

**OXFORDSHIRE MINERALS AND
WASTE LOCAL PLAN**

PART 1 – CORE STRATEGY

PROPOSED SUBMISSION DOCUMENT

January 2015

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1. INTRODUCTION

Introduction

- 1.1 The County Council is responsible for minerals and waste planning in Oxfordshire and has reviewed the planning policies for mineral working and waste management. The new Oxfordshire Minerals and Waste Local Plan will comprise the following documents: Part 1 – Core Strategy (this document); and Part 2 – Site Allocations.
- 1.2 Closely related to the Plan, the Council has also prepared the Oxfordshire Statement of Community Involvement, which was adopted in 2006. This has now been reviewed and a revised Statement of Community Involvement was adopted by the County Council on 9 December 2014.
- 1.3 The Minerals and Waste Local Plan: Part 1 – Core Strategy provides the planning strategies and policies for the development that will be needed for the supply of minerals and management of waste in Oxfordshire over the period to 2031. It sets out policies to guide minerals and waste development over the plan period and common core policies which address development management issues relevant to both minerals and waste.
- 1.4 This document is the Council's Minerals and Waste Local Plan: Part 1 – Core Strategy Proposed Submission Document, which is to be submitted to the Government for independent examination. The Council believes that the document as published is sound and provides the most appropriate strategies and policies to meet the minerals and waste development needs of the County.
- 1.5 This document is supported by a Sustainability Appraisal and Strategic Environmental Assessment, Habitats Regulation Assessment and Strategic Flood Risk Assessment. A Local Aggregate Assessment, a Waste Needs Assessment and a series of Topic Papers also provide background information on key issues and the development of the strategies and policies. These supporting documents, and all other documents that make up the evidence base for the plan, are available on the Council's website.

Representations on the proposed submission document

- 1.6 Before submitting this Core Strategy to the Government for examination, the Council is publishing it to allow for representations to be made. The period for making representations is at least 6 weeks from publication.
- 1.7 The period and procedure for making representations is set out in the statement of the representations procedure published alongside this plan.
- 1.8 A form is provided for making representations, which respondents are encouraged to use in order that all necessary information is provided. This asks for details of the section of the document to which the representation

relates, and how the representation relates to tests of soundness and legal compliance. Guidance on these tests is provided.

- 1.9 This Core Strategy Proposed Submission Document, together with all related and supporting documents, is available for viewing and downloading on the County Council website at:
<http://www.oxfordshire.gov.uk/cms/public-site/minerals-and-waste-policy>
- 1.10 The Core Strategy and information on how to make representations is also available in Oxfordshire libraries and District Council offices, and the County Council offices at County Hall and Speedwell House in Oxford.

What happens next?

- 1.11 The Council will review the representations received to ensure that the tests of soundness and legal compliance have been met. Subject to no further changes being required, the Core Strategy Proposed Submission Document and the representations received on it will be submitted to the Government. A Government appointed Inspector will carry out an independent examination of the Core Strategy, which is expected to take place in summer 2015. The County Council hopes to adopt the Core Strategy by the end of 2015. The programme for preparing the plan is set out in more detail in the Minerals and Waste Development Scheme¹.

¹ The Oxfordshire Minerals and Waste Development Scheme (Sixth Revision) 2014 came into effect on 08 December 2014 and is available on the County Council website.

2. BACKGROUND *(This section has not yet been amended)*

The Oxfordshire area

- 2.1 Oxfordshire is renowned for its knowledge-based economy and research and development facilities. It is also the most rural county in the South East of England. It has seven Special Areas of Conservation, protected by European legislation; numerous Sites of Special Scientific Interest and other sites of importance for biodiversity and geodiversity; a rich variety of landscapes, with almost a quarter of the land area within an Area of Outstanding Natural Beauty; numerous historic buildings; extensive archaeological assets; and areas of high grade agricultural land, including where sand and gravel is located along the River Thames and its tributaries. An area around Oxford is Green Belt. Figure 1 shows the main protected areas in the county.
- 2.2 The population of Oxfordshire is currently approximately 655,000. Over the next 20 years significant population growth, new housing, commercial and related development, investment in infrastructure and related traffic growth are expected². This has implications for the demand for and supply of minerals and also for the production of waste and how it is dealt with. Oxfordshire has to balance the need to protect and enhance its special environment, both urban and rural, with the needs for economic growth and housing.
- 2.3 About 40,000 homes could be built in Oxfordshire between 2011 and 2026. There is a need for considerable investment in new infrastructure to support the objective for Oxfordshire of supporting a thriving economy and to meet the pressures on essential services such as schools, transport and other community facilities. Key challenges for the plan are to make provision for the construction materials that will be needed to be supplied and for the waste that will be produced to be dealt with in ways that are effective and sustainable. There is also a need to ensure that new developments reduce carbon emissions and are resilient to climate change.
- 2.4 Key locations for development, as shown on figure 2, are:
- Didcot and Wantage & Grove, which are within the Science Vale UK area which also includes Milton Park, Harwell Science and Innovation Campus and Culham Science Centre;
 - Bicester, which is set to experience considerable housing and employment growth over the next 20 years, including a 5,000 home eco-development, and for which a masterplan will provide a long-term vision and framework for integrating growth of the town; and
 - Oxford, which remains a world class centre of education, research and innovation.
- 2.5 Large housing developments (1000+ homes) are also proposed at Banbury, Upper Heyford, Witney and Carterton. Just over half of planned growth in

² Oxfordshire's population is forecast to grow by a further 14% over the next 15 years. Road traffic has grown rapidly in Oxfordshire, particularly on the M40 and A34, and congestion is a significant problem; and growth in all traffic on Oxfordshire roads is predicted to be over 25% over the period to 2026.

Oxfordshire to 2026 is in the southern part of the county, with the remainder in the northern part.

Figure 1: Special Areas of Conservation, Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty and Green Belt in Oxfordshire

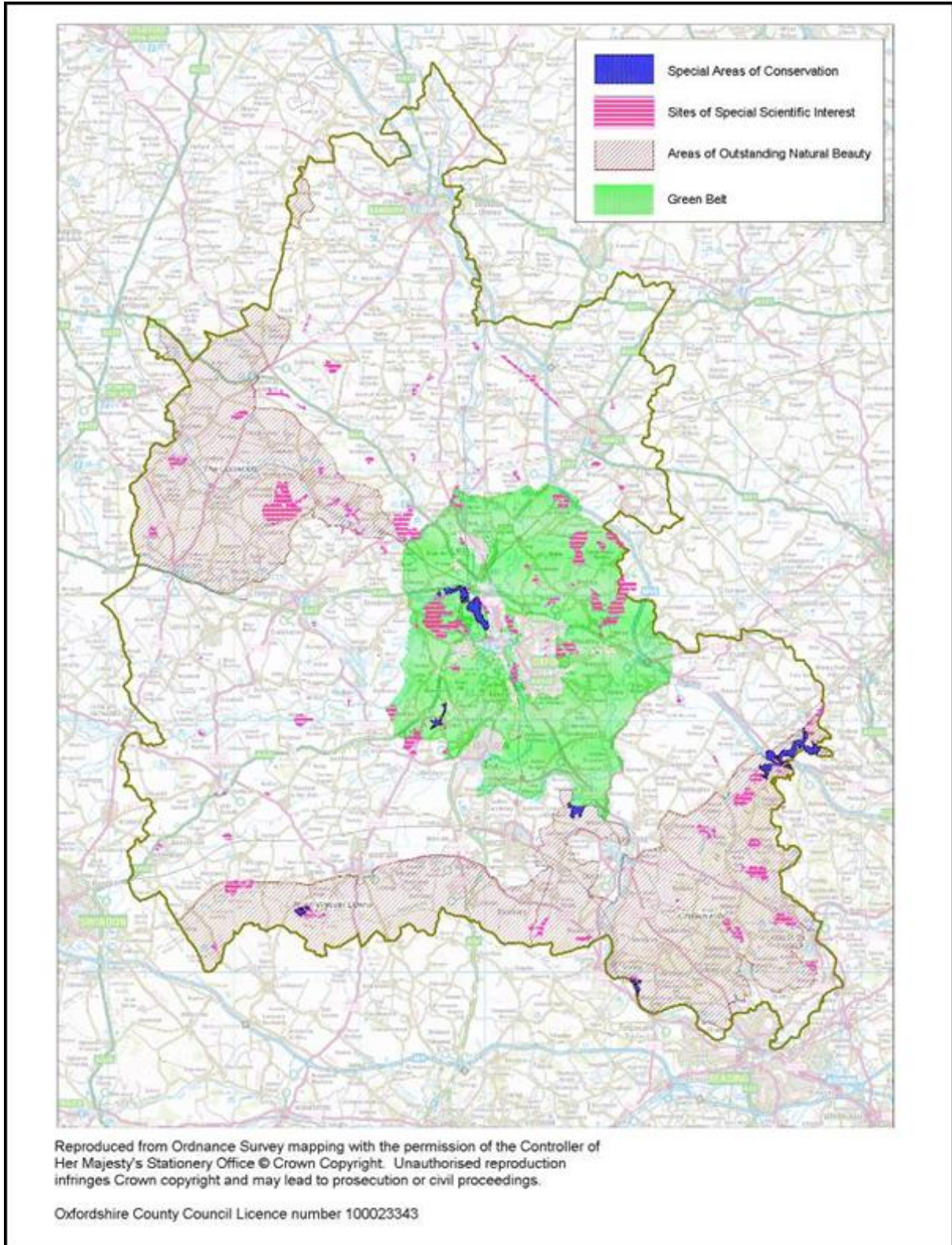
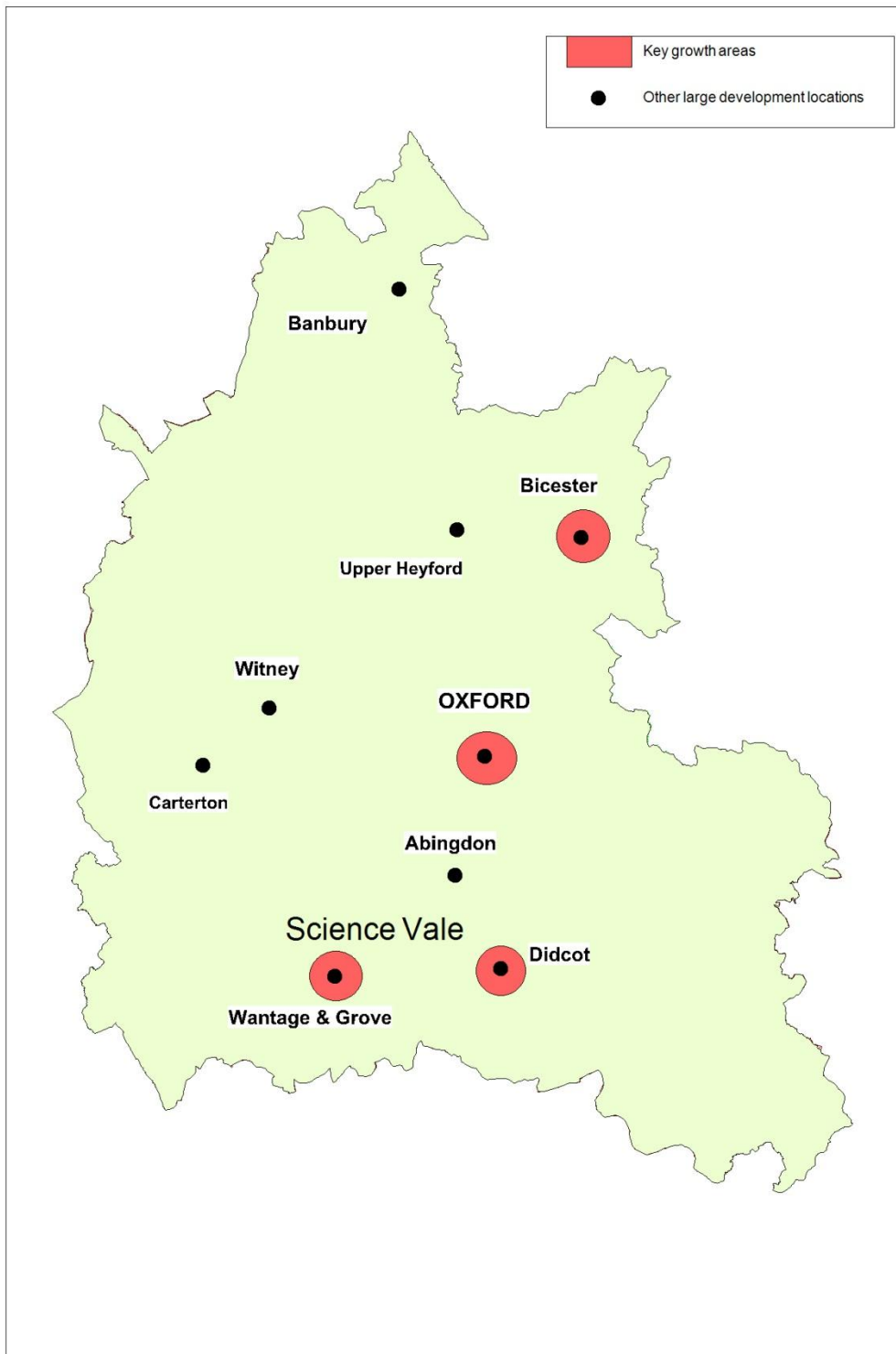


Figure 2: Key growth areas and other large development locations



Minerals in Oxfordshire

- 2.6 Sand and gravel is the most common mineral resource in Oxfordshire and this is typically found in river valley deposits, particularly along the River Thames and its tributaries the Windrush, Evenlode and Thame. Its primary use is to make concrete. Soft sand occurs mainly in the south west of the county; it is used in mortar and asphalt. Limestone and ironstone are found mainly in the north and west of the county; they are used primarily as crushed rock aggregate but also for building and walling stone. The resources include extensive areas of ironstone which received planning permission for mineral extraction in the 1950s, much of which is subject to environmental (Review Of Mineral Permissions (ROMP)) legislation which prevents further working until planning conditions that accord with up to date environmental standards have been agreed with the County Council. Figure 3 shows the location of mineral resources; and figure 4 shows the location of active mineral workings in the county.
- 2.7 Annual production of aggregates (sand and gravel and crushed rock) in Oxfordshire has fallen from 2.7 million tonnes to less than a million tonnes over the last 10 years³. A survey in 2009 found that 78% of sand and gravel and 51% of crushed rock produced in the county is used in Oxfordshire. The issue of how much should be provided for in future is covered in section 4.
- 2.8 There are movements of minerals both into and out of the county. The 2009 survey showed that Oxfordshire imported more sand and gravel and crushed rock than it exported. Hard rock aggregates are imported by rail from the Mendips and Leicestershire to meet construction needs which cannot be met by local, softer limestone and ironstone.
- 2.9 Production of aggregates from recycled construction and demolition waste and from secondary materials (including ash from Didcot A Power Station) is believed to have made an increasingly significant contribution to the overall requirement for aggregates. Didcot A power station closed in March 2013 but there will be a new source of ash when the Ardley energy from waste plant becomes operational. Locations of secondary and recycled aggregate facilities are shown in figure 5.

³ Oxfordshire County Council Local Aggregate Assessment 2013

Figure 3a: Sand and gravel resources in Oxfordshire

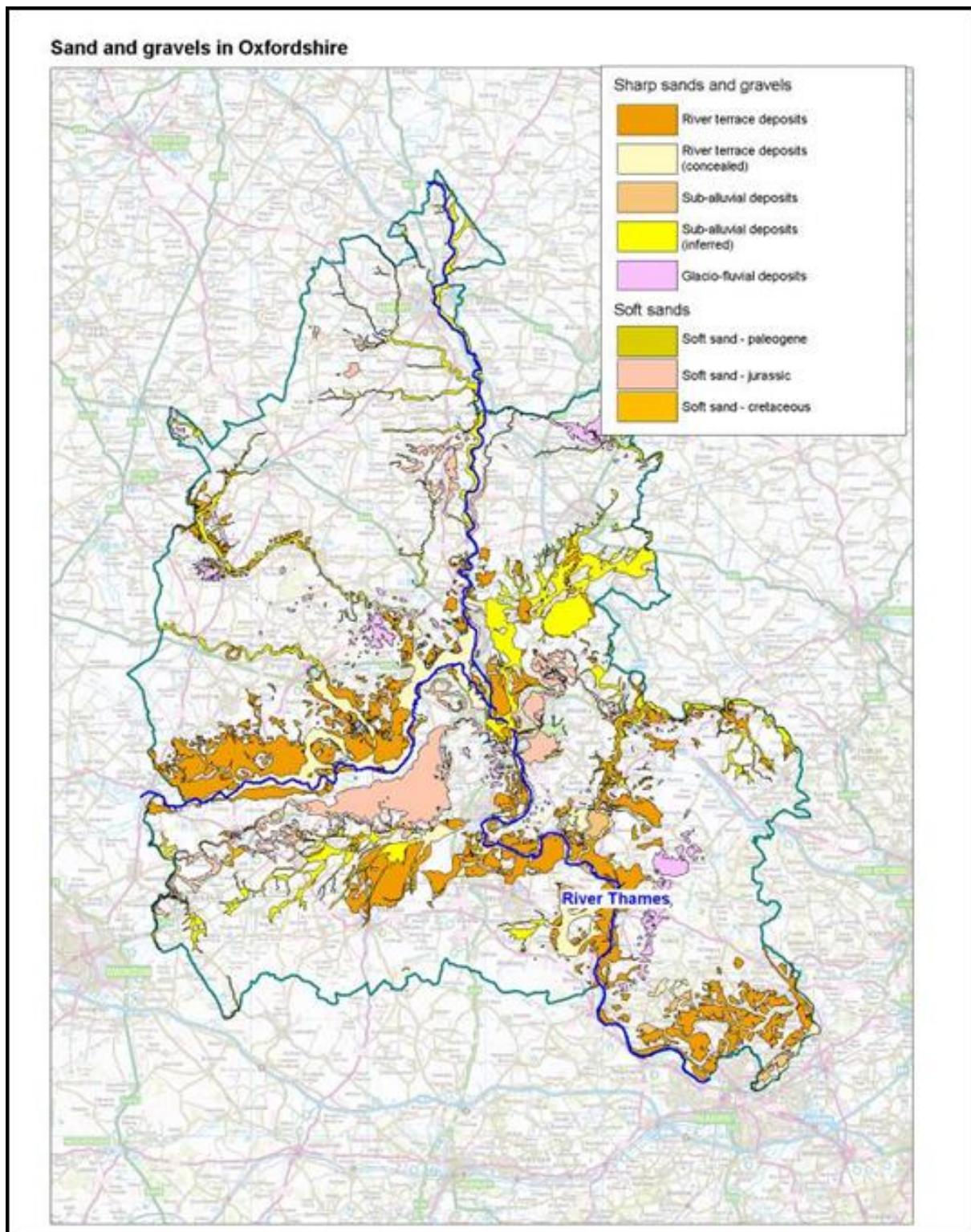


Figure 3b: Crushed rock resources in Oxfordshire

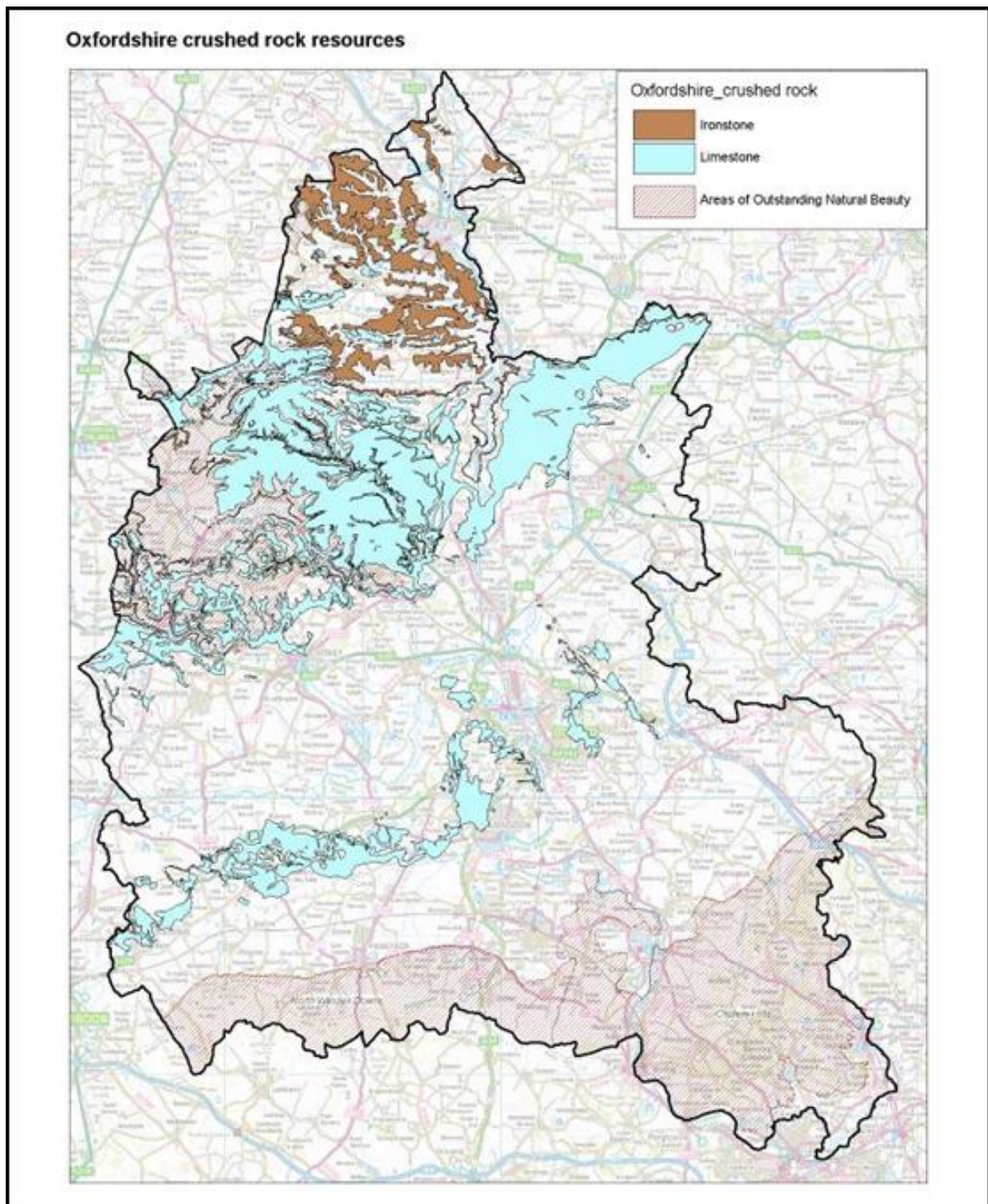


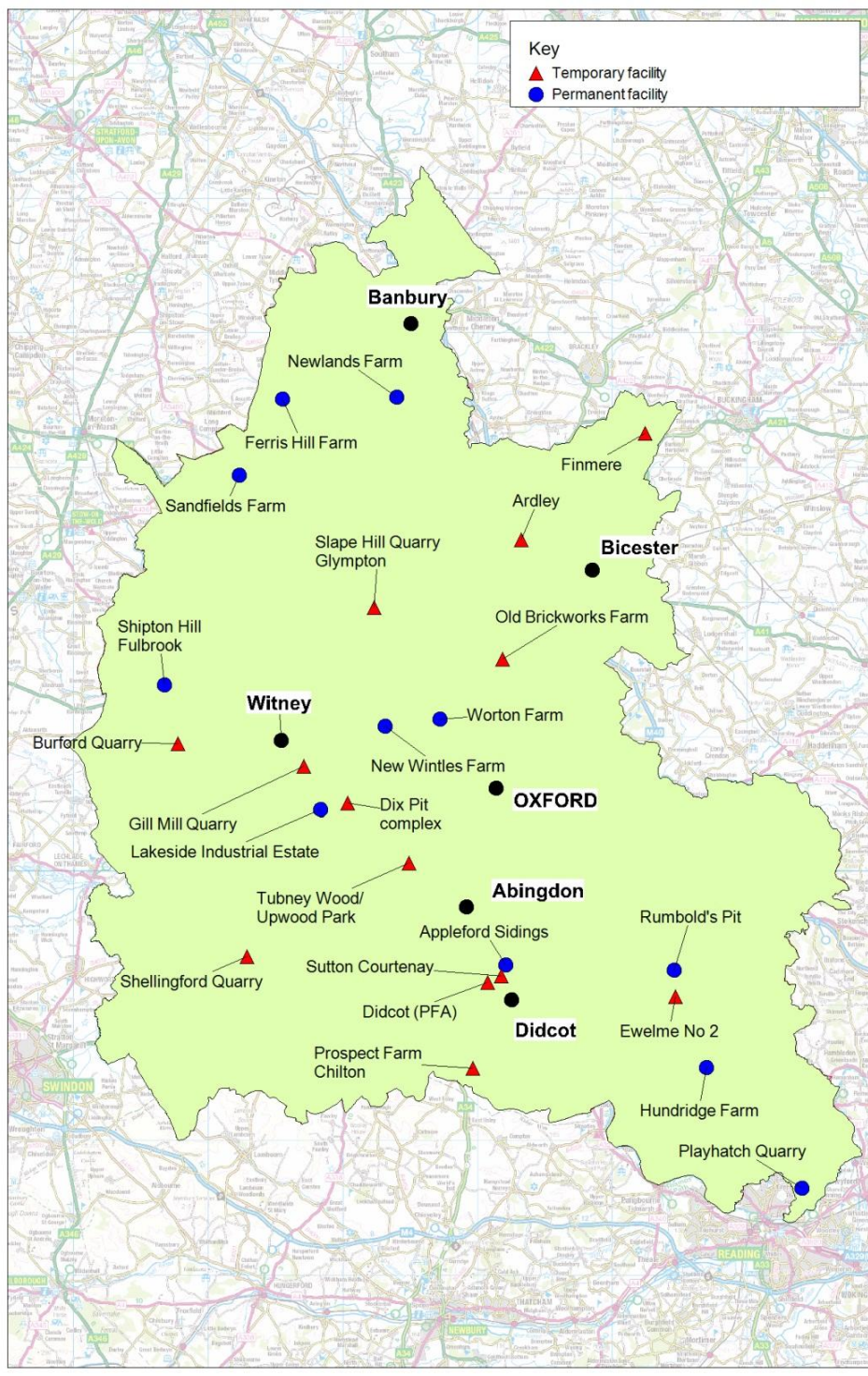
Figure 4: Location of active mineral workings and sites with planning permission.



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Figure 5: Location of recycled and secondary aggregate facilities with planning permission



Waste in Oxfordshire

- 2.10 Approximately 2.4 million tonnes of waste⁴ are currently produced annually by Oxfordshire residents, businesses and organisations, mostly comprising:
- Municipal (mainly household) waste (collected, processed and disposed of by the district and county councils) – approximately 15%;
 - Commercial and industrial waste (produced, processed and disposed of by the private sector) – approximately 30%;
 - Construction, demolition and excavation waste (produced, processed and disposed of by the private sector) – approximately 55%.
- 2.11 Agricultural and mineral wastes are also produced in significant quantity, but much of this is managed on site. Other wastes that need to be provided for are produced in smaller quantities. These are hazardous wastes (including oils and solvents, chemicals and asbestos); radioactive waste; and sewage sludge.
- 2.12 About 90% of Oxfordshire’s waste is dealt with in the county⁵. The main method of dealing with waste has been by disposal at local landfill sites, but waste is now increasingly being diverted from landfill by recycling and treatment. Existing waste facilities and sites with planning permission are shown on figure 6 (municipal and commercial & industrial waste) and figure 7 (construction, demolition and excavation waste).
- 2.13 Oxfordshire is a net importer of waste. Some waste is brought into the county from elsewhere for disposal at landfill sites, under commercial arrangements that are largely outside current planning controls. In particular, waste comes into Oxfordshire from London (much of it by rail) and Berkshire. In 2011 some 685,000 tonnes of waste from other areas was disposed in Oxfordshire landfills, as shown in Table 1, half of which was inert waste from construction and demolition projects. Sutton Courtenay is the largest receiving landfill site.

Table 1: Waste disposed in Oxfordshire from other areas (tonnes)

Area	2008	2009	2010	2011
Berkshire	218,473	185,139	149,418	108,173
London	254,457	307,520	580,236	456,312
Rest of UK	67,628	64,497	65,655	120,965
Total	540,558	557,156	795,309	685,450

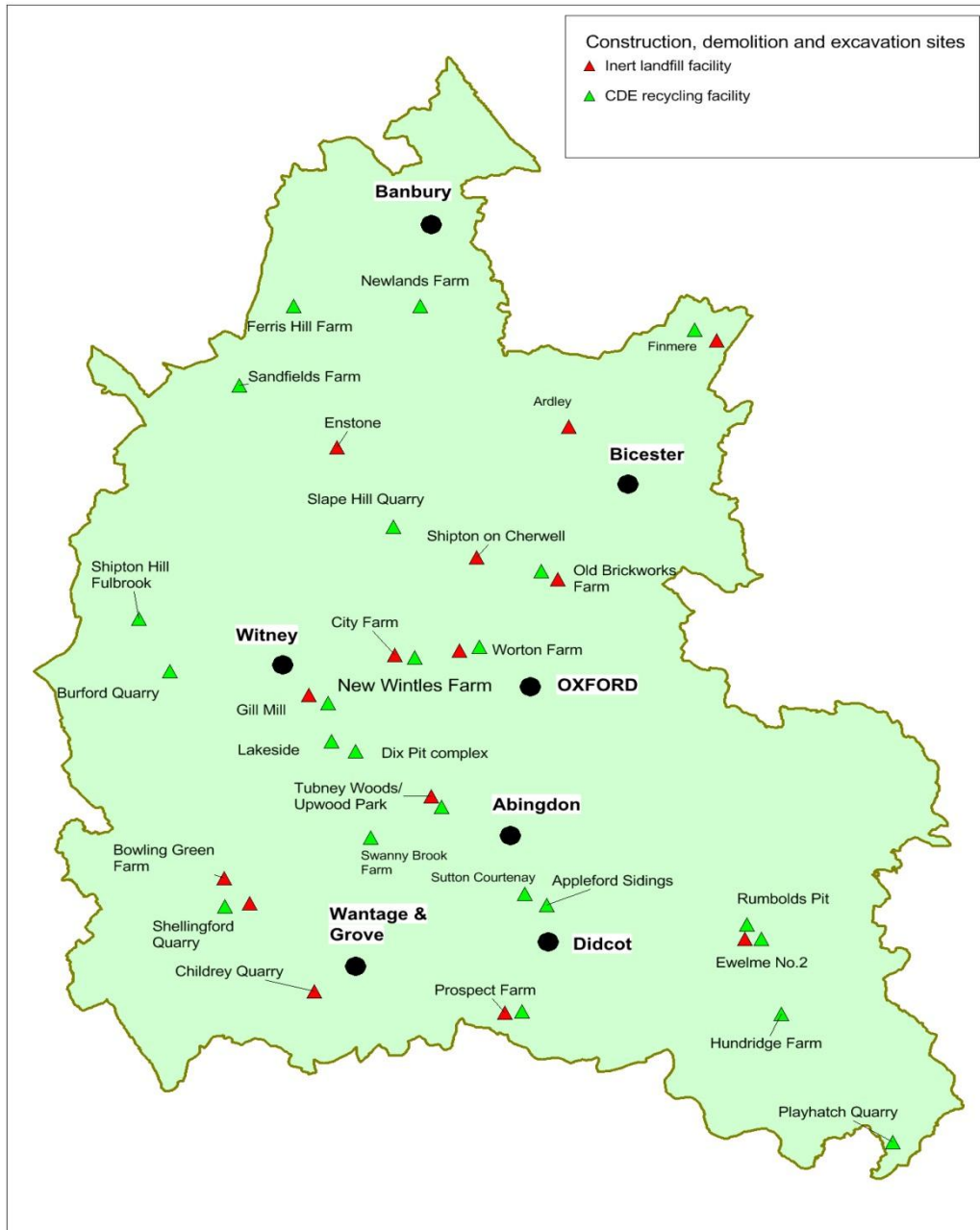
⁴ Oxfordshire Waste Needs Assessment 2012 and Report for Oxfordshire County Council by BPP Consulting 2014.

