Landfill**

**Appendix B of March 2012 SA Report**

**Proposed submission Core Strategy policy (2012) Policy W7: Landfill Policy**

The September 2011 consultation identified a need for additional disposal capacity for inert waste. No options were put forward, provision being made through a permissive policy for disposal in quarries requiring restoration (it being judged impractical to commit to including proposals in the future Site Allocations DPD). It is proposed to refine the emphasis in the proposed submission document to confirm that disposal in quarries will be the priority route, with opportunity for disposal in other circumstances being more limited.

The September 2011 consultation (based on work in the WNA) established no need for additional non-hazardous landfill, so no alternative to the preferred approach (make no additional site provision) was considered. The husbanding of existing resources takes its lead from SEP policy W13 and PPS10: no alternatives were considered.

**August 2011 SA Report**

**Provision of approximately 3 million cubic metres of capacity for disposal of inert waste that cannot be recycled, with priority given to use of inert waste to restore minerals workings**

The Council estimates that an additional 3 million cubic metres of capacity for disposal of inert waste that cannot be recycled will be required from around 2020. To meet this need, the Council proposes to make provision for this amount with priority given to use of inert waste to restore mineral workings. This option is assessed as having positive effects on land restoration (where inert waste is used to restore mineral works). It also supports county self sufficiency and can offer local job opportunities and therefore have positive economic benefits. The proposal however does not support SA objective 10 on moving waste up the hierarchy as landfill does not lead to more waste being recycled or recovered. However, it is acknowledged that adequate provision for landfill should still be provided as some waste that cannot be recycled/treated will require disposal.
The potential transport and climate mitigation impacts of the proposed approach are difficult to assess without knowing the location of sites. This should be addressed during site selection to ensure that sites are located close to sources of arisings. Other potential impacts on the built and natural environment should also be assessed in detail during site selection to mitigate against adverse effects.

### Hazardous waste types

**Appendix B of March 2012 SA Report**

**Proposed submission Core Strategy policy (2012) Policy W8: Hazardous and non legacy radioactive waste**

This policy covers the management of hazardous waste, including hazardous landfill.

Because of the difficulty of assessing specific needs for facilities handling this type of waste at a County level, the Sept 2011 consultation advised that specific facility provision was not thought to be possible.

The policy approach put forward has taken its lead from SEP (policy W15) that there will be a need for facilities to serve wider than County areas. It is proposed that the proposed submission document should make clear that the policy also applies to the very small amounts of radioactive wastes produced in some operational processes.

With specific regard to landfill, the Sept 2011 consultation did consider options for the provision of hazardous waste landfill, concluding that no additional provision should be made. No comment to the contrary has been made. The policy adequately caters for any proposals that may come forward in future.

**August 2011 SA Report**

**Landfill**

**Option 1:** No additional provision: continue to rely on hazardous waste landfill facilities outside Oxfordshire, apart from disposal of nonreactive hazardous waste

**Option 2:** Existing landfill change one of Oxfordshire’s existing non-hazardous landfills to hazardous landfill

Oxfordshire is a net exporter of hazardous waste. The Council acknowledges that the county should be as self-sufficient as is reasonably possible in managing hazardous waste. However, due to the specialist nature of hazardous waste management facilities, they currently tend to serve large catchment areas than a single county. Oxfordshire estimates that additional capacity could be required for approximately 50,000 tpa of hazardous waste produced in the county. Two options have been proposed for meeting the required provision:

- **Option 1:** This option makes no additional provision and would seek to continue to rely on hazardous waste facilities outside Oxfordshire, apart from disposal of non-reactive hazardous waste in existing non-hazardous landfill sites in Oxfordshire where acceptable. When assessed against the SA objectives, no significant positive or negative impacts are identified as it is taken to be ‘business as usual’. However, increases in the amount of hazardous waste requiring management outside the county could have some negative transport and climate mitigation impacts although this would be expected to be minor due to quantities of waste transported being relatively small. Option A does not support SA objective 11 on enabling Oxfordshire to be self-sufficient in its waste management although this is unlikely to be achievable given the specialist nature of hazardous waste management facilities.

