

OXFORDSHIRE MINERALS AND WASTE DEVELOPMENT FRAMEWORK

MINERALS AND WASTE CORE STRATEGY

WASTE PLANNING STRATEGY CONSULTATION DRAFT

September 2011



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EXECUTIVE SUMMARY

Introduction

1. The County Council is responsible for minerals and waste planning in Oxfordshire and is preparing a new plan for where mineral working and waste facilities should be located. This consultation document is the Council's draft plan for waste to 2030. It includes a strategy and policies for the different types of waste in Oxfordshire. The Council's preferred strategy is illustrated on a key diagram. Specific sites will be identified in a subsequent document. The Council is consulting separately on its draft plan for minerals. Comments on this document should be made by 31 October 2011.

Local Context

2. In past years Oxfordshire's residents businesses and organisations have produced some 2.2 million tonnes of waste annually. This includes municipal, commercial and industrial and construction, demolition and excavation wastes. There are also smaller quantities of hazardous and radioactive wastes. About 90% of this waste is dealt with in the county. Landfill has historically been the means of disposal, but about half of all waste is now recycled or treated in other ways. Waste is also brought into Oxfordshire for disposal by landfill, particularly from London, under private-sector commercial contracts.
3. Significant growth in population and new housing and commercial development is expected in Oxfordshire over the next 20 years. The key locations for development are Oxford, Bicester, and Science Vale (including Didcot and Wantage & Grove). A key challenge for the plan is to make provision for the waste that will be produced to be dealt with an effective and sustainable way.
4. There has been significant recent investment in Oxfordshire to increase recycling and treatment of waste, and reduce the amount sent to landfill. The District and City Councils have brought in new kerbside collection arrangements for recyclable materials and food and green waste. The County Council has procured composting and food waste treatment facilities and has entered a contract for an energy from waste treatment plant at Ardley which will further reduce the need for landfill. The private sector has also been investing in new recycling facilities for other waste streams.

Policy Context

5. The draft waste plan takes into account relevant legislation and international, national, regional and local policies and plans. A sustainability appraisal report, which incorporates the requirements of the Strategic Environmental Assessment Directive, is published alongside this document. A draft screening report has been prepared in respect of the European Habitats Directive.
6. The County Council shares the government's aim to break the link between economic growth and the environmental impact of waste. National policy is to deal with waste more sustainably through increased reuse, recycling,

composting and treatment to recover resources from waste; disposal of waste should be the option of last resort.

7. The draft waste plan has regard to the Sustainable Community Strategy, Oxfordshire 2030, and to the Oxfordshire Joint Municipal Waste Management Strategy, 2007.

Vision and Objectives

8. The strategy, policies and proposals are based on a vision and objectives for waste planning in Oxfordshire. The vision has three strands:
 - transformation of the way waste is dealt with, to increase recycling, composting and treatment, and minimise disposal by landfill;
 - provision of waste facilities to enable the county to continue to be largely self sufficient in dealing with its waste; and
 - location of waste facilities close to towns and main transport links, to reduce the distance waste needs to be moved.

Preferred Waste Strategy and Proposed Policies

9. The draft waste plan is underpinned by an assessment of the additional waste facilities that will be needed. The proposed strategy has been developed from consideration of options for provision of facilities to deal with the different types of waste; these options are set out in the document.
10. Policy W1 sets out the amounts of the main types of waste that provision should be made for in order that Oxfordshire can continue to be largely self-sufficient in dealing with its waste.
11. A declining amount of provision is proposed to be made for disposal of waste from London and other places outside Oxfordshire (Policy W2).
12. The draft strategy is for increased recycling, composting and treatment of waste, and minimum disposal by landfill from 2015. Policy W3 sets targets to reflect this; and policy W4 sets out the amount of additional provision required over the period to 2030, taking into account existing and permitted facilities.
13. To achieve this, Policy W5 proposes additional waste facilities:
 - a household waste recycling centre to serve Banbury;
 - two transfer stations for residual municipal waste in the Abingdon / Didcot / Wantage & Grove and the Witney / Carterton areas;
 - additional commercial and industrial waste recycling plants in or close to Bicester, Abingdon, Didcot, Faringdon, Henley and Thame;
 - a treatment plant for residual commercial and industrial waste in the Abingdon / Didcot / Wantage & Grove area;
 - permanent recycling plants for construction, demolition and excavation waste at or close to Oxford and the county's large and smaller towns; and temporary plants at landfill and quarry sites.

14. General criteria for sites for waste facilities, including the circumstances which may justify facilities in Green Belt and Areas of Outstanding Natural Beauty, are set out in Policy W6; priority is given to previously developed land.
15. It is proposed that inert waste that cannot be recycled should be used primarily to restore mineral workings; and that new landfill sites for non-hazardous waste should not be permitted, but that existing landfill capacity should be safeguarded (Policy W7).
16. Policy W8 allows for the development of specialist facilities for dealing with hazardous waste where there is an identified need; and policy W9 provides for storage of intermediate level radioactive waste at Harwell and for disposal of low-level radioactive waste only if there is an overriding need.
17. Existing and proposed permanent waste facilities are proposed to be safeguarded for waste use under Policy W10.

Common Core policies

18. The core policies cover issues common to both minerals and waste development. The plan recognises that development may need to take place in flood risk areas, but only where alternative sites have been considered and discounted (Policy C1). Proposals should demonstrate how water quality, flows and watercourses will be protected (Policy C2).
19. Policies C3 to C6 provide for local residents, environmental interests and other sensitive receptors to be protected from adverse impacts of development. Proposals should provide for protection and where possible enhancement of Oxfordshire's biodiversity and landscape, and should protect the county's historic assets, including important archaeological remains.
20. Policy C7 encourages the use of more sustainable means of transport than road. Where transportation has to be by road, the distance travelled should be minimised, taking into account the suitability of the roads, safety of other road users and residential and environmental amenity. Policy C8 seeks to protect and enhance the rights of way network.

Implementation and Monitoring

21. The concluding section sets out how the waste strategy will be implemented and the measures that will be taken to monitor implementation.

1. INTRODUCTION

Introduction

- 1.1 The County Council is responsible for minerals and waste planning in Oxfordshire and is reviewing the planning policies covering mineral working and waste management. This will result in a new type of plan – the Oxfordshire Minerals and Waste Development Framework. This will comprise four documents: the Minerals and Waste Core Strategy, a minerals site allocations document, a waste sites allocation document; and the Statement of Community Involvement, which the Council adopted in 2006.
- 1.2 The Minerals and Waste Core Strategy, when adopted by the County Council, will provide the planning strategies and policies for minerals and waste development in Oxfordshire up to 2030.
- 1.3 This consultation document is the Council's draft plan for waste. It includes options considered for the waste strategy; the Council's proposed strategy approach; proposed policies; and a key diagram to illustrate the preferred strategy. The Council is consulting separately on its draft plan for minerals.

How to respond to this consultation document

- 1.4 The County Council wants to get as wide a response as possible to the waste draft plan. Please let us have your views, preferably using the on-line consultation system.
- 1.5 Alternatively you can use the response form which can be downloaded from the County Council website or obtained from the address below. Please send response forms by post, fax or email to:

Minerals & Waste Draft Plan Consultation
(Speedwell House)
FREEPOST
Oxfordshire County Council

Fax No: 01865 241577

Email: mineralsandwasteplanconsultation@oxfordshire.gov.uk

- 1.6 **The closing date for responses is 31 October 2011.**
- 1.7 For further information, please contact the Minerals and Waste Policy Team on 01865 810431 or 01865 815398, or at the email or postal address above.
- 1.8 All documents published by the County Council in the preparation of the Minerals and Waste Plan are on the County Council website at:
www.oxfordshire.gov.uk/mineralsandwaste

What happens next?

- 1.9 This is an important opportunity to make your views known on our overall approach to planning for minerals and waste development in Oxfordshire. The County Council will consider carefully all comments received in preparing a final Plan (the Minerals and Waste Core Strategy). Publication of this for comment and submission to Government for examination is programmed for early 2012¹. The independent examination by a Government appointed Inspector will be held in 2012 and it is hoped the County Council can adopt the Strategy by early 2013.

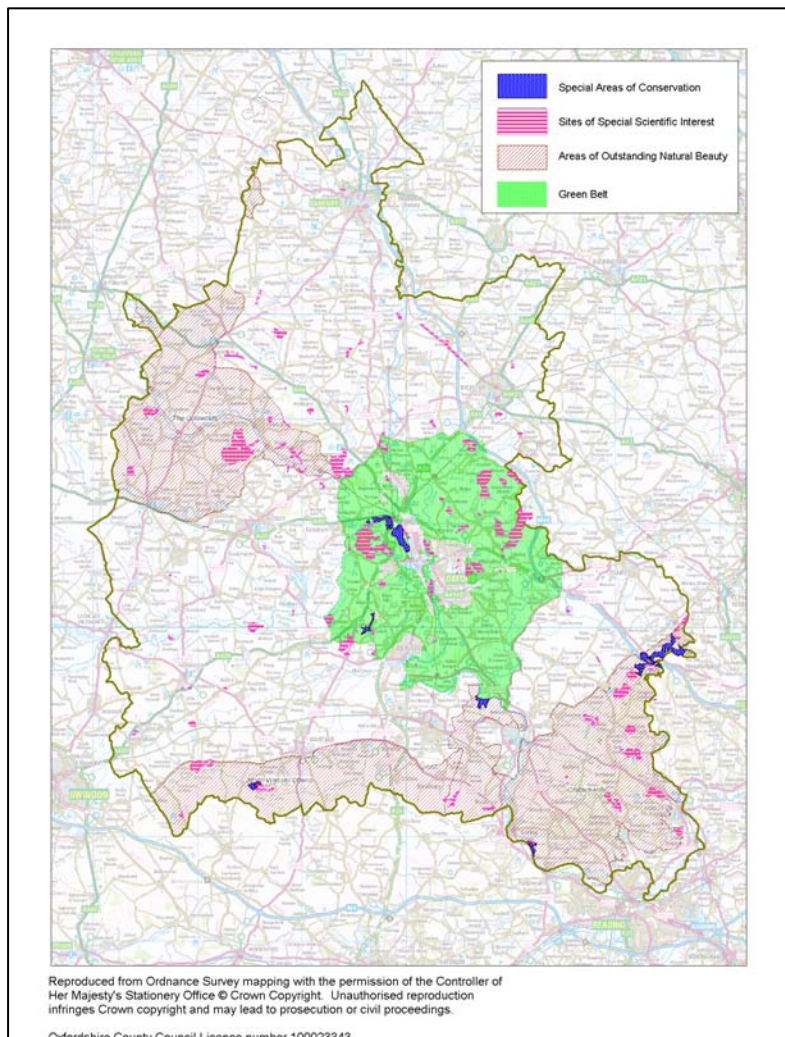
¹ The programme for the preparation of the Minerals and Waste Development Framework will be set out in a revised Oxfordshire Minerals and Waste Development Scheme (which will also explain what each development document will cover) which will be placed on the County Council website later in 2011.

2. BACKGROUND

The Oxfordshire Area

- 2.1 The plan 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 that is likely to take place over the next 20 years.
- 2.2 Oxfordshire is renowned for its knowledge-based economy and research and development facilities. It is also the most rural county in the South East and almost a quarter of the land area is within an Area of Outstanding Natural Beauty. It has seven Special Areas of Conservation which are protected by European legislation, numerous Sites of Special Scientific Interest and regionally important geological sites. It also has a rich variety of landscapes, numerous historic buildings, extensive archaeological remains and areas of high grade agricultural land. An area around Oxford is Green Belt. Figure 1 shows the main protected areas in the county.