⁵ Oxfordshire Waste Needs Assessment 2012.

Figure 6: Location of municipal and commercial & industrial waste facilities and sites with planning permission



Figure 7: Location of permanent construction, demolition & excavation waste facilities and sites with planning permission



Policy context

2.14 The draft plan reflects international, national and local policies and plans (regional plans are no longer relevant⁶). Broad areas of policy are outlined below; more specific aspects of planning policy are covered later in the document or in the relevant Topic Paper.

International/European

2.15 The key international plans and programmes which are relevant to the draft minerals and waste plan are:

- The World Summit on Sustainable Development, Johannesburg (2002);
- Kyoto Protocol and the UN framework convention on climate change (1997);
- Bern Convention on the conservation of European wildlife and natural habitats.

2.16 The European Union has issued a number of Directives which have been transposed into national legislation and policy and are of particular relevance to this plan (see paragraphs 2.17 and 2.21). These include the Waste Framework Directive⁷ and the Landfill Directive⁸. Other relevant Directives include the Habitats Directive⁹, the Strategic Environmental Assessment Directive¹⁰ and the Water Framework Directive¹¹.

National

2.17 The Minerals and Waste Local Plan – Core Strategy is being prepared under the Planning and Compulsory Purchase Act 2004 and the Localism Act 2011. The Localism Act 2011 introduced a specific requirement (the Duty to Cooperate) that local authorities preparing Local Plans engage ‘constructively, actively and on an on-going basis’ on strategic issues having cross-boundary significance with other authorities and agencies.

2.18 In 2012 the Government replaced the former national planning policy statements with a briefer single document, the National Planning Policy Framework (NPPF). The NPPF does not contain specific policy on waste planning and has not replaced PPS 10 – Planning for Sustainable Waste Management¹². The detailed practice guidance notes that supported the

⁶ The Regional Spatial Strategy for the South East (the South East Plan) was revoked in March 2013.

⁷ Directive on Waste (2008/98/EC) (transposed into English law under the Waste (England and Wales) Regulations 2011).

⁸ Directive on the Landfill of Waste (99/31/EC) (transposed into English law under the landfill (England & Wales) Regulations 2002).

⁹ The Conservation of Natural Habitats and Wild Flora and Fauna Directive (92/43/EC) (transposed into UK law under the Conservation of Habitats Species Regulations 2010).

¹⁰ Directive on the Assessment of the Effects of Certain Plans and Programmes on the Environment (2001/42/EC) (transposed into UK law under the Environmental Assessment of Plans and Programmes Regulations 2004).

¹¹ Directive 2000/60/EC: establishing a framework for Community action in the field of water policy.

¹² The government consulted on ‘Updated national waste planning policy: Planning for sustainable waste management’ in July 2013.

former planning policy statements are also currently still in place but are to be replaced by emerging briefer on-line National Planning Practice Guidance¹³. Other key publications include UK Post 2010 Biodiversity Framework, 2012 and UK Government Sustainable Development Strategy, March 2005.

- 2.19 The NPPF includes a presumption in favour of sustainable development, with local planning authorities expected to 'positively seek opportunities to meet the development needs of their area'. Sustainable development is expected to:
- Contribute to building a strong, responsive and competitive economy;
 - Support strong, vibrant and healthy communities;
 - Contribute to protecting and enhancing the natural, built and historic environment.
- 2.20 The NPPF recognises minerals as being 'essential to support sustainable economic growth and our quality of life'; and that there needs therefore to be 'a sufficient supply of material to provide the infrastructure, buildings, energy and goods that the country needs'¹⁴. Mineral planning authorities are to plan for 'a steady and adequate supply of aggregates' and industrial minerals. The NPPF also includes policy for on-shore oil and gas development, including unconventional hydrocarbons.
- 2.21 The Government published a new national Waste Management Plan for England in December 2013. This is a high level document which provides an analysis of the current waste management situation in England and evaluates how it will support implementation of the objectives and provisions of the Waste Framework Directive. It sets out the policies that are in place to help move towards a zero waste economy as part of the transition to a sustainable economy.
- 2.22 National planning policy for waste is current set out in Planning Policy Statement 10 'Planning for Sustainable Waste Management', March 2011 (PPS 10), and this is cross-referred to in the Waste Management Plan for England. In July 2013 the Government undertook consultation on updated national waste planning policy.
- 2.23 PPS10 includes the key objective of preparing and delivering planning strategies that help deliver sustainable development through:
- Driving waste management up the waste hierarchy;
 - Addressing waste as a resource; and
 - Looking to disposal as the last option (but one that must be adequately catered for).
- 2.24 The waste hierarchy is a key part of European policy in the Waste Framework Directive, and of national policy for the management of waste. In this hierarchy, waste prevention is the most desirable option and disposal is the option of last resort.

¹³ On-line National Planning Practice Guidance was introduced in draft form in September 2013.

¹⁴ National Planning Policy Framework, paragraph 142.

Figure 8: Waste Hierarchy



- 2.25 By moving the management of waste up this hierarchy, away from disposal to reuse, recycling, composting and treatment to recover resources, the Government aims to achieve more sustainable waste management and to break the link between economic growth and the environmental impact of waste. This aim is shared by the County Council.
- 2.26 Landfilling biodegradable waste produces methane gas which is a powerful greenhouse gas. European and national legislation and policy has put in place strong financial and policy drivers and challenging targets to reduce the amount of biodegradable waste that is sent to landfill, and to increase the recovery of resources from waste. Landfill tax (which applies to all wastes and has been increasing year on year) has been and continues to increase the costs of landfill so that it will no longer be the cheapest means of dealing with waste.
- 2.27 The Government therefore expects waste plans to provide sufficient opportunities for the provision of waste management facilities of the right type, in the right place and at the right time. Communities are encouraged to take more responsibility for their own waste, with waste disposed in one of the nearest appropriate installations in ways that do not endanger human health or harm the environment. Competitiveness in the management of waste is also encouraged¹⁵.

Local

- 2.28 The Oxfordshire Minerals and Waste Local Plan 2006 was adopted by the County Council in July 1996. It contains detailed policies for the supply of minerals, the provision of waste management facilities and for the control of minerals and waste developments. Under the Planning and Compulsory Purchase Act 2004 many of the policies of this Plan have been 'saved'¹⁶ and

¹⁵ Planning Policy Statement 10: paragraphs 2 and 3.

¹⁶ Letter from Government Office for the South East (Housing and Planning Directorate) 25 September 2007.

currently form part of the development plan for Oxfordshire pending their replacement by policies in the new Minerals and Waste Local Plan.

- 2.29 In October 2012 the County Council submitted an Oxfordshire Minerals and Waste Core Strategy to the Secretary of State for examination. This was intended to replace the 2006 Local Plan and had been the subject of widespread stakeholder engagement and public consultation¹⁷. The Inspector appointed to carry out the independent examination of the Core Strategy raised issues over the adequacy of the evidence base in relation to the recently published NPPF and its compliance with the new duty to co-operate. In view of this, the examination was suspended in February 2013 and in July 2013 the County Council resolved to withdraw that plan and to prepare a revised Oxfordshire Minerals and Waste Local Plan¹⁸.
- 2.30 The Development Plan for Oxfordshire comprises the District Councils' adopted Local Plans and the adopted Minerals and Waste Local Plan. Local plans prepared by the City and District Councils contain policies that are also relevant to minerals and waste planning. The current position with local plans in Oxfordshire is shown in the following table.

District Council	Adopted Plan
Cherwell	Local Plan (1996)* – saved policies**
Oxford City	Core Strategy (March 2011)
South Oxfordshire	Core Strategy (December 2012)
Vale of White Horse	Local Plan (July 2006) – saved policies**
West Oxfordshire	Local Plan (June 2006) – saved policies**

* Non-statutory Cherwell Local Plan 2011 also relevant to the determination of planning applications.
 ** Policies saved by Secretary of State in September 2007.

- 2.31 The Minerals and Waste Local Plan – Core Strategy must take into account and, as far as possible, should be consistent with the plans of other mineral and waste planning authorities which share strategic minerals or waste issues with Oxfordshire (including neighbouring authorities, those which export hard rock to Oxfordshire and those which receive hazardous or radioactive waste from Oxfordshire).
- 2.32 The County, City and District Councils have worked in partnership to produce a Sustainable Community Strategy for Oxfordshire – Oxfordshire 2030. This is a partnership plan for improving quality of life in Oxfordshire. It sets out a long-term vision for Oxfordshire's future: 'By 2030 we want Oxfordshire to be recognised for its economic success, outstanding environment and quality of life; to be a place where everyone can realise their potential, contribute to and benefit from economic prosperity and where people are actively involved in their local communities'.

¹⁷ Work undertaken on and evidence gathered in the preparation of the previous Minerals and Waste Core Strategy, including the outcome of stakeholder engagement and responses to consultations, have been taken into account in the preparation of this draft Minerals and Waste Local Plan: Core Strategy.

¹⁸ Report to the County Council meeting on 9 July 2013.

2.33 The strategic objectives of Oxfordshire 2030 include:

- World class economy: To build on Oxfordshire's vibrant economy and make sure that everyone has an opportunity to be included in that success.
- Healthy and thriving communities: To tackle lack of housing and respond effectively to the demographic challenges we face over the next 20 years.
- Environment and climate change: To respond to the challenges of climate change by minimising the effects of flooding, looking after our environment, reducing waste and use of energy to improve the quality of life for all.

2.34 Separate Community Strategies for the City and District Councils take their lead from these principles.

2.35 The Oxfordshire Local Enterprise Partnership is responsible for championing and developing the Oxfordshire economy and was launched by the Business Minister in March 2011. It aims to make Oxfordshire a globally competitive, knowledge based, economy open for business and at the heart of UK-wide economic growth, innovation and private sector job creation. The Business Plan for Growth 2013 looks to focus on three key spatial priorities:

- Science Vale UK: build on its existing research infrastructure and the designation of Harwell as the home of the national Satellite Applications 'Catapult';
- Bicester: where improved infrastructure and increased land availability is unlocking the potential for significant increases in employment growth;
- Oxford: continue to invest in developing the critical infrastructure necessary to realise the full potential of its world-class education, research and innovation.

2.36 The County Council is both the planning authority for waste development; and the waste disposal authority, with responsibility for the management and disposal of municipal waste, mainly comprising the household waste and some commercial waste collected by the five district councils.

2.37 The County and District Councils work together on municipal waste management under the Oxfordshire Waste Partnership. The Oxfordshire Joint Municipal Waste Management Strategy 2013 has been adopted by the Partnership and replaces the previous strategy 'No Time to Waste' that was agreed in 2007. The new strategy provides a framework and policies for the management of municipal waste in the county to 2030. The Partnership's vision for the future is: 'A society where everyone tries to prevent waste and sees waste materials as a potential resource'.

2.38 The Joint Municipal Waste Management Strategy includes policies:

- to ensure Zero growth or better of municipal waste per person per annum;
- to recycle or compost at least 65% of household waste by 2020 and at least 70% by 2025;

- to minimise waste to landfill and recover energy from non-recyclable waste and seek to landfill no more than 5% of non-recyclable household waste; and
- to work with the Waste Planning Authority to ensure that waste facilities are suitably sized and distributed with the aim of minimising the transport of waste

The strategy document is supported by two annexes:

Annex A – Oxfordshire Waste Partnership Action Plan;

Annex B – Waste Prevention Strategy 2010–2020.

2.39 The Minerals and Waste Local Plan – Core Strategy is separate from the Joint Municipal Waste Management Strategy but should be informed by and consistent with its provisions.

Issues

2.40 The plan needs to make provision for mineral working and supply to meet the needs for Oxfordshire’s planned growth and development that is likely to take place over the next 20 years and to maintain the existing built fabric of the county. It also needs to make provision for waste management facilities to meet the needs of the current population and businesses of Oxfordshire and the planned growth and development.

2.41 Much of the work that was undertaken in preparing the Minerals and Waste Core Strategy (see paragraph 2.29) is still relevant to the preparation of this new plan. The Topic Papers that support the Minerals and Waste Local Plan – Core Strategy make reference to this previous work where relevant. Many of the issues that need to be addressed by this plan were previously identified in the preparation of and consultation on the former Core Strategy.

Minerals

2.42 National policy¹⁹ recognises that minerals are a finite natural resource and can only be worked where they are found. Most mineral workings are located in rural areas, many of which are served by minor roads. In some cases lorries carrying aggregates have to pass through small villages and towns, contributing to congestion and impacting on local communities and the environment. The River Thames cuts across the county and the movement of sand and gravel is constrained by the limited number of river crossings, many of which have weight restrictions. One particular consequence of this is that aggregates from sources in West Oxfordshire (e.g. the Lower Windrush Valley) have to be transported longer distances, crossing the river at Oxford, in order to reach markets in the southern part of the county. Some communities have experienced extensive working in the past, and in certain areas the local landscape has been significantly altered by the creation of lakes from sand and gravel workings.

¹⁹ National Planning Policy Framework: paragraph 142.

2.43 Key issues for minerals planning in Oxfordshire that this plan needs to address are:

- The provision that should be made for aggregate minerals (sand and gravel, soft sand and crushed rock) taking into account the needs of Oxfordshire for construction materials, the contribution that can be expected from other areas and the needs for supply to other areas.
- The contribution to aggregate supply that could be made by secondary and recycled aggregate and how that contribution could be best secured.
- The locations that would best meet the provision that needs to be made for aggregate mineral working and how those locations should be identified in the plan.
- The approaches that should be taken to proposals for aggregate mineral working within identified locations, and elsewhere.
- The approach that should be taken to supply of aggregates from outside Oxfordshire, particularly by rail through aggregate railhead depots.
- The provision that should be made for non-aggregate minerals (e.g. building stone) and the approach that should be taken to proposals for mineral working.
- The approach that should be taken to the restoration and aftercare of mineral workings.
- The safeguarding of Oxfordshire's important mineral resources from sterilisation by other forms of development.

Waste

2.44 National policy²⁰ puts an emphasis on the need for new waste management facilities, to drive the management of waste up the waste hierarchy and divert waste from landfill. In Oxfordshire a number of new waste management facilities have already been developed across the county. Some existing sites are the subject of temporary planning permissions and further facilities are expected to be needed. Sites already in longer term waste management use are valuable but can be vulnerable to pressures for other forms of development.

2.45 The government expects communities to take more responsibility for their own waste, but it can be difficult to find suitable sites for waste management facilities within or close to centres of population. Consequently, many waste facilities are located in rural areas away from the built up areas where most waste is produced. In and around Oxford, the difficulties of finding appropriate sites are further accentuated by the need to consider the protection of the Green Belt.

2.46 Oxfordshire has a considerable amount of landfill space in comparison with most other counties, but increasingly less waste is being disposed in landfills as new waste treatment facilities become operational. The disposal of Oxfordshire's waste by landfill will be significantly reduced when the new Ardley Energy from Waste plant opens later in 2014. This may lead to

²⁰ PPS 10 – Planning for Sustainable Waste Management

proposals for the durations of landfill sites to be extended beyond what was originally intended, with the consequent continuation of any impacts on the local communities that host them.

2.47 Key issues for waste planning in Oxfordshire that this plan needs to address are:

- The types of waste the plan should provide for and the quantities of those wastes likely to be produced in Oxfordshire over the plan period.
- The ways in which the wastes produced in Oxfordshire should be managed over the plan period.
- The amount of waste management capacity that will be needed to manage the wastes produced in Oxfordshire and the approach that should be taken to provision over and above the level required for Oxfordshire's waste.
- The approach that should be taken to waste that comes into Oxfordshire from other areas.
- The new waste management facilities that will be required and where they should be located.
- Whether there are any types of waste that cannot be managed in Oxfordshire and how provision should be made for these.
- The types of locations and sites that should be used for waste management facilities.
- The way in which Oxfordshire's existing landfill sites should be considered in the event that the quantities of waste being landfilled fall significantly.
- The safeguarding of waste management facilities for future waste use and how might this would be best achieved.

Habitats Regulations Assessment

2.48 The Habitats Directive requires that planning authorities assess the likely effects of their plans, either alone or in combination with other plans and projects, on sites which have been designated as being of European importance for the habitat or species they support. In Oxfordshire there are seven sites designated as Special Areas of Conservation (SAC). A Habitats Regulations Assessment screening report, prepared by the Council (to support the subsequently withdrawn Core Strategy), identifies the seven sites and the conservation objectives that apply to each and provides an assessment of the likely impacts on them.

2.49 The screening report suggested that there could potentially be an impact of mineral extraction near Oxford Meadows SAC and Cothill Fen SAC. Further work was commissioned to provide a hydrogeological assessment of mineral working in the Eynsham / Cassington / Yarnton sharp sand and gravel area and the soft sand area north and south of the A420, west of Abingdon (part of the Corallian Ridge between Oxford and Faringdon). The consultants' report forms an addendum to the screening report. The report concluded that, with certain safeguards, mineral extraction could take place if required in these areas without being likely to have an effect on the SACs.

- 2.50 The County Council considers that this Habitats Regulations Assessment screening report and addendum is adequate to support the consultation draft plan. The screening report will be reviewed in the light of relevant responses to the consultation in consultation with Natural England and, if necessary, a revised screening report will be prepared to support the pre-submission draft of the plan.

Sustainability Appraisal / Strategic Environmental Assessment

- 2.51 The Strategic Environmental Assessment Directive requires that an assessment is carried out of the likely impacts of the plan on a range of environmental criteria. Policies and proposals in development plan documents must also be subject to sustainability appraisal, which includes consideration of social and economic as well as environmental factors. A sustainability appraisal scoping report has been prepared and published following consultation with the Environment Agency, Natural England and English Heritage.
- 2.52 The Council commissioned consultants to carry out a sustainability appraisal incorporating a strategic environmental assessment of options to assess the potential impacts of minerals and waste development against a range of environmental, economic and social criteria and this has informed the preferred approach set out in this draft plan.

Strategic Flood Risk Assessment

- 2.53 Local Authorities are expected to prepare a Strategic Flood Risk Assessment to inform the development of strategies and policies in local plans²¹. A Strategic Flood Risk Assessment assesses the potential risk of flooding to and from development that may take place, and provides detailed mapping of areas at risk of flooding from all potential sources and anticipates the potential impact of climate change. The Strategic Flood Risk Assessment provides the main source of data to apply sequential testing of development options with a view to ensuring that, as far as possible, development takes place in areas at least risk of flooding.
- 2.54 The Council commissioned consultants to carry out a Level 1 Strategic Flood Risk Assessment in October 2010 to inform preparation of the (subsequently withdrawn) Minerals and Waste Core Strategy. The data in that assessment remains up to date and relevant and will form the basis for any update of the Strategic Flood Risk Assessment that is necessary, including to record and take account of changes to planning policy since the previous document was prepared. The Level 1 Strategic Flood Risk Assessment does not identify a need for a Level 2 (more detailed) study of flood risk in any area where minerals or waste development is anticipated.

²¹ National Planning Policy Framework: paragraph 100.

3. VISION AND OBJECTIVES FOR MINERALS AND WASTE IN OXFORDSHIRE

Introduction

3.1 The vision and objectives of the plan provide the basis for the development of the strategy, policies and proposals for minerals supply and waste management through the period to 2031. The objectives seek to address the issues identified in chapter 2 above, taking into account relevant national and local policies, in particular the need to support Oxfordshire's economy, protect its environment and help develop healthy and thriving communities²².

Minerals Planning Vision

3.2 The growth that is planned for Oxfordshire presents major challenges for minerals planning, including that adequate supplies of the minerals needed for construction are made available when and where required and in the most sustainable way possible.

3.3 The vision for minerals planning in Oxfordshire in 2031 is that:

- a) There will be a sufficient supply of aggregate materials available to meet the development needs of the county with a world class economy, and make an appropriate contribution to wider needs, provided from the following sources (in order of priority):
 - secondary and recycled aggregate materials (where practicable);
 - locally produced sharp sand and gravel, soft sand, limestone and ironstone; and
 - import of materials such as hard crushed rock that are not available locally.
- b) Mineral workings and supply facilities will be located and managed to minimise:
 - the distance that aggregates need to be transported by road from source to market;
 - the use of unsuitable roads, particularly through settlements; and
 - other harmful impacts of mineral extraction, processing and transportation on Oxfordshire's communities and environment.
- c) Restored mineral workings will enhance the quality of Oxfordshire's natural environment and the quality of life for Oxfordshire residents by:
 - delivering a net gain in biodiversity, and making a significant contribution to establishing a coherent and resilient ecological network, through the creation of priority habitats at a landscape scale;
 - providing opportunity for access to the countryside and recreation activity; and

²² Oxfordshire Sustainable Community Strategy Oxfordshire 2030.

- helping to reduce the risk of flooding and adding to flood storage capacity.

Minerals Planning Objectives

3.5 The Oxfordshire Minerals Planning Vision is supported by the following objectives which underpin the minerals strategy and policies in this plan:

- i. Facilitate the efficient use of Oxfordshire's mineral resources by encouraging the maximum practical recovery of aggregate from secondary and recycled materials for use in place of primary aggregates.
- ii. Make provision for a steady and adequate supply of sharp sand and gravel, soft sand and crushed rock over the plan period to meet the planned economic growth and social needs of Oxfordshire.
- iii. Make an appropriate contribution to meeting wider needs for aggregate minerals, having regard to the strategic importance of Oxfordshire's mineral resources, particularly sand and gravel.
- iv. Enable a continued local supply of limestone and ironstone for building and walling stone for the maintenance, repair and construction of locally distinctive buildings and structures, and of clay to meet local needs for engineering and restoration material.
- v. Provide a framework for investment and development by mineral operators and landowners through a clear and deliverable spatial strategy which is sufficiently flexible to meet future needs and has regard to existing and planned infrastructure.
- vi. Minimise the flood risk associated with minerals development and contribute to climate change mitigation and adaptation, including through restoration schemes which provide habitat creation as a mechanism for addressing climate change adaptation and additional flood storage capacity in the floodplain where possible.
- vii. Minimise the transport impact of mineral development on local communities, the environment and climate change by minimising the distance minerals need to be transported by road and encouraging where possible the movement of aggregates by conveyor, pipeline, rail and on Oxfordshire's waterways.
- viii. Protect Oxfordshire's communities and natural and historic environments (including important landscapes and ecological, geological and archaeological and other heritage assets) from the harmful impacts of mineral development (including traffic).
- ix. Provide benefits to Oxfordshire's natural environment and local communities through the restoration and aftercare of mineral workings at the earliest opportunity, in particular by contributing to nature conservation, enhancing the

quality and extent of Conservation Target Areas, contributing to landscape character, improving access to the countryside, safeguarding local amenity, providing opportunities for local recreation and providing benefit to the local economy.

- x. Implement a biodiversity-led restoration strategy that delivers a net gain in biodiversity, and contributes to establishing a coherent and resilient ecological network, through the landscape-scale creation of priority habitat.
- xi. Safeguard important known resources of sharp sand and gravel, soft sand, crushed rock and fuller's earth to ensure that those resources are not needlessly sterilised and remain potentially available for future use and are considered in future development decisions.
- xii. Safeguard important facilities for the production of secondary and recycled aggregate, railhead sites for the bulk movement of aggregate into Oxfordshire by rail and other infrastructure to support the supply of minerals in Oxfordshire.

Waste Planning Vision

3.6 The growth that is planned for Oxfordshire presents significant challenges for waste planning including that the waste generated by existing and new developments is managed and used in the most effective and sustainable way possible. The underlying philosophy is to seek to reduce waste generation and to see waste as a resource, through maximizing reuse, recycling and composting and recovery of value from residual waste.

3.7 The vision for waste planning in Oxfordshire in 2031 is that:

- a) There will have been a transformation in the way that waste is managed in Oxfordshire, with:
 - increased re-use, recycling and composting of waste;
 - treatment (so far as is practicable) of all residual waste that cannot be recycled or composted; and
 - only the minimum amount of waste that is necessary being disposed of at landfill sites.
- b) The county will remain largely self-sufficient in dealing with the waste it generates. An economically and environmentally efficient network of clean, well-designed recycling, composting and other waste treatment facilities will have been developed to recover material and energy from the county's waste and support its thriving economy.
- c) Waste management facilities will be distributed across the county, with larger-scale and specialist facilities being located at or close to Oxford and other large towns, particularly the growth areas, and close to main transport links, and with smaller-scale facilities serving more local areas. Facilities will be located and managed to minimise the use of unsuitable roads, particularly through settlements, and other harmful impacts of waste management

development on Oxfordshire's communities and environment. This network of waste management facilities will have helped to build more sustainable communities that increasingly take responsibility for their own waste and keep to a minimum the distance waste needs to be moved within the county.

Waste Planning Objectives

- 3.8 The Oxfordshire Waste Planning Vision is supported by the following objectives which underpin the waste strategy and policies in this plan:
- i. Make provision for waste management capacity that allows Oxfordshire to be net self-sufficient in meeting its own needs for household waste, commercial and industrial waste, construction, demolition and excavation waste and agricultural waste.
 - ii. Encourage the provision of facilities for the management of hazardous and radioactive wastes produced in Oxfordshire, recognising that specialist facilities for these waste types often require provision at a sub-national or national level.
 - iii. Support initiatives that help reduce the amounts of waste produced and provide for the delivery, as soon as is practicable, of waste management facilities that will drive waste away from landfill and as far up the waste hierarchy²³ as possible; in particular facilities that will enable increased re-use, recycling and composting of waste and the recovery of resources from remaining (residual) waste.
 - iv. Seek to provide for waste to be managed as close as possible to where it arises, and encourage other areas to become net self-sufficient in meeting their own waste needs, to:
 - minimise the distance waste needs to be transported by road;
 - reduce adverse impacts of waste transportation on local communities and the environment; and
 - enable communities to take responsibility for their own waste.
 - v. Provide for a broad distribution of waste management facilities to meet local needs across Oxfordshire and make more specific provision for larger facilities that are not practical below a certain size and that are needed to serve the whole or more substantial parts of the county or a wider area.
 - vi. Seek to ensure that waste management facilities where possible provide benefits to the communities they serve, including employment and the potential for recovery and local use of energy (heat and power) from waste, and are recognised as an integral part of community infrastructure.
 - vii. Make adequate provision for waste that cannot be recycled or treated (residual waste) and that would otherwise need to be disposed of in landfill.

²³ The waste hierarchy is shown at paragraph 2.24.

- viii. Maintain opportunity for the disposal of residual waste from other areas in Oxfordshire's existing landfill sites.
- ix. Seek to avoid the permanent loss of green field land when making provision for sites for waste management facilities, giving priority to the re-use of previously developed land.
- x. Protect Oxfordshire's communities and natural and historic environments (including important landscapes and ecological, geological and archaeological and other heritage assets) from the harmful impacts of waste management development (including traffic).
- xi. Secure the satisfactory restoration of temporary waste management sites, including landfills, where the facility is no longer required or acceptable in that location.

4. MINERALS PLANNING STRATEGY

- 4.1 This section sets out the County Council's minerals planning strategy and policies for the plan period to 2031. Provision must be made for a steady and adequate supply of aggregate minerals over this period. The Council intends that this should be done by encouraging the use of secondary and recycled aggregates as well as by identifying areas for mineral working to meet the need for primary aggregates such as sand and gravel and crushed rock.
- 4.2 The strategy also addresses safeguarding of mineral resources and infrastructure to ensure future availability of supply. A policy for restoration of mineral working recognises the temporary nature of mineral extraction and the importance of restoring sites to enhance the environment and to provide amenities for the public.

Recycled and secondary aggregate

- 4.3 In line with national policy, the contribution that recycled and secondary material can make to aggregate supply in Oxfordshire should be taken into account before the extraction of primary minerals is considered. Recycled and secondary aggregate in Oxfordshire currently includes:
- Locally derived construction and demolition waste;
 - Locally derived road planings;
 - Spent rail ballast (brought in by rail to a site at Sutton Courtenay).
- 4.4 Oxfordshire has permitted capacity for recycling approximately 0.9 million tonnes a year of construction and demolition waste (much of this is in temporary sites at quarries and landfill sites). Didcot A power station ceased to operate during 2013 and ash recycling at Didcot is not included in this figure. It is expected that ash from the energy recovery facility at Ardley that commenced operation in 2014 will be used as secondary aggregate.
- 4.5 The total production of recycled and secondary aggregate is difficult to quantify because it includes, for example, material from mobile crushing plants at building and road development sites which is recycled and sometimes re-used on site, and material which passes through waste transfer stations. Surveys of secondary and recycled aggregate producers in Oxfordshire in 2012 and 2013 indicate a total of around 470,000 tonnes a year, but the overall supply was likely to be higher than that as the surveys were not comprehensive.
- 4.6 National policy is to aim to source mineral supplies indigenously but there may also be opportunities for recycled or secondary aggregate materials to be supplied from outside the county. For example, china clay waste from Cornwall is supplied to London and use of this material as an aggregate in Oxfordshire could become economic in future. In the interests of achieving an overall sustainable supply of minerals to Oxfordshire, where such material is sourced from distance it should where practicable be transported by rail rather than by road.

- 4.7 The previous (withdrawn) Minerals and Waste Core Strategy included a policy target for recycled and secondary aggregate facility provision of 0.9 million tonnes per year. That target was from the now revoked South East Plan. It is now more appropriate for policy M1 not to set a specific target, which could be misconstrued as setting a maximum level to be achieved, but rather to seek to maximise the contribution to aggregate supply in Oxfordshire from recycled and secondary aggregate sources. Policy M1 is a positive policy to enable facilities to be provided in order to achieve this.
- 4.8 The targets in policy W3 for recycling of construction, demolition and excavation waste (increasing to 60% by 2031) and policies W4, W5 and W6 on waste management capacity requirements and provision and siting of facilities will operate in conjunction with policy M1 to deliver facilities for recycled aggregate production, which is expected to form the majority of recycled and secondary aggregate supply in Oxfordshire.
- 4.9 Provision for additional facilities for the production of recycled aggregates from construction and demolition waste will be made through the identification of sites in the Minerals and Waste Site Allocations Development Plan Document, in line with policies W4, W5 and W6 on waste management capacity requirements and provision and siting of facilities. Policy W6 includes provision for recycling facilities to be located within the Green Belt in very special circumstances and policy C8 allows for small-scale facilities serving local needs to be provided in Areas of Outstanding Natural Beauty. Recycled and secondary aggregate facilities with permanent permission, or with temporary permission extending at least to the end of the plan period, will be safeguarded under policy W11 and these sites will also be identified in the Site Allocations Document. Restoration of the sites of temporary facilities located at quarries and landfill sites will be required in line with policy M10.
- 4.10 **Policy M1: Recycled and Secondary Aggregate**

So far as is practicable, the need for aggregate mineral supply to meet demand in Oxfordshire should be met from recycled and secondary aggregate materials in preference to primary aggregates, in order to minimise the need to work primary aggregates.

The production and supply of recycled and secondary aggregate will be encouraged, in particular through:

- **Recycling of construction, demolition and excavation waste;**
- **Recycling of road planings;**
- **Recycling of rail ballast;**
- **Recovery of ash from combustion processes; and**
- **where available, the supply of secondary aggregates from sources outside Oxfordshire;**

to enable the contribution made by these materials towards meeting the need for aggregates in Oxfordshire to be maximised.