- **Option 2:** This option proposes changing one of Oxfordshire’s existing non-hazardous landfill sites to hazardous landfill. This would have a positive impact on SA objectives related to transport and climate mitigation as it would reduce the distance hazardous waste requiring disposal would be transported. It would also enable the county to move towards self-sufficiency in hazardous disposal capacity. To change the non-hazardous landfill site to hazardous, operators would be required to comply with strict Environment Agency landfilling criteria as well as planning criteria to ensure that such changes do not lead to adverse effects on the environment and the local amenity.

**Legacy Radioactive Waste**

**Appendix B of March 2012 SA Report**

**Proposed submission Core Strategy**

For the proposed submission document it is proposed that the scope of the policy is refined to address legacy wastes only.

Two types of waste are considered in this policy:

1. **Intermediate Legacy Waste**: 3 options considered in September 2011 consultation, with preference for option 2 (accommodate only waste arising in Oxfordshire) and setting a test for any waste that might need to be imported from facilities elsewhere (need to show clear benefit to Oxfordshire). In response to public comment, it is proposed that the proposed submission document modifies this approach to remove the test for any waste brought in from elsewhere – leaving this for detailed consideration in a planning application (this was not a specific option previously).

2. **Low Level Waste**: 4 options considered in September 2011 consultation, with preference for option 4 (disposal at a suitable site outside Oxfordshire) and setting a hierarchy of alternative options needed to be considered. It is proposed that the proposed submission document takes a different approach, setting out the circumstances in which disposal on-site (the most sustainable option according to SA/SEA) would be permitted. The policy now makes no differentiation as to whether off-site disposal is preferable inside or outside Oxfordshire. In effect, the options have not changed but a different assessment has emerged.

### August 2011 SA Report

**Intermediate Level Radioactive Waste Storage**

| Option A | Storage at source (Harwell and Culham) |
| Option B | Treatment and long term storage at Harwell pending transfer to a national disposal facility |
| Option C | Treatment and long term storage for waste from Oxon and storage for waste from Dorset pending removal to a national facility |

Intermediate low level radioactive waste is produced at Harwell and smaller quantities at Culham. There is a requirement for treatment and storage of an estimated 10,000 cubic metres of intermediate level radioactive waste and three proposals have been considered for dealing with this waste:

Option A: Option A seeks to make provision at source – treatment and long-term storage at Harwell (for Harwell waste only) and at Culham (for Culham waste only), pending removal to a national disposal facility. This option is considered sustainable in that it supports management of waste close to where it is produced reducing the need to transport waste further (although the distance between the two facilities is only approximately 7 miles). Key issues that would need to be considered at Harwell include:

- Potential impact on local biodiversity including a SSSI 7 kms to the south east of the site
- The close proximity to the North Wessex Downs AONB as well as potential local visual and landscape impacts
- Potential impacts on Scheduled monuments identified close to the site (within 5kms)

Potential for ground water and surface water contamination

Potential for land contamination

Potential amenity and health impacts associated with management of intermediate level waste

Key issues that should be considered at Culham include:

- Potential impacts on local site biodiversity (there are no designated sites close to or within the site)
- Potential impacts on the AONB