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



Waste in Oxfordshire

- 2.3 Prior to the economic downturn, on average a total of about 2.2 million tonnes of waste was produced annually by Oxfordshire's residents, businesses and organisations. This mostly comprises:
- Municipal waste produced in Oxfordshire (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 25%;
 - Construction, demolition and excavation waste (produced, processed and disposed of by the private sector) – approximately 60%.
- 2.4 Other wastes produced in smaller quantities are hazardous wastes (including oils and solvents, chemicals and asbestos); radioactive waste; metal waste; and sewage sludge.
- 2.5 About 90% of Oxfordshire's waste is dealt with in the county. The main method of dealing with waste has hitherto been disposal at local landfill sites, but waste is increasingly being diverted from landfill by recycling and treatment. Existing waste facilities and sites with planning permission are shown on figure 2 (municipal and commercial & industrial waste) and figure 3 (construction, demolition and excavation waste).
- 2.6 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 2008, more than 700,000 tonnes were imported, with Sutton Courtenay being the biggest receiving landfill site.
- 2.7 As waste planning authority the County Council must, through its waste planning strategy, make provision for facilities in Oxfordshire sufficient to manage all types of waste.

Figure 2: Existing municipal and commercial & industrial waste facilities and sites with planning permission

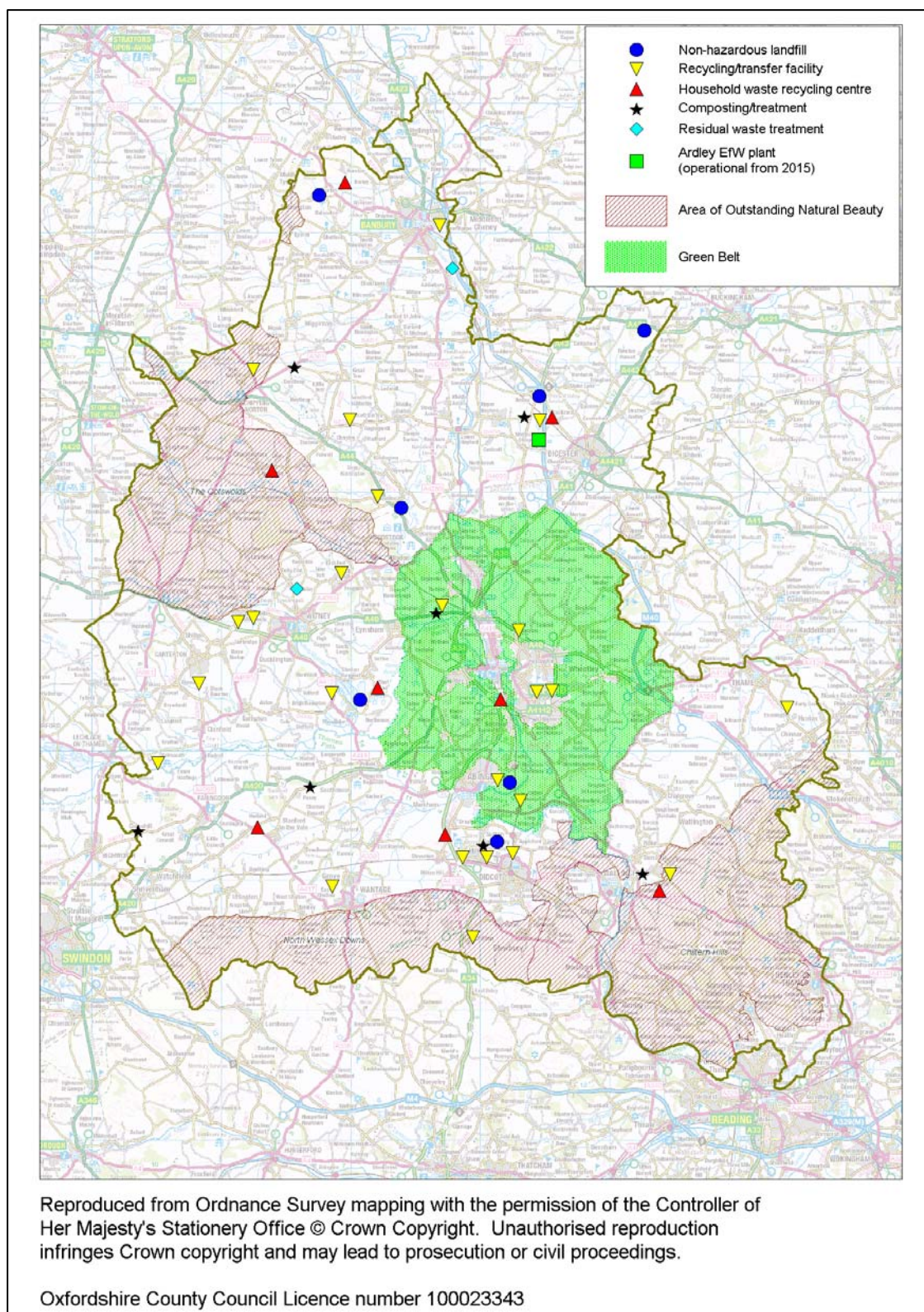
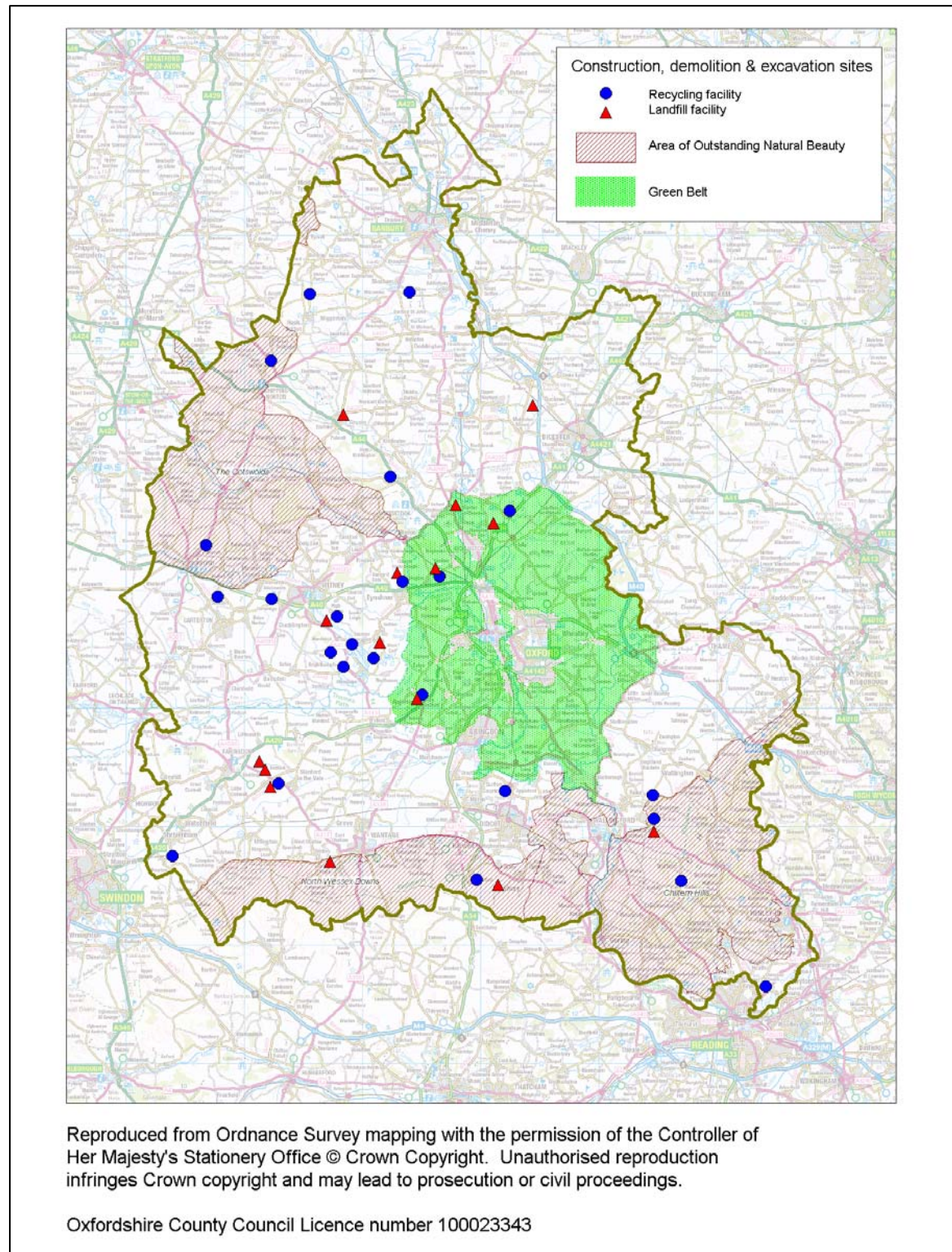


Figure 3: Existing permanent construction, demolition & excavation waste facilities and sites with planning permission