Where practicable, the transport of recycled and secondary aggregate materials from sources distant to Oxfordshire should be by rail.

Permission will be granted for facilities for the production and/or supply of recycled and secondary aggregate, including temporary recycled aggregate facilities at aggregate quarries and inert waste landfill sites, at locations that meet the criteria in policies W5, W6 and C1 – C11.

Sites for the production and/or supply of recycled and secondary aggregate will be safeguarded in accordance with policy W11.

Sites proposed or safeguarded for the production and/or supply of recycled and secondary aggregate will be identified in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document.

Provision for working aggregate minerals

- 4.11 The National Planning Policy Framework requires mineral planning authorities to prepare an annual Local Aggregate Assessment based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including recycled and secondary aggregate sources). The plan must make provision for the aggregate supply requirements identified in the Local Aggregate Assessment.
- 4.12 The County Council's Oxfordshire Local Aggregate Assessment 2014 sets the following requirements for provision for land-won aggregate supply:
- Sharp sand and gravel – 1.015 million tonnes a year;
 - Soft sand – 0.189 million tonnes a year;
 - Total sand and gravel – 1.204 million tonnes a year;
 - Crushed rock – 0.584 million tonnes a year.
- 4.13 Due to particular local factors in Oxfordshire, as identified in the Local Aggregate Assessment, for sharp sand and gravel and crushed rock these figures are higher than the 10 year average (2004 – 2013) of sales from Oxfordshire's quarries. In the case of soft sand the 10 year sales average (2003 – 2012) has been used. These figures are higher than the levels of sales in 2013 and provide significant headroom to accommodate possible changes in local circumstances such as an increase in economic activity and consequent demand for aggregates. Oxfordshire has been a net importer of sharp sand and gravel in recent years but these levels of provision will allow local production to increase again such that Oxfordshire meets its own needs for sharp sand and gravel, with flexibility for appropriate cross-boundary movements of aggregates. These provision figures will also allow Oxfordshire to continue to be a net exporter of soft sand, which is a less widely distributed mineral.
- 4.14 The crushed rock produced in Oxfordshire is generally of relatively low quality with limited end uses. Hard crushed rock is not available locally and will continue to be imported from elsewhere (particularly Somerset, South Gloucestershire and Leicestershire), to meet needs that require this type of aggregate. But Oxfordshire is one of the few places in the South East of

England where there are resources of rock, and provision figures will enable the county to continue to make an appropriate contribution towards local and wider requirements for crushed rock.

- 4.15 National policy and guidance requires provision to be made for the maintenance of landbanks of reserves with planning permission of at least 7 years for sand and gravel and at least 10 years for crushed rock, based on the latest Local Aggregate Assessment. Policy M2 provides for this. In Oxfordshire sharp sand and gravel and soft sand generally occur in different locations and have distinct and separate uses and markets. In line with current national policy, separate landbanks will be maintained for these minerals. Where practicable, transport of crushed rock should be by rail.
- 4.16 The Local Aggregate Assessment is to be reviewed annually and the provision figures are likely to change as the 10 year sales average period moves forward and other relevant local information changes. Regular monitoring of aggregates supply and demand in Oxfordshire will be carried out through the plan period and will be recorded in the Minerals and Waste Annual Monitoring Reports and used in the annual reviews of the Local Aggregate Assessment.
- 4.17 The current Local Aggregate Assessment annual figures indicate the following additional requirements for which provision needs to be made over the plan period (2014 to 2031), taking into account existing planning permissions:
- Sharp sand and gravel – 9.791 million tonnes;
 - Soft sand – 1.238 million tonnes; and
 - Crushed rock – no additional requirement.
- Table 2 shows how these requirements are calculated.

Table 2: Aggregate provision required over plan period 2013 – 2031

	Sharp Sand & Gravel (million tonnes)	Soft Sand (million tonnes)	Crushed Rock (million tonnes)
A. Annual Provision (from LAA)	1.015	0.189	0.584
B. Requirement 2014 – 2031 (A x 18 years)	18.270	3.402	10.512
C. Permitted Reserves at end 2013	6.619	2.164	10.819
D. Permissions granted since end 2013	1.86	0	0
E. Total permitted reserves (C + D)	8.479	2.164	10.819
F. Remaining requirement to be provided for in Plan (B – E)	9.791	1.238	(0.307)

Note:

The figures for permissions granted since the end of 2012 (row D) and for total permitted reserves (row E) do not include:

- i. Extension to Gill Mill Quarry (5.0 million tonnes sharp sand & gravel) for which the County Council's Planning & Regulation Committee resolved on 13 January 2014 that, subject to the applicant entering a legal agreement and routeing agreement, permission be granted.

If this extension is granted permission, the total permitted reserves of sharp sand and gravel would be increased to approximately 13.5 million tonnes, although not all of this reserve would be available for working within the plan period to 2031.

4.18 This is the current position but this may change over the plan period if the level of provision changes as the Local Aggregate Assessment is reviewed annually. Such changes are likely to be relatively small from one year to another but may add up to more substantial change over a period of years. The strategy for mineral working therefore needs to have sufficient flexibility to allow for changes in demand for locally supplied aggregates. Policy M2 therefore does not include the figures from the current Local Aggregate Assessment but instead makes a policy commitment to meeting the requirement in the most recent Local Aggregate Assessment.

4.19 **Policy M2: Provision for working aggregate minerals**

Provision will be made to enable the supply of aggregate minerals from land-won sources within Oxfordshire to meet the requirement identified in the most recent Local Aggregate Assessment.

Permission will be granted for aggregate mineral working to enable separate land banks of reserves with planning permission to be maintained for the extraction of minerals of:

- **at least 7 years for sharp sand and gravel;**
- **at least 7 years for soft sand;**
- **at least 10 years for crushed rock;**

in accordance with the annual requirement rate in the most recent Local Aggregate Assessment.

Locations for working aggregate minerals

- 4.20 Minerals can only be extracted where they exist in the ground. The identification of locations where extraction is likely to be able to take place acceptably provides greater certainty of where mineral working will take place and where it will not take place. Policy M3 identifies the broad locations – strategic resource areas – within which it is proposed that future working for sharp sand and gravel, soft sand and crushed rock should take place. The strategic resource areas are indicated on the Minerals Key Diagram.
- 4.21 Within these strategic resource areas, sites for working will be identified in the Minerals and Waste Site Allocations Development Plan Document, taking into account all the other relevant policies of the plan. Policy M4 sets out the criteria that will be used to assess potential sites for inclusion in the Site Allocations Document. These criteria are not listed in any order of priority. These strategic areas and the specific sites that are identified will provide a basis for the minerals industry to select sites for working and submit planning applications; and for those applications to be considered by the County Council, also taking into account all the other relevant policies of the plan. Policy M5 provides for permission to be granted for applications for 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.
- 4.22 Table 1 above indicates that there is currently no requirement for additional provision for crushed rock working. The areas for crushed rock working identified in policy M3 are included as a contingency in the event that the requirement for local crushed rock increases significantly and additional permitted reserves are required to maintain the landbank and ensure an adequate level of supply.

Sharp Sand and Gravel

- 4.23 At the current (2014) Local Aggregate Assessment requirement rate (1.015 million tonnes a year), existing planning permissions could on average provide for a supply of sharp sand and gravel until 2021, although in practice some

sites will be exhausted sooner and others will last longer. The strategy in this document makes provision for sharp sand and gravel for the rest of the plan period, to 2031.

- 4.24 Production of sharp sand and gravel in Oxfordshire has become increasingly concentrated in the northern part of the county (Cherwell and West Oxfordshire Districts), particularly in West Oxfordshire, with a decline in the proportion coming from quarries in the southern part (South Oxfordshire and Vale of White Horse Districts). Over the last 10 years an average of 74% of production has been from northern Oxfordshire. Although there are extensive remaining sand and gravel resources in West Oxfordshire, including within the current working areas of the Lower Windrush Valley and around Cassington, there are concerns about the rate and intensity of mineral working in the area and the consequent cumulative impact on local communities, generation of traffic, including on the A40, and impacts on local rivers and groundwater flows.
- 4.25 There is a broadly equal split in existing and forecast levels of economic growth and development between the northern and southern parts of the county (taking Oxford as a mid-point), and consequently it is expected that there will be a similar broadly equal split in the demand for aggregate within the county. The plan objectives include minimising the distance that minerals need to be transported by road, from quarry to market. In line with this, the minerals planning strategy should promote and enable a move over the plan period to a distribution of sharp sand and gravel production that more closely reflects the distribution of demand for aggregate within the county.
- 4.26 This means changing the balance of production capacity between the strategic resource areas in western Oxfordshire (mainly in West Oxfordshire District) and southern Oxfordshire (in South Oxfordshire and Vale of White Horse Districts), even though remaining resources of sharp sand and gravel are more extensive in West Oxfordshire. In view of the relatively high level of existing permitted reserves in the northern part of Oxfordshire (mainly in West Oxfordshire), any requirement for additional sites for sharp sand and gravel should be met primarily in the southern part of the county, at least over the first half of the plan period. Provision for additional sand and gravel working in southern Oxfordshire would enable local supplies of aggregate for planned housing and economic growth in this part of the county, including the Science Vale area.
- 4.27 Within southern Oxfordshire, the existing Sutton Courtenay Quarry has only a few years' worth of permitted reserves remaining and limited possibilities for further extensions; and other existing quarries are either already exhausted or small scale, with the exception of Caversham Quarry where a large extension was permitted in 2014 but which serves a market area in the far south east of the county extending into Reading and other parts of Berkshire. It is therefore likely that any significant requirement for additional sites in this part of the county will need to be met by a new working area within the Thames and Lower Thame Valleys area from Kennington to Cholsey. Potential site options within this strategic resource area will be assessed when the Site Allocations

document is prepared and any selected site(s) will be identified in that document.

- 4.28 Within the northern part of the County, the only significant remaining resources of sharp sand and gravel lie within the strategic resource areas along the Thames Valley to the west/north of Oxford and the related Lower Windrush and Lower Evenlode Valleys (mostly in West Oxfordshire but partly in Cherwell District). Any provision for working that is required from this part of the county in the plan period should be from within the Standlake to Yarnton area, which includes the existing working areas of the Lower Windrush Valley and around Cassington. Provision should not be made from the resource areas further to the west, around Bampton and Clanfield, primarily because these areas are further from the main locations of demand for aggregate in Oxfordshire and lack suitable road access to the advisory lorry route network.
- 4.29 The Habitats Regulations Assessment screening report has concluded that a finding of no likely significant effect on Oxford Meadows Special Area of Conservation (SAC) cannot be reached in respect of land to the east and north east of the River Evenlode within the Eynsham / Cassington / Yarnton part of the Thames, Lower Windrush and Lower Evenlode Valleys (Standlake to Yarnton) strategic resource area. The Habitats Directive requires the Council to take a precautionary approach in the plan and therefore proposals should not involve mineral working within that part of the Eynsham / Cassington / Yarnton area. The screening report has also concluded that any proposals for working in the Eynsham / Cassington / Yarnton area would need to demonstrate that they would not affect water levels at Oxford Meadows SAC.
- 4.30 Potentially important archaeological constraints have been identified in the Lower Windrush Valley, south of Hardwick, and at a number of locations within the Thames and Lower Thame Valleys (Kennington to Cholsey) strategic resource area. The Council will work with English Heritage to ensure that important archaeology is given appropriate protection, in particular when sites for mineral working are identified in the Site Allocations document.

Soft sand

- 4.31 Soft sand accounts for approximately 20% of sales of all sands and gravels in Oxfordshire. Soft sand resources are limited to the Corallian Ridge area between Oxford and Faringdon, where most existing quarries are located, and a smaller area at Duns Tew, where there is a single quarry. Two types of soft sand are worked, supplying different markets: sand from the Tubney area generally meets higher specifications than sand from the Faringdon area. The strategy in policy M3 should enable both types of soft sand to continue to be worked.
- 4.32 At the current (2014) Local Aggregate Assessment requirement rate (0.189 million tonnes a year), existing planning permissions could on average provide a supply of soft sand until 2024, although in practice some sites will be exhausted sooner and others will last longer. The additional requirement for

soft sand working over the plan period should be met from sites within the two resource areas, but mainly from the Corallian Ridge area.

- 4.33 For the period to 2031, it would be preferable for further soft sand working to be from extensions to existing quarries where this is possible, rather than from new quarries. This would make efficient use of existing plant and infrastructure and minimize additional impact. Potential site options within the strategic resource areas will be assessed when the Site Allocations document is prepared and any selected sites will be identified in that document.
- 4.34 The Habitats Regulations Assessment screening report has concluded that proposals for mineral working within the Corallian Ridge area from Oxford to Faringdon would need to demonstrate that they would not affect water levels at Cothill Fen SAC.

Crushed rock

- 4.35 At the current (2014) Local Aggregate Assessment requirement rate (0.584 million tonnes a year), current permitted reserves of crushed rock could on average last until 2031, although in practice some sites will be exhausted sooner and others will last longer. Production of crushed rock has fluctuated considerably over past years. Existing working areas of limestone are south east of Faringdon, south of Burford and north west of Bicester. There is one existing area of ironstone working in the north of the county at Alkerton / Wroxton.
- 4.36 The ironstone resource area in the north of the county is less well located relative to strategic routes and market areas in Oxfordshire than are some areas of limestone resource; and there are substantial permitted reserves of ironstone remaining to be worked. Better quality aggregate is generally available from within the limestone deposits than from the ironstone. Any additional provision should be made within the limestone areas. Such provision should preferably be made through extensions to existing quarries rather than from new quarries, to make efficient use of existing plant and infrastructure, and minimize additional impact.
- 4.37 The Local Aggregate Assessment 2014 indicates no requirement for further areas for crushed rock working during the plan period but, if demand increases significantly, additional permissions could be needed towards the end of the plan period. It is likely that any such additional requirement could be met from extensions to existing quarries and that new quarries will not be needed during the period of this plan. In view of this, and given that crushed rock resources in Oxfordshire – in particular the resources of limestone outside of Areas of Outstanding Natural Beauty – are extensive, strategic resource areas for possible future crushed rock working are included in policy M3 but there may not be any requirement for specific sites to be identified in the Site Allocations document.
- 4.38 Government policy is that major minerals developments should only be permitted in Areas of Outstanding Natural Beauty (AONB) in exceptional

circumstances. There are sufficient aggregate resources in Oxfordshire outside the AONBs such that working within these areas is not necessary. Policy C8 provides protection for the landscape quality of the county.

4.39 Policy M3: Locations for working aggregate minerals

The principal locations for aggregate minerals extraction will be within the following strategic resource areas, as indicated on the Minerals Key Diagram:

Sharp sand and gravel

- **The Thames, Lower Windrush and Lower Evenlode Valleys area from Standlake to Yarnton;**
- **The Thames and Lower Thame Valleys area from Kennington to Cholsey;**
- **The Thames Valley area from Caversham to Shiplake.**

Soft sand

- **The Corallian Ridge area from Oxford to Faringdon;**
- **The Duns Tew area.**

Crushed rock

- **The area north west of Bicester;**
- **The Burford area south of the A40;**
- **The area east and south east of Faringdon.**

Specific sites for working aggregate minerals will be identified within these strategic resource areas in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document.

4.40 Policy M4: Working of aggregate minerals

Specific sites for working aggregate minerals within the strategic resource areas identified in policy M3, to meet the requirements set out in policy M2, will be identified in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document, in accordance with the following criteria:

- a) consideration of the quantity and quality of the mineral resource;**
- b) priority for extensions of existing quarries, where environmentally acceptable, before working new sites;**
- c) changing the balance of production capacity for sharp sand & gravel between the strategic resource areas in western & southern Oxfordshire over the plan period to one which more closely reflects the distribution of demand within the county;**

- d) potential for restoration and after-use and for achieving the restoration objectives of the Plan in accordance with policy M8;**
- e) suitability & accessibility of the primary road network;**
- f) proximity to large towns and other locations of significant demand to enable a reduction in overall journey distance from quarry to market;**
- g) ability to provide more sustainable movement of excavated materials;**
- h) avoidance of locations within or in conflict with the purposes of an Area of Outstanding Natural Beauty;**
- i) avoidance of locations likely to have an adverse effect on sites and species of international nature conservation importance and Sites of Special Scientific Interest; in the case of locations within the Eynsham / Cassington / Yarnton area, it must be demonstrated that there will be no change in water levels in the Oxford Meadows Special Area of Conservation and the proposal must not involve the working of land to the north or north east of the River Evenlode; in the case of locations within the Corallian Ridge area, it must be demonstrated that there will be no change in water levels in the Cothill Fen Special Area of Conservation;**
- j) avoidance of locations likely to have an adverse effect on designated heritage assets and archaeological assets which are demonstrably of equivalent significance to a scheduled ancient monument;**
- k) avoidance of, or ability to suitably mitigate, potential significant adverse impacts on:**
 - i. locally designated areas of nature conservation and geological interest;**
 - ii. local landscape character;**
 - iii. water quality, water quantity, flood risk and groundwater flow, in accordance with policies C3 and C4;**
 - iv. agricultural land and soil resources;**
 - v. local transport network;**
 - vi. land uses sensitive to nuisance (schools & hospitals);**
 - vii. residential amenity & human health; and**
 - viii. character and setting of local settlements;**
- l) potential cumulative impact of successive and/or simultaneous mineral development, including with non-mineral development, on local communities;**

m) ability to meet other objectives and policy expectations of the Plan.

Prior to the adoption of the Minerals & Waste Local Plan: Part 2 – Site Allocations Document, the criteria in this policy will be taken into consideration in the determination of planning applications for aggregate minerals working.

4.41 Policy M5: Working of Aggregate Minerals

Permission will be granted for the working of aggregate minerals within the locations identified further to policy M4 provided that the requirements of polices C1 – C11 are met.

Permission will not be granted for the working of aggregate minerals outside the locations identified further to policy M4 unless the requirement to maintain a steady supply of aggregate in accordance with policy M2 cannot be met from within those areas. The criteria in policy M4 will be taken into consideration in the determination of planning applications for aggregate minerals working in locations not identified under policy M4.

Permission will exceptionally be granted for the working of aggregate minerals outside the locations identified further to policy M4 where extraction of the mineral is required prior to a planned development in order to prevent the mineral resource being sterilised provided that the requirements of polices C1 – C11 are met.

Permission for working of ironstone for aggregate use will not be permitted except in exchange for revocation without compensation of an equivalent existing permission in Oxfordshire containing workable resources and where there would be an overall environmental benefit.

Imported aggregates and rail depots

4.42 Aggregates are imported through three rail depots at Banbury, Sutton Courtenay and Kidlington²⁴. Planning permission has been granted for a rail depot at Shipton on Cherwell. There is a depot at Hinksey Sidings, Oxford which has been used solely by the rail industry to bring in rail ballast for internal use, but this is not currently in use for the transshipment of rail ballast²⁵.

4.43 There will be an ongoing need for importation of aggregate materials that cannot be quarried locally, particularly hard rock for roadstone. Rail and water

²⁴ The existing Kidlington rail depot is to be relocated to a nearby permitted site to enable the construction of a new station at Water Eaton.

²⁵ The rail depot at Hinksey Sidings, Oxford is solely for the supply of ballast to Network Rail and is not therefore considered part of the County's aggregates supply.

transport should take priority over road, particularly for longer distance movements. Existing and permitted depots should therefore be safeguarded; and additional depots should be permitted at suitable locations should the opportunity arise.

4.44 District Councils are asked to consult the County Council on all planning applications for non-mineral related development that affect a safeguarded aggregate rail depot site as set out at paragraph XX below, under safeguarding mineral infrastructure.

4.45 **Policy M6: Aggregates rail depots**

The following rail depot sites are safeguarded for the importation of aggregate into Oxfordshire:

- **Hennef Way, Banbury (existing facility);**
- **Kidlington (permitted replacement facility);**
- **Appleford Sidings, Sutton Courtenay (existing facility);**
- **Shipton on Cherwell Quarry (permitted facility);**
- **and any other aggregate rail depot sites which are permitted, as identified in the Annual Monitoring Report.**

Permission will be granted for new aggregate rail depots at locations with suitable access to an advisory lorry route and that meet the criteria in polices C1 – C11.

Safeguarded rail depot sites will be identified in the Minerals & Waste Local Plan: Part 2 – Site Allocations Document.

Proposals for development that would result in the direct loss of a safeguarded aggregate rail depot site will not be permitted unless a suitable alternative site can be provided.

Development sensitive to disturbance from, and which would prejudice the operation or establishment of an aggregate rail depot at a safeguarded site should not take place unless:

- **a suitable alternative site can be provided; or**
- **it can be demonstrated that the rail depot is no longer needed for Oxfordshire's aggregate supply requirements.**

Non-aggregate mineral working

Building Stone

4.46 The Council recognises the importance of small scale building, roofing and walling stone extraction in rural areas for the conservation and restoration of historic buildings and to maintain local distinctiveness in new development. Limestone is particularly important for maintaining the built environment in the Cotswolds Area of Outstanding Natural Beauty.

- 4.47 Large quantities of waste stone can be generated during the extraction of building stone, particularly in the initial phases of working. Waste stone may have a potential use as aggregate; the use or disposal of it is an issue which needs to be considered on a case by case basis through a planning application.

Clay

- 4.48 Clay has been worked at certain sand and gravel quarries to produce material for lining landfill sites and for use in restoration and landscaping. In accordance with policy M4, within the Eynsham / Cassington / Yarnton area working of clay associated with sand and gravel extraction should only be permitted if it can be demonstrated that it would not lead to changes in water levels in the Oxford Meadows Special Area of Conservation.

Chalk

- 4.49 Chalk has been extracted in Oxfordshire in the past, in particular for industrial and agricultural uses. There is no current indication of demand for a resumption of chalk working during the plan period but, in the event there is, this could be accommodated in suitable locations on a small scale basis. Most of Oxfordshire's chalk resource lies within the North Wessex Downs and Chilterns Areas of Outstanding Natural Beauty, which would need to be given appropriate protection in accordance with policy C8. In line with policy M4, it is unlikely that working of chalk for aggregate use would be acceptable within these areas.

Fuller's earth

- 4.50 Fuller's earth is a nationally scarce industrial mineral which occurs in the Baulking – Fernham area in the south west of the county. It was previously worked but, whilst there are remaining resources that are potentially workable, there has been no market for this mineral for a number of years and there is no indication that this position is likely to change during the plan period.

Oil and gas

- 4.51 There is currently no exploration for or production of oil or gas in Oxfordshire. Exploratory work in the past did not find any oil or gas fields, although gas was encountered in some of the holes drilled. In addition to requirements for planning permission, oil and gas exploration and production can only be undertaken within areas that have been licensed by the government. There are currently no licence areas covering Oxfordshire. In July 2014 the government invited applications for onshore oil and gas licences under the 14th Landward Licensing Round. Under this licensing round, large parts of the UK are potentially available for licence, including some parts of Oxfordshire, as identified in a strategic environmental assessment that was published by the government in December 2013. It is not yet known whether licences have been applied for or will be awarded covering any parts of the county.

4.52 In the event that licences are awarded covering parts of Oxfordshire, it is possible that proposals for exploratory drilling would come forward, which could be followed by proposals for production in the event that significant oil or gas reserves were found. Proposals could be for drilling either by conventional means or by hydraulic fracturing (fracking). The section on oil and gas in policy M6 will provide a policy basis consistent with the National Planning Policy Framework and national guidance on oil and gas against which any such planning applications can be considered.

4.53 **Policy M7: Non- aggregate mineral working**

Building Stone

Permission will be granted for extensions to existing quarries and new quarries for the extraction of traditional local building stone where a need for the material has been demonstrated and the proposed quarrying is small-scale.

Clay

The extraction of clay will be permitted in conjunction with the working of sharp sand and gravel from the locations in policy M3 A. The extraction of clay will not be permitted in other locations unless it can be demonstrated that there is a local need for clay which:

- cannot be met by extraction in conjunction with sharp sand and gravel working; or
- would be met with less overall environmental impact than by extraction in conjunction with sharp sand and gravel working.

Chalk

The extraction of chalk for agricultural or industrial use in Oxfordshire will be permitted provided the proposed quarrying is small-scale. Extraction of chalk for wider purposes, including as an aggregate or for large scale engineering will not be permitted unless the proposal is demonstrated to be the most sustainable of all alternative options.

Fullers Earth

The working of fullers earth will be permitted provided that a national need for the mineral has been demonstrated.

Oil and Gas (conventional and unconventional)

Proposals for the exploration and appraisal of oil or gas will be permitted provided arrangements are made for the timely and suitable restoration and after-care of the site, whether or not the exploration or appraisal operation is successful.

The commercial production of oil and gas will be supported in the following circumstances:

- A full appraisal programme for the oil or gas field has been successfully completed;
- The proposed location is the most suitable, taking into account environmental, geological and technical factors;

- **For major development in an Area of Outstanding Natural Beauty it is clearly demonstrated that the proposal is in the public interest, including in terms of national considerations.**

All proposals for the working of non-aggregate minerals, including exploration and appraisal, shall meet the criteria in policies C1 – C11.

Safeguarding mineral resources

- 4.54 Mineral deposits are finite resources and can only be worked where they exist in the ground. It is Government policy that important mineral resources should be safeguarded for the long term. Mineral planning authorities are required to define Mineral Safeguarding Areas in minerals plans so that resources are not sterilised by non-mineral development, although there is no presumption that the resources will be worked. The County Council will have regard to the British Geological Survey good practice advice on mineral safeguarding.
- 4.55 Sharp sand and gravel, soft sand and limestone are currently and will continue to be worked in Oxfordshire. Fuller's earth is no longer worked but is a nationally scarce mineral. It is therefore proposed to safeguard what are currently considered to be the economically viable areas of these resources. Whilst ironstone is also currently worked, there is no need for this mineral to be safeguarded as an aggregate resource in view of the extensive resources of better quality limestone in the county. Limestone and ironstone are not safeguarded as potential resources of building stone in view of the variability of these minerals and the lack of clear information on deposits and locations where safeguarding is justified.
- 4.56 Mineral safeguarding areas will be defined on maps in the Site Allocations document. The extent of safeguarded areas can be reviewed if economic or other considerations change.
- 4.57 District councils in Oxfordshire are responsible for planning development (other than minerals and waste) in their areas. The County Council, as Mineral Planning Authority, must also identify mineral consultation areas and specify the types of application for non-mineral related development on which the relevant district council must consult the County Council within these areas. The mineral consultation areas will be based on the minerals safeguarding areas and will include land within 250m of the boundary of a Minerals Safeguarding Area.
- 4.58 **Policy M8: Safeguarding mineral resources**

Mineral Safeguarding Areas will be defined in the Minerals and Waste Local Plan: Part 2 – Site Allocations Document, covering the following mineral resources:

- **Sharp sand and gravel in the main river valleys, including the strategic resource areas identified in policy M3, and other areas of proven resource;**

- **Soft sand within the strategic resource areas identified in policy M3;**
- **Limestone within the strategic resource areas identified in policy M3;**
- **Fuller's earth in the Baulking – Fernham area.**

Mineral resources in these areas are safeguarded for possible future use. Development that would prevent or otherwise hinder the possible future working of the mineral will not be permitted unless it can be shown that:

- **The site has been allocated for development in an adopted local plan or neighbourhood plan; or**
- **The need for the development outweighs the economic and sustainability considerations relating to the mineral resource; or**
- **The mineral will be extracted prior to the development taking place.**

Mineral Consultation Areas, based on the Mineral Safeguarding Areas, will be defined, identified and updated when necessary in the Minerals and Waste Annual Monitoring Reports.

Safeguarding Mineral Infrastructure

- 4.59 It is also important that the infrastructure that supports the supply of minerals is safeguarded. Safeguarding of minerals infrastructure is a requirement of the NPPF (paragraph 143) and includes sites for and facilities associated with the transport of minerals by rail or water; sites for the manufacture of aggregate mineral products; and sites for the handling, processing and distribution of recycled and secondary aggregate material. The National Planning Practice Guidance gives the reasons for such safeguarding as being to: ensure that sites for these purposes are available should they be needed; and
 - prevent sensitive or inappropriate development that would conflict with the use of sites identified for these purposes.
- 4.60 Mineral infrastructure sites may be of a relatively low land value and could be vulnerable to pressures for redevelopment for other uses. However, they could be difficult or impossible to replace if lost to other uses. The continued operation of mineral infrastructure could also be prejudiced by other, non-compatible development (such as housing) being located on nearby land.
- 4.61 In line with this national policy and guidance, the Council considers that the following infrastructure is important to support the supply of minerals in Oxfordshire and should be safeguarded:
- existing and permitted quarries (with remaining permitted reserves) and the processing and other ancillary plant and facilities associated with them;

- aggregate rail depots and wharves, rail links to quarries and other bulk mineral transport facilities, and the processing and other ancillary plant and facilities associated with them;
 - industrial manufacturing plant using minerals, such as roadstone coating, concrete batching and concrete product plants;
 - processing and other plant and facilities for the production or supply of recycled and/or secondary aggregate materials; and
 - any sites proposed through the Minerals and Waste Local Plan for any of these uses.
- 4.62 The National Planning Practice Guidance advises that, except where they are located at quarries, aggregate wharves or rail terminals, safeguarding of facilities for the storage, handling and transport of minerals in local plans will rest largely with the district planning authority. Policy MX therefore relates only to safeguarding of sites and infrastructure for which the County Council is the planning authority.
- 4.63 District Councils are asked to consult the County Council on all planning applications for non-mineral related development that affect a safeguarded site. This will allow the County Council as the mineral planning authority to consider any mineral planning issues raised. The District Councils will also be asked to consult the County Council on proposals for development that may be incompatible with and/or prejudicial to the future of a safeguarded facility. The County Council will provide further guidance on the types of development on which consultation should take place and maps of the safeguarded sites and a consultation zone around each site²⁶.

4.64 Policy M9: Safeguarding mineral infrastructure

Existing and permitted infrastructure that supports the supply of minerals in Oxfordshire is safeguarded against development that would unnecessarily prevent the operation of the infrastructure or would prejudice or jeopardise its continued use by creating incompatible land uses nearby.

Safeguarded sites will be identified in the Minerals and Waste Site Allocations Document.

Proposals for development that would prevent or prejudice the use of a site safeguarded for mineral infrastructure will not normally be permitted unless:

- **the merits of the development clearly outweigh the need for safeguarding; or**
- **it can be demonstrated that the infrastructure is no longer needed; or**
- **the capacity of the infrastructure can be appropriately and sustainably relocated or provided elsewhere.**

²⁶ Consultation zones are likely to be in the order of 250 metres around the safeguarded site boundary.