Potential impacts on the Scheduled Monument site identified 1km east of the site

Potential impacts on surface and ground water

Potential amenity and health impacts

Option B – This option provides for treatment and long-term storage of intermediate level nuclear waste (from Harwell and Culham) at Harwell, pending removal to a national disposal facility. Compared to option A, this option would lead to some waste from Culham being transported to Harwell. Although assessed as a negative impact against SA objectives on transport and climate change, this impact is likely to be minor due to the distance travelled (approximately 7miles) and the quantities of waste moved (expected to be small). The key sustainability issues identified above would still need to be addressed at the planning application stage to ensure that development of the proposed facility at Harwell does not lead to
| Low Level Radioactive Waste Management | adverse environmental impacts.  
Option C – This option seeks to provide for the treatment and long-term storage of intermediate level nuclear waste from Oxfordshire (Harwell and Culham) and waste from Dorset (Winfrith) at Harwell, pending removal to a national disposal facility. This option like option B above would lead to radioactive waste being transported from Culham but also from Dorset which lies outside the County. It is not clear at this stage the quantities of waste from Winfrith that would require transportation to Harwell but due to the distance involved, this option is judged as having a potential negative impact on SA objectives 5 and 7. The key sustainability issues identified above for the Harwell site would still need to be addressed at the planning application stage to ensure that development of the proposed facility does not lead to adverse environmental impacts. |
|---|---|
| **Option A** – Storage Temporary storage (if required) and disposal in a bespoke facility at Harwell; and at Culham.  
**Option B** – Temporary storage (if required) of waste at source of waste and disposal in a bespoke facility at Harwell.  
**Option C** – temporary storage (if required) of waste at source of waste and disposal in a suitable off-site landfill in Oxfordshire.  
**Option D** – Temporary storage (if required) of waste at source of waste and disposal in a suitable off-site landfill site outside Oxfordshire. | It is estimated that a total of 100,000 cubic metres of low level radioactive waste mainly arising from demolition and clearance of buildings at Harwell and Culham will be required. The Council has considered four options for the storage and disposal of this waste as follows:  
**Option A** – Temporary storage and disposal in a bespoke facility at Harwell (for Harwell only), and at Culham (for waste from Culham). This option when assessed against the SA objective would lead to the least movement of materials and therefore performs well against SA objectives 5 and 7. The following key issues would need to be considered when assessing the potential development of such facilities at Harwell and Culham:  
**Harwell:**  
Potential impact on local biodiversity including a SSSI 7 kms to the south east of the site  
The close proximity to the North Wessex Downs AONB as well as potential local visual and landscape impacts  
Potential impacts on Scheduled monuments identified close to the site (within 5kms)  
Potential for ground water and surface water contamination  
Potential for land contamination  
**Culham:**  
Potential impacts on local site biodiversity (there are no designated sites close to or within the site)  
Potential impacts on the Greenbelt and AONB  
Potential impacts on the Scheduled Monument site identified 1km east of the site  
Potential impacts on surface and ground water  
Potential amenity and health impacts  
**Option B:** Temporary storage of waste at source of waste and disposal of a bespoke facility at Harwell (waste from Harwell and Culham). This option would lead to some movement of materials from Culham. However, although assessed as a potential negative impact in terms of transport and climate mitigation, this impact is likely to be minor due to the distance travelled and the amount of waste requiring transportation being relatively small. The key environmental and amenity issues identified above (Option A) for Harwell should be addressed at the planning application stage to mitigate against potential adverse effects.  
**Option C** – Temporary storage of waste at source of waste and disposal in a suitable off-site landfill in Oxfordshire. This option would see waste stored at Harwell and Culham before being disposed off-site in a landfill in Oxfordshire. It would result in waste being transported from its source of arising for disposal elsewhere in the county. Depending on the location of the landfill site there is potential for increases in negative transport impacts as well as GHG emissions associated with waste transportation. Potential impacts on the built and natural environment as well as on amenity associated with such a disposal facility would need to be considered in detail at the site selection and planning application stages to ensure that |
such development does not lead to adverse impacts on the environment and local amenity as well as human health.

Option D - Temporary storage of waste at source of waste and disposal in a suitable off-site landfill outside Oxfordshire. This option like option C above would see waste stored at Harwell and Culham before being disposed off site but to a landfill site outside of Oxfordshire. For the purposes of this assessment, it has been assumed that landfill sites out of county are likely to be further from the sources of waste arising than landfill sites within Oxfordshire. This is assessed as having potential for negative transport impacts and associated GHG emissions and it also does not support SA objective 11 on enabling county self-sufficiency. Potential impacts on the built and natural environment and amenity of such a facility should be considered in detail at the site selection and planning stages to ensure that proposals do not lead to adverse impacts on the environment (this responsibility would lie with the local authority where such a site would be located and is outside Oxfordshire County Council’s remit but the Council will be consulting potentially affected Waste Planning Authorities).

Safeguarding

| Proposed submission Core Strategy policy (2012) Policy W10: Safeguarding | This policy takes its lead from the requirement in SEP policy W17 to safeguard waste sites and no alternative approaches have been put forward. The September 2011 consultation explained the advantages of including confirmation of an approach to safeguarding and it is proposed that this remains in the proposed submission document. |