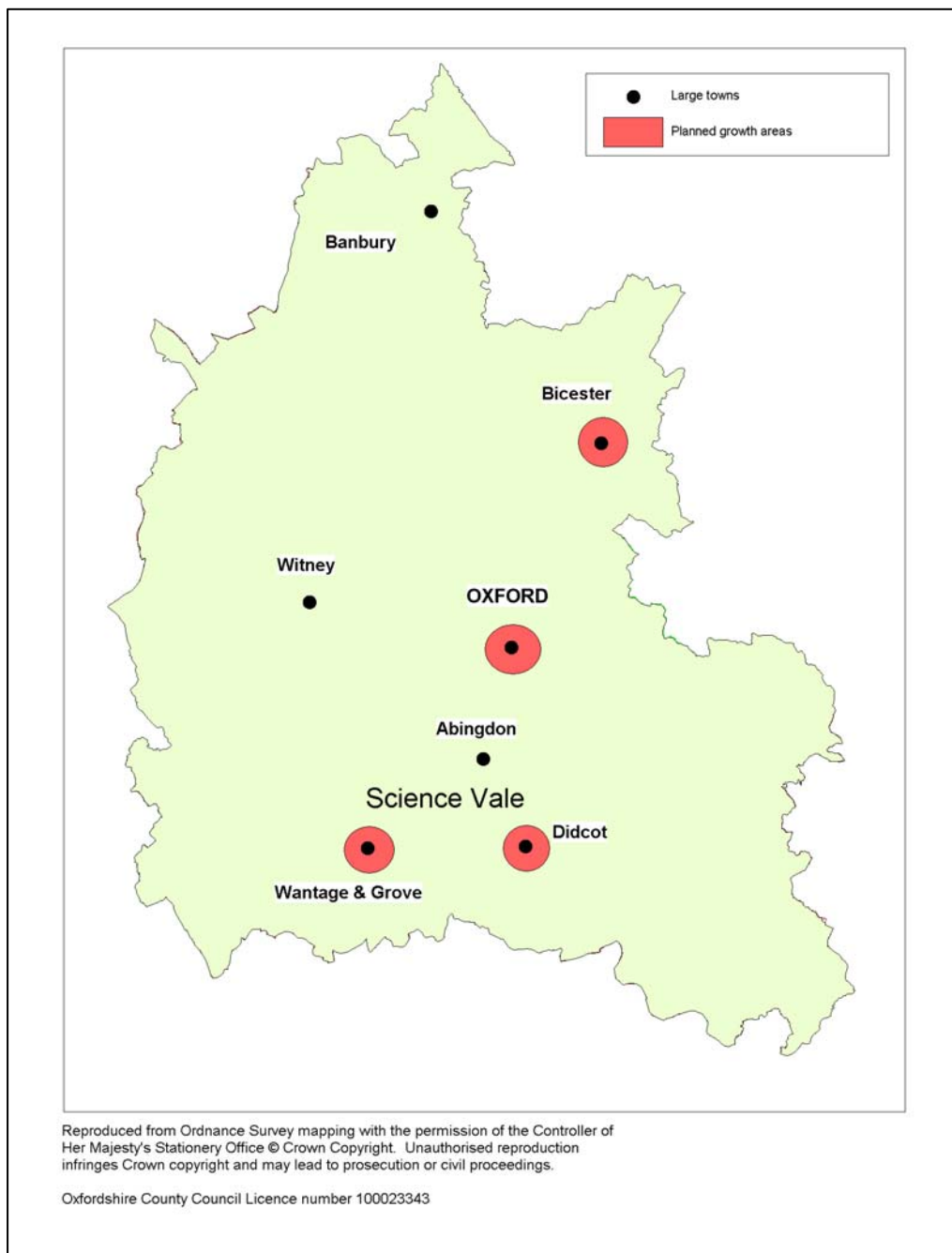
Issues

- 2.8 The population of the county is currently approximately 635,500². Over the next 20 years significant population growth, new housing, commercial and related development, investment in infrastructure and related traffic growth are expected in Oxfordshire³ which has implications 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.
- 2.9 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. A key challenge for waste planning is to make provision for the waste that will be produced to be dealt with in an effective and sustainable way.
- 2.10 Key locations for development, as shown on figure 4, 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, where the 5,000 home eco-development proposal is acting as a focus for delivering an international exemplar of sustainable development;
 - Oxford, which remains a world class centre of education, research and innovation.
- Large housing developments (1000+ homes) are also proposed at Banbury, Upper Heyford, Witney and Carterton.

² Oxfordshire Data Observatory, 2010.

³ Oxfordshire's population is forecast to grow by a further 12% to 2026 with the building of up to about 50,000 new dwellings. Road traffic has grown rapidly in Oxfordshire, particularly on the M40 and A34, and congestion is a significant problem; growth in all traffic on Oxfordshire roads is predicted to be over 25% over the period to 2026.

Figure 4: Planned growth areas and other large towns



Policy context

- 2.11 The draft plan reflects international, national and regional policies and plans. Broad areas of policy are outlined below; specific areas of policy are covered later in the document.

International/European

- 2.12 The key international plans and programmes which are relevant to the draft 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.

2.13 The European Union has issued a number of Directives on waste, which are transposed into national legislation and policy. Of particular relevance to this strategy are the Waste Framework Directive⁴ and the Landfill Directive⁵. The European Union has also issued Directives to develop environmental and sustainability policy. The Habitats Directive⁶ and the Strategic Environmental Assessment Directive⁷ are of particular relevance to this plan (see paragraphs 2.27 and 2.28).

National

2.14 Government policy on “Planning for Sustainable Waste Management” (PPS10)⁸ includes the key objective of preparing and delivering planning strategies that help deliver sustainable development through:

- driving waste management up the waste hierarchy⁹;
- addressing waste as a resource; and
- looking to disposal as the last option.

2.15 Government policy in PPS10 includes the requirement that waste plans should ensure sufficient opportunities for the provision of waste management facilities in appropriate locations and should both inform and in turn be informed by any relevant municipal waste management strategy.

2.16 In providing for new waste management facilities, the draft strategy seeks to promote changes in waste management practice in line with European, national and other relevant policy and the objectives of this strategy.

2.17 European and national policy for waste management (EU Waste Framework Directive, 2008 and PPS10) set out a waste hierarchy, as shown in figure 5, in which prevention of waste is the most desirable option and disposal is the option of last resort.

⁴ Directive on Waste (2008/98/EC) (transposed into English law under the Waste (England and Wales) Regulations 2011)

⁵ Directive on the Landfill of Waste (99/31/EC) (transposed into English law under the Landfill (England and Wales) Regulations 2002)

⁶ 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)

⁷ 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)

⁸ Planning Policy Statement 10: Planning for Sustainable Waste Management (July 2005).

⁹ The waste hierarchy is defined in the update to Planning Policy Statement 10: Planning for Sustainable Waste Management (30 March 2011) as prevention; preparing for re-use; recycling; other recovery; and disposal.

Figure 5: Waste hierarchy



- 2.18 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. The County Council shares this aim.
- 2.19 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 increase the recovery of resources from waste. Landfill tax (which applies to all wastes and has been increasing year on year) and the Landfill Allowance Trading Scheme (which will apply to municipal waste up to 2013) are increasing the costs of landfill so that it will no longer be the cheapest means of dealing with waste.

Regional

- 2.20 Under current legislation, this plan must be in general conformity with the South East Plan, May 2009 (the regional strategy). However, the Government's Localism Bill, which is currently going through Parliament, proposes the abolition of all regional strategies. The South East Plan includes strategic policies for waste management. The County Council considers that these policies generally continue to be appropriate to Oxfordshire, except that higher targets for waste recycling and diversion of waste from landfill are now considered to be achievable (see paragraph 4.19).

Local

- 2.21 The Oxfordshire Minerals and Waste Local Plan was adopted by the County Council in July 1996. It contains detailed policies for the provision of waste management facilities and for the control of waste developments. Under the Planning and Compulsory Purchase Act 2004 (which introduced the requirement to prepare minerals and waste development frameworks), many of the policies of this Plan were 'saved', i.e. are still in force as part of the development plan for Oxfordshire until they are replaced by new policies in the Minerals and Waste Development Framework.

- 2.22 The draft waste strategy has regard to and is consistent with the existing and emerging new plans (local development frameworks) prepared and adopted by the City and District Councils¹⁰. The Minerals and Waste Development Framework and the City and District Plans will together form the development plan for Oxfordshire, containing a full set of local planning policies and proposals for the county against which planning applications for development will be considered. The draft strategy also has regard to the principles of the Sustainable Community Strategy, Oxfordshire 2030.
- 2.23 The draft waste strategy should also take into account and, as far as possible, be consistent with the existing and emerging plans of neighbouring planning authorities and more distant planning authorities which have waste links with Oxfordshire (e.g. counties which Oxfordshire sends hazardous waste to for disposal).
- 2.24 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.
- 2.25 The county and district councils work together on municipal waste management under the Oxfordshire Joint Municipal Waste Partnership (the Waste Partnership). The Oxfordshire Joint Municipal Waste Management Strategy 'No Time to Waste' was agreed by the six Oxfordshire local authorities in January 2007. It provides a framework for the management of municipal waste in the county to 2030 and sets challenging local targets for the management of municipal waste. It identifies a need for new waste treatment facilities, in addition to increased recycling and composting, to significantly reduce the quantity of biodegradable waste sent to landfill. This planning strategy is separate from the municipal waste strategy but it is consistent with and has been informed by it.
- 2.26 The Joint Municipal Waste Management Strategy is under review. The review is not expected to raise significant planning issues (e.g. radical changes to targets for recycling and diversion of waste from landfill or requirements for additional waste management facilities for municipal waste). Nevertheless, the waste planning strategy should include flexibility to allow for any changes in municipal waste management requirements in Oxfordshire.

Habitats Regulations Assessment

- 2.27 The Habitats Directive requires planning authorities to assess the likely impact of their plans 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). Natural England is being consulted on a draft Habitats Regulations Assessment

¹⁰ The Oxford Core Strategy was adopted by Oxford City Council in March 2011; the other four Oxfordshire District Councils are preparing Core Strategies but have existing local plans with saved policies which are still in force as part of the development plan for Oxfordshire

screening report, prepared by the Council, which identifies the seven sites, describes the conservation objectives of each site and provides an assessment of the likely impacts on them.

Sustainability Appraisal / Strategic Environmental Assessment

- 2.28 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. A sustainability appraisal scoping report has been prepared and published following consultation with the Environment Agency, Natural England and English Heritage.
- 2.29 The Council commissioned consultants to carry out a sustainability appraisal incorporating a strategic environmental assessment to assess the likely impacts of the draft plan against a range of environmental, economic and social criteria. The consultants have appraised:
- the waste objectives;
 - the options for the waste strategy;
 - the preferred waste strategy and policies; and
 - the common core policies.
- 2.30 The sustainability appraisal report, incorporating the requirements of strategic environmental assessment and providing an appraisal of the economic and social implications of the plan, is published alongside the draft plan as part of this consultation.

3. VISION AND OBJECTIVES FOR WASTE IN OXFORDSHIRE

- 3.1 The vision and objectives for the Waste Strategy provide a basis for the development of the strategy, policies and proposals for waste management.
- 3.2 The aspirations for Oxfordshire outlined in chapter 2 and the significant growth that is planned present major 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.
- 3.3 The vision and objectives seek to address these and related issues, in particular the need to support Oxfordshire's economy, to protect its environment, and to provide an effective framework for making provision for the management of waste.

Waste Planning Vision

- 3.4 The vision for Oxfordshire's waste planning strategy is that:
- a) By 2030 there will have been a transformation in the way Oxfordshire manages its waste, with:
 - increased 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 large towns, particularly the growth areas, and close to main transport links, and smaller-scale facilities at or close to small towns. This network will have helped to build more sustainable communities that increasingly take responsibility for their own waste and reduce the distance waste needs to be moved within the county.

Waste Planning Objectives

- 3.5 The Oxfordshire Waste Planning Vision is supported by the following eight waste planning objectives which set out the principles which underpin the draft Plan.
- i. Provide for waste management capacity that enables Oxfordshire to be net self-sufficient in meeting its own waste needs.

- ii. Provide for delivery, as soon as is practicable, of waste management facilities that will drive waste away from landfill and as far up the waste hierarchy¹¹ as possible; in particular facilities to meet the targets for recycling and composting and for the treatment and diversion from landfill of Oxfordshire's remaining (residual) waste.
- iii. Provide for waste to be managed as close as possible to where it arises to:
 - minimise the distance waste needs to be transported by road;
 - reduce adverse impacts of waste transportation on local communities and the environment;
 - allow communities to take responsibility for their own waste;
 - and generally provide for a broad distribution of facilities;whilst recognising that some types of waste management facility are uneconomic or not practical below a certain size and therefore will need to serve a wider area.
- iv. Recognise that waste management is an integral part of community infrastructure and take opportunities to locate facilities in or close to the communities they serve, including in conjunction with planned growth, and for recovery and local use of energy (heat and power) from waste.
- v. Recognise that waste will continue to be imported into Oxfordshire from London and elsewhere for disposal by landfill and seek to limit this to residual waste (following recycling and treatment elsewhere) and for the quantity to decrease over time as new facilities are provided where the waste is produced.
- vi. Give priority to the use of previously developed land, including land within the Green Belt if appropriate, and ensure that new waste management facilities are sensitive to the amenities of local communities and do not cause unnecessary harm to the County's distinctive natural and built environment.
- vii. Promote sustainable waste practice in new construction work based on the principle of keeping waste to a minimum, managing waste on site where possible, recycling construction waste as aggregate, and creating buildings and layouts that facilitate the recovery of resources from waste and opportunities for combined heat and power.
- viii. Secure the satisfactory restoration of landfill sites and other temporary waste management sites, where the facility is no longer required or acceptable in that location, in keeping with the surrounding area.