Restoration and after-use of mineral workings

- 4.65 Once mineral workings have fulfilled their primary purpose of providing minerals, the restoration of these sites can have a major environmental benefit. Mineral working can provide opportunities for environmental improvements such as new or increased habitat, improved public access and in relation to historic environment (e.g. provision of public access to and information on archaeological discoveries), which benefit the local community and may offset the impact of working²⁷.
- 4.66 There is considerable potential both for linking existing areas of habitat and creating new areas of habitat for wildlife and, in doing so, helping to meet national and local habitat creation targets. Whilst new habitat has been delivered in Oxfordshire as a result of the restoration of mineral workings, opportunities have been missed in the past. With a suitable policy framework, and careful planning at an early stage, the level of high-quality habitat delivered through mineral working can be increased, creating valuable places for both wildlife and people.
- 4.67 Proposals for restoration, aftercare and after-use should be submitted with applications for mineral working, should include provision for long-term maintenance of the after-use and enhancement of the environment and should accord with District Local Plan policies, including environmental protection, countryside and access enhancement and noise management. Proposals for restoration should demonstrate that local communities have been consulted on options for after use.
- 4.68 The restoration of each mineral working site should be determined on its individual merits and circumstances. Restoration to the original land-use may not be the best option and is not always possible. Restoration to an alternative use (e.g. creation of priority habitat) may be equally acceptable or preferable. Generally, nature conservation, agriculture, woodland and recreation are acceptable restoration after-uses for mineral workings, subject to the particular local circumstances such as the existing and neighbouring habitats, biodiversity and landscape. Each restoration scheme should have a coherent land use strategy with a particular primary end use or end uses. Measures to conserve and enhance biodiversity should always be incorporated in restoration schemes, such that restoration schemes deliver a net gain in biodiversity.
- 4.69 A biodiversity-led restoration strategy should include:
- a) treating biodiversity as the primary consideration in the restoration of mineral sites;
 - b) giving preference to allocating and / or permitting mineral development in areas where it will have the greatest potential to maximise biodiversity benefits (i.e. within Conservation Target Areas);

²⁷ Within flood plain areas, restored sand and gravel workings can reduce the risk of flooding by providing for increased flood water storage capacity and improved conveyance of flood water.

- c) creation of priority habitat at a landscape scale, either on individual sites or on clusters of sites in close proximity;
- d) integration of habitat creation on restored mineral sites into the existing ecological network in the surrounding area; and
- e) targets for the area of priority habitat that will be created on sites identified for mineral working in the Site Allocations document.

4.70 Restoration schemes should assist or achieve priority habitat or species targets and objectives, including targets and objectives relating to the Oxfordshire Biodiversity Action Plan, Conservation Target Areas, the Upper Thames River Valleys Futurescape and Living Landscapes projects, any Nature Improvement Areas, and relevant National Character Areas. Where restoration could protect and/or improve geodiversity and improve educational opportunities this should be incorporated into the proposed restoration scheme, such as by providing for important geological faces to be left exposed and enabling access to the faces. Where a mineral working site has the potential to provide for local amenity uses, including appropriate sport and recreational uses, these uses should be incorporated into the restoration scheme. Within the floodplain, restoration of mineral workings should where possible include provision for increased flood storage capacity to reduce the risk of flooding elsewhere.

4.71 Mineral working involves disturbance and change to the landscape. Restoration should take place as soon as possible after working to minimise the impact of open quarry workings. In larger workings restoration can commence before working has ended and restoration should be planned in a timely and phased manner. There is increasing difficulty in securing material for restoration, and policy W7 seeks to ensure that inert waste is prioritised for use in mineral restoration schemes. The County Council will work with the District Councils to secure this, but the shortage of suitable material may result in restoration that relies on infilling with inert waste taking some years to complete.

4.72 Because of a general shortage of inert waste material for infilling, sand and gravel workings in the river valleys are often restored to wetlands. In the flood plain, when suitable material is available, consideration should always be given to filling below original land levels to improve flood storage capacity. This should be done on a site specific basis with an assessment of the impact on groundwater aquifers. The Environment Agency should be consulted at an early stage to establish the extent to which waste material can be used to restore sand and gravel workings in the flood plain²⁸.

4.73 The risk to aircraft from bird strike is also an important consideration and this may restrict the location of some workings and/or affect the design of restoration schemes, as most of Oxfordshire's sand and gravel resources (and some sand and limestone resources) lie within 13 kilometres of a military

²⁸ The Topic Paper on Restoration explains in more detail the circumstances in which waste can be used to help restore workings in the flood plain.

airfield or civilian aerodrome²⁹. Within these areas, proposals for working, restoration and after-use will need to be drawn up and designed in consultation with the MOD and/or Oxford Airport; and consultation with relevant biodiversity organisations may also be helpful. A bird hazard management plan may need to be prepared as part of a planning application. The careful use of inert fill and other engineering techniques can help to reduce the area of open water created and increase the area of wetland and species-rich meadow habitat. These latter habitats offer a lower risk of bird strike and greater value for biodiversity than open water.

- 4.74 It is important that restoration is achieved to a high standard and this will generally be required through conditions attached to planning permissions. Planning conditions can provide for aftercare provisions to be put in place for a period of up to five years following restoration, to successfully establish an after-use: longer term management may be secured through legal agreement and will be sought where necessary, for example many habitats and species require a period longer than 5 years to become successfully established. (In Oxfordshire the standard long-term management period is 20 years, in addition to the 5 years of statutory aftercare.) Such agreements may also be sought to secure a desired long term management strategy, particularly where public access is also anticipated. Financial guarantees to secure satisfactory restoration may be justified, but only in exceptional circumstances³⁰.
- 4.75 Policy M8 sets out the general approach to restoration of mineral workings. Core policies C2 to C11 are also relevant to considering the type of after-use that may be appropriate and the content of a restoration scheme.
- 4.76 **Policy M10: Restoration of mineral workings**

Mineral workings shall be restored to a high standard and in a timely and phased manner to an after-use that is appropriate to the location and delivers a net gain in biodiversity, taking into account:

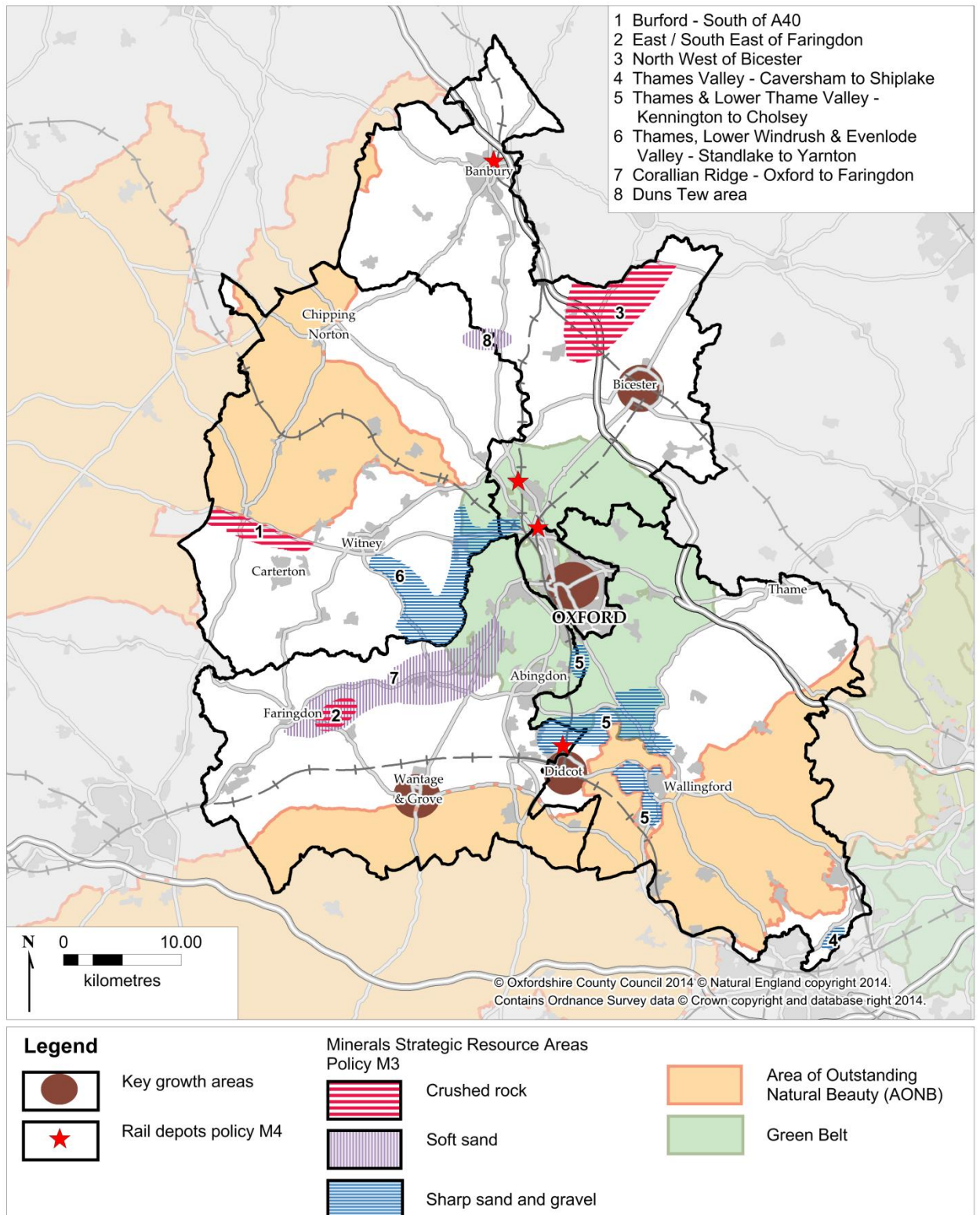
- **the characteristics of the site prior to mineral working;**
- **the character of the surrounding landscape;**
- **the amenity of local communities including opportunities to provide for local amenity uses;**
- **the capacity of the local transport network;**
- **flood risk and opportunities for increased flood storage capacity;**
- **bird strike risk and aviation safety;**
- **the conservation and enhancement of biodiversity appropriate to the local area, supporting the establishment of a coherent and resilient ecological network through the landscape-scale creation of priority habitat;**
- **opportunities to protect and/or improve geodiversity; and**
- **opportunities for enhancement of historic environment.**

²⁹ MoD and/or Oxford Airport should be consulted and involved in the design of restoration schemes for mineral workings within 13 km of specified airfields or the need for a bird hazard management plan. Relevant biodiversity organisations should also be involved as appropriate.

³⁰ National Planning Policy Guidance on Minerals advises that financial guarantees can be sought for a novel or untested form of restoration or where there is reliable evidence of a potential technical or financial failure.

Planning permission will not be granted for mineral working unless satisfactory proposals have been made for the restoration, aftercare and after-use of the site, including where necessary the means of securing them in the longer term.

Figure 9: Minerals Key Diagram



5. WASTE PLANNING STRATEGY

- 5.1 This section sets out the County Council's waste planning strategy and policies for the period to 2031. Provision must be made for the facilities that will be needed for the management of waste in the county during that period. The Council intends that this should be done in a way that promotes and enables the movement of waste up the waste management hierarchy, away from landfill and towards increased re-use, recycling, composting and recovery of resources from waste.
- 5.2 How many and what sort of waste facilities will be needed in Oxfordshire over this period cannot be predicted with absolute accuracy. The strategy can only be based on the best information available today. A separate Waste Needs Assessment³¹ sets out estimates of the quantities of waste that will need to be managed in Oxfordshire; the waste management capacity currently available; and the additional capacity that may be required up to 2031. These will be monitored regularly and updated in the Council's Minerals and Waste Annual Monitoring Reports.
- 5.3 The strategy includes a spatial strategy for the delivery of the new waste infrastructure that is expected to be needed, which is illustrated on the key diagram at the end of this section, and policies which provide the context for considering future proposals for waste development. The strategy provides a framework for the identification of suitable sites in a subsequent Site Allocations document and for the submission of planning applications by operators for new waste management facilities.

Waste to be managed

- 5.4 Attitudes and behaviour towards waste continue to change³², but the amount of waste produced in Oxfordshire is still expected to grow as population increases and the economy develops, particularly in the main urban areas of Oxford, Banbury, Bicester, Witney, Abingdon, Didcot, and Wantage and Grove. Several types of waste need to be planned for in Oxfordshire³³ and these are shown in Table 3. The Waste Needs Assessment sets out in greater detail how much waste is currently managed, how these amounts have been arrived at and how much may need to be managed in future.

³¹ OCC Waste Needs Assessment 2014 and review/update by consultants BPP 2014

³² The amount of waste produced per person has been reducing along with the amount of waste disposed in landfill.

³³ National Planning Policy Guidance for Waste (October 2014)

Table 3: Assessment of Oxfordshire waste managed in 2012 (tonnes)

MSW	C&I	CDE	Hazardous	Agricultural	Waste Water	LLW
300,000	710,000	1,005,000	50,000	900,000	20,000	not known

MSW – Municipal Solid Waste, now Local Authority Collected Waste (LACW)

C&I – Commercial and Industrial Waste

CDE – Construction, Demolition and Excavation Waste

LLW – Low Level Radioactive Waste

- 5.5 The principal waste streams are local authority collected waste, commercial and industrial waste and construction, demolition and excavation waste. The amounts that may need to be managed are set out in policy W1: the other wastes are referred to in policy WX, W8, W9 and W10 respectively. Agricultural waste makes up almost a third of the waste referred to, but most is managed on site (in individual farming units) and is often outside normal planning control.
- 5.6 Waste forecasts are liable to change over time, as new information becomes available. The forecasts set out in policy W1 will be reviewed each year in the Minerals and Waste Annual Monitoring Report. The forecasts are important as they provide the basis for assessing how much waste management capacity is required in Oxfordshire (policy W4).
- 5.7 The forecast for local authority collected waste assumes that from 2012 there will be no further increase in the amount of waste produced by each household. The growth that is forecast reflects the waste that will arise from the expected increase in population, taking into account of both planned and assessed housing need³⁴. Estimates of municipal waste arisings will be kept under review by the County Council as part of its work in helping to implement the Oxfordshire Joint Municipal Waste Management Strategy.
- 5.8 Commercial and industrial waste forecasts are informed by a number of scenarios³⁵ that take account of economic growth forecasts for Oxfordshire and Defra national forecasts. An upper growth rate scenario has been used, based on a compound annual growth in waste arisings of 0.7% to 2021 and 0.2% thereafter, resulting in with an overall increase in arisings of some 9% between 2012 and 2030.
- 5.9 Future construction, demolition and excavation waste will be largely governed by the rate of new building work. Forecasts also take account of policy, legislation and standards – all of which are pushing the sector to more

³⁴ March 2014: G L Hearn Oxfordshire Strategic Housing Market Assessment

³⁵ Feb 2014: BPP Consulting Baseline, Forecasts & Targets for Commercial & Industrial Waste Generated in Oxfordshire

sustainable waste management methods . A high growth rate scenario has been used and assumes that growth in waste arisings will be partly checked by pressures to reduce waste. Steady growth in this waste stream is assumed each year to 2021 based on an assumption that construction increases as the economy picks up and house building in particular increases in response to the demands recently assessed³⁶. This results in an overall increase of 50% in waste to be managed with waste levels stabilising thereafter.

- 5.10 Waste Planning Authorities are advised to develop a framework in which communities take more responsibility for their own waste and waste is disposed in one of the nearest available locations³⁷. This points to counties being net self-sufficient in managing the quantities of waste they produce, with cross boundary movements of waste generally being in balance. For each of the principal waste streams policy W1 seeks to provide for waste facilities that are able to manage waste that is equivalent to that generated in Oxfordshire.
- 5.11 For some time Oxfordshire has been receiving waste for disposal from other areas (see table 7 – paragraph 5.55). This reflects the continuing availability of landfill space in Oxfordshire³⁸, the relative proximity of a number of urban centres (e.g. Reading, Wokingham, Bracknell and Newbury) and a growing shortage of landfill capacity in other areas – in particular Berkshire and north Hampshire. London also has a shortage of landfill capacity and exports waste for disposal to other areas, including Oxfordshire (much of this waste arrives by rail). The amounts of waste that have been disposed are over and above that which might be expected to arise from local cross boundary movements. The amount of waste from London may be reducing³⁹, but there is still a need to plan for imported waste in excess of local cross-boundary movement. This is covered in policy W7 (Landfill) and policy W4 (Waste management capacity requirements).

5.12 **Policy W1: Management of Oxfordshire waste**

Provision will be made for waste management facilities that allow Oxfordshire to be net self-sufficient in the management of its principal waste streams – local authority collected waste (formerly municipal waste), commercial and industrial waste, and construction, demolition and excavation waste) over the period to 2031.

The amounts of waste that need to be managed (below) will be updated as necessary in future Oxfordshire Minerals and Waste Annual Monitoring Reports.

³⁶ See footnote 4

³⁷ The National Planning Policy for Waste (Oct 2014) also expects that mixed municipal waste is recovered in line with the proximity principle.

³⁸ All of Oxfordshire's landfills are permitted to take waste from outside the county, but in some cases there are restrictions on the areas from which waste can be imported.

³⁹ Waste from West London that was being disposed at Sutton Courtenay is now being disposed in South Gloucestershire. The London Plan also provides for London Boroughs to be self-sufficient by 2030.

Estimated tonnages for Oxfordshire principal waste streams (million tonnes)

	2012	2016	2021	2026	2031
LACW	0.300	0.320	0.343	0.360	0.376
C&I	0.710	0.736	0.758	0.766	0.773
CDE	1.005	1.220	1.483	1.483	1.483

Provision for agricultural waste, hazardous waste, radioactive waste and waste water/sewage sludge respectively will be made in accordance with policies WX, W8, W9 and W10.

Diversion of waste from landfill

- 5.13 The way that waste is dealt with in Oxfordshire has changed markedly in recent years. From a past position of most waste being disposed by landfill, half is now believed to be recycled or recovered for other use. The recycling and recovery of municipal waste is leading this trend (58% in 2012/13)⁴⁰ and further improvement can be expected as a result of investment in new waste facilities.
- 5.14 But this strategy still seeks an improvement, as quickly as is practical, in the proportion of waste that is recycled, composted and recovered to minimise the amounts of waste disposed in landfill. Policy W3 therefore sets targets for the way in which the principal waste streams should be managed: this also allows assessment to be made of future waste management capacity requirements.
- 5.15 The targets in this strategy have evolved from waste management targets in the former South East Plan but have been modified and updated to reflect local circumstances in Oxfordshire, including the objectives and policies of the Oxfordshire Joint Municipal Waste Management Strategy 2013 which also aims to move waste management further up the waste hierarchy. For local authority collected waste and commercial and industrial waste the targets in policy W3 reflect:
- higher recycling and composting targets that are considered achievable in Oxfordshire; and
 - maximum diversion from landfill.
- 5.16 Oxfordshire's municipal waste strategy aims for recycling of at least 65% of household waste by 2020 and at least 70% by 2025. Other areas are setting recycling targets at around 70% for commercial and industrial waste, and there seems no reason why recycling targets in Oxfordshire for this waste stream should not match those being set for municipal waste.

⁴⁰ Recycling rates vary between District Council (Waste Collection Authority) areas and can be checked on each authority's website.

- 5.17 For municipal waste that is not recycled or composted, the County Council as Waste Disposal Authority has entered a contract for its treatment in an energy recovery facility that is now being built at Ardley (near Bicester). This will become fully operational in late 2014 and soon after no more than 5% of the County's municipal waste need be sent direct to landfill. The facility will also be capable of treating most, if not all, of Oxfordshire's commercial and industrial waste that is not recycled or composted. So there is no reason why later in the plan period any more than 5% of this waste stream need be sent direct to landfill⁴¹. To avoid an excess of residual waste treatment capacity impinging on opportunities to meet recycling and composting targets, policy W3 requires planning applications to demonstrate that there is no opportunity for waste being managed higher up the waste hierarchy than is being proposed.
- 5.18 Construction, demolition and excavation waste is subject to a target imposed by the European Waste Framework Directive. This requires that 70% of construction and demolition waste be recycled. But excavation waste, amounting to about half of the waste stream, is not subject to this target and most is used (disposed or recovered) in quarry restoration or associated engineering work. Most demolition waste comprises hard material and the vast majority is already processed and re-used as recycled aggregate: this type of waste accounts for about a third of the inert wastes produced in Oxfordshire. Construction waste is more varied in content: little more than a third is currently recycled, and there may be some scope to improve on this.
- 5.19 Recycling targets for construction, demolition and excavation waste need to reflect the varied nature of this waste stream. There is unlikely to be significant opportunity to improve on present performance (about 52%). The former South East Plan set a recycling target of 60% (for construction, demolition *and* excavation waste) and this remains appropriate. Most of the waste not recycled will still be put to good use to restore quarries and as engineering and cover material at non-hazardous landfills.

5.18 Policy W3: Diversion of waste from landfill

Provision will be made for capacity to manage the principal waste streams in a way that provides for the maximum diversion of waste from landfill.

Oxfordshire waste management targets 2010 – 2030

Waste Management / Waste Type	Target Year				
	2012	2016	2021	2026	2031
Municipal waste:					
Composting & food waste treatment	25%	29%	32%	35%	35%
Dry Recycling	33%	33%	33%	35%	35%

⁴¹ This does not include hazardous residues from waste treatment processes (policy W8)

Treatment of residual waste	0%	30%	30%	25%	25%
Landfill	42%	8%	5%	5%	5%
Total	100%	100%	100%	100%	100%
Commercial and industrial waste:					
Recycling, composting & food waste treatment	50%	60%	65%	70%	70%
Treatment of residual waste	0%	15%	25%	25%	25%
Landfill	50%	25%	10%	5%	5%
Total	100%	100%	100%	100%	100%
Construction, demolition and excavation waste:					
Recycling	52%	55%	60%	60%	60%
Landfill/Restoration*	48%	45%	40%	40%	40%
Total	100%	100%	100%	100%	100%

* includes waste disposed as part of a recovery operation
Targets for 2012 approximate to actual performance for that year

Proposals for the management of all types of waste should demonstrate that the waste cannot reasonably be managed through a process that is higher up the waste hierarchy than that proposed.

Provision of additional waste management capacity

- 5.19 Estimates of the amount of waste to be managed during the plan period are set out below. These use the forecast totals from policy W1 and assume that the targets set by policy W3 are met. The tonnages provide the basis for assessing the capacity required to manage the principal waste streams.
- 5.20 There is a case for applying a contingency to the estimates for commercial and industrial waste and for construction, demolition and excavation waste, as the baselines themselves can only be estimated⁴². The assessed baselines for 2012 compare favourably with those of other Waste Planning Authorities⁴³ so a contingency, by way of uplift, has not been added. The estimates will be kept under review and updated in future Minerals and Waste Annual Monitoring Reports.

⁴² Data for local authority collected waste is far more reliable.

⁴³ The Waste Needs Assessment provides more detail

Table 5: Oxfordshire: estimated waste to be managed 2012 – 2031
(tonnes per annum)

Waste Management / Waste Type	Target Year				
	2012	2016	2021	2026	2031
Municipal waste:					
Composting & food waste treatment	74,900	92,800	109,700	126,100	131,500
Dry Recycling	98,800	105,500	113,200	126,100	131,500
Treatment of residual waste	0	96,000	102,900	90,000	93,900
Landfill	125,900	25,600	17,100	18,000	18,700
Total	299,600	319,900	342,900	360,200	375,600
Commercial & industrial waste:					
Recycling, composting & food waste treatment	355,000	441,400	492,700	535,800	541,100
Treatment of residual waste	0	110,400	189,500	191,400	193,300
Landfill	355,000	184,000	75,800	38,300	38,600
Total	710,000	735,800	758,000	765,500	773,000
Construction, demolition & excavation waste:					
Recycling	522,600	671,200	889,900	889,900	889,900
Landfill / Restoration	482,400	549,100	593,200	593,200	593,200
Total	1,005,000	1,220,300	1,483,100	1,483,100	1,483,100

Figures rounded to nearest 100 tonnes

Estimates for 2016 – 2031 for commercial and industrial waste and for construction, demolition and excavation waste include a 10% contingency (see paragraph xxx).

Landfill totals do not include hazardous waste arising from residual waste treatment.

- 5.21 Table 6 shows where waste management capacity is either adequate or inadequate to meet the needs identified. Appendix XX provides details on the capacity provided by existing waste management facilities. Capacity is adequate to achieve net self-sufficiency in the immediate future, but there is likely to be a shortfall of recycling capacity later in the plan period. This reflects the increase expected in waste arisings taking into account the potential impact of closing facilities that are subject to temporary permission. Potential capacity gaps are shown in amber or red to reflect a more significant shortfall. This does not take account of capacity that is subject to

unimplemented planning permissions and referenced in the Waste Needs Assessment.

Table 6: Oxfordshire – assessment of capacity to manage the principal waste streams (tonnes per annum)

FINAL FIGURES STILL UNDER REVIEW

Facility type	2012	2016	2021	2026	2031
Non-haz recycling	160,100	28,300	164,600	290,200	319,000
Compost / food treatment	95,200	80,500	22,500	700	5,100
Non-haz residual waste treatment	2,100	95,700	10,600	20,700	14,800
Inert recycling	77,400	26,700	329,400	432,900	530,900

Shortfalls are calculated by deducting existing capacity (Appendix XX) from estimated requirement (table 5)

- 5.22 The number of waste facilities that may be required cannot be identified in this plan, but locations suitable for new facilities will be identified in the Site Allocations Development Plan Document. The market will play a key role in determining the number and scale of facilities that are eventually provided. The estimates in table 6 provide the basis for assessing the overall need to be provided and will also be relevant when planning applications are under consideration.
- 5.23 Provision for green waste composting and the treatment of food waste is generally adequate, although some additional capacity might be required later in the plan period. The Ardley energy recovery facility provides capacity to treat 300,000 tonnes of residual non-hazardous waste each year and this is also likely to be adequate to meet Oxfordshire’s equivalent level of need. But it does seem likely that there will be a need to identify additional capacity for transfer and recycling well before the end of the plan period.
- 5.24 Policy W4 generally encourages the provision of facilities for re-use, transfer, recycling, composting and food waste treatment so that Oxfordshire can be net self-sufficient in the management of the principal waste streams. The policy does not seek to preclude the movement of waste into Oxfordshire if managed at such facilities: this recognises that there is an overall need to help move the management of waste up the waste hierarchy. It is also likely that any facility located in Oxfordshire will also benefit the management of the county’s waste.
- 5.25 A more restrictive approach is taken to the provision of facilities for the treatment of residual waste. These facilities are below recycling and composting in the waste hierarchy and a need for capacity over and above

that being provided at Ardley has not been identified⁴⁴. Expensive to develop, these facilities have tended to be large scale and further capacity is likely to draw waste into the County from other areas. This is unlikely to accord with the proximity principle and result in waste travelling longer distances than is otherwise necessary. Such facilities could also compromise the achievement of recycling and composting targets in Oxfordshire. In future for the development of smaller scale residual waste treatment facilities may become more economic, and if designed to serve local areas (and possibly linked to local provision of heat and power) such facilities may be acceptable if they help to divert waste from landfill. Policy W3 would also require a proposal to demonstrate that it did not prejudice the achievement of local recycling and composting targets.

5.26 The following paragraphs summarise the needs of each waste stream:

Municipal waste

5.27 Facilities are already being provided for in accordance with the Joint Municipal Waste Management Strategy 2013. Services provided at Household Waste Recycling Centres are currently under review, and some sites are subject to time limited permissions. Locations for any new facilities will have regard to the policies in this Core Strategy.

5.28 The Ardley energy resource facility will soon be fully operational and will meet all Oxfordshire's requirement for residual municipal waste treatment throughout the plan period. Facilities for the bulking up and transfer of residual municipal waste from the southern and western parts of the County for efficient transportation to Ardley (for which the County Council as waste disposal authority has let a contract) are currently being put in place⁴⁵.

5.29 Existing and planned facilities for handling municipal waste are shown on figure 6. A need to develop major infrastructure to help manage this waste stream seems unlikely during the plan period.

Commercial & industrial waste

5.30 There does appear to be a need for additional recycling facilities for this type of waste. There are unimplemented permissions for significant facilities at Banbury, Finmere and Kidlington (Gosford)⁴⁶. If built, these facilities would

⁴⁴ Planning permission for a smaller residual waste treatment facility at Finmere (north of Bicester) has also been granted; but this has not been taken up.

⁴⁵ The County Council has granted permission for a waste transfer facility at Dix Pit, Stanton Harcourt (in West Oxfordshire); and has resolved to grant permission for a waste transfer facility at Sutton Courtenay (in the southern part of the county).

⁴⁶ The Waste Needs Assessment provides further details: development of the permitted MRF has commenced at Finmere.

reduce the need for additional recycling capacity considerably. They may also influence when and where other facilities are required⁴⁷.

- 5.31 This waste stream includes metal wastes much of which is recycled at dedicated scrap yards. There may be some increase in metal waste arisings, but there appear to be sufficient facilities in place to deal with this. Because these facilities are specialised, the capacity they provide has not been taken into account in assessing future recycling needs for the entire waste stream. If taken into account, existing metal recycling sites would reduce the need identified in table 6 by 50,000 – 100,000 tpa. In some cases these sites may also provide opportunity for additional capacity.

Construction, demolition and excavation waste

- 5.32 Additional recycling facilities need to be provided for screening and treatment of soils and sub-soils and the processing of concrete, bricks etc. to produce hard aggregate. Some of the need identified is also for the recycling of construction waste products and this may be undertaken at facilities that also recycle commercial and industrial waste.
- 5.33 Re-processing activities often take place on open sites requiring space for stockpiling and circulation. Permanent sites therefore need to be carefully chosen, focussing on areas where there are expected to be concentrations of waste arising from significant new development. This requirement will in particular be at Bicester, Didcot, Wantage and Grove, which have limited capacity at present, and also at Banbury. Oxford will accommodate significant new development involving urban renewal, which is a major generator of this type of waste. There are currently no permanent facilities in Oxford, and unless part of a planned development provision should be made for such facilities outside the Green Belt.

5.34 **Policy W4: Waste management capacity requirements**

Sites suitable for facilities for the re-use, transfer and pre-treatment of waste prior to disposal will be identified in the Sites Allocations Development Plan Document to meet identified needs (table 6). Capacity requirements will be monitored and updated in Annual Monitoring Reports to identify the contribution already made by:

- permanent and established waste facilities;
- time-limited facilities;
- facilities subject to an unimplemented planning permission.

When considering proposals for new development account will be taken of the waste needs identified. Facilities for re-use, transfer and pre-treatment of waste prior to disposal (recycling, composting and treatment of food waste) will normally be permitted. Further capacity for

⁴⁷ It is unlikely that the recycling facility permitted at Gosford will now be built, due to the construction of a new railway station at Water Eaton which affects the site.

the treatment of residual local authority collected waste and/or commercial and industrial waste will be permitted only if it can be demonstrated that this would not impede the achievement of other waste management targets and that it will enable waste to be managed at the nearest appropriate installation.

Strategy for waste management facilities for the principal waste streams

- 5.35 Policy W5 sets out the general strategy for where new waste facilities should be located to serve the principal waste streams and is illustrated in the Waste Key Diagram. Specific locations for waste sites will be identified in the Site Allocations Development Plan Document also taking account of policy W6 (Siting of waste management facilities) and the Core Policies. Provision for the other waste streams is made in other waste specific policies.
- 5.36 A key objective of this plan is to manage waste as close as reasonably possible to the source of its arising. The main concentrations of waste arising are in urban centres (figure 15). There is a wide distribution of small towns across the county and a concentration of larger towns nearer the centre. Policy W5 allows for a broad spread of waste facilities across the county with strategic scale facilities located nearer to the centre.
- 5.37 To help achieve an appropriate distribution of waste management capacity across the county, table 7 shows the number of facilities in each district and the waste management capacity they provide.