¹¹ The waste hierarchy is shown at paragraph 2.17

4. DRAFT WASTE PLANNING STRATEGY

Development of the waste strategy

- 4.1 This draft strategy is for the period to 2030. How many and what sort of facilities will be needed for dealing with waste in Oxfordshire over this 20 year period cannot be predicted with accuracy. The draft strategy can only be based on best estimates. A waste needs assessment has been prepared as a separate document¹² which 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 2030. These will be monitored regularly and updated as and when necessary.
- 4.2 The preferred strategy is also informed by responses to public consultation undertaken in 2007 on the initial Minerals and Waste Core Strategy Preferred Options and the Waste Sites and Policies Issues and Options. The strategy has evolved from further work on options carried out since then, including stakeholder engagement with statutory bodies.
- 4.3 The strategy comprises core policies which provide the context for considering future proposals for waste development and a spatial strategy for the delivery of the new waste infrastructure that is expected to be needed, which is shown on the key diagram at the end of this section. This will provide a framework for the identification of sites for waste development in the sites allocations document.

How much waste will need to be managed?

- 4.4 The amount of waste produced in Oxfordshire is expected to grow as the population and economic development increase particularly in the main urban areas of Oxford, Banbury, Bicester, Witney, Abingdon, Didcot, and Wantage and Grove. It is estimated that the amounts of waste produced in Oxfordshire could increase over the period to 2030 as shown in the following table for the three main waste types.

Table 1: Estimates of Oxfordshire waste to be managed 2010 – 2030 (tonnes per annum)

Waste Type	2010	2015	2020	2025	2030
Municipal	310,000	330,000	340,000	350,000	370,000
Commercial & Industrial	570,000	580,000	600,000	620,000	640,000
Construction, Demolition & Excavation	650,000*	1,300,000	1,300,000	1,300,000	1,300,000
Total	1,530,000	2,210,000	2,240,000	2,270,000	2,310,000

Figures rounded to nearest 10,000 tonnes

*Reflects reduction in construction activity due to current economic position; prior to the recession approximately 1.3 million tonnes of construction, demolition and excavation waste were produced annually.

¹² Waste Needs Assessment, Oxfordshire County Council, May 2011

- 4.5 The annual quantities of other types waste are also expected to increase over the period 2010 to 2030:
- Hazardous Waste – from approximately 40,000 tonnes to 60,000 tonnes;
 - Metal Waste – from approximately 50,000 tonnes to 60,000 tonnes;
 - Sewage Sludge – from approximately 20,000 tonnes to 25,000 tonnes (dry solids).
- 4.6 For municipal waste it has been assumed that from 2012 there will be no further increase in the amount of waste produced by each household. Growth in municipal waste is therefore based only on what will arise from the expected increase in population, using the planned increase in housing.
- 4.7 For commercial and industrial waste, a low growth rate has been assumed (0.63%). Production of construction, demolition and excavation waste is believed to have fallen sharply due to the economic downturn, to about half the pre-recession level. It has been assumed that this will increase again when the economy recovers, and it is estimated that by 2015 production of construction, demolition and excavation waste will return to previous levels.
- 4.8 Government policy and the South East Plan (policy W4) point to counties being self-sufficient in managing the quantity of waste they produce, with cross boundary movements of waste generally being in balance. Apart from landfill of residual non-hazardous waste (see paragraph 4.61), this principle has been adopted in assessing the amount of waste that needs to be provided for in Oxfordshire.
- 4.9 Policy W1 includes the amounts of waste that will need to be managed each year as a guide to the number of waste management facilities that may be required.
- 4.10 **Policy W1: The amount of waste to be provided for**
- Provision will be made to enable Oxfordshire to be net self-sufficient in the management of municipal waste, commercial and industrial waste and construction, demolition and excavation waste.**
- Provision should be made for waste facilities sufficient to manage the following amounts of waste over the period to 2030:**
- **Municipal Solid Waste – 370,000 tonnes per annum;**
 - **Commercial and Industrial Waste – 640,000 tonnes per annum;**
 - **Construction Demolition and Excavation Waste – 1,300,000 tonnes per annum.**
- 4.11 The following figures should be used as a guide to the amount of provision to be made for the different types of management for each waste type. These will be kept under review through the plan period and if necessary will be revised.

Table 2: Oxfordshire: estimated waste to be managed per annum 2010 – 2030

Waste Type / Management Type	2010	2015	2020	2025	2030
	tonnes per annum				
Composting:					
Municipal	90,000	100,000	105,000	110,000	115,000
Commercial & Industrial	–	30,000	30,000	30,000	30,000
Total	90,000	130,000	135,000	140,000	145,000
Recycling:					
Municipal	80,000	100,000	105,000	110,000	115,000
Commercial & Industrial	280,000	295,000	330,000	375,000	385,000
Total	360,000	395,000	435,000	485,000	500,000
Residual Treatment:					
Municipal	–	120,000	120,000	130,000	130,000
Commercial & Industrial	–	250,000	230,000	205,000	210,000
Total	–	370,000	350,000	335,000	340,000
Landfill:					
Municipal	140,000	10,000	10,000	10,000	10,000
Commercial & Industrial	285,000	15,000	15,000	15,000	15,000
Total	425,000	25,000	25,000	25,000	25,000
Construction, Demolition & Excavation Waste:					
Recycling	325,000	650,000	780,000	780,000	780,000
Landfill / Restoration	325,000	650,000	520,000	520,000	520,000
Total	650,000	1,300,000	1,300,000	1,300,000	1,300,000

Composting includes capacity for food waste

Landfill estimates do not include hazardous waste arising from residual treatment

All figures rounded to nearest 5,000 tonnes

Waste imports and exports

- 4.12 Allowance must also be made for the movement of some waste across the county boundary. Some waste is exported out of Oxfordshire, but waste is also received for disposal from other counties, in particular Berkshire. This reflects the availability of landfill and the location of large towns like Reading and Swindon close to Oxfordshire. London has a shortage of landfill capacity and therefore exports waste for disposal to other places, including Oxfordshire. Much of this is transported by rail.
- 4.13 It is expected that waste will continue to be brought into Oxfordshire for disposal by landfill, but in declining amounts as new recycling and residual waste treatment facilities are developed in London and elsewhere. There should be continuing pressure on authorities in London to make provision for dealing with their own waste.

- 4.14 It is estimated that waste may be imported into Oxfordshire for disposal at the following rates over the period of this plan. It has been assessed that there is sufficient capacity remaining within existing landfill sites for these quantities of waste (in addition to meeting Oxfordshire's landfill requirements).

Table 3: Oxfordshire: estimates of waste imported for disposal to landfill 2010 – 2030

Waste Source	Total Imports for 5 year periods (million tonnes)			
	2010 – 2015	2016 – 2020	2021 – 2025	2026 – 2030
London	1.33	0.84	0.42	0.42
Elsewhere	2.25	1.42	0.71	0.71
Total	3.58	2.26	1.13	1.13

London Waste Imports to 2025 are from South East Plan policy W3

London Waste for period 2016-2025 assumes that 66% of the apportionment for that period is taken up in first 5 year period

Waste from elsewhere is based on an assumed current import rate of 450,000 tpa

Waste from elsewhere for period 2016-20 is in same proportion to period 2010-15 as for London (63%)

London waste and waste from elsewhere for 2026-30 is assumed to be as for period 2021-25

- 4.15 It would be counter-productive to allow new waste management facilities in Oxfordshire predominantly to treat waste from elsewhere. This would be a disincentive to self-sufficiency in other areas and would lead to waste travelling longer distances than necessary, or to provision of waste management capacity in excess of estimated requirements. Such facilities should only be permitted where clear benefits to the area can be identified (e.g. in helping the delivery of a facility that is needed to meet the requirements of Oxfordshire).

4.16 Policy W2: Waste imports

Provision will be made for disposal of a declining amount of waste from London and elsewhere at existing landfill sites. Facilities which provide substantially for the treatment of waste from outside Oxfordshire will not be permitted unless there would be clear benefits within Oxfordshire.

How should Oxfordshire's waste be managed?

- 4.17 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, approaching half of all waste is now being recycled or recovered for other use. This trend is expected to continue as a result of current investment in new waste facilities.
- 4.18 This strategy seeks, as quickly as is practical, the provision of additional facilities to increase recycling and composting and recovery of resources from waste, and to minimise disposal of waste to landfill.
- 4.19 The targets in this strategy, which underpin the waste needs assessment, take account of waste management targets in the South East Plan but modified in line with national policy to move waste management up the waste hierarchy to reflect:

- higher recycling and composting targets for municipal waste, that the Oxfordshire Waste Partnership consider achievable in Oxfordshire; and
- maximum diversion from landfill of municipal waste and commercial and industrial waste being achieved from 2015.

- 4.20 Oxfordshire's municipal waste strategy currently aims for recycling of 55% of household waste by 2020, but this target is being reviewed and it is already clear that a recycling/composting rate of 62% should be achievable by 2020. The recycling targets for commercial and industrial waste and for construction, demolition and excavation waste in the South East Plan are considered appropriate to Oxfordshire.
- 4.21 The County Council as Waste Disposal Authority has entered a contract for the treatment of municipal waste that is not recycled or composted, and an energy from waste treatment plant is to be built at Ardley. It is estimated that from 2015 only 2% of municipal waste will need to be sent direct to landfill. This strategy assumes that from 2015 all Oxfordshire's commercial and industrial waste that is not recycled or composted will also, so far as is practical, be sent to a waste treatment facility, and that only 2% of this waste will need to be sent direct to landfill.
- 4.22 Most recycled construction, demolition and excavation waste comprises hard material which can be used as aggregate and lesser amounts of soil. The recycling target reflects the physical nature of this waste and is unlikely to be capable of significant improvement. The waste remaining will not all need to be disposed of in landfill as much of it will be used to restore quarries and as engineering and cover material at non-hazardous landfills.

4.23 Policy W3: Waste management targets

Provision will be made for waste to be managed in accordance with the following targets, to provide for the maximum diversion of waste from landfill.

Oxfordshire waste management targets 2010 – 2030

Waste Management / Waste Type	Target Year				
	2010	2015	2020	2025	2030
Municipal waste:					
Composting & food waste treatment	29%	30%	31%	31%	31%
Recycling	25%	31%	31%	31%	31%
Treatment of residual waste	0%	37%	36%	36%	36%
Landfill	46%	2%	2%	2%	2%
Total	100%	100%	100%	100%	100%
Commercial & industrial waste:					
Composting & food waste treatment	0%	5%	5%	5%	5%
Recycling	50%	50%	55%	60%	60%
Treatment of residual waste	0%	43%	38%	33%	33%
Landfill	50%	2%	2%	2%	2%
Total	100%	100%	100%	100%	100%
Construction, demolition & excavation waste:					
Recycling	50%	50%	60%	60%	60%
Landfill/Restoration	50%	50%	40%	40%	40%
Total	100%	100%	100%	100%	100%

How much additional waste capacity is needed?

4.24 In deciding on the facilities that might be required and when they should be provided, account needs to be taken of the estimated future level of waste arisings and the capacity already available to manage that waste.

4.25 There are uncertainties in estimating future levels of waste production and cross-boundary movements of waste, particularly where facilities are close to sources of waste in other counties. Flexibility therefore needs to be built into assessments of future waste management requirements. To ensure sufficient

facilities, for each type of waste management the additional capacity to be provided for is 10% higher than the estimate of waste arising.

- 4.26 Policy W4 shows the additional capacity likely to be required for composting, recycling and residual waste treatment, for the three main waste streams. The total estimated amount of waste to be provided for is approximately 2.3 million tonnes a year (policy W1). Taking into account the capacity already available at existing waste facilities and sites with planning permission, it is estimated that additional provision needs to be made for recycling and residual waste treatment facilities with a combined capacity of approximately 800,000 tonnes a year. The additional capacity required increases through the plan period, as waste production is expected to increase slightly, but mainly due to a decline in existing capacity as facilities with temporary planning permissions come to the end of their lives.

4.27 Policy W4: Provision of additional waste management capacity

Provision for additional waste management capacity will be made in accordance with the following guideline figures.

Oxfordshire: additional waste capacity required (tonnes per annum)

Waste Type / Management Type	2010	2015	2020	2025	2030
Composting:					
Municipal / Commercial & Industrial	–	–	–	–	–
Recycling:					
Municipal / Commercial & Industrial	–	–	–	50,000	100,000
Construction, Demolition & Excavation	–	–	80,000	390,000	500,000
Residual Treatment:					
Commercial & Industrial	–	200,000	180,000	160,000	160,000

All figures rounded to nearest 10,000 tonnes

Figures based on estimates of waste arising +10% contingency

Where should new waste facilities be located?

- 4.28 The Waste Needs Assessment identifies a need for new recycling and treatment/recovery facilities and decisions need to be made on where these should be located. A key objective of this plan is to manage waste as close as possible to the source of arising. This generally points to a broad spread of facilities in order to minimise transport distances. However, different sizes of facility are appropriate for different types of waste management and technology.

- 4.29 For the main waste streams, there are two broad spatial options:
- larger/medium facilities focused on the large towns (Oxford; Banbury; Bicester; Abingdon; Didcot; Wantage & Grove; Witney).
 - a more dispersed pattern of smaller facilities related to both large (as above) and smaller towns (Chipping Norton; Carterton; Faringdon; Wallingford; Henley; Thame).
- 4.30 As a guide to the possible distribution of the waste management capacity required across the county, the population of Oxfordshire can be divided into the following areas based around the large towns, as shown on figure 6.

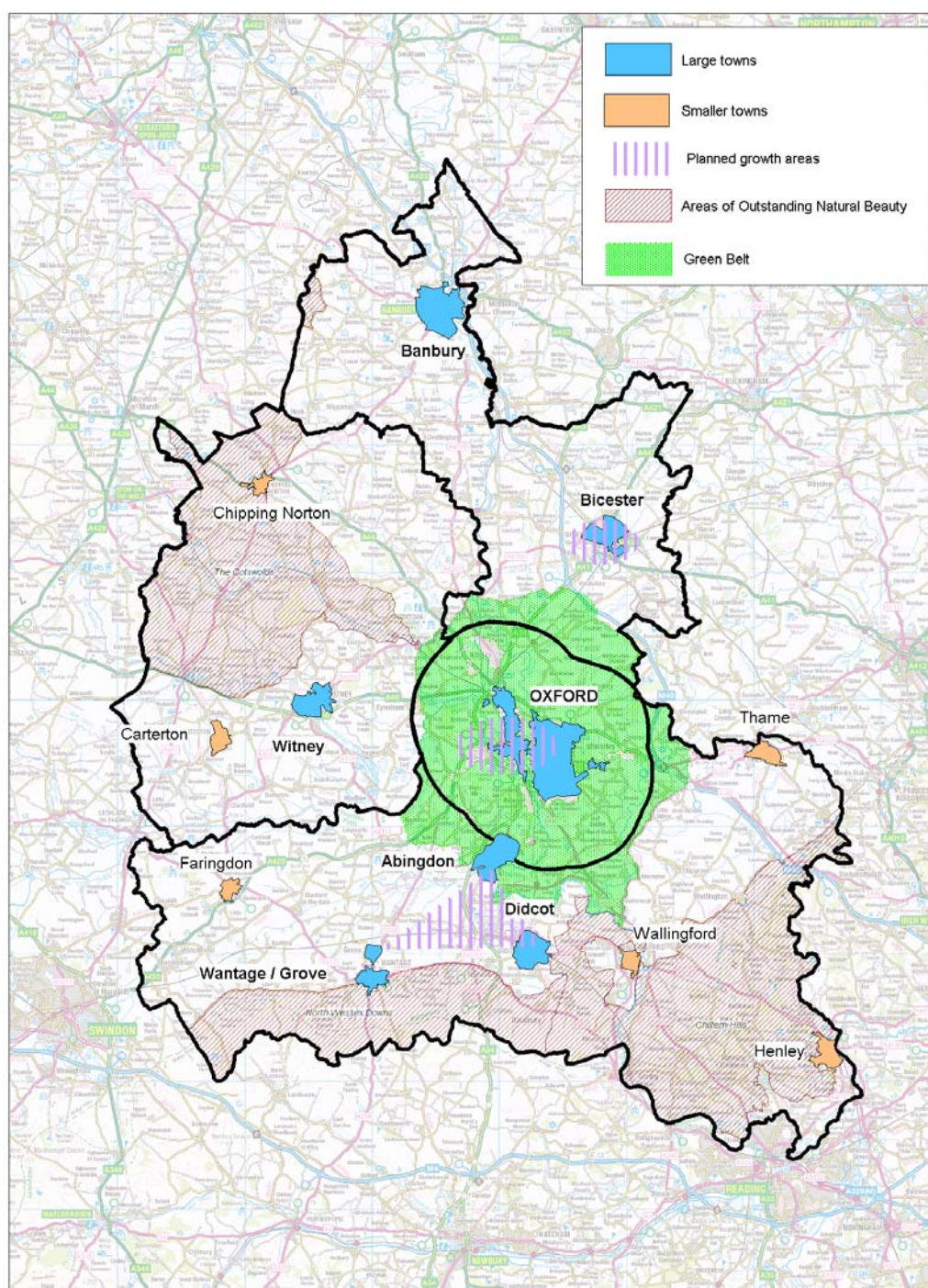
Table 4: Population distribution by areas based around large towns

Area of the County and Large Towns	Population: number	Population: percentage
Northern Oxfordshire: Banbury and Bicester plus most of Cherwell District	120,000	18%
Oxford: City plus nearby communities within surrounding Districts	210,000	32%
Southern Oxfordshire: Abingdon, Didcot and Wantage & Grove plus most of South Oxfordshire and Vale of White Horse Districts	225,000	35%
Western Oxfordshire: Witney plus most of West Oxfordshire District	95,000	15%
Oxfordshire Total	650,000	100%

Figures rounded to nearest 5,000

- 4.31 Options have been identified that broadly indicate areas where new waste facilities might be located. The different types of waste are considered separately although, municipal and commercial and industrial waste recycling and treatment facilities can cater for both of these waste streams. The most appropriate option will vary between waste streams and types of waste management facility. The options that have been considered for different waste streams are set out below.
- 4.32 Facilities should, as far as practicable, be suitably sized and distributed to minimise transport distance; and be well related to and proportionate to the needs of the population of the area they will serve. The overall approach that is proposed is to make provision for a range of additional waste management facilities (taking into account the locations of existing and permitted facilities), generally with large or medium facilities within or close to the large towns and small facilities to serve the smaller towns, but with more concentrated provision for the treatment of residual waste. This approach is consistent with the Oxfordshire Joint Municipal Waste Management Strategy. Concentrated provision will also be needed for more specialist requirements such as for hazardous and radioactive waste, which are covered separately at paragraphs 4.66 and 4.75. Broad, strategic locations where the development of most facilities should take place are shown on the key diagram at the end of this section.

Figure 6: Areas of the County around large towns, and smaller towns



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- 4.33 Large (approximately 50,000 tonnes per annum or more throughput) and medium (approximately 20,000 to 50,000 tonnes per annum) waste facilities will generally be appropriate at or close to large towns. This could include locations up to 5 km from the built up area, where there is good access to the main road network. Small waste facilities (approximately 20,000 tonnes per annum or less) will be appropriate, and medium facilities may be appropriate, at or close to smaller towns. This could include locations up to 2 km from the built up area, where there is good access to the main road network. Small and medium facilities to serve local needs may also be appropriate in more rural locations, where they meet the criteria in policy W6 and have good access to the main road network.

Municipal waste

- 4.34 Facilities to handle municipal waste are already being provided for in accordance with the Joint Municipal Waste Management Strategy and the Household Waste Recycling Centre Strategy adopted by the County Council in April 2011. Existing and planned facilities for municipal waste are shown on figure 2.
- 4.35 The recycling centre strategy includes provision of a new facility to serve Banbury (to replace the existing temporary facility at Alkerton). A site for this facility will be identified in the separate site allocations document.
- 4.36 The Ardley energy from waste facility is expected to meet all Oxfordshire's requirement for residual municipal waste treatment from mid 2014. There is a need to provide for bulking up and transfer of residual municipal waste from the southern and western parts of the County for efficient transportation to Ardley and the County Council (as waste disposal authority) intends to let a contract for this. The County Council thinks this could best be provided by two transfer stations: one in the Abingdon / Didcot / Wantage & Grove area; and one in the Witney / Carterton area.

Commercial & industrial waste

- 4.37 The waste needs assessment shows that the strategy should in particular support the provision of additional facilities for recycling of commercial and industrial waste; and treatment of residual commercial and industrial waste. The total estimated amount of commercial and industrial waste to be provided for is approximately 640,000 tonnes a year (policy W1). Taking into account the capacity already available at existing waste facilities and sites with planning permission, it is estimated that additional provision needs to be made for recycling and residual waste treatment facilities with a combined capacity of approximately 300,000 tonnes a year.
- 4.38 Metal wastes are mainly recycled at dedicated scrap yards. Although metal waste production is expected to increase, there are sufficient existing permanent facilities to provide the required capacity.

Recycling of commercial & industrial waste

- 4.39 There is an estimated gap of approximately 100,000 tpa by 2030 between the capacity forecast to be required and capacity at existing facilities and sites with planning permission. There are permissions for new large permanent recycling facilities at Banbury and Gosford, near Oxford, and for a temporary facility at Finmere.
- 4.40 This requirement mainly arises after 2020, mainly due to the temporary nature of many existing facilities, and is primarily needed to serve the large towns of Bicester, Abingdon and Didcot and their surrounding areas. The reasonable options for provision of this capacity are:
- a): Concentration of additional provision at or close to Oxford.
 - b): Additional provision at or close to large towns in:
 - Northern Oxfordshire (Bicester); and
 - Southern Oxfordshire (Abingdon; Didcot).
 - c): Additional provision at or close to large and smaller towns in:
 - Northern Oxfordshire (Bicester);
 - Southern Oxfordshire (Abingdon; Didcot; Faringdon; Henley; Thame).
- 4.41 From an initial assessment, option c) best meets the objectives in paragraph 3.5, in particular objective iii (provide for waste to be managed as closely as possible to where it arises) and objective iv (facilities to be located in or close to the communities they serve). It is considered that recycling facilities for commercial and industrial waste could be delivered by the private sector at the scale required such that objective ii (delivery of waste management facilities that will drive waste up the hierarchy) would also be met.
- 4.42 **The proposed approach is additional provision for commercial and industrial waste recycling plants at or close to large and smaller towns in the northern and southern areas of the county.**

Residual treatment of commercial & industrial waste

- 4.43 From mid 2014 the energy from waste facility at Ardley is expected to have capacity to treat up to approximately 180,000 tonnes per annum of commercial & industrial waste. The location of the plant in northern Oxfordshire, close to the county boundary, means it is likely to take in waste from outside Oxfordshire. It has been assumed that only half (90,000 tonnes per annum) of the potential commercial & industrial waste capacity will be available for non-municipal waste from Oxfordshire. This leaves an estimated gap in required provision for Oxfordshire commercial & industrial waste of approximately 200,000 tonnes per annum by 2015.
- 4.44 The County Council has resolved to grant planning permission for a gasification plant of 90,000 tonnes per annum at Finmere, which could meet part of the requirement but is located in northern Oxfordshire.