Table 7: Distribution of waste capacity by District Council area

TO BE COMPLETED

Area	Population	Number of facilities	Waste Management Capacity		
			Tonnes per annum	Tonnes per head	Landfill Cubic metres
Cherwell	142,359				
Oxford	151,739				
South	136,013				
Vale	122,432				
West	106,008				
County	658,551				

- 5.38 Oxford has the largest and greatest concentration of population but is poorly provided with waste infrastructure. This reflects the pressures on land that is suitable for development within the city boundary and which commands high land values: the city is also surrounded by Green Belt. Every opportunity should be taken to add to waste management capacity in Oxford but the

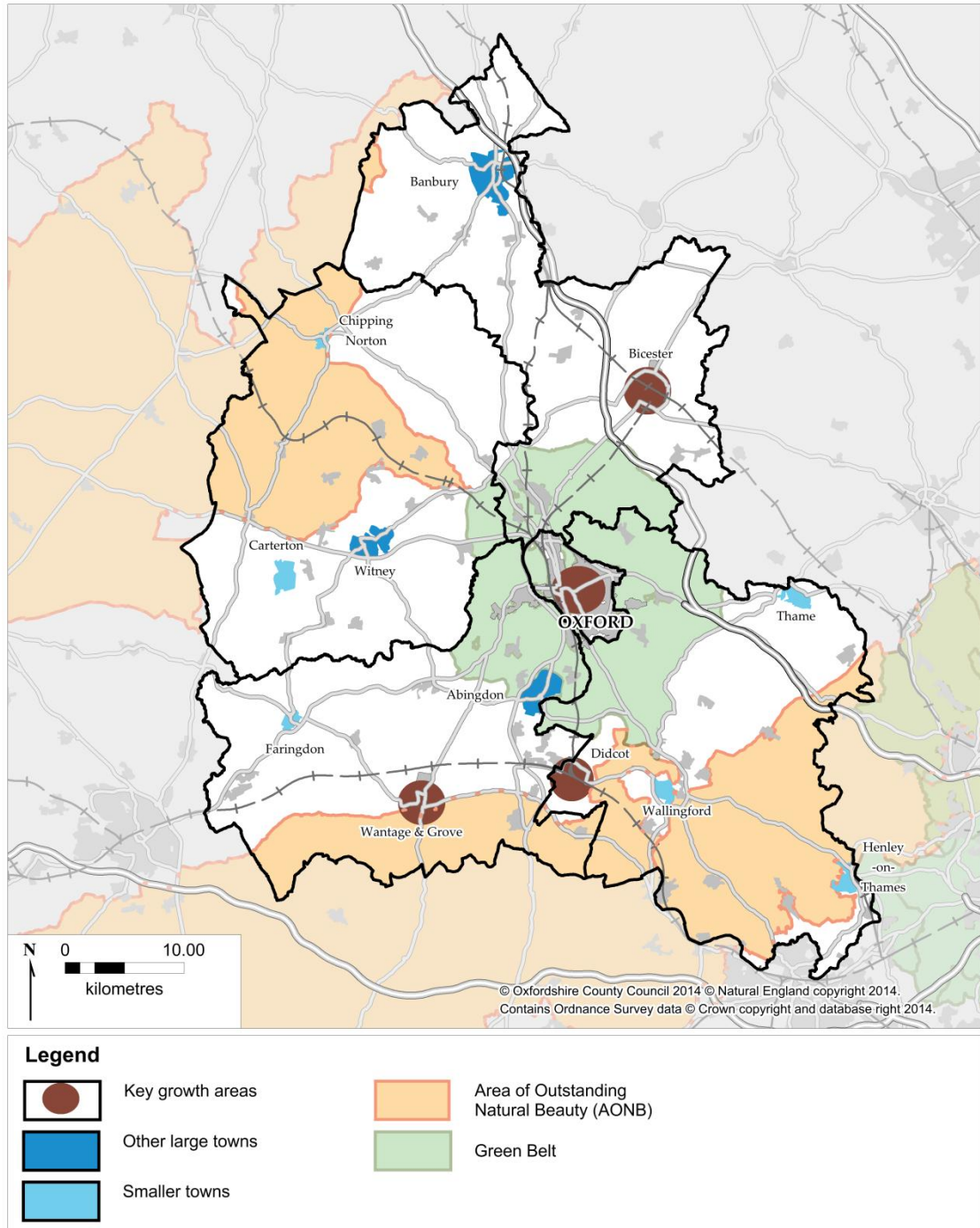
aforementioned pressures suggest that Oxford may be unable to provide the balance of waste management capacity achieved in other districts.

- 5.39 The difficulty of finding locations suitable for waste development in Oxford will itself create pressure for waste development on Green Belt land. In the past, some waste development has been allowed in the Green Belt⁴⁸, recognising a particular need for waste facilities close to Oxford but the government has recently re-iterated that Green Belt land should only be released for waste development in very special circumstances⁴⁹ (see policy W6). Policy W5 allows for facilities that may help to provide for Oxford's needs being located beyond the Green Belt – notwithstanding that this could add to the distance that waste may otherwise need to travel. Didcot and Bicester are growth points close to Oxford and provide opportunity to accommodate facilities serving that growth and the needs of the city.

⁴⁸ A large grain silo at Gosford (near Kidlington) was allowed to be redeveloped for a Materials Recycling Facility but this land is now required for rail expansion.

⁴⁹ Planning Policy Statement 10: Planning for Sustainable Waste Management advised that substantial weight could be given to the wider environmental and economic benefits of sustainable waste management when determining proposals for waste development in the Green Belt.

Figure 15: Areas of the County showing growth areas, other large towns, and smaller towns



- 5.40 Policy W5 aims to provide some flexibility to allow the market to respond to future change. Some types of waste management require larger scale facilities in order to be practicable and a different approach is required to their location, not least because the environmental impact is potentially more significant. Table 8 provides the means to differentiate between larger and smaller scale facilities.

Table 8: Guide to facility size

Scale	Recycling/Treatment/Recovery		
	>50,000 tpa	>20,000 tpa	<20,000 tpa
Strategic	✓	x	x
Non-Strategic	x	✓	x
Local	x	x	✓

Landfill is addressed separately in policy W7

- 5.41 Strategic facilities could serve the whole county, or at least large parts of it. These should be located in the area indicated on the Key Diagram, taking advantage of the relative proximity of Bicester, Oxford, Abingdon and Didcot. These urban areas account for a significant proportion of the county's waste arisings and are linked by A34/M40 for safe and convenient movement of waste without endangering or inconveniencing local communities. This broad area includes locations outside the Green Belt where large-scale growth is expected, offering opportunity for suitable sites to come forward.
- 5.42 Non-strategic waste facilities are likely to serve a reasonably large area, possibly the size of one or two district areas (Figure 15). Facilities of this scale should generally be located in or close to the city and larger towns: in addition to those already referred to, this would include Wantage and Grove; Witney; and Banbury. If possible, facilities should be located within 5 km from the built up area. But the key criterion is good access to the Oxfordshire lorry route network (Core Policy C10), and locations that are further from the towns may be suitable where this is the case. Both strategic and non-strategic facilities are unlikely to be compatible with the aims of planning in the Areas of Outstanding Natural Beauty. Green Belt provisions (already outlined) also apply.
- 5.43 Significant parts of the County are more rural and 'remote' from the advisory lorry routes and main sources of waste. Such areas often contain attractive countryside and small communities. These areas are only suitable for Local Scale waste facilities which are more likely to be capable of being in keeping with their surroundings: this is particularly important in the Areas of Outstanding Natural Beauty where specific considerations apply. For local facilities controls may be imposed, including limits on the volume of waste handled and times of operation, to control excessive growth of operations and ensure that facilities remain compatible with their general location. Sites within and close to the smaller towns (figure 15) are preferred, but other locations may be appropriate if the criteria in policy W6 and the Core Policies are met.

- 5.44 Table 9 sets out the locations where waste management facilities of a particular scale are likely to be acceptable in principal.

Table 9: Locations for waste management facilities

Town	Strategic	Non-strategic	Local
Abingdon, Bicester, Didcot, Oxford	✓	✓	✓
Banbury, Witney, Wantage/Grove	x	✓	✓
Small Towns*	x	x	✓

Carterton, Chipping Norton, Faringdon, Henley-on-Thames, Thame, Wallingford.

- 5.45 There are potential benefits, through operating synergies and reduced transport of waste, in locating temporary recycling facilities at landfill and quarry sites. Because such sites are normally well provided for in terms of infrastructure, they are likely to be suitable for non-strategic or local facilities and, if located in the broad area of search, strategic facilities. This approach is allowed for in policy W6.

5.46 Policy W5: Locations for facilities to manage the principal waste streams

Strategic waste management facilities should be located in a core area based on Bicester, Oxford, Abingdon and Didcot and identified in the key diagram (figure 16). Non-strategic facilities should also be well related to other main sources of waste arising (Witney, Wantage/Grove and Banbury). Elsewhere, and particularly in more remote rural areas, facilities should only be small scale, in keeping with their surroundings.

Proposals for new waste management facilities shall meet the criteria in policies W6 and C1 – C11.

Siting of Waste Management Facilities

- 5.47 Policy W6 identifies the type of land that is likely to be most appropriate for waste management facilities. For facilities managing the principal waste streams, the policy should also be considered in conjunction with policy W5 (Locations for facilities). Core Policies C1-C11 help to determine whether a particular site is suitable in environmental terms. These various policies will be applied in the identification of sites for waste use in the Site Allocations Development Plan Document; and also to help determine planning applications for waste development.

- 5.48 The National Planning Policy Framework⁵⁰ encourages the reuse of previously developed land, and this core principle should be applied when searching for sites suitable for waste management. Most waste management activities are likely to be acceptable on land that is already in use for waste management⁵¹ or identified as suitable for employment (in particular industrial) purposes. If consideration is being given to the continuation of a waste use on land that is already subject to a restoration requirement, the cumulative effect of previous waste activities on the well-being of the local community may be relevant⁵².
- 5.49 Waste facilities should not endanger human health or cause unacceptable harm to the environment. Land associated with waste water treatment plant may provide opportunity for other activities that have potential to generate odour. Redundant farm buildings and their curtilages may also offer opportunity but are more likely to be suitable for smaller scale facilities (see policy W5). Generally speaking, green field sites should be avoided. Proposals for development of a green field site should demonstrate that there is a compelling need for such a facility and that potential harm (in particular landscape impact) can be satisfactorily mitigated.
- 5.50 Finding sites suitable for a permanent waste facility is often difficult. Facilities can often be located at active mineral working and landfill sites, but are likely to be subject to conditions that will require their removal when quarrying or landfill activities are complete. Permanent facilities are less likely to be acceptable at these sites but temporary facilities in quarries and landfills will help to meet the recycling targets set in policy W3.
- 5.51 Parts of the Cotswolds, North Wessex Downs and Chilterns Areas of Outstanding Natural Beauty (AsONB) are situated close to towns where growth is expected and additional waste will be produced. Any new waste facilities that are required should be located in or close to these towns and located in a way that does not adversely affect the character or setting of the AsONB (see also policy C8). Small scale waste management facilities for local needs could be acceptable where the development would not compromise the objectives of their designation⁵³

The Oxford Green Belt

- 5.52 Most proposals for waste management facilities are likely to be inappropriate in the Green Belt. The National Planning Policy Framework requires that substantial weight be given to any harm that is likely to be caused by development proposals in the Green Belt. Development considered harmful to the Green Belt should only be approved if there are very special

⁵⁰ National Planning Policy Framework – paragraph 17

⁵¹ The Town and Country Planning (Use Classes) Order does not include a class for waste management activities: planning permission may be required to change from one type of waste activity to another.

⁵² National Planning Policy For Waste (paragraph 5).

⁵³ In May 2013 an appeal decision in West Berkshire (APP/W0340/A/12/2188549) found that a proposal for a MRF of 25-30,000 tpa capacity would be “out of character with the beauty and tranquillity of the AONB”.

circumstances and where the potential harm to the Green Belt is clearly outweighed by other planning considerations. The National Planning Policy for Waste recognises that some types of waste management facilities have particular locational needs and these may need to be considered.

- 5.53 In the past planning permission has been granted for some waste development in the Green Belt, recognising the difficulty of finding suitable sites in and close to Oxford. Until recently national policy indicated⁵⁴ that when weighing up the impact of developing land in the Green Belt, substantial weight be given to the wider environmental and economic benefits of sustainable waste management but this advice is not repeated in the recent National Planning Policy for Waste.
- 5.54 Unless waste proposals can be considered appropriate in Green Belt terms⁵⁵, evidence must be provided to show that there are very special circumstances for any waste development in the Green Belt. This should include an explanation of why the type of waste facility specified has a particular need to be located in the Green Belt as opposed to a location elsewhere. If very special circumstances are demonstrated, conditions are likely to be imposed to ensure the facility meets the needs that have been identified. These considerations also apply to facilities designed to operate for a fixed period, unless for a relatively short period (perhaps one or two years).
- 5.55 Policy W6 applies to proposals for waste facilities that manage all types of waste. Pressure for the development of develop land in the Green Belt for larger scale facilities should be avoided as policy W5 allows for facilities that may be designed to help serve the needs of Oxford to be located in the Didcot and Bicester areas (policy W5).
- 5.56 **Policy W6: Siting of waste management facilities**

Priority will be given to siting waste management facilities on land that:

- **is already in waste management or industrial use; or**
- **is previously developed, derelict or underused; or**
- **is at an active mineral or landfill site; or**
- **involves existing agricultural buildings and their curtilages; or**
- **is at a waste water treatment works.**

Proposals for temporary facilities should provide for the satisfactory removal of the facility, including at mineral working and landfill sites where the facility should be removed on or before the host activity ceases.

Waste management facilities will not be permitted on green field land unless there is an over-riding need that cannot be met in any other way.

⁵⁴ Planning Policy Statement 10 (now withdrawn).

⁵⁵ Small extensions or replacement buildings may be appropriate; also certain engineering operations and changes of use if they preserve openness and do not compromise the purpose of including land in the Green Belt (see National Planning Policy Framework).

Waste management development that is inappropriate in the Green Belt will not be permitted unless very special circumstances can be demonstrated, including that the specified facility has a particular locational need to be located in the Green Belt as opposed to any other location. Conditions may be imposed to ensure that such a facility serves the need described.

Landfill

5.57 Disposal of waste in landfill is the option of last resort in the waste hierarchy, but the government advises that is one that must still be planned for. Landfill still helps to enable waste to be disposed of in one of the nearest appropriate installations⁵⁶. Policy W7 deals with disposal of non-hazardous (municipal and commercial and industrial) and inert wastes by way of landfill. Disposal of hazardous and radioactive waste is covered by policies W9 and W10. Some 1.0 million tonnes of waste is disposed in Oxfordshire landfill each year, and a significant proportion arises in areas outside the county.

Table 7: Waste to Oxfordshire licensed landfill sites by type and origin (tonnes)

Waste Origin	2008		2010		2012	
	HIC	CDE	HIC	CDE	HIC	CDE
London	254,313	144	259,133	321,103	160,757	25,222
Berkshire	215,576	2,897	144,872	4,546	82,857	8,894
Rest of UK	13,874	53,754	45,857	19,798	46,177	63,230
Imports Total	483,763	56,795	449,862	345,447	289,609	97,346
Oxon	548,111	337,361	403,483	217,544	312,651	205,839
Overall Total	1,031,874	394,156	853,345	562,991	602,260	303,185

HIC = household, industrial & commercial wastes
 CDE = construction, demolition & excavation wastes

Non-hazardous waste

5.58 Oxfordshire has six non-hazardous landfill sites with room to dispose of more than 9.0 million tonnes of waste. If landfilling continued at the rate shown in

⁵⁶ This is referred to as 'the proximity principle' and is a requirement of the European Waste Framework Directive.

table 7, the available void would be exhausted within the next 10 years - well before the end of the plan period.

Table 8: Void remaining in Oxfordshire Non-hazardous landfill (Dec 2012)

Site Name	District	Void	Closure Date
Finmere Quarry	Cherwell	372,993	2035
Ardley Quarry	Cherwell	1,430,642	2019
Alkerton Phase 3	Cherwell	842,000	2014
Dix Pit	West Oxon	1,562,748	2030
Slape Hill Quarry	West Oxon	20,000	2019
Sutton Courtenay	Vale	5,117,624	2030
Total	Oxfordshire	9,346,307	

Source: Environment Agency – data as provided by operators
1 tonne of non-hazardous waste = 1 cubic metre void

- 5.59 However, the amount of non-hazardous waste from Oxfordshire going to landfill is falling as recycling increases and this will decrease markedly when the Ardley energy resource facility is fully operational. Table 7 may also suggest that the amount of waste going into the county's landfills from other areas is also declining. As similar facilities to that being built at Ardley are built in other areas⁵⁷, this decline should continue. But it also appears that when landfill facilities close few are being replaced and in future waste may travel longer distances to access those facilities that remain open. These factors make it difficult to assess how long it will be before Oxfordshire's landfill void becomes exhausted.
- 5.60 Policy W3 envisages that no more than 5% of Oxfordshire's waste will go to landfill, but waste from Berkshire could increase in line with a contract for the disposal of household waste from Reading, Wokingham and Bracknell Forest. Household waste from West London that was being landfilled at Sutton Courtenay is now being disposed in South Gloucestershire and although the London Plan commits the Boroughs to being waste self-sufficient, this may take longer than expected to achieve and some waste from London may yet be disposed in Oxfordshire. One of Oxfordshire's landfill sites has already closed and a second is likely to close shortly⁵⁸, so reducing the void available.
- 5.61 The Waste Needs Assessment provides evidence that the remaining void space is unlikely to be exhausted before the end of the plan period. The most realistic assessment is based on the following:
- Oxfordshire landfill diversion targets (policy W3) are achieved;
 - Waste imports continue at the rate seen in 2012⁵⁹ except for:

⁵⁷ A large Energy from Waste facility is currently under construction at Calvert Landfill, close to the boundary between Oxfordshire and Buckinghamshire.

⁵⁸ Alkerton stopped receiving waste in 2011 and the operator of Dix Pit has recently announced its intention to close the facility.

⁵⁹ This recognises that some waste may still need to be disposed from London

- waste from West London (about 170,000 tonnes per annum) no longer being counted;
- waste from Berkshire being increased in line with estimates provided by the Re3 authorities⁶⁰;
- the void available at Alkerton and Dix Pit is not used.

Table 9: Oxfordshire Non-hazardous landfill capacity 2012 – 2031 (cubic metres)

	2012	2016	2021	2026	2031
Waste (tonnes)	838,900	2,412,398	1,986,159	1,464,396	1,071,956
Void	9,346,300	4,691,602	2,705,443	1,241,047	169,091

1 tonne of waste = 1 cubic metre void

- 5.62 Policy W7 therefore makes no provision for additional landfill space within the plan period. It remains to be seen whether waste management practice evolves in such a way that disposal of non-hazardous waste in landfill is no longer needed, and this may be a matter for later review of this plan.
- 5.63 Most of the waste to be disposed in Oxfordshire will come from other areas, and the County Council will continue to work with other authorities with a view to trying to achieve further reduction in the amount of waste disposed in this way. From 2020 it is likely that Oxfordshire will be left with three key ‘disposal’ facilities, as shown in the Key Diagram. These are at:
- Ardley Energy Resource Facility;
 - Sutton Courtenay Landfill;
 - Finmere Quarry Landfill.
- 5.64 Local communities have been concerned at the prospect of these facilities taking waste from other areas. Controls are in place on the two landfills restricting the area from which waste can currently be imported but it is unrealistic to consider further restriction, even if such opportunity were to arise: there is little justification in seeking to restrict the use of facilities that are increasingly in short supply. The void available in the two landfills is far greater than needed to meet Oxfordshire’s own landfill requirement, and unless waste is disposed from other areas their planned closure dates would need to be extended by many years before the landfills were complete. Alternatively, valuable void space would likely be lost.
- 5.65 The former South East Plan sought to safeguard (or husband) unused landfill void for future use, but it is now clear that such a policy would also be difficult to implement. It is not realistic to expect a commercial operator to keep open a facility that is seen as unviable. Placing a facility in care and maintenance is itself costly. Although there is a risk of losing void that is difficult to replace, it is no longer realistic to seek to safeguard unused landfill, particularly as the

⁶⁰ Reading, Wokingham and Bracknell Forest Unitary Authorities.

early closure of a site is likely to be seen as beneficial locally. No provision for safeguarding these sites is therefore made in policy W11 (Safeguarding).

- 5.66 If waste going to landfill decreases, as expected, operators may be faced with a choice of either closing a facility before the void has been fully filled⁶¹ or applying for permission to extend the period within which the landfill should be complete. The relevant considerations are not clear cut, and policy W7 provides for a flexible approach to be taken. As a general rule sites should be restored as soon as possible, in accordance with policy M8. But proposals seeking to extend waste activity on a landfill site beyond the expected closure date may be justified by a desire to husband the resource. Such proposals should identify the revised rate of fill and demonstrate any steps that are being taken to secure restoration of the site as soon as possible. Once complete, it is reasonable to expect that any restored land remains undisturbed.
- 5.67 The Landfill Directive requires that landfill sites taking biodegradable waste incorporate measures to capture the gas they produce (and preferably utilise this for energy recovery). Landfill sites also produce leachate and discharges also need to be controlled to avoid pollution to watercourses and groundwater. Provision for any further development that may be required to effectively control gas and leachate on existing landfill sites is made through policy W6. Former landfills were not required to capture gas and should further waste development be envisaged on these sites provision for the capture of landfill gas should always be considered.

Inert waste

- 5.68 Inert waste from construction, demolition and excavation projects (that which is not recovered as soils or recycled aggregate) is needed for the restoration of mineral workings and as engineering material at landfill sites. Some 600,000 tonnes of material could be available for this purpose each year from Oxfordshire waste (table 5).
- 5.69 Some 8.0 million tonnes of material will be required to restore worked out quarries in accordance with approved restoration schemes⁶²: this includes the significant voids at Shellingford and Shipton-on-Cherwell Quarries. If only waste arising in Oxfordshire (that which is not recycled as aggregate or soil) were to be used for this purpose, the approved schemes could not be completed before 2026.
- 5.70 Further void space may need to be identified toward the end of the plan period, but there are a number of unrestored quarries in Oxfordshire and new quarries (requiring progressive restoration) are expected (see policies M3 and M4). A shortage of options for the disposal of residual waste arising in Oxfordshire is unlikely and opportunities will be identified in the Site Allocations Development Plan Document. It is more likely that there will be a

⁶¹ This may require approval for an amended restoration scheme.

⁶² As at January 2012.

shortage of suitable waste material to achieve satisfactory restoration of worked out quarries (see also policy M8). Policy W7 therefore provides for priority to be given to the use of residual waste in the restoration of worked out quarries. If not used in this way, proposals for disposal on land should demonstrate that there is a positive environmental benefit and that there is no adverse landscape impact.

5.71 Despite the costs involved in transporting this type of waste, Oxfordshire has recently received significant amounts of inert waste for disposal from other areas⁶³. The county may be seen as a suitable location for the disposal of surplus inert waste from future large scale engineering projects such as the Thames Tideway Tunnel in London and HS2, particularly if there is potential for moving this type of waste by rail. As such waste can make a useful contribution to the restoration of the county's exhausted mineral workings, its 'disposal' or use in Oxfordshire is not inappropriate. Core Policy C10 encourages the transport of material by means other than road where possible.

5.72 **Policy W7: Landfill**

Provision for disposal of Oxfordshire's non-hazardous waste will be made at existing facilities which will also provide for the disposal of waste from other areas (including London and Berkshire) as necessary. Further provision for the disposal of non-hazardous waste by means of landfill will not be made.

Permission may be granted to extend the life of existing non-hazardous landfill sites where this is shown to be required for the continued disposal of residual non-hazardous waste and where this will allow for the restoration of the landfill in accordance with a satisfactory scheme.

Priority will be given to the use of inert (construction, demolition and excavation) waste which cannot be recycled as infill material at active or unrestored quarries where such material is required to achieve satisfactory restoration for appropriate after use. Permission will not otherwise be granted for the disposal of inert waste unless there would be overall environmental benefit.

Landfill sites shall be restored in accordance with policy M8 for restoration of mineral workings.

Hazardous waste

5.73 This waste stream includes a variety of wastes and most require treatment or disposal at specialist facilities. These can be expensive to develop and

⁶³ In 2010 and 2011 over 600,000 tonnes of inert waste was received from London; it is understood that most of this came from the construction of the Olympics site and was transported by rail.

operate and they often serve an area much wider than a single county. It is acknowledged that these wastes, often small in volume or low in weight, are generally transported longer distances than other types of waste.

- 5.74 Oxfordshire is a net exporter of hazardous (and radioactive) waste. In 2012, 52,000 tonnes of hazardous waste was produced. In the same year 31,000 tonnes of waste was managed in the county. Much of the waste was treated or recovered and some 6,000 tonnes was disposed by way of landfill or incineration. Most facilities in Oxfordshire are small scale, but there is a significant transfer and recycling facility close to Ewelme (in South Oxfordshire) and an asbestos disposal facility at Ardley landfill (in Cherwell) both of which manage waste from a wide area. There are hazardous waste landfills in adjoining counties, at Swindon, Cheltenham and East Northamptonshire (which is also permitted to accept very low level radioactive waste); and the nearest hazardous waste incinerators are at Slough and Fawley (Southampton).
- 5.75 The amount of hazardous waste produced is expected to increase. The Ardley energy recovery facility will produce hazardous residues that will need to be disposed at suitable facilities and it is thought there could be steady growth in oil based residues which currently make up about 20% of the waste produced. European legislation is also likely to bring more waste into the hazardous categorisation.

Table 10: Oxfordshire Hazardous Waste arisings 2012 – 2031 (tonnes)

2012	2016	2021	2026	2031
52,000	58,750	65,500	72,250	79,000

- 5.76 For Oxfordshire to be net self-sufficient in the management of these wastes, capacity would be required to manage a further 45,000 – 50,000 tonnes of waste per annum. In view of the variety of different waste materials produced and the specialist nature of waste facilities needed, this is not likely to be practicable, especially in an area the size of Oxfordshire. The aim is therefore for Oxfordshire to be as self-sufficient in the management of these wastes as possible. Subject to conforming with other relevant policies (W6 and C1 – C11) policy W8 allows for the development of further facilities, recognising that proposals that respond to a locally identified need are also likely to meet needs in a wider area. Such facilities will often be seen as strategically important, but when compared to the principal waste streams the tonnages managed are not significant. Facilities are likely to have a capacity of less than 20,000 tonnes per annum and these would qualify as a smaller facility (policy W5).
- 5.77 The Strategy for Hazardous Waste Management in England identifies a need for particular types of facilities, as did the former South East Plan, and the following may be relevant to Oxfordshire:

- treatment facilities for air pollution control residues (from combustion plants);
- recycling of waste electronic equipment;
- treatment of contaminated construction, demolition and excavation waste;
- treatment of oily wastes/sludges;
- hazardous waste landfill.

5.78 Some of Oxfordshire's non-hazardous landfills could be made suitable for disposal of hazardous waste (and very low level radioactive waste – see policy W9). However, there is no indication that proposals for disposal of hazardous waste at landfill sites in Oxfordshire will come forward. This may reflect the fact that there are currently facilities available in neighbouring counties. Policy W8 is nevertheless sufficiently flexible to allow for any change in these circumstances in the future.

5.79 **Policy W8: Hazardous waste**

Permission will be granted for facilities for the management and disposal of hazardous waste where they are designed to manage waste produced in Oxfordshire. Facilities that also provide capacity for hazardous waste from a wider area should demonstrate that they will meet a need for waste management that is not adequately provided for elsewhere.

Agricultural Waste

5.80 Oxfordshire farms generate about 900,000 tonnes of waste each year. This seems to be a relatively stable figure and is unlikely to alter significantly in future years. The vast majority of this waste (98%) is of organic origin, including slurries, manure and silage effluent that offer potential to generate energy when treated e.g. through Anaerobic Digestion.

5.81 The use of land for agriculture does not require planning permission, and this allows for the spreading on land of waste for the benefit of agricultural production. Buildings and other development associated with agriculture may require planning permission, but mostly this is permitted by general order⁶⁴ and does not require the submission of a planning application. Where application is required, they will normally be considered by the District Council as local planning authority, but where buildings are designed to treat waste, planning permission needs to be obtained from the County Council as Waste Planning Authority.

5.82 Non organic wastes can be managed at facilities designed to manage commercial and industrial and hazardous wastes. Although many organic wastes will be spread on land, there may be good opportunity for treatment on intensive farming units where waste may be produced in such quantity that there may be surplus that cannot be spread locally. Policy WX provides for the construction of such facilities, provided they comply with the Core Policies (C1

⁶⁴ The Town and Country Planning General (Permitted Development) Order

– C11). Agricultural units offer good opportunity for such development as they are more likely to be remote from housing where issues of general amenity are unlikely to arise. Attention should be paid to the impact of development on the local landscape, particularly where units are situated within, or close to, an Area of Outstanding Natural Beauty.

- 5.83 The importation of additional feedstock to help make such a facility viable may give rise to local difficulties (e.g. from significant lorry movements) but the benefit of helping to divert waste from landfill should also be considered. Where organic agricultural waste is planned to be used in a waste treatment facility elsewhere, proposals should be considered in accordance with policies W5 and W6.

5.84 Policy WX: Agricultural waste

Proposals for the treatment of agricultural and other organic waste within a unit of agricultural production will normally be acceptable, and encouragement given to proposals that are designed to generate energy from the waste using a process such as anaerobic digestion.

Proposals that are designed to treat agricultural waste in conjunction with other organic wastes at facilities not located on an agricultural unit will be assessed in accordance with policies W5 and W6.

Provision for the management of non-natural agricultural waste will be made at facilities designed to manage non-hazardous, inert and hazardous wastes in accordance with policies W4 and W8.

All proposals should conform with Core Policies C1 – C11.

Management of radioactive waste

- 5.85 Low Level (LLW), Intermediate Level (ILW) and High Level (HLW) radioactive waste is classified according to the level of radiation and the heat produced during the decay of the radioactivity. Radioactive waste arises from both nuclear and non-nuclear activities: naturally occurring radioactive material (NORM) is also produced from some industrial processes, including mineral working activity such as drilling for oil and gas.
- 5.86 The more significant amounts of radioactive waste produced in Oxfordshire – both LLW and ILW - are from the former nuclear energy research facility at Harwell (Vale of White Horse District) and the Joint European Taurus (JET) facility at Culham (South Oxfordshire District). Small amounts of radioactive waste are produced from non-nuclear activities, including the medical, educational and manufacturing sectors and mostly categorised as LLW.

- 5.87 The disposal network available to the non-nuclear industry has been described as ‘fragile’ and non-existent in some parts of the country⁶⁵. Radioactive waste storage and management facilities are provided at nuclear sites, but disposal routes are also scarce. The government therefore expects disposal routes to be conserved and other routes developed or strengthened as necessary⁶⁶. The main disposal route for many wastes is the Low Level Waste Repository (LLWR) near Drigg in Cumbria, but very low level radioactive wastes (VLLW) can be disposed by way of incineration or at licensed landfill⁶⁷, enabling the LLWR to be used more effectively. Higher level wastes will eventually be disposed in a national facility⁶⁸.
- 5.88 Facilities to manage radioactive waste are highly specialised and expensive to develop and the Nuclear Decommissioning Authority has been looking at ways in which facilities that treat and store higher level wastes can be used most effectively. In addition to managing waste from a single source, they may also be capable of serving the needs of a wider area. Proposals for managing radioactive waste are unlikely at locations other than Harwell or Culham, but provision is still made for any such proposals to be considered positively, in line with national policy, and recognising that any disposal facility would be likely to help manage waste produced in Oxfordshire. As Waste Planning Authority the County Council would deal with planning applications for the management of radioactive waste.
- 5.89 Estimates of the radioactive wastes that may arise at Harwell and Culham as a result of decommissioning activities are set out below. Policy W9 makes provision for managing those wastes on each site where necessary, so each is shown on the Waste Key Diagram. This is explained in the paragraphs that follow.

Table 11: Forecast arisings of Intermediate and Low Level Radioactive Waste from Harwell and Culham as a result of decommissioning activity

	Waste in Store		Waste in Store + future arisings (packaged volume)	
	2010	2013	As 2010	As 2013
Culham				
ILW	30	62	817	825
LLW	600	220	8,100	7,160
Harwell				
ILW	2,130	2,300	6,870	6,600
LLW	2,820	1,240	99,600	39,800

Future arisings as assessed in 2013 are for the period to 2020 only

⁶⁵ Strategy for the management of solid low level radioactive waste from the non-nuclear industry in the United Kingdom (March 2012).