- 4.45 The additional capacity required will mainly be needed to serve southern Oxfordshire but also the Witney area. The reasonable options for provision of this capacity are:
- a) 1 large facility in the Abingdon / Didcot / Wantage & Grove area.
 - b) 2 smaller facilities in the Abingdon / Didcot / Wantage & Grove area; and the Witney area.
- 4.46 From an initial assessment, option a) best meets the objectives in paragraph 3.5. Waste treatment plants need to be of sufficiently large scale to be economic and practical, and therefore capable of being delivered by the private sector. A more dispersed pattern of smaller facilities would reduce the distances waste needs to be transported (objective iii), but is unlikely to be deliverable.
- 4.47 **The proposed approach is to make provision for one large plant for treatment and recovery of resources from residual commercial and industrial waste (which is not recycled) in the Abingdon / Didcot / Wantage & Grove area.**

Construction, demolition and excavation (CDE) waste

- 4.48 There is currently a surplus of recycling capacity for construction, demolition and excavation waste. This is expected to change to a need for additional capacity by 2020, as demand for recycling increases with economic recovery and planning permissions for temporary facilities expire. The total estimated amount of this waste to be provided for is approximately 1,300,000 tonnes a year (policy W1). Taking into account the capacity already available at existing and permitted permanent waste facilities, it is estimated that additional provision needs to be made for recycling facilities with a combined capacity of approximately 500,000 tonnes a year by 2030. Based on where housing development is planned and taking into account existing permanent facilities, this requirement will mostly be at Bicester, Didcot and Wantage and Grove, but with some requirement also at Oxford, Banbury, Witney, Carterton, Abingdon and the smaller towns in southern Oxfordshire.
- 4.49 There are potential benefits, through operating synergies and reduced transportation of waste, in locating temporary recycling facilities at landfill and quarry sites. Based on the current position, half of the additional capacity required could be provided at temporary facilities. The reasonable options for provision of the required additional capacity are:
- a) Concentration of additional permanent provision at or close to Bicester, Didcot and Wantage & Grove; and temporary facilities at landfill and quarry sites across Oxfordshire.
 - b) Dispersal of additional permanent provision at or close to Oxford and large and smaller towns in:

- Northern Oxfordshire (Banbury; Bicester);
 - Southern Oxfordshire (Abingdon; Didcot; Wantage and Grove; Faringdon, Wallingford; Henley; Thame); and
 - Western Oxfordshire (Witney; Carterton);
- and temporary facilities at landfill and quarry sites where opportunities arise across Oxfordshire.
- c) Additional permanent provision only, at or close to Oxford and towns large and smaller towns in:
- Northern Oxfordshire (Banbury; Bicester);
 - Southern Oxfordshire (Abingdon; Didcot; Wantage and Grove; Faringdon, Wallingford; Henley; Thame); and
 - Western Oxfordshire (Witney; Carterton).
- 4.50 From an initial assessment, option b) best meets the objectives in paragraph 3.5. In particular it meets objective iii (provide for waste to be managed as closely as possible to where it arises) and objective iv (facilities to be located in or close to the communities they serve). It is considered that recycling facilities for construction, demolition and excavation waste could be delivered by the private sector at the scale required for a dispersed pattern of provision, such that objective ii (delivery of waste management facilities that will drive waste up the hierarchy) would also be met. There are potential synergies in locating recycling plants at quarries and landfill sites, in terms both of aggregates production and disposal of residues, and overall impacts can be lessened through a reduction in the number or size of new sites required.
- 4.51 **The proposed approach is to disperse the additional provision required for construction, demolition and excavation waste recycling plants (to produce recycled aggregates and soils) at:**
- **permanent facilities at or close to Oxford and the large and smaller towns in the rest of the county;**
 - **and temporary facilities located at landfill and quarry sites across Oxfordshire.**

Proposed provision for waste management in Oxfordshire

4.52 Policy W5: Provision of additional waste management facilities

For municipal waste, provision will be made for:

- **A household waste recycling centre to serve Banbury;**
- **Two residual waste transfer stations in the Abingdon / Didcot / Wantage & Grove and the Witney / Carterton areas of the county.**

For the other main waste types, provision will be made for:

- **Additional permanent recycling plants for commercial and industrial waste at or close to towns in the northern (Bicester) and southern (Abingdon; Didcot; Faringdon; Henley; Thame) areas of the county;**

- **A plant for treatment of and recovery of resources from residual commercial and industrial waste (which is not recycled) in the Abingdon / Didcot / Wantage & Grove area;**
- **Additional permanent recycling plants for construction, demolition and excavation waste (to produce recycled aggregates and soils) at or close to Oxford and the large and smaller towns in the rest of the county; and temporary recycling plants located at landfill and quarry sites across Oxfordshire.**

Broad locations that are proposed for strategic waste facilities are identified in the key diagram (figure 7). Waste management facilities will be permitted at suitable sites within these broad locations.

Small scale facilities to serve local needs may be acceptable outside these locations where they meet the criteria in policy W6. Sites for new waste management facilities will be identified in a site allocations document.

- 4.53 Annex 1 sets out how overall provision for the management of all wastes will be made taking into account existing and planned waste facilities.
- 4.54 Specific locations suitable for waste management facilities will be identified in a separate site allocations document. Priority should be given to land that is previously developed and suitable for employment purposes. Redundant farm buildings may be suitable for small scale facilities in rural areas. Green field sites will not normally be appropriate locations unless there is a compelling need and any impact of the development can be mitigated, but land adjacent to compatible land uses e.g. sewage works may be appropriate. Temporary facilities will normally be acceptable at active mineral or landfill sites provided they are related to the mineral working or landfill operation and will be removed when that operation is completed.
- 4.55 The Cotswolds, North Wessex Downs and Chilterns Areas of Outstanding Natural Beauty lie close to towns where waste facilities may be required, particularly Witney, Wantage & Grove and Didcot, but also Chipping Norton, Wallingford and Henley. Proposals for waste development within or in proximity to Areas of Outstanding Natural Beauty will be considered against relevant national and local policies.
- 4.56 The South East Plan (policy W17) says small scale waste management facilities for local needs should not be precluded within Areas of Outstanding Natural Beauty where the development would not compromise the objectives of the designation. It is unlikely that waste management facilities larger than 20,000 tonnes per annum throughput will be compatible with a location within an Area of Outstanding Natural Beauty.
- 4.57 Oxford is the largest source of waste in the county, yet there are few waste facilities located there. There is a need to explore whether there are potential opportunities in the Oxford area for new waste facilities, particularly for

recycling commercial and industrial and construction, demolition and excavation wastes.

4.58 Government policy (PPG2 and PPS10) is that in most cases the development of green belt land for waste management would be inappropriate but, where there is a pressing need for a particular waste facility to be located in Green Belt, the need for the development may constitute a very special circumstance to be taken into account.

4.59 Where there is a need for a facility to predominantly serve Oxford and there is no reasonable prospect of an alternative location becoming available in the foreseeable future, waste development in the Green Belt may be considered acceptable. Specific controls may be sought to ensure that any such facility serves Oxford in the first instance.

4.60 Policy W6: Sites for waste management facilities

In providing for additional waste management capacity priority will be given to land that:

- **is already in permanent waste management or industrial use;**
- **is previously developed, derelict or underused;**
- **involves existing agricultural buildings and their curtilages;**
- **adjoins sewage works or other uses compatible with waste management development.**

Waste management facilities will not be permitted on green field land unless there is an established over-riding need and it has been demonstrated that there are no more suitable sites available.

Within Areas of Outstanding Natural Beauty, only small-scale waste management facilities to meet local waste needs will normally be permitted.

Waste management facilities to serve the needs of Oxford may be allowed in the Green Belt where it can be shown that there is an established over-riding need and no reasonable prospect of an alternative site becoming available such that very special circumstances are demonstrated. Controls may be imposed to ensure that such facilities do genuinely serve the waste management needs of Oxford.

Temporary waste management facilities will be permitted at mineral working and landfill sites where the waste development is related to and will be removed on completion of the mineral working or landfill operation.

Final disposal of waste

- 4.61 In recent years, Oxfordshire's non-hazardous landfill sites have been taking in over 1 million tonnes of municipal and commercial and industrial waste each year. With an estimated void of more than 12 million cubic metres, landfill space would be exhausted by 2025 if previous fill rates continue. However, municipal and commercial and industrial waste going to landfill from Oxfordshire is expected to decrease markedly from 2015. It is also expected that imported waste will decline as new waste treatment facilities are introduced elsewhere. It is assessed that Oxfordshire will still have some landfill space remaining at 2030, although the number of facilities will have reduced.
- 4.62 Government policy (PPS10) sees disposal of waste as the option of last resort, but nevertheless recognises that it must be adequately catered for; planning strategies should enable waste to be disposed of in one of the nearest appropriate installations. Whilst further landfill capacity for non-hazardous waste is not expected to be needed in the period to 2030, existing capacity should be safeguarded for disposal of residual non-hazardous waste, as in the South East Plan (policy W13). It is expected that consideration will need to be given to extending the lifetime of some existing landfills as decreasing amounts of waste are sent directly to landfill, in order to provide for the period to 2030.
- 4.63 A large proportion of inert waste from construction, demolition or excavation projects that is not recovered as soils or recycled aggregate is used beneficially in the restoration of mineral workings. It is uncertain how much material is currently being used in this way, but there is evidence of insufficient suitable material being available to enable restoration of mineral workings.
- 4.64 It is estimated there will be a need for an additional approximately 3 million cubic metres of capacity for disposal of inert waste that cannot be recycled, during the later part of the plan period from around 2020. Priority should be given to the use of inert waste to restore mineral workings. Other landfill or land-raising of inert waste, including such operations as construction of bunds, landscaping and spreading on agricultural land should generally be avoided unless there is a genuine need, such as where there are no mineral restoration opportunities within a reasonable distance, or there would be a clear environmental benefit. Provision for additional inert waste disposal capacity will be made in conjunction with the identification of sites for mineral working.

4.65 **Policy W7: Landfill**

Provision will be made for additional landfill capacity for inert (construction, demolition and excavation) waste which cannot be recycled, at quarries that require infilling for restoration. Permission will normally be granted for disposal of inert waste only where it is required for the restoration of mineral workings or where there would be overall environmental benefit or where there is a demonstrated need that cannot otherwise reasonably be met.

Permission will not be granted for new landfill sites for non-hazardous waste. Existing non-hazardous landfill capacity will be safeguarded for the disposal of residual non-hazardous waste. Permission will normally be granted to extend the life of existing non-hazardous landfill sites where this is necessary to meet the need for disposal of residual non-hazardous waste or to enable completion and restoration of the landfill.

Landfill sites should be restored in accordance with policy M6 for restoration of mineral workings.