⁶⁶ UK Strategy for the Management of Solid Low Level Radioactive Waste from the Nuclear Industry (2010)

⁶⁷ The nearest incinerator capable of taking Oxfordshire radioactive waste is at Southampton. Of the four landfills licensed to accept VLLW the nearest is in East Northamptonshire.

⁶⁸ A site for a deep geological repository has not yet been identified and is unlikely to be available before the end of the plan period.

Harwell

- 5.90 The major research facilities at Harwell include an area regulated⁶⁹ as a nuclear licensed site. The licensed area at Harwell is being progressively decommissioned with a view to its redevelopment as part of the Harwell Oxford Campus. This decommissioning work will continue to involve the treatment and storage of the legacy radioactive wastes that remain from earlier research activity and will continue throughout the lifetime of the plan. Part of the Harwell Oxford Campus is within the recently designated Science Vale Enterprise Zone: the site is also within the North Wessex Downs Area of Outstanding Natural Beauty.
- 5.91 Facilities for the treatment and long term storage of intermediate level radioactive waste have already been developed and Harwell's storage capacity will increase further on completion of a new secure store in 2017⁷⁰. The operator of the Harwell site has not identified a need for further facilities to manage ILW but policy W9 nevertheless provides for other facilities that may be needed for the treatment and storage of waste from Harwell or Culham in advance of the opening of the national disposal facility. Further development at Harwell to facilitate the storage of intermediate level waste from sites outside Oxfordshire is not anticipated⁷¹. If such a proposal does emerge it would need to be considered against national policy and demonstrate that it is the best alternative option in terms of sustainability and environmental considerations.
- 5.92 Much of the legacy waste at Harwell will be of low level radioactivity from demolition and clearance of buildings and ground. There could be as much as 100,000 cubic metres of LLW at Harwell, some of which will have to be disposed at the Low Level Waste Repository (or possibly at the proposed national deep geological repository). But the majority is likely to be classified as either very low level waste or high volume low activity (HVLA) waste and could be disposed elsewhere. Additional temporary storage facilities may also be needed on site pending disposal.
- 5.93 There is no route for the disposal of VLLW in Oxfordshire, the nearest facility being in East Northamptonshire⁷². Some waste from Harwell is already being disposed at this facility, which has permission to operate to 2027. There is no guarantee that the facility can take all of Harwell's waste, in particular any that is not disposed before 2027. The Nuclear Decommissioning Authority's

⁶⁹ Nuclear licensed sites are controlled by the Office of Nuclear Regulation with involvement from other organisations, including the Environment Agency.

⁷⁰ The facility has planning permission. Although it will also accommodate waste from Culham and Winfrith in Dorset, the Nuclear Decommissioning Authority has also agreed that some higher level waste will transfer from Harwell to be treated and stored at Sellafield in Cumbria..

⁷¹ In November 2013 the Nuclear Decommissioning Authority consulted on proposals for the consolidation of storage facilities for legacy nuclear waste. This did not envisage a wider role for Harwell beyond that already provided for in the recently approved ILW store.

⁷² The East Northamptonshire Resource Facility is operated by Augean Ltd: there are no restrictions which would preclude the small amounts of VLLW arising from the non-nuclear sector being disposed in this facility.

approach to disposal of VLLW⁷³ is that local circumstances will dictate whether or not disposal in a bespoke on-site facility or at a commercial facility elsewhere is preferable.

- 5.94 Some time ago, the operator of the Harwell site undertook a study of the best practical environmental options for the disposal of VLLW from the site⁷⁴. Three credible options were identified and the initial conclusion was that on-site disposal was marginally preferable. However, this outcome was reviewed in 2011, taking account of revised policy guidance and costs, and the preference was revised⁷⁵ to disposal of the waste at an off-site facility.
- 5.95 Disposal of waste at the site of waste arising would normally be the most sustainable approach to waste management, and sustainability appraisal undertaken for this plan⁷⁶ supports this. However, the sustainability appraisal has been undertaken at a strategic level, whereas the work undertaken by the operator has been more detailed. Disposal of Harwell's VLLW off site is also more compatible with the site's envisaged end state (redevelopment as part of the Harwell Oxford Campus). Notwithstanding that there is a current disposal route available, albeit out of county, policy W9 provides for the disposal of this waste should no other route be available in the longer term. This also provides flexibility should there be other changes of policy or guidance. Proposals for the disposal of VLLW at Harwell should only take place if there are no other alternatives. They would also need to demonstrate Best Available Techniques⁷⁷.

Culham

- 5.96 The Culham Science Centre continues to host and operate the Joint European Taurus (JET) project in building J1 and a number of smaller structures. The buildings include a small facility for the treatment and storage of radioactive waste. A number of the buildings built to accommodate the JET project will host other activities when the project ceases, but some remain subject to temporary permission and their removal will give rise to further radioactive waste when decommissioning of the JET facility takes place. The United Kingdom Atomic Energy Authority's view is that, consistent with policies in the adopted South Oxfordshire Core Strategy, the JET site could continue to host further activity. But until this is confirmed through the further grant of planning permission, this plan anticipates a need to manage the various radioactive wastes identified in table 11.
- 5.97 Recent changes to the Environmental Permitting Regulations has reduced the need (and therefore volume) for some waste produced at Culham to be categorised as radioactive waste. However, for the remainder the small waste

⁷³ Policy for the Long Term Management of Solid Low Level Radioactive Waste in the UK (March 2007).

⁷⁴ The HVLA Waste Public Consultation at UKAEA Harwell: Update No.1.

⁷⁵ The HVLA Waste Public Consultation at RSRL Harwell: Update No.3 (January 2011).

⁷⁶ Sustainability Appraisal incorporating Strategic Environmental Assessment of the Pre Submission Minerals and Waste Core Strategy Sustainability Appraisal Report (March 2012) prepared by URS for the County Council.

⁷⁷ Application would also need to be made to the Environment Agency for a disposal licence.

management facility at Culham is not seen as a longer term solution for the storage of radioactive waste, and policy W9 makes specific provision for the storage of Culham's intermediate level waste at Harwell.

- 5.98 A specific disposal route for any VLLW has not yet been identified and it could be necessary to consider whether this takes place at Culham, albeit as a last result. Such a proposal would conflict with the United Kingdom Atomic Energy Authority's vision for the site, now set out in a recently developed master plan. The operator believes that economic and environmental considerations are likely to result in radioactive waste arising from the decommissioning of the JET facility being stored or disposed off-site, and that provision for the disposal of VLLW at Culham is not necessary. But there are a number of uncertainties about the disposal of this type of waste (see Harwell above) and until the need (or otherwise) for a clear disposal route is resolved other opportunities need to remain open. Policy W9 provides for this. Because the Culham site is in the Green Belt any proposal may need to demonstrate that there are very special circumstances (policy W6) and demonstrate Best Available Techniques – as well as conforming to the Core Policies.

5.99 **Policy W9: Management of radioactive waste**

Permission will be granted for proposals for the management or disposal of low level radioactive waste particularly where the proposal demonstrates that it could make a significant contribution to the management of waste produced in Oxfordshire. Where designed to provide for the needs of a wider area, proposals should also demonstrate they would meet a need for waste management that is not adequately provided for elsewhere.

All proposals should conform with Core Policies C1 – C11.

The Site Allocations Development Plan Document will make specific provision for:

- **the treatment and storage of Oxfordshire's intermediate level legacy radioactive waste at Harwell Oxford Campus, pending its disposal at a national disposal facility;**
- **the treatment and storage of low level legacy radioactive waste at Harwell Oxford Campus and Culham Science Centre pending its eventual disposal.**

Disposal of low level radioactive waste at bespoke facilities at Harwell Oxford Campus or at Culham Science Centre will be permitted if alternative disposal routes are otherwise unavailable.

Waste water (sewage)

- 5.100 Thames Water plc. operates strategic waste water (sewage) treatment works (STWs) at Banbury, Bicester, Oxford, Witney, Didcot and Wantage/Grove.

Local treatment works serving smaller catchments feed into the STWs which treat raw sludge before recycling it to agricultural land. Three of the STWs (Oxford, Banbury and Didcot) already recover energy from these processes, and additional plant is being installed at Oxford to enable a greater volume of sludge to be treated, recover more energy from that sludge and reduce the volume of treated sludge for recycling to agricultural land.

- 5.101 Thames Water’s 25-year Sludge Strategy (December 2008) identified a need to improve treatment processes at the STWs in response to growing waste volumes and changes to the way treated sludge is applied to agricultural land. As a result of work already undertaken at Banbury and Didcot, and pending the completion of work at Oxford STW, Thames Water now anticipates that the function of Witney, Wantage and Bicester STWs will change to only produce raw sludge cake that will be transported to Oxford STW for treatment and energy recovery. The Strategy originally forecast an increase in the amount of waste to be disposed, but this has now been revised.

Table 11: Sewage Sludge produced in Oxfordshire and requiring disposal (tonnes dry solids)

Sewage Sludge Arisings 2012	Sludge Strategy forecast 2030	Revised forecast 2041
20,000	25,000	16,500

- 5.102 Proposals for waste water treatment are decided by the county council as waste planning authority in consultation with the district council as local planning authority. Provision needs to be made for existing waste water treatment plant to be improved where this is necessary to serve existing development. The Sludge Strategy did not envisage a need for additional strategic sites in Oxfordshire, but the Core Strategy looks beyond the period covered by that Strategy and levels of growth are likely to be greater than envisaged when the Strategy was produced. It is therefore sensible for this plan to make provision for such infrastructure – strategic or otherwise – should that be needed to facilitate new housing or other development being planned by the district councils. Policy W10 provides for the improvement of existing facilities and the development of new facilities where necessary.
- 5.103 This type of development has greater potential to impact on the environment (in particular landscape); also on general amenity. Allowing waste water development to take place on green field land (contrary to the general presumption in policy W6) allows for it to be sited away from settlements at a safe distance from local housing. Development in such locations should be capable of meeting the core policies (C1 – C11); development should otherwise only be allowed to proceed if there are compelling arguments to the contrary. Particular considerations still apply in the Green Belt and the Areas of Natural Beauty (see policies W6 and C8).

5.104 Policy W10: Waste water and sewage sludge

Proposals for the treatment and disposal of waste water and sewage sludge will normally be found acceptable:

- in the interests of long term waste water management;
- to improve operational efficiency;
- to enable planned development to be taken forward.

Proposals should accord with Core Policies C1 – C11 and will otherwise only be considered favourably if there is an over-riding need that cannot be met in a more suitable location and where any adverse environmental impact is minimised.

Safeguarding waste management sites

5.105 Waste management facilities have the potential to cause harm to the environment in a number of ways. It can be difficult to find sites that are suitable to manage waste and in Oxfordshire this is compounded by the high value of development land and competition from more profitable forms of development.

5.106 National planning policy⁷⁸ expects that existing, planned and potential sites for the handling, processing and distribution of substitute, recycled and secondary aggregate material be safeguarded. The recently issued national policy for waste⁷⁹ does not require that safeguarding be extended to other waste facilities, but it expects the capacity available from existing operational facilities be taken into account when considering future needs. These requirements, and the acknowledged difficulty of finding sites that are suitable for waste management, support the need to safeguard sites for waste use.

5.107 Safeguarding existing, permitted and potential waste sites will help to:

- prevent the loss of waste capacity to other forms of development;
- keep available options for developing additional capacity; and
- minimise the need to find new sites for waste uses.

Pending the adoption of the Site Allocations Development Plan Document, policy W11 safeguards, on an interim basis, all sites that are known to contribute, or have permission to contribute, to Oxfordshire's waste management needs. This applies to all waste management facilities except landfill (to which policy W7 applies).

5.108 The safeguarded sites are listed in Appendix XX and their locations shown on maps 5 and 6. The Site Allocations Document will confirm whether or not safeguarding will apply to each site for the duration of the plan⁸⁰, taking into account:

- it's suitability in planning terms;
- the type of planning permission under which it currently operates;

⁷⁸ Paragraph 143 of the National Planning Policy Framework (March 2012)

⁷⁹ National Planning Policy for Waste (October 2014)

⁸⁰ Further details are set out in the Waste Site Safeguarding Topic Paper.

- the contribution made to the county's waste needs.

The Site Allocations Development Plan Document may also safeguard further sites, including any that are identified as having potential for waste management needs.

- 5.109 Policy W11 provides that there should be a presumption against development on a safeguarded site that could compromise its future use for waste purposes. Such development should only be permitted if a suitable alternative location for the waste use can be identified and safeguarded. A site may be released from safeguarding if it is established, through the consideration of a planning application, that there is no further need for waste management facilities to serve the area or that such activity is particularly unsuited to its location (e.g. not compatible with an adjoining residential use).
- 5.110 Pending the adoption of the Site Allocations Document the District Councils will consult the County Council (as Waste Planning Authority) on all planning applications for non-waste development that may affect a safeguarded site, thereby ensuring that any waste planning issues are taken into account. The District Councils will also consult the County Council on proposals for development close to a safeguarded site with a view to identifying whether development may be incompatible with and/or prejudicial to the future of the safeguarded facility. The Site Allocations Document will address any circumstances where consultation need not apply. Pending the adoption of the Site Allocations Document a consultation zone of 250 metres will apply to all waste sites⁸¹.
- 5.111 A list of safeguarded sites will be included in future Annual Monitoring Reports, to include for any new sites that are permitted or become operational in the intervening period, and to identify sites that may have closed.

5.112 **Policy W11: Safeguarding waste management sites**

Existing and permitted waste management sites are safeguarded for future waste management use pending the adoption of the Site Allocations Development Plan Document.

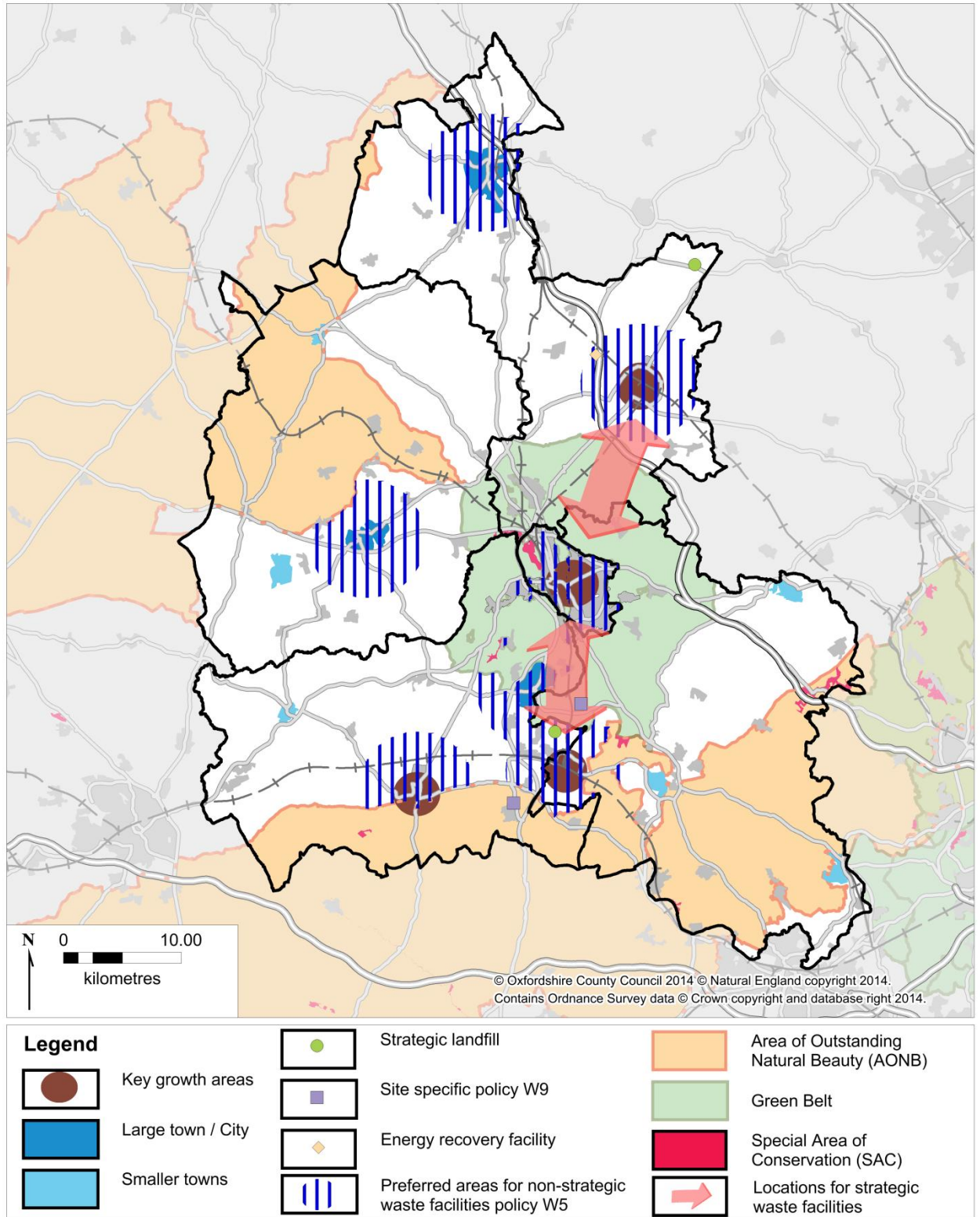
The list of safeguarded sites (Appendix XX) will be updated in future Minerals and Waste Annual Monitoring Reports.

Proposals for development that would prevent or prejudice the future use of a site safeguarded for waste management will not normally be permitted unless:

- **provision for new waste management capacity is made at a suitable alternative location; or**
- **it can be demonstrated that the site is no longer needed or suitable for waste management use.**

⁸¹ The adopted East Sussex Waste Minerals Plan (February 2013) applies a consultation zone of 250 metres around all waste sites.

Figure 16: Waste Key Diagram



6. CORE POLICIES FOR MINERALS AND WASTE

(This section has not yet been amended)

Sustainable Development

6.1 The National Planning Policy Framework sets out how planning policies for England are expected to be applied. There is a strong presumption in favour of sustainable development and local plans are expected to follow this approach. The plan's objectives are built on the principle of sustainable development. The plan's policies seek to deliver sustainable development and decisions on planning applications should be taken in accordance with these policies unless material circumstances determine otherwise. But for the avoidance of doubt, an over-arching policy is included in the plan to ensure that the presumption in favour of sustainable development is taken into account in all decisions on minerals and waste development. Such a policy was not included in the previous Core Strategy as it was prepared prior to the National Planning Policy Framework being published.⁸²

6.2 Policy C1: Sustainable Development

A positive approach will be taken to minerals and waste development in Oxfordshire, reflecting the presumption in favour of sustainable development contained in the National Planning Policy Framework and the aim to improve economic, social and environmental conditions of the area.

Planning applications that accord with the policies in this plan will be approved without delay, unless material considerations indicate otherwise. Where there are no policies relevant to the application, or relevant plan policies are out of date, planning permission will be granted unless material considerations indicate otherwise, taking into account whether:

- **any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits of the proposed development when assessed against the National Planning Policy Framework; or**
- **specific policies in the National Planning Policy Framework indicate that the development should be restricted.**

Climate Change

6.3 Average carbon dioxide emissions from Oxfordshire are higher than the South East and national averages. The County Council is committed to increasing energy efficiency and reducing emissions. Waste recycling and recovery facilities contribute to reducing emissions by diverting waste from landfill: this is addressed specifically in policy W3. Minerals and waste facilities that are

⁸² The National Planning Policy Framework was published on 27 March 2012: the Oxfordshire Minerals and Waste Core Strategy was approved by the Council for submission to the Secretary of State on 9 April 2012.

well located, designed and operated can minimise the generation of greenhouse gases and be resilient to the impacts of climate change.

- 6.4 Minerals and waste development proposals, including operational practices and restoration proposals, must take account of climate change for the lifetime of the proposed development. This will be through measures to minimise generation of greenhouse gas emissions and to allow flexibility for future adaptation. Applications for major developments should consider providing information on climate change in the accompanying Environmental Statement.
- 6.5 Methods of adaptation to climate change include the use of sustainable drainage systems designed to improve the rate and manner of absorption of water from hard and soft surfaces, reducing direct run-off into rivers or storm water systems; the use of sustainable construction methods; sustainable transport methods where possible; and the use of environmentally friendly fuels.
- 6.6 **C2: Climate Change**

Proposals for minerals or waste development, including restoration proposals, should take account of climate change for the lifetime of the development from construction through operation and decommissioning. Applications for development should adopt a low carbon approach and measures should be considered to minimise greenhouse gas emissions and provide flexibility for future adaptation to the impacts of climate change.

Flooding

- 6.7 Minerals and waste development is vulnerable to flooding, most commonly from fluvial sources; but damage or inconvenience can also arise from surface water run-off and groundwater. Development can increase flood risk to other property if not adequately mitigated, but may also have a positive benefit by adding to flood water storage capacity through well considered restoration of mineral workings (see also policy M8). Consideration of the risk caused by flooding must be taken into account at all stages of the planning process.
- 6.8 Government policy and guidance⁸³ aims to steer development to areas of lowest flood risk. As this is not always possible, development is categorised according to its flood risk. The level of flood risk associated with minerals and waste development is set out in Appendix 1 (table A.1).
- 6.9 Development in areas other than Flood Zone 1 (the lowest flood risk zone) must be sequentially tested to establish whether it could take place in an area of lower flood risk. In some cases a further test (the exceptions test) must be undertaken to establish whether development may take place in areas

⁸³ Technical Guidance to the National Planning Policy Framework and draft National Planning Policy Guidance on flooding.

vulnerable to flooding. Appendix 1 (table A.2) sets out the circumstances in which minerals and waste development may take place in areas that are vulnerable to river flooding.

- 6.10 Sand and gravel working is ‘water compatible development’ – a category of development that is at the lowest vulnerability of flooding. Sand and gravel working is the only form of mineral extraction that can take place in the functional flood plain (Flood Zone 3b), provided a sequential test is undertaken. Other mineral working and all processing activities have a higher flood risk vulnerability classification.
- 6.11 Processing activity associated with sand and gravel working may involve plant and machinery or the formation of stockpiles, all of which can displace flood water, reduce flood water storage and interfere with water flows at times of flood. Such development can take place in areas that are at some risk of flooding (see Appendix 1) but not in the functional flood plain. As mineral working may span more than one flood zone a sequential approach to layout is needed. For sand and gravel working and processing this means that any development likely to displace flood water (including stockpiles) should be located on land that is outside the functional floodplain.
- 6.12 Waste development, depending on the nature of the operation, is not appropriate in the functional flood plain. This includes landfill operations - which may raise ground levels and pollute or disrupt groundwater flows. Where waste development is allowed in areas at lower risk of flooding (see Appendix 1) the sequential test and, for landfill sites, the exceptions test must first be satisfied. The potential for pollution to groundwater should also be taken into account (see paragraph 6.16). Inert waste may need to be imported to a site to achieve the satisfactory restoration of a sand and gravel working situated in the flood plain and this can take place in certain circumstances and where there is overall improvement to flood storage capacity⁸⁴.
- 6.13 The Strategic Flood Risk Assessment (SFRA)⁸⁵ assesses the extent to which future minerals and waste development in Oxfordshire may be at risk of flooding or increase flood risk to other property. This also takes into account the future impact of climate change. The SFRA did not identify a flood risk from potential waste development, but identified that many of the possible locations for sand and gravel working are in areas that are vulnerable to flooding. A sequential test of potential areas has been undertaken⁸⁶ and established that land to meet Oxfordshire’s aggregate requirement cannot reasonably be met without extracting sand and gravel from sites that lie in the functional floodplain.
- 6.14 Planning applications for minerals and waste development of more than a hectare in size or where situated in an area at risk of flooding must be

⁸⁴ The disposal of waste in landfill in Flood Zone 3b (the functional flood plain) is contrary to Technical Guidance to the National Planning Policy Framework. The issue of the use of waste in the restoration of quarries in the flood plain is addressed in the Topic Paper on Restoration.

⁸⁵ Oxfordshire Minerals and Waste (Level 1) Strategic Flood Risk Assessment, Scott Wilson, October 2010.

⁸⁶ Topic Paper on Flooding and Water Environment.

accompanied by a site specific Flood Risk Assessment. Further guidance is given in the SFRA⁸⁷.

6.15 Policy C3: Flooding

Minerals and waste development will, wherever possible, take place in areas that are not at risk of flooding. Where development takes place in an area of identified flood risk this should only be where alternative locations in areas of lower flood risk have been explored and discounted (using the Sequential Test and Exceptions Test as necessary) and where a flood risk assessment is able to demonstrate that the risk of flooding is not increased from any source, including:

- **an impediment to the flow of floodwater;**
- **the displacement of floodwater and increased risk of flooding elsewhere;**
- **a reduction in existing floodwater storage capacity;**
- **an adverse effect on the functioning of existing flood defence structures;**
- **the discharge of water into a watercourse.**

The opportunity should be taken to increase flood storage capacity in the flood plain where possible, particularly through the restoration of sand and gravel workings.

Water environment

6.16 Minerals and waste development has the potential to affect water quality and pollute groundwater resources. Surface water run-off from hard standing areas, for example, can pollute groundwater resources. So too can the discharge of waste water from waste management operations such as composting or recycling plants if not properly controlled. Leachate from non-hazardous landfill needs to be particularly carefully controlled.

6.17 Careful consideration also needs to be given to the impact of sand and gravel extraction on groundwater resources. In the river valleys the water table is often higher and working normally gives rise to a need for dewatering. Mineral extraction can cause disruption to ground and surface water flows in these circumstances, as can the formation of artificial lakes or the partial filling of void using inert waste as part of restoration⁸⁸. Dewatering may also impact on local groundwater abstractions and may have an adverse effect on vegetation and nearby watercourses by lowering the water table in the vicinity of workings.

6.18 In Oxfordshire there has already been much extraction of sand and gravel from the river valleys, in particular the Thames and Lower Windrush valleys.

⁸⁷ See also the Technical Guidance to the National Planning Policy Framework and the draft National Planning Policy Guidance.

⁸⁸ The circumstances in which waste can be used in the restoration of sand and gravel workings in the flood plain are considered in the Topic Paper on Restoration.

Further mineral working is expected to take place in the river valleys and the cumulative impact of extraction and restoration on groundwater needs careful consideration in these areas in addition to the specific impact of an individual working. Proposals close to an area of existing working⁸⁹ will need to take account of cumulative impact by considering:

- the nature of the geological deposits in the area;
- the characteristics of the aquifer;
- water balance calculations for operational and restoration phases of working; and
- volumetric flows or levels of local watercourses or other groundwater dependent receptors for operational and restoration phases of working.

6.19 The Environment Agency can offer appropriate advice on groundwater impact⁹⁰. Where significant cumulative impact is envisaged groundwater modelling may need to be undertaken. The Environment Agency also has a regulatory function in relation to licensing discharges to the water environment and the abstraction of water. Abstractions that are used for drinking water (including private and unlicensed abstractions) lie in Source Protection Zones 1 and 2 and are subject to a minimum 50 metre and 250-500 metre radius protection respectively. When granting planning permission, the County Council will consider whether it is necessary to attach appropriate conditions to mitigate any potential harm to groundwater and will liaise with the Environment Agency to ensure these do not conflict with or unnecessarily duplicate other controls.

6.20 All proposals for mineral development should demonstrate how the operation and restoration of a site will, where appropriate, protect water resources from pollution and contribute towards the aim of the River Thames River Basin Management Plan to achieve good ecological status in all waters by 2015.

6.21 **Policy C4: Water environment**

Proposals for minerals and waste development will need to demonstrate that there would be no unacceptable adverse impact on or risk to:

- **The quantity or quality of surface or groundwater resources required for habitats, wildlife and human activities;**
- **The quantity or quality of water obtained through abstraction unless acceptable alternative provision can be made;**
- **The flow of groundwater at or in the vicinity of the site.**

Proposals for minerals and waste development should ensure that the River Thames and other watercourses and canals of significant landscape, nature conservation or amenity value are adequately protected.

⁸⁹ Within 1 kilometre of an area of existing or historic working, as recommended by the Environment Agency.

⁹⁰ See also Environment Agency Groundwater Protection: Principles and Practice (November 2012)

General Amenity

- 6.22 Provision for minerals and the effective management and disposal of waste must be balanced with the need to protect people and the environment from potential harm⁹¹. If alternative locations are available, needs should normally be met on land that causes least overall harm to amenity, particularly bearing in mind the need to protect human health⁹². Minerals and waste development often gives rise to concerns about pollution and harm to people and the environment. Planning decisions should ensure that no unacceptable harmful impact⁹³ results from development and measures can normally be put in place to ensure that development meets appropriate standards.
- 6.23 Issues of noise, dust, air quality and vibration should be taken into account when considering proposals for mineral development. Pollution from associated traffic and visual impact are also relevant and in some cases issues associated with tip and quarry-slope stability, differential settlement of quarry backfill and subsidence may also arise⁹⁴. A buffer zone can help to mitigate potential harm from workings. Standard distances for buffer zones between workings and sensitive receptors⁹⁵ are not specified as they can lead to unnecessary restriction and sterilisation of mineral resources: they may also result in inadequate protection measures for affected property. The extent of any buffer zone should be decided on a case by case basis at the planning application stage.
- 6.24 Many of the issues raised by mineral development are also relevant to proposals for waste management. Concerns about odour, vermin, birds, litter and light pollution may also arise⁹⁶. In many cases there are national standards to help assess whether any harm may be unacceptable and the County Council will seek advice from the relevant District Council on certain issues, particularly noise. The extraction of minerals can be concentrated in particular areas, for example where there are commercially workable mineral resources and there has been investment in infrastructure. Proposals for further development should consider the cumulative impact of working on local amenity. Cumulative impact should also be taken into account in proposals for the expansion of existing waste facilities.
- 6.25 The Environment Agency operates controls that overlap with the planning process. Planning focuses on the acceptable use of land and the impact of that use⁹⁷ and when decisions are made it can be assumed that pollution control regimes will operate effectively to control emissions to air and discharges to water, etc. An application for an environmental permit can be

⁹¹ A key objective of the NPPF is that “planning should contribute to conserving and enhancing the natural environment and reducing pollution”.

⁹² Paragraph 120 of the National Planning Policy Framework and paragraph 1, Planning Policy Statement 10 – Planning for Sustainable Waste Management.

⁹³ Paragraph 144 of the National Planning Policy Framework. Paragraph 123 also draws attention to the need to avoid “significant adverse impact” from noise.

⁹⁴ Impacts arising from site restoration, including bird strike, are addressed in policy M8.

⁹⁵ Including housing, schools, hospitals and offices. This also applies to waste developments.

⁹⁶ A full list of considerations is set out in Appendix E of PPS 10 – Planning for Sustainable Waste Management

⁹⁷ Paragraph 122 of the National Planning Policy Framework.

sought prior to or concurrently with a planning application. This allows for all relevant information to be available at the planning stage and can help avoid unnecessary duplication of controls. Planning conditions should not normally be used to control matters that are the subject of an environmental permit.

6.26 Policy C5 addresses general environmental and amenity considerations only. Other core policies address areas associated with environmental protection, including water quality, the natural environment, the historic environment and landscape.

6.27 **Policy C5: General environmental and amenity protection**

Proposals for minerals and waste development shall demonstrate that they will not have an unacceptable adverse impact on the environment, residential amenity and other sensitive receptors, including from noise, dust, visual intrusion, light pollution, traffic, air quality, odour, vermin, birds, litter, vibration, tip and quarry-slope stability, differential settlement of quarry backfill, subsidence and the cumulative impact of development.