Hazardous waste

- 4.66 Hazardous waste comprises a variety of different waste materials that require specialist types of treatment or disposal facility. These facilities can be expensive to develop and operate; and they generally serve an area wider than a single county in order to be viable. Hazardous wastes therefore often have to be transported much longer distances to suitable sites than do other waste types. Oxfordshire is a net exporter of hazardous waste: it is estimated that less than 30% of the hazardous waste produced is currently managed within the county. Most of the facilities within Oxfordshire are small scale, but there is a significant transfer and recycling facility at Ewelme and an asbestos disposal facility at Ardley landfill, both of which provide for Oxfordshire and a wider area. There are hazardous waste landfills in adjoining counties, at Swindon, Cheltenham and East Northamptonshire; and the nearest hazardous waste incinerators are at Slough and Fawley (Southampton).
- 4.67 The amount of hazardous waste produced is expected to increase and further treatment facilities will be required as European legislation directs hazardous waste away from landfill and stricter pollution control measures are introduced. In Oxfordshire, the Ardley energy from waste plant will produce hazardous residues that will need to be disposed of at suitable facilities. It is estimated that additional capacity could be required for 50,000 tonnes per annum of hazardous waste produced in Oxfordshire.
- 4.68 Oxfordshire should aim to be as self-sufficient as is reasonably possible in managing this waste. But, in view of the variety of different hazardous waste materials and the specialist nature of hazardous waste facilities, provision of all this required capacity within Oxfordshire is unlikely to be practical.
- 4.69 The South East Plan (policy W15) identifies a number of priorities for the treatment of hazardous waste which could be relevant to Oxfordshire, including treatment facilities for air pollution control residues (from combustion plants), waste electronic equipment and contaminated construction, demolition and excavation waste. There may also be a need for enhanced treatment facilities at the main sewage sludge treatment sites in the county (Banbury, Bicester, Oxford, Witney, Didcot and Wantage & Grove), although no specific requirements have been identified. Development proposals for sewage sludge treatment will be considered against Policy W6.

- 4.70 The relatively small amounts of different types of hazardous waste to be dealt with, the specialist nature of facilities and the need for them often to serve a more than local market to be economic, makes it difficult to estimate requirements for the treatment of hazardous waste in Oxfordshire and to identify options for the provision of facilities. Consequently no options are put forward for hazardous waste treatment facilities but a general policy is included to enable facilities to be permitted where an appropriate need is identified. Such facilities should provide for waste produced in Oxfordshire. Where proposed facilities will serve a wider area, they will be regarded as strategic facilities (even if only handling small tonnages) and should be located in accordance with the general policies for location of waste facilities.
- 4.71 The reasonable options for meeting the requirement for provision for hazardous waste landfill are:
- a) Continue to rely on hazardous waste landfill facilities outside Oxfordshire, apart from disposal of non-reactive hazardous waste (mainly asbestos) at the existing Ardley landfill.
 - b) Change one of Oxfordshire's existing non-hazardous landfills (Alkerton, Ardley, Finmere, Dix Pit or Sutton Courtenay) to hazardous landfill.
- 4.72 It is uncertain whether any of Oxfordshire's existing non-hazardous landfills would be suitable for general disposal of hazardous waste; and there has been no indication that private sector proposals will come forward for new hazardous waste disposal sites in the county. Taking into account the existence of hazardous waste landfills close to Oxfordshire and the other factors above, the initial assessment is that option a) is the most practical and deliverable.
- 4.73 **The proposed approach is to continue to rely on hazardous waste facilities outside Oxfordshire, apart from disposal of non-reactive hazardous waste (mainly asbestos) at the existing Ardley landfill`.**
- 4.74 **Policy W8: Hazardous waste**

Permission will be granted for facilities for the management of hazardous waste where:

- **they are designed to meet a requirement for the management of waste produced in Oxfordshire; and**
- **they are reasonably required to meet a need for waste management that is not adequately provided for elsewhere.**

Radioactive waste

- 4.75 Radioactive waste in Oxfordshire mainly comprises existing materials that remain as a legacy from nuclear research facilities that are being decommissioned, principally at Harwell, with smaller quantities at Culham (JET project). The County Council, as waste planning authority, would deal with

planning applications for any facilities for storing, managing or disposing of radioactive waste in Oxfordshire.

Intermediate level radioactive waste storage.

- 4.76 There is no waste of high level radioactivity at Harwell, but some of the remaining waste is of intermediate level radioactivity. This will need to be disposed of at the proposed national facility (deep geological repository), but that is not expected to be available during the period to 2030. In the meantime there will be a requirement for treatment and storage of an estimated 10,000 cubic metres of intermediate level waste from Harwell and a smaller amount from Culham.
- 4.77 The operator of the Harwell site has proposed the provision of a new on-site storage facility for intermediate level radioactive waste, although some of the waste could be taken to a storage facility in Cumbria. The operator has also suggested that a storage facility at Harwell could accommodate intermediate level radioactive waste from Culham and from Winfrith in Dorset.
- 4.78 The reasonable options identified for making provision for intermediate level radioactive waste are:
- a) Storage at source of waste: treatment and long-term storage of intermediate level nuclear waste at Harwell (waste from Harwell only); and Culham (waste from Culham only); pending removal to a national disposal facility.
 - b) Treatment and long-term storage of intermediate level nuclear waste (waste from Harwell and Culham) at Harwell, pending removal to a national disposal facility.
 - c) Treatment and long-term storage of intermediate level nuclear waste from Oxfordshire (waste from Harwell and Culham) and storage of waste from Dorset (Winfrith) at Harwell, pending removal to a national disposal facility.
- 4.79 An intermediate level radioactive waste store is a specialist facility which would be costly to provide. The quantity of waste at Culham is small and there would be economies of scale involved in moving it to a storage facility at Harwell; and the need for a further building in the Green Belt at Culham would be avoided. But it is not at present clear that there is a justifiable case for bringing waste from Dorset to Harwell. The initial assessment is that option b) is the most practical and acceptable option.
- 4.80 **The preferred approach is storage of intermediate level radioactive nuclear legacy waste from sites in Oxfordshire at Harwell, pending removal to a national disposal facility. Any proposal for storage of waste from outside Oxfordshire at Harwell would need to be strongly justified as an exception.**

Low level radioactive waste management.

- 4.81 Most of the nuclear waste at Harwell and Culham is of low level radioactivity and mainly arises from demolition and clearance of buildings which have a small amount of radioactive contamination. It is estimated that there is a total of approximately 100,000 cubic metres of this waste at Harwell, and a smaller quantity at Culham. Some of this will have to be taken for disposal to the existing specialist facility in Cumbria (near Drigg), or may possibly need to be disposed of at the proposed national deep geological repository. But the bulk of this waste is classified as very low level waste and could be disposed of in a suitable landfill. Permission has recently been granted for the disposal of low level radioactive waste at a landfill site in East Northamptonshire. Some low level waste may need to be stored for a temporary period to allow radioactive contamination levels to reduce to the appropriate level for safe disposal by landfill.
- 4.82 The reasonable options identified to meet the requirement for provision for low level radioactive waste are:
- a) Temporary storage (if required) and disposal in a bespoke facility at Harwell (waste from Harwell only); and at Culham (waste from Culham only).
 - b) Temporary storage (if required) of waste at source of waste and disposal in a bespoke facility at Harwell (waste from Harwell and Culham).
 - c) Temporary storage (if required) of waste at source of waste and disposal in a suitable off-site landfill in Oxfordshire.
 - d) Temporary storage (if required) of waste at source of waste and disposal in a suitable off-site landfill outside Oxfordshire.
- 4.83 There has been no indication that private sector proposals would come forward for disposal of low level radioactive waste at an existing landfill in Oxfordshire. It is not clear that the provision of dedicated disposal sites at Harwell and Culham, or just at Harwell, would be practical in terms of viability and availability of suitable site(s). There is disposal capacity available outside Oxfordshire. The initial assessment is that option d) is the most practical and acceptable option. But there should be flexibility to reconsider the other options if disposal capacity proves not to be available outside Oxfordshire.
- 4.84 **The preferred approach is temporary storage (if required) of low level radioactive nuclear legacy waste from Harwell and Culham at the source of the waste and disposal at suitable facilities outside Oxfordshire. If capacity is not available at suitable facilities outside Oxfordshire, consideration should be given firstly to disposal at a suitable existing landfill in Oxfordshire; and secondly to disposal at a new bespoke landfill at Harwell.**

- 4.85 In addition, small quantities of low-level activity radioactive wastes are produced in Oxfordshire from non-nuclear sources, mainly from medical, research and educational establishments. These are currently taken to specialist disposal facilities outside Oxfordshire. The small quantities of non-nuclear low level waste arising in Oxfordshire could continue to be managed through existing arrangements.

4.86 **Policy W9: Radioactive waste**

Provision will be made for:

- **Storage of intermediate level radioactive nuclear legacy waste from sites in Oxfordshire at Harwell, pending removal to a national disposal facility;**
- **Temporary storage (if required) of low level radioactive nuclear legacy waste at Harwell and Culham.**

Broad locations that are proposed for strategic waste facilities are identified in the key diagram (figure 7).

Permission will only be granted for the storage of intermediate level radioactive waste from outside Oxfordshire at Harwell if there is an overriding need and there would be clear benefits within Oxfordshire.

Permission will only be granted for the management or disposal of low level radioactive waste at existing landfill sites or at a new bespoke facility at Harwell if it can be demonstrated that no other suitable disposal facility is available and there is an overriding need to dispose of the waste in Oxfordshire.

Permission will not be granted for the management or disposal of radioactive waste at other locations in Oxfordshire.

Safeguarding waste management sites

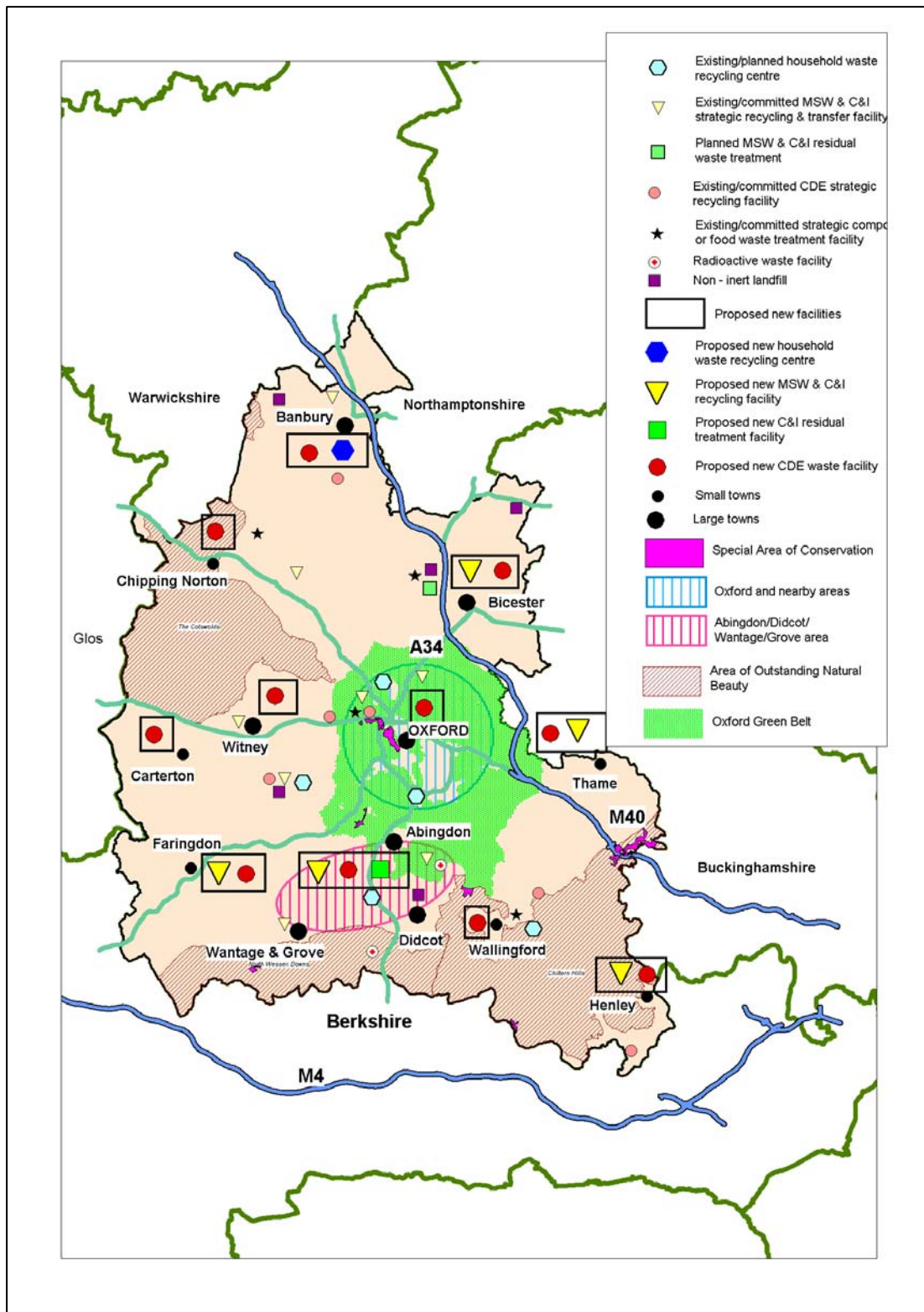
- 4.87 Waste facilities have the potential to conflict with a wide range of environmental interests, and there is acknowledged difficulty in finding suitable sites. This is compounded by the high value of development land in the county and the competition from more profitable forms of development. Suitable sites should therefore be safeguarded for waste management use, as provided for by the South East Plan (policy W17).
- 4.88 Safeguarding permanent waste management sites will prevent their loss to other development, keep them available for potential further waste development and avoid the number of new sites required being increased. Safeguarded sites will be identified in the sites allocations document, which will also confirm the detailed provisions that will apply to safeguarding. There will be a presumption against any other form of development taking place on a safeguarded waste site unless a suitable alternative location can be provided.