Agricultural land and soils

6.28 Where significant development on agricultural land is necessary, national policy⁹⁸ normally expects areas of poorer quality land to be used in preference to that of a higher quality. There are extensive areas of high quality agricultural land in Oxfordshire, much of which lie in areas underlain by minerals. Proposals for minerals development will be expected to address the impact of the development on the extent and quality of any best and most versatile (BMV) agricultural land (grades 1, 2 and 3a)⁹⁹. Where appropriate, agricultural land classification survey information should be provided. Proposals for waste development should be capable of avoiding best and most versatile agricultural land¹⁰⁰ and permanent development involving the loss of such land will not normally be permitted.

6.29 Where mineral extraction affects BMV agricultural land, proposals for restoration and aftercare should look to preserve the long-term potential for the land and its soils as a high quality agricultural resource wherever possible. Proposals for restoration need to be realistic, however, and in some cases a return to agriculture may need to be at lower level due to availability of suitable inert infill material. In the floodplain the use of fill to restore mineral working must take account of national policy on flood risk (see also policies C3 and M8)¹⁰¹ and a return to agriculture may not always be possible.

⁹⁸ Paragraph 112 of the National Planning Policy Framework.

⁹⁹ Agricultural Land Classification: Ministry of Agriculture, Fisheries and Food (1998).

¹⁰⁰ See policy W6.

¹⁰¹ In the flood plain it may not always be possible to return land to pre-existing levels and a return to agricultural land at lower level may not be practicable in view of the high water table.

6.30 Where BMV agricultural land cannot be restored after mineral extraction proposals will need to demonstrate that any need cannot be met on lower grade land and that there is good planning reason to justify the development in that location. Provision for the sustainable management and use of all disturbed soils during extraction should be demonstrated, including means of stripping soils and storage in ways that maintain soil quality. Where BMV agricultural land is not restored, proposals must show how alternative and beneficial use is to be made of high quality soils that are not being replaced.

6.31 **Policy C6: Agricultural land and soils**

Proposals for minerals and waste development shall demonstrate that they take into account the presence of any best and most versatile agricultural land.

The permanent loss of best and most versatile agricultural land will only be permitted where it can be shown that there is a need for the development which cannot reasonably be met using lower grade land, taking into account other relevant considerations.

Development proposals should make provision for the management and use of soils in order to maintain soil quality, including making a positive contribution to the long-term conservation of soils in any restoration.

Biodiversity and Geodiversity

6.32 Oxfordshire has a significant number of statutorily designated sites of international, national and local nature conservation importance, intended to protect important species, habitats and geological features¹⁰². These include seven Special Areas of Conservation designated under European legislation. National policy provides that the level of protection given to designated sites depends on their status. The overall intention is to ensure that a net gain in biodiversity is achieved, including by establishing ecological networks to reduce habitat fragmentation.

6.33 Mineral development can often impact on biodiversity, but restoration of sites normally offers opportunity for net gains in the longer term. Policy C7 provides the basis for considering whether the impact of minerals or waste development in terms of biodiversity is acceptable or capable of satisfactory mitigation. It also addresses the restoration of sites where the after-use is related to biodiversity (see also policy M8). Arrangements for the long term management of restored sites need to be agreed, including arrangements for monitoring and remediation (should establishment of habitats or mitigation for species prove unsuccessful).

¹⁰² Further details are contained in the Topic Paper on Biodiversity and Geodiversity. There are 102 Sites of Special Scientific Interest in Oxfordshire, some of which are also designated as National Nature Reserves. There are 362 locally designated Local Wildlife Sites, some of which are also designated as Local Nature Reserves.

- 6.34 Special Areas of Conservation (SACs) are protected by particular legislation and are not specifically referred to in policy C7. Oxfordshire has four National Nature Reserves, also designated as a SAC or a Site of Special Scientific Interest (SSSI). SSSIs are designated nationally and, in line with national policy, these are afforded the highest level of protection. Development likely to have an adverse effect on a SSSI should not normally be permitted. An exception should only be made where the benefits of developing the site clearly outweigh the harm likely to be caused to the SSSI and any broader impact on the national network.
- 6.35 Oxfordshire also has a large number of sites locally designated for their importance to wildlife or habitat including Local Wildlife Sites, Local Nature Reserves and Sites of Local Importance for Nature Conservation. Development should avoid or mitigate any adverse effects on these areas. If the effects cannot be avoided or mitigated then the development should not be allowed to proceed.
- 6.36 A variety of legally protected species, notable species and UK priority habitats and species are found in Oxfordshire. The highest level of protection is given to European Protected Species. However, harm to all protected species, notable and priority species and habitats should be avoided.
- 6.37 A number of Conservation Target Areas (CTAs)¹⁰³ have been identified in Oxfordshire to help deliver the objectives of National and Local Biodiversity Action Plans¹⁰⁴. The CTAs include concentrations of existing high value nature conservation sites, including designated sites, as well as land that can provide important ecological linkages between these sites. They provide a network of green infrastructure where targeting improvement can achieve maximum benefit for biodiversity. Minerals and waste development close to or within a CTA should ensure that opportunity is taken to conserve and enhance the nature conservation interest of the CTA, including improving habitat connectivity.
- 6.38 Only about 6% of the county is covered by woodland. Ancient woodland accounts for half of the tree cover and is particularly valued because it is irreplaceable. Species-rich grassland is another example of an irreplaceable habitat. Ancient woodland should be protected from loss or adverse impact. Elsewhere, development should seek to preserve existing trees wherever possible and provide for additional tree planting with native species for screening and landscaping as appropriate. Tree planting may provide a productive land use on restored mineral workings where landscape and biodiversity objectives are met.
- 6.39 Oxfordshire has a rich geological resource. Some important geological sites are already designated as Sites of Special Scientific Interest. Local Geology Sites should continue to be protected, but previously unknown geological

¹⁰³ There are 36 Conservation Target Areas in Oxfordshire.

¹⁰⁴ The objectives of the UK Biodiversity Action Plan are now incorporated within the UK Post 2010 Biodiversity Framework, 2012; and Biodiversity 2020: A Strategy for England's Wildlife & Ecosystems incorporates the objectives of the previous Biodiversity Strategy for England.

features and remains of importance (including fossils and trace fossils) may also be discovered. Where such finds are made, every effort should be made to protect those of potential international or national importance. Where it is not possible to afford the same protection to finds of more local importance, they should be appropriately recorded. Where possible, access to all geological finds should be provided for educational purposes.

6.40 Policy C7: Biodiversity and Geodiversity

Minerals and waste development should conserve and, where possible, enhance biodiversity.

Sites and species of international nature conservation importance (e.g. Special Areas of Conservation and European Protected Species) will be given the highest level of protection.

Development shall ensure that:

- **there is no adverse effect on a Site of Special Scientific Interest, either individually or in combination with other development;**
- **irreplaceable habitats, including ancient woodland and aged or veteran trees are not lost or harmed;**
- **no damage is caused to sites locally designated for the purposes of nature conservation and/or geological interest, including;**
 - **Local Nature Reserves;**
 - **Local Wildlife Sites;**
 - **Local Geology Sites;**
 - **Sites of Local Importance for Nature Conservation.**

Development that does not meet these requirements will be refused permission, unless the impact can be mitigated to result in a net gain in biodiversity or, if the impact cannot be fully mitigated, the need for the development on that site clearly outweighs the harm. In the case of Sites of Special Scientific Interest, the need for the development would need to clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest.

Development shall avoid harm to protected, priority or notable species and habitats.

All proposals for mineral working and landfill shall demonstrate how the development will make an appropriate contribution to the maintenance and enhancement of local habitats, biodiversity or geodiversity (including fossil remains and trace fossils), including contributing to the objectives of the Conservation Target Areas wherever possible. Satisfactory long-term management arrangements for restored sites shall be clearly set out and included in proposals. These should include a commitment to ecological monitoring and remediation (should habitat creation and/or mitigation prove unsuccessful).

Landscape

- 6.41 When considering proposals for minerals and waste development in Areas of Outstanding Natural Beauty (AONB) the County Council has a statutory duty to have regard to the purpose of conserving and enhancing the natural beauty of those areas. The setting of and views associated with the Chilterns, Cotswolds and North Wessex Downs AONBs should also be taken into account in considering development proposals¹⁰⁵. Major development should not take place in AONBs unless there are exceptional circumstances and such development is 'in the public interest'¹⁰⁶. A key aim of planning in AONBs is to take account of the need to safeguard agriculture, forestry, other rural industries and the economic and social needs of local communities¹⁰⁷. This points to development being small scale to serve local needs. In Oxfordshire this is likely to rule out most mineral development with the possible exception of small quarries supplying local building stone. Proposals for development within AONBs should be informed by the relevant AONB Management Plan.
- 6.42 National planning policy recognises the importance of the countryside¹⁰⁸. Across the county proposals for minerals and waste development should be designed to minimise visual impact and where possible enhance the quality and character of the countryside and landscape. Restoration and after use of mineral working should take account of the landscape character areas set out in the Oxfordshire Wildlife and Landscape study and other relevant landscape character assessments.
- 6.43 Minerals and waste development close to a settlement should take account of the character and setting of the settlement. Proposals should set out measures for an acceptable separation distance with landscaping and planting that is appropriate to the character of the area and that would be consistent with the proposed after-use of the site. Where development is considered acceptable, consideration should be given to after-uses that help develop a network of green infrastructure for the benefit of the local community, wildlife and habitat.

6.44 Policy C8: Landscape

Proposals for minerals and waste development shall demonstrate that they respect and where possible enhance local landscape character, and are informed by landscape character assessment. Proposals shall include measures to mitigate adverse impacts on landscape, including careful siting, design and landscaping.

High priority will be given to conservation and enhancement of the natural beauty of the landscape in Areas of Outstanding Natural Beauty (AONB). Proposals for minerals and waste development within an AONB

¹⁰⁵ The relevant AONB Management Plan should inform the consideration of proposals for development within or in proximity to an AONB.

¹⁰⁶ Paragraph 116 of the National Planning Policy Framework.

¹⁰⁷ Natural England website guidance.

¹⁰⁸ National Planning Policy Framework – Core Planning Principles (paragraph 17).

shall demonstrate that they take this into account and are informed by the relevant AONB Management Plan. Proposals for minerals and waste development that would affect the setting of an AONB shall also take this into account. Development within AONBs shall normally only be small-scale, to meet local needs and should be sensitively located and designed.

Historic environment

- 6.45 Oxfordshire has a wide range of heritage assets including listed buildings, historic parks and gardens and ancient monuments, which influence the character of the environment and sense of place. There are extensive archaeological assets located in the river valleys where mineral resources are also present. Proposals for minerals and waste development should include measures to conserve designated heritage assets and to protect them from loss or harm.
- 6.46 Before determining an application for mineral extraction or waste development the County Council will normally require the applicant to describe the significance of any heritage assets affected, and any contribution made by their setting. The level of detail should be proportionate to the asset's importance but sufficient to understand the potential impact of the proposal on their significance.
- 6.47 Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, the applicant should carry out a preliminary desk-based archaeological assessment to determine the nature and significance of any archaeological assets, and the contribution of the setting to that significance, as well as any potential impacts on the assets or their setting. This preliminary assessment should also identify any previously unidentified heritage assets. The County Council may, subject to the results of this initial assessment, require an archaeological field evaluation of the site to inform the determination of the application. This information should identify any means for mitigating the impact of extraction on the heritage assets.
- 6.48 **Policy C9: Historic environment and archaeology**

Proposals for minerals and waste development will not be permitted unless it is demonstrated that they or associated activities will not have an unacceptable adverse impact on the historic environment. Great weight will be given to the conservation of designated heritage assets such as Blenheim Palace, scheduled monuments, listed buildings, conservation areas, historic battlefields, registered parks and gardens and archaeological assets which are demonstrably of equivalent significance to a scheduled monument, and the setting of those assets.

Where an application would affect a non-designated heritage asset, the benefits of the proposal will be balanced against the scale of harm to or loss of the heritage asset and its significance.

Where, following assessment of an application, the loss (wholly or in part) of a heritage asset is considered acceptable in principle, the applicant will be required to record and advance understanding of that asset, proportionate to the nature and level of the asset's significance, and to publish their findings.

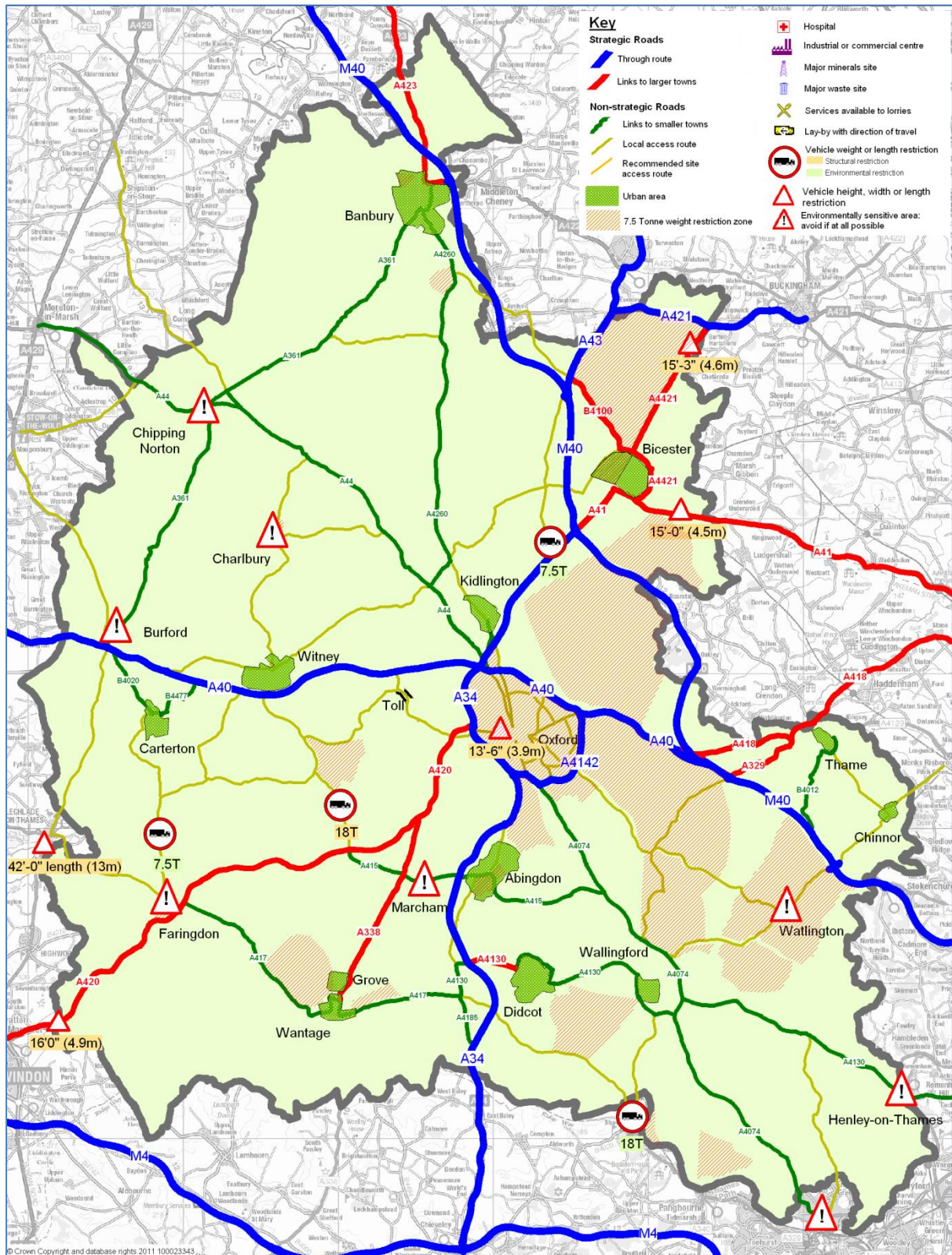
Transport

- 6.49 The Oxfordshire Local Transport Plan 2011 – 2030 (LTP3) aims to reduce carbon emissions from transport, improve air quality and reduce other environmental impacts. The County Council recognises that the transport network should be operated in a way that balances the protection of the local environment with efficient and effective access for freight and distribution. To ensure that traffic from new development can be accommodated safely and efficiently on the transport network, contributions are often sought to mitigate adverse impacts: commuted sums can also be sought toward the operation and maintenance of facilities, services and infrastructure¹⁰⁹.
- 6.50 The impact of traffic associated with minerals and waste development must always be taken into account when considering the suitability of a site in relation to local communities and the environment generally. Account should also be taken of the need to minimise the distances materials need to be transported, to achieve a commensurate reduction in air pollution, greenhouse gas emissions and overall impact on the environment.
- 6.51 The harm caused by the movement of minerals and waste by road can be reduced by encouraging the uptake of alternative transport methods such as rail, conveyor, pipeline and water. These alternatives can be practicable where movement of large quantities over long distances is involved or in particular local circumstances¹¹⁰. But it may not be economically viable or practicable for quarries and waste facilities to use such alternatives where minerals are distributed mostly to local markets or where waste is produced and handled locally. For these reasons aggregates and waste in Oxfordshire are likely to continue to be transported mainly by road.

¹⁰⁹ Policy SD2 of the Oxfordshire Local Transport Plan 2011-2030 (revised April 2012).

¹¹⁰ Oxfordshire's need for hard crushed rock is largely met by material being transported by rail to depots at Banbury, Kidlington and Sutton Courtenay.

Figure 17: Oxfordshire Lorry Route Map



Source: Oxfordshire Lorry Routes (Feb 2012) Oxfordshire County Council

- 6.52 Most of the traffic associated with minerals and waste development involves heavy goods vehicles, and it is important that sites secure safe and suitable access¹¹¹ to roads that are suitable for such traffic. Figure 17 shows the network of roads that the County Council considers suitable for use by heavy goods vehicles (the Oxfordshire Lorry Route Map). Direct access to this network will not always be possible, particularly in the case of motorways and trunk roads. Where direct access is not possible, sites should generally be in locations that have access to a road which provides convenient access to this network and avoids the use of roads not suited to heavy goods vehicles or which pass through rural settlements.
- 6.53 The provision of safe and suitable access to the Oxfordshire lorry route network may require alteration of road junctions or improvements to minor roads. Where this is likely the Council will seek a contribution to such improvement before development starts. Lorries can damage highways and lead to a need for more frequent maintenance and commuted sums towards on-going maintenance of part of a route to the Lorry Network may also be sought, in line with the Local Transport Plan.
- 6.54 The harmful impact of lorry traffic in environmentally sensitive locations and settlements can be reduced by routeing agreements to control traffic movements. Such agreements will direct lorry traffic to and along the lorry route network (figure 17) taking into account road standard, settlements, road safety issues and other factors. This also needs to be balanced against the likelihood of vehicles driving further, increasing carbon emissions and pollution. If appropriate mitigation of unacceptable traffic impacts cannot be secured, the site is unlikely to be suitable for the type of development proposed.

6.55 **Policy C10: Transport**

Minerals and waste development will be expected to make provision for safe and suitable access to the advisory lorry routes in ways that maintain and, if possible, lead to improvements in:

- **the safety of all road users including pedestrians;**
- **the efficiency and quality of the road network;**
- **residential and environmental amenity.**

Where development leads to a need for improvement to the transport network to achieve this, developers will be expected to provide such improvement or make an appropriate financial contribution.

Where practicable minerals and waste developments should be located, designed and operated to enable the transport of minerals and/or waste by rail, water, pipeline or conveyor.

Where minerals and/or waste will be transported by road:

¹¹¹ Paragraph 32 of the National Planning Policy Framework.

- a) **mineral workings should as far as practicable be in locations that minimise the road distance to locations of demand for the mineral, using roads suitable for lorries, taking into account the distribution of potentially workable mineral resources; and**
- b) **waste management and recycled aggregate facilities should as far as practicable be in locations that minimise the road distance from the main source(s) of waste, using roads suitable for lorries, taking into account that some facilities are not economic or practical below a certain size and may need to serve a wider than local area.**

Rights of way

- 6.56 The Oxfordshire Rights of Way Improvement Plan and the Oxfordshire Local Transport Plan 2011 – 2030 set out the County Council’s intention to protect and maintain public rights of way and natural areas so that all users are able to understand and enjoy their rights in a responsible way. These plans also note that the County Council will seek opportunities for network improvements and initiatives to better meet the needs of walkers, cyclists, and horse riders, including people with disabilities, for local journeys, recreation, and health.
- 6.57 Proposals to enhance, promote and improve the rights of way network and to increase permissive access to the countryside should be brought forward as part of restoration plans for mineral workings and landfill sites¹¹². Operators and landowners can usefully discuss plans with the local community before finalising such proposals. Proposals should consider arrangements for future management of access routes in the longer term.
- 6.58 If a proposal for mineral extraction would necessitate the temporary diversion or closure of a right of way, the planning application should provide all details, including the proposed route, the width of the proposed diversion, the materials to be used and the access implications for users, which demonstrate that a safe and convenient right of way will be maintained. Where temporary diversions are required applications should also provide details of how the right of way will be restored when the mineral workings are completed. The process for diverting a public right of way whether on a temporary or permanent basis follows a separate application process and advice from Oxfordshire County Council should be sought beforehand.
- 6.59 Public access to restored mineral workings should be carefully managed so as not to impact adversely on any sensitive habitats and species in the restored area.

¹¹² Paragraph 75 of the National Planning Policy Framework.

6.60 Policy C11: Rights of way

The integrity of the rights of way network shall be maintained and if possible retained in situ in safe and useable condition. Diversions should be safe, attractive and convenient and, if temporary, shall be reinstated as soon as possible. If permanent diversions are required, these should seek to enhance and improve the public rights of way network.

Improvements and enhancements to the rights of way network will generally be encouraged and public access sought to restored mineral workings, especially if this can be linked to wider provision of green infrastructure. Where appropriate, operators and landowners will be expected to make provision for this as part of the restoration and aftercare scheme.

7. IMPLEMENTATION AND MONITORING

(This section has not yet been amended)

Implementation of the minerals planning strategy

- 7.1 Implementation of the minerals planning strategy will be achieved primarily through the determination of planning applications for mineral working and other minerals developments. In carrying out its responsibility as mineral planning authority for dealing with applications for minerals development, the County Council will cooperate with the District Councils (the local planning authorities). The County Council will seek to work closely with local stakeholders, other statutory bodies and the minerals industry, to provide appropriate advice prior to the submission of applications and to engage with local residents.
- 7.2 The aim will be to ensure that development delivers the objectives of the minerals planning strategy. This will be done by taking due account of the policies and proposals in the strategy in pre-application discussions and when determining planning applications and by imposing appropriate planning conditions and, where necessary, negotiating legal agreements when permissions are granted.
- 7.3 The minerals planning strategy aims to enable sufficient supply of aggregate minerals to meet the development needs of Oxfordshire and to make an appropriate contribution to wider needs. The quarries and other minerals supply facilities and infrastructure that will be needed will be delivered through investment and development by the private sector, in particular landowners and the minerals industry. Implementation of the strategy will depend on proposals for sufficient sites (for recycling plants, quarry extensions and/or new quarries) in appropriate locations coming forward as planning applications in time to be available to enable supply needs to be met. The Council will cooperate with other mineral planning authorities to ensure an adequate & steady supply of minerals is maintained.
- 7.4 The Local Aggregate Assessment identifies the provision for minerals supply that needs to be made over the plan period, and that the minerals planning strategy needs to provide for. The strategy makes separate provision for secondary and recycled aggregates and for locally extracted aggregates: sharp sand and gravel; soft sand; and crushed rock; and includes a policy on importation of aggregates by rail.
- 7.5 The strategy indicates that on the basis of Local Aggregate Assessment 2013, currently the additional provision required for mineral working over the plan period is: 7.87 million tonnes of sharp sand and gravel; 0.80 million tonnes of soft sand; and no additional requirement for crushed rock. Locations where the required mineral working should take place are identified (policy M3).
- 7.6 Provision for secondary and recycled aggregates (policy M1) is to be made through a mix of permanent facilities and temporary facilities at aggregate quarries and inert waste landfill sites. Supply is expected to be primarily from

recycling of construction and demolition waste. Provision for this will need to be made in conjunction with the provision for construction, demolition and excavation waste facilities as part of the Council's waste planning strategy. Many existing aggregates recycling facilities are operating on temporary permissions; these will need to be replaced or have their operational life extended in order to maintain supply capacity.

- 7.7 Four areas of search for working of sharp sand and gravel are identified (policy M3). It is anticipated that current permitted reserves will on average last until around 2020. Further working is to be through extensions to existing quarries or new quarries to replace exhausted quarries, but with no increase in the overall level of working in the two West Oxfordshire areas (Lower Windrush Valley and Eynsham / Cassington / Yarnton). It is expected that there will be a need for a new working area within southern Oxfordshire during the plan period, particularly since the existing Sutton Courtenay Quarry has only a few years' worth of permitted reserves remaining and limited possibilities for further extension. Implementation of the strategy will depend on sufficient applications coming forward in acceptable locations to enable all five areas to make an appropriate contribution to the overall level of supply, including a phased transition of working from existing quarries that become exhausted to new working areas.
- 7.8 Two areas of search, where there are existing workings, are identified for further provision of soft sand (policy M3). It is anticipated that current permitted reserves will on average last until around 2024. Continuation of supply is preferentially to be through extensions to existing quarries, to make the most efficient use of existing plant and infrastructure. But new quarries will be permitted if sufficient supply cannot be made through extensions. Implementation of the strategy will depend on sufficient applications coming forward in acceptable locations to enable each area to make an appropriate contribution to the overall level of supply.
- 7.9 Three areas, where there are existing workings, are identified for further provision of crushed rock (policy M3). It is anticipated that current permitted reserves will on average last until 2036. Additional provision may be needed towards the end of the plan period if demand increases. If so, this is preferentially to be through extensions to existing quarries, to make the most efficient use of existing plant and infrastructure, but new quarries will be permitted if sufficient supply cannot be made through extensions.
- 7.10 Proposals for mineral working may come forward in other locations, but these will not normally be permitted unless the provision required to deliver the strategy cannot be met from identified areas.
- 7.11 Possible sites for mineral working have been put forward (nominated) to the County Council by mineral operators and landowners. A preliminary technical assessment of these site options has been undertaken to check that the minerals planning strategy is potentially capable of being delivered.

- 7.12 Provision to meet requirements for non-aggregate minerals, in particular building stone and clay, will depend on applications coming forward in acceptable locations, which will be considered against policy M6. Proposals for working other minerals are not currently expected but policy M6 provides a policy basis for considering any such applications.
- 7.13 Improvements to infrastructure, particularly roads and junctions, may be required in order that new quarries or extensions to existing quarries can be developed in a way that is locally acceptable. Appropriate financial contributions for such improvements will be sought from mineral developers and operators through legal agreement at the planning application stage. Provisions for obtaining developer contributions are changing with the introduction of the Community Infrastructure Levy, which will need to be taken into account in implementing the strategy.
- 7.14 The strategy depends on permitted mineral working sites, secondary and recycled aggregates production sites and aggregates rail depots being available to be worked or operate to their full extent or capacity. It also depends on potentially workable mineral resources being kept available throughout the plan period and not being sterilised by other development. This is also important for ensuring that mineral resources are potentially available for the longer term. Mineral safeguarding areas will be defined and identified; and mineral consultation areas will be drawn up to define areas wherein the District Councils must consult the County Council on applications for specified types of development. Delivery of this part of the strategy will require liaison with the District Councils.
- 7.15 The core policies have been developed to ensure the minerals strategy is delivered in an environmentally acceptable way, including by setting out criteria against which planning applications will be considered. These policies will be implemented by the County Council through the development management process.

Monitoring of the minerals planning strategy

- 7.16 The minerals planning strategy is based on current circumstances and currently available information, but it must be able to respond to changing circumstances and needs. The County Council as Mineral Planning Authority will monitor the effectiveness of the policies and proposals in delivering the vision and objectives of the strategy and the changing context within which the strategy is being used.
- 7.17 The Council will produce a Minerals and Waste Monitoring Report at least annually, in accordance with the Planning and Compulsory Purchase Act 2004 (as amended). These reports will include an assessment of:
- the extent to which the policies in the Minerals and Waste Local Plan are being achieved;
 - any changes needed where policies are not working or objectives are not being met; and

- progress on the preparation of minerals and waste local plan documents. Any relevant changes in government or other policy will be addressed through the monitoring reports.
- 7.18 The Council will continue to carry out regular monitoring of sales and reserves of aggregate minerals and of planning applications and decisions, as well as monitoring of mineral working sites. The Council will work with the minerals industry and with other mineral planning authorities, including through the South East Aggregates Working Party, in monitoring sales, distribution and reserves of aggregates and changes in patterns of supply, and in forecasting future demands.
- 7.19 The Council will also make use of monitoring and survey work undertaken by other agencies, such as the Environment Agency and Natural England, and of other work carried out within the Council such as for transport planning and biodiversity, to monitor change.
- 7.20 Observations recorded in the monitoring reports will feed into reviews of the minerals planning strategy. It is intended that the strategy will be reviewed and rolled forward every five years. But monitoring may indicate a need for review of part or the whole of the strategy sooner. For example, if it becomes clear that the provision for minerals supply in the strategy is insufficient or excessive, or that sites are not coming forward as planning applications within strategy areas, an earlier review of the strategy may be required.
- 7.21 An implementation and monitoring framework for the minerals planning strategy will be included in the Minerals and Waste Annual Monitoring Reports. Indicators and targets will be developed to provide a consistent basis for monitoring the performance of the strategy's vision, objectives and policies for minerals development to 2030. The indicators will reflect the intent of the strategy objectives and the sustainability appraisal framework identified in the Sustainability Appraisal Report.
- 7.22 In the case of some of the core policies it will not be possible to set a specific target but it will still be possible to assess the effectiveness of these policies in relation to minerals development.
- 7.23 The results of monitoring against the implementation and monitoring framework will be reported in the monitoring reports.

Implementation of the waste planning strategy

- 7.24 The waste planning strategy is a plan for where the facilities that will be needed to deal with waste in Oxfordshire should be located. It must be read and applied in conjunction with strategies that cover other aspects of waste management. Other strategies, including the Oxfordshire Joint Municipal Waste Management Strategy, have informed the proposals in the plan for how different wastes should be dealt with.

- 7.25 This plan sets targets for ways in which different wastes should be managed (by composting, recycling, treatment and landfill) but it does not attempt to dictate which particular technologies should be used within each type of management. Different technologies will be appropriate in different circumstances. This is largely a matter for the waste industry. Waste management technologies are likely to develop and change through the plan period.
- 7.26 The waste planning strategy addresses the government's aim of reducing the amount of waste produced in the estimates of waste growth. Other agencies and strategies are better able to lead on influencing behaviour patterns and financial issues relating to waste generation, such as the government's Waste Resources Action Programme (WRAP) and European Pathway to Zero Waste. Locally, the Oxfordshire Waste Partnership has produced a Waste Prevention Strategy 2010-2020.
- 7.27 Implementation of the waste planning strategy will be achieved primarily through the determination of planning applications for waste facilities. In carrying out its responsibilities as waste planning authority for dealing with applications for waste development, the County Council will cooperate with the District Councils (the local planning authorities). Where the District Councils deal with proposals for development which have significant implications for the management of waste, the County Council should be consulted. The County Council will seek to work closely with local stakeholders, other statutory bodies and the waste industry, to provide appropriate advice, prior to the submission of applications.
- 7.28 The aim will be to ensure that development delivers the objectives of the waste planning strategy. This will be done by taking due account of the policies and proposals in the strategy in pre-application discussions and when determining planning applications and by imposing appropriate planning conditions and, where necessary, negotiating legal agreements when permissions are granted.
- 7.29 The waste planning strategy aims to enable sufficient waste facility capacity to deal with the waste that is expected to be produced in Oxfordshire, including from new developments, and some waste from outside the county. The waste facilities and infrastructure that will be needed will be delivered through investment and development by the private sector.
- 7.30 In the case of facilities for municipal waste, this is likely mainly to be done under contract or partnership arrangements with the County or District Councils, as waste disposal and collection authorities. Implementation of the strategy will depend on proposals for sufficient facilities (particularly for composting, recycling and treatment of waste) in appropriate locations coming forward as planning applications in time to be available when they are required to enable waste management needs to be met.
- 7.31 The provision for additional waste management capacity that needs to be made over the plan period (policy W4) will be identified, monitored and

updated through the Minerals and Waste Annual Monitoring Reports. The waste planning strategy identifies the broad locations where the additional waste management facilities to meet this requirement should be located (policy W5) and sets out criteria for the siting of facilities (policy W6).

- 7.32 Possible sites for waste development have been put forward (nominated) to the County Council by waste operators and landowners; and a number of other possible sites have been identified during preparation of the plan. These potential sites have informed the generation of the options for provision of waste facilities, which have in turn led to the waste planning strategy.
- 7.33 For facilities that are needed in the short term, site availability is particularly important; preliminary work indicates that the strategy should be capable of being delivered. For longer term needs, other sites may be put forward or identified, but the number of site options already known indicates that needs should be capable of being met in accordance with the strategy. A preliminary assessment of sites will be prepared to check that the waste planning strategy is potentially capable of being delivered.
- 7.34 Some proposals for waste facilities may come forward in locations that are not identified in the plan. Government policy (PPS10) is that such applications should be considered favourably where they are consistent with planning policy. This may lead to more capacity for waste composting, recycling and treatment being permitted than has been estimated to be needed. But, except where it is clear this would lead to an unacceptable level of waste importation into Oxfordshire (contrary to policy W2) or there would be unacceptable impact, the provision of facilities that would help to increase the amount of waste diverted away from landfill should not be restricted.
- 7.35 In addition to the provision for additional waste facilities made in this plan, at the local community level smaller scale facilities can make an important contribution towards meeting targets for increased recycling and composting of waste. The local bottle banks and recycling bins already located in many communities provide tangible evidence of this. Opportunities may arise for further local facilities of this type to be provided and also for community composting sites, like the existing community facility at Coleshill.
- 7.36 Major development proposals, such as large housing schemes, may provide opportunities for waste management facilities to be provided as part of the infrastructure for the overall development. Such facilities could provide a local waste recycling site or a local source of heat and power generated from waste. This could help to deliver the provision proposed in policy W5 or could be additional provision in accordance with policy W6.
- 7.37 Improvements to infrastructure, particularly roads and junctions, may be required in order that new or expanded waste management facilities can be developed in a way that is locally acceptable. Appropriate financial contributions for such improvements will be sought from developers and waste operators through legal agreement at the planning application stage. Provisions for obtaining developer contributions are changing with the

introduction of the Community Infrastructure Levy, which will need to be taken into account in implementing the strategy.

- 7.38 The Government Review of Waste Policy in England 2011¹¹³ refers to the principle that those most impacted by waste developments should benefit most, and says this should operate at all levels. The Review says this should be achieved through dialogue between communities, local authorities and waste operators and refers to industry protocols for providing community benefits in relation to infrastructure projects, as has been developed for wind generation. The provision of community benefits by developers could help in securing the timely delivery of the waste facilities that are needed in Oxfordshire. The County Council will work with communities and waste operators on the provision of community benefits in relation to waste development proposals where this is appropriate having regard to the nature, scale and potential impacts of the development.
- 7.39 The strategy depends on permitted permanent waste facility sites being available to operate to their full capacity throughout the plan period and not being prejudiced by other development. Existing and proposed permanent waste management sites will be safeguarded for waste use (policy W11). The District Councils should consult the County Council on applications for other development that would prevent or prejudice the use of a safeguarded site for waste management. Delivery of this part of the strategy will require liaison with the District Councils.
- 7.40 The core policies have been developed to ensure the waste strategy is delivered in an environmentally acceptable way, including by setting out criteria against which planning applications will be considered. These policies will be implemented by the County Council through the development management process.

Monitoring of the waste planning strategy

- 7.41 The waste planning strategy is based on current circumstances and currently available information, but it must be able to respond to changing circumstances and needs. Regular monitoring is necessary, both to identify the impact of changes and to check that the strategy is achieving its objectives and identify whether there is a need to adjust the strategy in order to achieve the desired outcomes.
- 7.42 The County Council as Waste Planning Authority will monitor the effectiveness of the policies and proposals in delivering the vision and objectives of the strategy; and the changing context within which the strategy is being used.

¹¹³ Government Review of Waste Policy in England 2011, Defra, June 2011

- 7.43 The Council will produce a Minerals and Waste Monitoring Report at least annually, in accordance with the Planning and Compulsory Purchase Act 2004 (as amended). These reports will include an assessment of:
- the extent to which the policies in the Minerals and Waste Local Plan are being achieved;
 - any changes needed where policies are not working or objectives are not being met; and
 - progress on the preparation of minerals and waste local plan documents.
- Any relevant changes in government or other policy will be addressed through the monitoring reports.
- 7.44 The Council monitors the quantities of municipal waste produced and the ways in which it is managed, but is reliant on other agencies, in particular the Environment Agency, for data on other types of waste. The Council also monitors planning applications and decisions and the capacity available at waste facilities, as well as monitoring waste sites. The Council will work with the waste industry, the Environment Agency and with other waste planning authorities, including through the South East Waste Planning Advisory Group, in monitoring production and movements of waste and the ways in which it is managed and in forecasting future waste production and waste management requirements.
- 7.45 The Council will also make use of monitoring and survey work undertaken by and information available from other agencies, such as Defra, Environment Agency and Natural England, and on other work carried out within the Council such as for transport planning and biodiversity, to monitor change.
- 7.46 Observations recorded in the monitoring reports will feed into reviews of the waste planning strategy. It is intended that the strategy will be reviewed and rolled forward every five years. But monitoring may indicate a need for review of part or the whole of the strategy sooner. For example, if it becomes clear that the provision for additional waste facilities in the strategy is insufficient, or that sites are not coming forward as planning applications within strategy locations, an earlier review of the strategy may be required.
- 7.47 An implementation and monitoring framework for the waste planning strategy will be included in the Minerals and Waste Annual Monitoring Reports. Indicators and targets will be developed to provide a consistent basis for monitoring the performance of the strategy's vision, objectives and policies for waste development to 2030. The indicators will reflect the intent of the strategy objectives and the sustainability appraisal framework identified in the Sustainability Appraisal Report.
- 7.48 In the case of some of the core policies it will not be possible to set a specific target but it will still be possible to assess the effectiveness of these policies in relation to waste development.
- 7.49 The results of monitoring against the implementation and monitoring framework will be reported in the monitoring reports.

Appendix 1. Flood Vulnerability Classification and Flood Zone Compatibility

(This section has not yet been amended)

Table A1: Minerals and Waste Flood Vulnerability Classification

Development Type	Vulnerability Classification	Flood Zone Compatibility
Mineral or waste development requiring hazardous substances consent	Highly Vulnerable	Flood Zone 1 and 2
Landfill sites*	More Vulnerable	Flood Zone 1 and 2
Waste management facilities handling hazardous waste	More Vulnerable	Flood Zone 1 and 2
Minerals working and processing (except for sand and gravel working)	Less Vulnerable	Flood Zones 1, 2 and 3a
Sand and Gravel Workings	Water Compatible	Flood Zone 1, 2, 3a, 3b
Sand and Gravel processing sites (including grading and washing plant)	Less Vulnerable	Flood Zone 1, 2, and 3a
Sewage Treatment Plants	Less Vulnerable	Flood Zones 1, 2 and 3a
Waste recycling, composting and transfer uses (including recycling to produce recycled aggregate)	Less Vulnerable	Flood Zones 1, 2 and 3a
Secondary aggregate re-cycling (considered as minerals processing)	Less Vulnerable	Flood Zones 1, 2 and 3a
Waste treatment processes (including anaerobic digestion, mechanical biological treatment, incineration, gasification and pyrolysis).	Less Vulnerable	Flood Zones 1, 2, and 3a
Concrete block manufacture (considered as minerals processing)	Less Vulnerable	Flood Zones 1, 2 and 3a
Concrete batching plant (considered as minerals processing)	Less Vulnerable	Flood Zones 1, 2 and 3a

This table is developed from Tables 2 and .3 in Technical Guidance to the National Planning Policy Framework, March 2012.

Waste management categories are based on guidance in Planning for Sustainable Waste Management Companion Guide to PPS10 – page 31.

* Inert waste imported for the restoration of sand and gravel workings not included where imported as part of a recovery operation (an increase in flood storage capacity is likely in these circumstances)

Table A2. PPS25 Flood Risk Vulnerability and Flood Zone Compatibility
 (Developed from Tables 2 and 3 in Technical Guidance to the National Planning Policy Framework, March 2012)
 (*This section has not yet been amended*)

Minerals & Waste Development Type	Use Category	FLOOD ZONE			
		1	2	3a	3b
Any mineral or waste proposal which also requires hazardous substances consent	Highly Vulnerable	✓	Use only appropriate if Sequential Test is passed ↓ Use only appropriate if the Exception Test is passed ↓ ✓	✗ Use should not be permitted	✗ Use should not be permitted
Landfill sites or sites used for waste management facilities for hazardous waste	More Vulnerable	✓	Use only appropriate if Sequential Test is passed ↓ ✓	Use only appropriate if Sequential Test is passed ↓ Use only appropriate if the Exception Test is passed ↓ ✓	✗ Use should not be permitted
Waste management facilities (except landfill and hazardous waste), Minerals working and processing (except for sand and gravel workings)	Less Vulnerable	✓	Use only appropriate if Sequential Test is passed ↓ ✓	Use only appropriate if Sequential Test is passed ↓ ✓	✗ Use should not be permitted
Sand and gravel workings (that exclude processing operations)	Water Compatible	✓	Sequential Test suggested as means of prioritising sites at allocation stage ✓	Sequential Test suggested as means of prioritising sites at allocation stage ✓	Sequential Test suggested as means of prioritising sites at allocation stage ✓

✗: Use should not be permitted ↓: If passed proceed ✓: Appropriate use

Glossary (*This section has not yet been amended*)

Aggregates – sand, gravel and crushed rock that is used in the construction industry to make things like concrete, mortar, asphalt and drainage material. For secondary or recycled aggregates, see below.

Agricultural waste – waste from a farm or market garden including pesticide containers, tyres and old machinery.

Aftercare – The management and treatment of land for a set period of time immediately following the completed restoration of a mineral working to ensure the land is returned to the required environmental standard.

After-use – The long term use that land formerly used for mineral workings is restored to, e.g. agriculture, forestry, nature conservation, recreation or public amenity such as country parks.

Anaerobic Digestion Facility – facility involving process where biodegradable material is encouraged to break down in the absence of oxygen, which changes the nature and volume of material and produces a gas which can be burnt to recover energy and digestate which may be suitable for use as a soil conditioner.

Ancient Woodland – woodland that has existed continuously since or pre -dates 1600. Before this date planting of new woodland was uncommon, so a wood present in 1600 was likely to have developed naturally. The ancient woodland inventory is a data source held and maintained by the Woodland Trust on the location and extent of ancient woodlands.

Annual Monitoring Report (AMR) – see Monitoring Report.

Apportionment – the allocation between minerals and waste authorities of an overall total amount of provision required for mineral production or waste management, for a particular period of time, e.g. as set out in the South East Plan.

Area of Outstanding Natural Beauty (AONB) – area with statutory national landscape designation, the primary purpose of which is to conserve and enhance natural beauty.

Biodegradable waste – materials that can be broken down by naturally-occurring micro-organisms, e.g. food, garden waste and paper.

Biodiversity Action Plan (BAP) – strategy prepared by the local planning authority together with nature conservation organisations aimed at protecting and enhancing the biological diversity.

Biological Diversity / Biodiversity – the variety of life including plants, animals and micro-organisms, ecosystems and ecological processes.

Buffer zones – areas drawn around settlements or properties in which mineral development is prohibited. The purpose of these zones is to protect settlements from

disruption caused by the working of minerals. They can also be used to prevent sterilisation of minerals resources by the encroachment of other developments.

Climate change – long-term changes in temperature, precipitation, wind and all other aspects of the earth's climate.

Commercial and Industrial waste – waste from factories or premises used for the purpose of trade or business, sport, recreation or entertainment.

Composting – the breakdown of organic matter aerobically (in presence of oxygen) into a stable material that can be used as a fertiliser or soil conditioner.

Conservation Target Areas (CTAs) – important areas for wildlife in Oxfordshire, where the main aim is to restore biodiversity at a landscape-scale through the maintenance, restoration and creation of Biodiversity Action Plan priority habitats.

Construction, Demolition and Excavation waste – waste arising from the building process comprising demolition and site clearance waste and builders' waste from the construction/demolition of buildings and infrastructure. Includes masonry, rubble and timber.

Core Strategy – sets out the long-term spatial vision for a local planning authority area and the strategic policies and proposals to deliver that vision.

Crushed rock – naturally occurring rock which is crushed into a series of required sizes to produce an aggregate.

Designated Heritage Asset – a World Heritage Site, Scheduled Monument, Listed Building, Registered Park and Garden, Registered Battlefield or Conservation Area designated as such under the relevant legislation.

Development Plan Documents (DPDs) – spatial planning documents that form part of a Local Plan or a Minerals and/or Waste Plan and are subject to independent examination. They have 'development plan' status. They can include Core Strategy and Site Allocations DPDs.

Energy from Waste (EfW) Facility/Plant – residual waste treatment facility where energy (heat and/or electricity) is recovered from waste; either from direct combustion of waste under controlled conditions at high temperatures; or from combustion of by-products derived from the waste treatment process such as biogas or refuse-derived fuel.

Energy Recovery – covers a number of established and emerging technologies, though most energy recovery is through incineration technologies. Many wastes are combustible, with relatively high calorific values – this energy can be recovered through processes such as incineration with electricity generation, gasification or pyrolysis.

Environment Agency (EA) – Government advisor and agency with statutory responsibilities to protect and improve the environment (including air, land and water).

Extension to quarry – extraction of minerals on land which is contiguous or non-contiguous with an existing quarry, where extracted material is moved to the existing quarry processing plant and access via means other than the highway (e.g. by conveyor or internal haul-road).

Gasification – A technology related to incineration where waste is heated in the presence of air to produce fuel rich gases.

Greenfield site – site previously unaffected by built development.

Greenhouse gases – gases such as methane and carbon dioxide that contribute to climate change.

Green Infrastructure – a network of strategically planned and managed natural and working landscapes and other open spaces that conserve ecosystem values and functions and provide associated benefits to human populations.

Groundwater – water held in water-bearing rocks, in pores and fissures underground.

Habitats Regulations Assessment (HRA) – an assessment of the likely impacts of the possible effects of a plan's policies on the integrity of European sites (including Special Areas of Conservation and Special Protection Areas), including possible effects 'in combination' with other plans, projects and programmes.

Hazardous waste – waste that may be hazardous to humans and that requires specific and separate provision for dealing with it. Categories are defined by regulations. Includes many "everyday" items such as electrical goods. Previously referred to as Special Waste.

Household Waste Recycling Centres (HWRCs) – place provided by the Waste Disposal Authority where members of the public can deliver household wastes for recycling or disposal (also known as Civic Amenity Sites).

Heritage Asset – A building, monument, site, place area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. Heritage assets are the valued components of the historic environment. They include assets identified by the local planning authority during the process of decision-making or the plan-making process (including local listing).

Household Waste – waste from household collection rounds, street sweeping, litter collection, bulky waste collection, household waste recycling centres and bring or drop-off recycling schemes.

Incineration – burning of waste at high temperatures under controlled conditions. This results in a reduction in bulk and may involve energy reclamation. Produces a

burnt residue or 'bottom ash' whilst the chemical treatment of emissions from the burning of the waste produces smaller amounts of 'fly ash'.

Independent Examination – process whereby an independent Planning Inspector publicly examines a Development Plan Document for its soundness before issuing their report and recommendations to the planning authority.

Inert waste – waste that does not normally undergo any significant physical, chemical or biological change when deposited at a landfill site. It may include materials such as rock, concrete, brick, sand, soil or certain arisings from road building or maintenance. Most of the category “construction, demolition and excavation” waste is inert waste.

Industrial waste – wastes from any factory, transportation apparatus, scientific research, dredging, sewage and scrap metal.

Intermediate Level Waste (ILW) – radioactive wastes which exceed the upper activity boundaries for Low Level Waste but which do not need heat to be taken into account in the design of storage or disposal facilities.

In-Vessel Composting Facility – facility where the composting process takes place inside a vessel where conditions are controlled and optimised for the aerobic breakdown of materials.

Landbank – the reserve of unworked minerals for which planning permission has been granted, including non-working sites, expressed in tonnage or years.

Landfill – permanent disposal of waste into the ground by the filling of voids or by landraising.

Landfill Allowance Trading Scheme (LATS) – a government scheme to reduce the amount of biodegradable municipal waste sent to landfill, under which Waste Disposal Authorities are allocated annual allowances for the amounts of biodegradable municipal waste that may be landfilled; the allowances are tradeable between authorities.

Landfill gas – gas generated by the breakdown of biodegradable waste within landfill sites, consisting mainly of methane and carbon dioxide.

Landfill tax – Government tax on waste disposed of at landfill sites. Aims to encourage more sustainable waste management methods.

Landraise or **Landraising** – permanent disposal of waste material above ground, resulting in the raising of the ground level.

Landscape character – a distinct, recognisable and consistent pattern of elements, be it natural (e.g. soil and landform) and/or human (e.g. settlement and

development) in the landscape that makes one landscape different from another, rather than better or worse¹¹⁴.

Local Development Framework (LDF) – folder of local development documents prepared planning authorities, that sets out the spatial planning strategy for the area.

Local Development Scheme – the programme for the preparation of local development documents.

Local Nature Reserve – an area of particular wildlife interest declared by a local authority under Section 21 of the National Parks and Access to the Countryside Act 1949; usually managed by the local authority.

Local Plan – part of the statutory development plan that sets out policies on land use and development, prepared by planning authorities.

Low Level Waste (LLW) – radioactive waste having a radioactive content not exceeding four gigabecquerels per tonne (GBq/te) of alpha or 12 GBq/te of beta/gamma radioactivity, but not including radioactive materials that are acceptable for disposal with municipal and general commercial or industrial waste; includes soil, building rubble, metals and organic materials arising from both nuclear and non-nuclear sources; metals are mostly in the form of redundant equipment; organic materials are mainly in the form of paper towels, clothing and laboratory equipment that have been used in areas where radioactive materials are used, such as hospitals, research establishments and industry.

Marine aggregates – aggregates sourced by dredging from the sea bed.

Marine-borne material – sand and gravel that is taken from the sea bed and imported to land.

Materials Recovery/Recycling Facility (MRF) – facility where recyclable materials are sorted and separated from other wastes before being sent for reprocessing.

Mechanical and Biological Treatment (MBT) – residual waste treatment process involving the mechanical separation of recyclable materials followed by composting of the remaining material to produce a fuel or stabilised waste for landfilling.

Mineral Consultation Areas – areas of potential mineral resource wherein district planning authorities should consult the County Council on applications for development, to prevent mineral resources being lost ('sterilised').

Mineral reserves – Mineral deposits which have been investigated and are proven to be of economic importance due to the quality, quantity and nature of the deposit. Permitted reserves also have planning permission for extraction.

¹¹⁴ Natural England definition;

<http://www.naturalengland.org.uk/ourwork/landscape/englands/character/default.aspx>

Mineral resource – A potential source of a mineral without permission for extraction, where the deposit's nature, quality and quantity may not yet have been assessed.

Mineral Safeguarding Areas – areas of known mineral resource that are considered to be of sufficient economic or conservation value (such as building stones) to warrant protection for generations to come.

Mineral Local Plan – part of the statutory development plan that sets out the land use policies for minerals for the plan area, prepared by a minerals planning authority (unitary or county council).

Minerals Planning Authority – the planning authority responsible for planning control of minerals development.

Minerals and Waste Development Framework (MWDF) – folder of local development documents prepared by minerals and waste planning authorities that sets out the spatial planning strategy for minerals and waste planning for the area.

Mitigation measures – actions to prevent, avoid, or minimise the actual or potential adverse effects of a development, action, project, plan, or policy.

Monitoring Report – assesses the implementation of the Local Development Scheme and the extent to which policies in Local Development Documents are being achieved.

Municipal waste/Municipal solid waste (MSW) – waste that is collected by a waste collection authority. Mostly consists of household waste, but can also include waste from municipal parks and gardens, beach cleansing, waste resulting from clearance of fly-tipped materials and some commercial waste.

National Planning Policy Framework – Planning policy document (March 2012) for England issued by central Government which supersedes the majority of Planning Policy Statements, Planning Policy Guidance Notes, Minerals Policy Statements and Minerals Planning Guidance notes. Does not replace PPS 10.

National Nature Reserve – nationally important area of special nature conservation interest, designated by Natural England under Section 16 of the National Parks and Access to the Countryside Act 1949.

Natural England – the Government's advisor on the natural environment.

Non-Hazardous Waste – waste, which is neither inert nor hazardous, which is permitted to be disposed at a non-hazardous landfill; also referred to as non-inert waste.

Non-inert waste – waste that is potentially biodegradable or may undergo significant physical, chemical or biological change when deposited at a landfill site. Also referred to as “non-hazardous waste”.

Nuclear Decommissioning Authority (NDA) – a non-departmental public body with responsibility to deliver the decommissioning and clean-up of the UK's civil nuclear legacy.

Permitted reserves – mineral reserves with planning permission for extraction.

Planning Policy Guidance (PPG) – documents issued by Central Government setting out its national land use policies and guidance for England on different areas of planning. These were gradually being replaced by Planning Policy Statements.

Planning Policy Statements (PPS) – documents issued by Central Government to replace the existing Planning Policy Guidance in order to provide clearer and more focused policies for England on different areas of planning (with the removal of advice on practical implementation, which is better expressed as guidance rather than policy). Most were replaced by the National Planning Policy Framework (NPPF) in March 2012.

Planning permission – formal consent given by the planning authority to develop or use land.

Primary aggregates – naturally-occurring mineral deposits that are used for the first time as an aggregate.

Pyrolysis – a technology related to incineration where waste is heated in the absence of air to produce gas and liquid fuel plus solid waste.

Recycled aggregates – derived from reprocessing waste arising from construction and demolition activities (e.g. concrete, bricks and tiles), highway maintenance (e.g. asphalt plantings), excavation and utility operations. Examples include recycled concrete from construction and demolition waste material, spent rail ballast and recycled asphalt.

Recycling – the recovery of waste materials for use as or conversion into other products (including composting but excluding energy recovery).

Recovery – obtaining value from waste through one of the following means:

- Recycling;
- Composting;
- Other forms of material recovery (such as anaerobic digestion);
- Energy recovery (combustion with direct or indirect use of the energy produced, manufacture of refuse derived fuel, gasification, pyrolysis or other technologies).

Residual waste – the waste remaining after materials have been recovered from a waste stream by re-use, recycling, composting or some other material recovery process (such as anaerobic digestion).

Residual Waste Treatment Facility – facility for processing waste which has not been re-used, recycled or composted in order to recover resources and minimise the amount of waste that needs to be disposed by landfill; the two most common forms

of residual waste treatment are energy from waste and mechanical and biological treatment.

Resource Park – a site comprising a number of different waste recovery, treatment and reprocessing facilities which enables synergy between those facilities to be realised through common location.

Restoration – methods by which the land is returned to a condition suitable for an agreed after-use following the completion of minerals or waste operations.

Re-use – the repeat utilisation of an item/material for its original (or other) purpose.

Screening report – in Habitats Regulations Assessment, the first stage of the assessment process to determine whether there will be possible effects of a plan's policies on the integrity of European sites.

Secondary Aggregates – usually the by-products of other industrial processes, e.g. blast furnace slag, steel slag, pulverised-fuel ash (PFA), incinerator bottom ash, furnace bottom ash, recycled glass, slate waste, china clay sand and colliery spoil.

Sensitive Receptor – the aspects of the environment likely to be significantly affected by the development, including in particular population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between these factors¹¹⁵.

Sewage Sludge or Sludge – the semi-solid or liquid residue removed during the treatment of wastewater.

Site of Special Scientific Interest – site notified by Natural England under Section 25 of the Wildlife and Countryside Act 1981 as having special wildlife or geological features worthy of protection.

Sludge Treatment Centre – facility at a sewage treatment plant where sludge removed from waste water (sewage) is subject to a treatment process to enable it to be recovered and/or disposed.

Soundness – in accordance with national planning policy, local development documents must be 'soundly' based in terms of their content and the process by which they were produced. They must also be based upon a robust, credible evidence base. There are four tests of soundness in the National Planning Policy Framework.

South East Aggregates Working Party (SEEAWP) – a non-executive technical group covering the South East of England with the role of advising government (the Department for Communities and Local Government), Mineral Planning Authorities and industry on aggregates, including helping mineral planning authorities fulfil the duty to cooperate on strategic mineral planning issues, comprising officers of the

¹¹⁵ Definition in EIA regulations

mineral planning authorities, representatives of the minerals industry and government representatives .

South East Waste Planning Advisory Group (SEWPAG) – a non-executive technical group comprising the waste planning authorities of South East England and representatives of the Environment Agency, the waste industry and the environmental sector which provides advice to help waste planning authorities fulfil the duty to cooperate on strategic waste planning issues.

South East Plan – the Regional Spatial Strategy for the South East region, prepared by the former South East England Regional Assembly and approved by the Secretary of State in May 2009.

Special Area of Conservation – site of international importance for nature conservation, designated under the EU Habitats Directive.

Special Protection Area (SPA) – designation of international importance for nature conservation made under the EU Birds Directive to conserve the best examples of the habitats of certain threatened species of birds.

Statement of Community Involvement – document which outlines the standards and approach that the County Council will undertake in engaging stakeholders and the local community in producing minerals and waste plans and in considering planning applications.

Statutory consultee – Organisations with which the local planning authority must, by regulation, consult on the preparation of its land use plan or in determining a planning application. For land use plans, this always includes the Environment Agency, Natural England and English Heritage.

Sterilisation – this occurs when developments such as housing, roads or industrial parks are built over mineral resources, preventing their possible future extraction.

Strategic Environmental Assessment (SEA) – an environmental assessment of certain plans and programmes, including those in the field of planning and land use, which complies with the EU Directive 2001/42/EC; it involves the preparation of an environmental report, carrying out of consultation, taking into account of the environmental report and the results of the consultation in decision making, provision of information when the plan or programme is adopted and showing that the results of the environment assessment have been taken into account.

Structure Plan – framework of strategic planning policies, produced by the County Council. The Oxfordshire Structure Plan was largely replaced as a statutory planning document by the South East Plan in May 2009.

Sustainable Development / Sustainability – development that meets the needs of the present without comprising the ability of the future generations to meet their own needs, by taking into consideration long-term social, economic and environmental impacts.

Sustainable Community Strategy – statutory strategy for promoting the economic, social and environmental well-being of the area. Prepared through partnership working between statutory sector providers, the community and voluntary sector, businesses, residents and the local authorities.

Sustainability Appraisal – an appraisal of the economic, environmental, and social effects of a plan from the outset of the preparation process to allow decisions to be made that accord with the principles of sustainable development and to check policies against sustainability objectives. The scoping report of a sustainability appraisal seeks the agreement of statutory consultees and the competent authority on the intended range of issues to be covered in the assessment. The Planning and Compulsory Purchase Act 2004 requires a sustainability appraisal to be undertaken of all development plan documents.

Thermal Treatment – generic term encompassing incineration, gasification and pyrolysis.

Transfer Station – a bulk collection point for waste prior to its onward transport to another facility for treatment or disposal.

Very Low Level Waste (VLLW) – radioactive waste with very low concentrations of radioactivity, arising from both nuclear and non-nuclear sources, which because it contains little total radioactivity can be safely treated by various means, including disposal with municipal and general commercial and industrial waste at landfill sites. Formal definition:

(a) **in the case of low volumes ('dustbin loads') of VLLW** "Radioactive waste which can be safely disposed of to an unspecified destination with municipal, commercial or industrial waste ("dustbin" disposal), each 0.1m³ of waste containing less than 400 kilobecquerels (kBq) of total activity or single items containing less than 40 kBq of total activity. For wastes containing carbon-14 or hydrogen-3 (tritium):

- in each 0.1m³, the activity limit is 4,000 kBq for carbon-14 and hydrogen-3 (tritium) taken together; and
- for any single item, the activity limit is 400 kBq for carbon-14 and hydrogen-3 (tritium) taken together.

Controls on disposal of this material, after removal from the premises where the wastes arose, are not necessary."

(b) **in the case of high volumes of VLLW** "Radioactive waste with maximum concentrations of four megabecquerels per tonne (MBq/te) of total activity which can be disposed of to specified landfill sites. For waste containing hydrogen-3 (tritium), the concentration limit for tritium is 40MBq/te. Controls on disposal of this material, after removal from the premises where the wastes arose, will be necessary in a manner specified by the environmental regulators".

Voidspace – volume within landfill (including landraising) sites that is permitted and/or available to receive waste.

Waste Collection Authority – local authority that has a duty to collect household waste, usually district or unitary authorities.

Waste Disposal Authority – local authority responsible for managing the waste collected by the collection authorities, and the provision of household waste recycling centres, usually county or unitary councils.

Waste Planning Authority – local planning authority responsible for planning control of waste management and disposal, usually county or unitary councils.

Waste Local Plan – part of the statutory development plan that sets out the land-use policies for waste for the plan area, prepared by a waste planning authority (unitary or county council).

Waste water – the water and solids from a community that flow to a sewage treatment plant operated by a water company.

Waste and Resources Action Programme (WRAP) – a government body which helps to develop markets for material resources that would otherwise have become waste, provides advisory services and helps influence public behaviour through national level communication programmes.

Abbreviations

AMR	Annual Monitoring Report
AD	Anaerobic Digestion
AONB	Area of Outstanding Natural Beauty
BAP	Biodiversity Action Plan
CDE	Construction, demolition and excavation waste
C&I	Commercial and industrial waste
CTA	Conservation Target Area
DPD	Development Plan Document
EA	Environment Agency
EfW	Energy from Waste facility
EIA	Environmental Impact Assessment
HRA	Habitats Regulations Assessment
HWRC	Household Waste Recycling Centre
ILW	Intermediate Level Waste
IVC	In-vessel composting facility
LATS	Landfill Allowance Trading Scheme
LDF	Local Development Framework
LLW	Low level waste
LNR	Local Nature Reserve
LTP	Local Transport Plan
MBT	Mechanical and Biological Treatment
MPA	Minerals Planning Authority
MPS	Minerals Policy Statement
MRF	Materials Recycling/Recovery Facility
MSW	Municipal Solid Waste
MWDF	Minerals and Waste Development Framework
NDA	Nuclear Decommissioning Authority
NHW	Non Hazardous Waste

PPG	Planning Policy Guidance
PPS	Planning Policy Statement
RSS	Regional Spatial Strategy
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEEAWP	South East Aggregates Working Party
SEWPAG	South East Waste Planning Advisory Group
SSSI	Site of Special Scientific Interest
SPA	Special Protection Area
SPD	Supplementary Planning Document
VLLW	Very low level waste
WCA	Waste Collection Authority
WDA	Waste Disposal Authority
WPA	Waste Planning Authority
WRAP	Waste and Resources Action Programme