- 4.89 Waste sites subject to temporary planning permission will not be safeguarded unless they are identified as suitable for permanent waste development.
- 4.90 Careful consideration will also be given to development proposals in the vicinity of a safeguarded waste site. Development that is incompatible with and prejudicial to the future of a safeguarded facility should not be permitted.

4.91 **Policy W10: Safeguarding**

Existing and proposed permanent waste management sites will be safeguarded for waste management use. Proposals for other development that would prevent or prejudice the use of a safeguarded site for waste management will not normally be permitted unless either 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.

Figure 7: Waste Key Diagram



5. COMMON CORE POLICIES FOR MINERALS AND WASTE

Climate change

- 5.1 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. Minerals and waste facilities that are well located, designed and operated can minimise the generation of greenhouse gases and be resilient to the impacts of climate change.
- 5.2 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.
- 5.3 Methods of adaptation 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.
- 5.4 The county council expects operators to adopt a low carbon approach in their proposals for minerals and waste development and will consider planning applications in line with national policy on climate change and with policies in the City and District Council Local Development Frameworks. Applications for major developments may also provide information on climate change in their accompanying Environmental Impact Assessment.

Flooding

- 5.5 In Oxfordshire, the more workable sand and gravel deposits occur in the river valleys and much extraction has already taken place in these areas. PPS25 'Development and Flood Risk', which aims to steer development to areas of lowest flood risk, recognises sand and gravel working as 'water compatible development' – that category of development that is least affected by flooding. But a sequential test must still be applied before sand and gravel workings can be identified as appropriate when sited in the flood plain.
- 5.6 Except for certain types of landfill, waste management facilities can also be regarded as flood compatible development. Such development can take place in areas at risk of flooding providing a sequential test (and in some cases an exceptions test) establishes that there are no better alternatives in areas of lower flood risk.

- 5.7 A Strategic Flood Risk Assessment (SFRA)¹³ has been undertaken to assess the extent to which areas of possible minerals and waste development are at risk of flooding (including the future impact of climate change). A sequential test has informed the selection of the proposed areas for future minerals development in policy M3; due to other planning considerations, some areas have been identified in the floodplain. The SFRA will be used to help identify the most suitable sites for mineral development in the minerals site allocations document. The SFRA has not identified that any of the required waste infrastructure is likely to need to be located in areas at high risk of flooding.
- 5.8 An individual flood risk assessment will be required for any minerals or waste development proposals in an area at risk of flooding. A flood risk assessment is also required for development of a site of more than 1 hectare elsewhere (further guidance is given in the SFRA).
- 5.9 Where mineral working takes place in the flood plain, it is expected that associated development (buildings, stock piles etc) will be situated in areas that pose the lowest risk to flooding.
- 5.10 Mineral working in the flood plain can offer opportunities to increase flood water storage capacity and reduce the risk of flooding elsewhere. Wherever possible this should be taken into account in planning for the eventual restoration of the site.
- 5.11 **Policy C1: 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, and where a flood risk assessment is able to demonstrate that the development will not:

- **impede the flow of floodwater;**
- **displace floodwater and increase the risk of flooding elsewhere;**
- **reduce existing floodwater storage capacity;**
- **adversely affect the functioning of existing flood defence structures.**

Proposals for the restoration of quarries located in areas liable to flood should, where possible, incorporate measures for the storage of floodwater.

Water environment

- 5.12 Much of the current sand and gravel extraction in the county takes place in the valleys of the River Thames and its tributaries, particularly the River Windrush. Sand and gravel extraction can cause disruption to flows of ground water and surface water through de-watering during working and the creation of lakes.

¹³ Oxfordshire Minerals and Waste (Level 1) Strategic Flood Risk Assessment, Scott Wilson, October 2010

Sand and gravel extraction can also impact on water quality. The impact of any proposals for minerals or waste development on water quality and pollution prevention will be considered. This will include dewatering and the impact dewatering may have on regulated groundwater abstractions.

- 5.13 Waste developments and minerals site restoration which involves infilling with waste have the potential to cause pollution of surface and groundwater resources. In particular, surface run-off, landfill leachate and the discharge of waste water from waste management operations such as composting or recycling plants can cause pollution. Where appropriate, planning conditions may be imposed to ensure that measures are taken to prevent water contamination.

5.14 **Policy C2: Water environment**

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;**
- **The quantity or quality of water abstraction currently experienced by water abstractors 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 the protection of watercourses and canals of significant landscape, nature conservation or amenity value.

Environmental and amenity protection

- 5.15 The need for minerals and waste developments must be balanced against the need to protect the environment. Policy C3 provides for protection to local residents and other interests from unacceptable impacts caused by minerals and waste development. The actual measures required to do this at any particular site can only be established when detailed information is available in a planning application. Setting standard buffer zone distances can lead to unnecessary restrictions being imposed and minerals being unnecessarily sterilised or to inadequate protection measures being required. The buffer zone distances appropriate to any particular development proposal should be decided on a case by case basis at the planning application stage.
- 5.16 Applications for minerals and waste development in proximity to settlements should seek to safeguard the character, setting and amenity of those settlements and should include mitigation measures that incorporate an acceptable separation distance, and landscaping and planting appropriate to the existing landscape setting and consistent with the proposed after-use of the site.

- 5.17 The potential impact of noise, dust, odour, other air emissions, vibration, vermin and litter on sensitive receptors will be assessed in the consideration of proposals for minerals and waste development.

5.18 **Policy C3: Environmental and amenity protection**

Proposals for minerals and waste development should demonstrate that they will not have an unacceptable adverse impact on the environment, residential amenity and other sensitive receptors.

Biodiversity and geodiversity

- 5.19 The County Council is committed to protecting and, wherever possible, enhancing biodiversity and geodiversity throughout the county. Oxfordshire has a significant number of statutorily designated sites of international, national, regional and local nature conservation importance, intended to protect important species, habitats and geological features.
- 5.20 Outside these designated sites, Oxfordshire's landscape also supports a wide array of habitats and species, many of which are recognised through the UK and Oxfordshire Biodiversity Action Plans. The Council will seek to ensure that biodiversity in these non-designated areas is protected and enhanced, and that habitat fragmentation is avoided.
- 5.21 Oxfordshire has very little woodland; only about 6% of the county is woodland, of which half is ancient woodland. Woodland should be protected during mineral working. The County Council will encourage tree planting with native species for screening and landscaping and as a productive land use on restored mineral workings.
- 5.22 Proposals must address the need to maintain and/or enhance the following features of local and regional importance: Conservation Target Areas, Local Biodiversity Action Plan habitats and species, Local Wildlife Sites, woodlands and Local Nature Reserves.
- 5.23 Proposals for minerals development should seek to achieve a net gain in natural assets and resources through contributing to Oxfordshire Biodiversity Action Plan targets, which are delivered by the Conservation Target Areas (CTA) approach, and by protecting and enhancing green infrastructure and strategic biodiversity networks.
- 5.24 Oxfordshire has a rich geological resource. In addition to important geological sites which are designated as Sites of Special Scientific Interest and Regionally Important Geological and Geomorphological Sites, previously unknown geological remains may sometimes be discovered. Where such finds are made, all efforts should be made to protect those of regional, national or international importance and, if this is not possible, they should at least be recorded.

5.25 Policy C4: Biodiversity and geodiversity

Proposals for minerals and waste development should demonstrate that the development will not have an unacceptable adverse impact on sites designated as internationally, nationally or locally important for nature conservation, including the Oxfordshire Conservation Target Areas and the setting of those areas.

Mineral working and waste management development should not damage or destroy irreplaceable habitats or biodiversity, including ancient woodland and species rich grassland.

The County Council will seek the enhancement of Conservation Target Areas to implement Oxfordshire Biodiversity Action Plan (BAP) targets within and close to areas of mineral working. Mineral extraction will not be permitted unless the long term maintenance of BAP Priority Habitats and appropriate contributions to Oxfordshire BAP targets through the Conservation Target Area approach have been secured.

Nationally and regionally important geological features including geological Sites of Special Scientific Interest and Regionally Important Geological and Geomorphological Sites should be protected from harmful development and retained in situ unless there are exceptional reasons justifying their removal, in which event their presence should be appropriately recorded.

Landscape

- 5.26 Proposals for minerals and waste development should include appropriate provisions to protect and where possible enhance the quality and character of the countryside and landscape of the whole county. In particular proposals for development should demonstrate that they will not have a negative impact on views and settings associated with the Chilterns, Cotswolds and North Wessex Downs Areas of Outstanding Natural Beauty (AONB). Government policy is that major developments should only be permitted in these areas in exceptional circumstances. Where development is proposed within or in proximity to an AONB, the assessment should be informed by the relevant AONB Management Plan. Development proposals should also take into account the landscape character areas, which are not statutory designations.

5.27 Policy C5: Landscape

Proposals for minerals and waste development should demonstrate that the development will protect and where possible enhance the landscape quality of Oxfordshire and will take account of the landscape character areas identified in the Oxfordshire Wildlife and Landscape study. Appropriate measures should be taken to mitigate potential adverse visual impacts through siting, design and landscaping.

Historic environment and archaeology

- 5.28 Before determining an application for mineral extraction the County Council will normally require the applicant to carry out a preliminary, desk-based archaeological assessment to determine the nature and significance of any archaeological assets. The County Council may, subject to the results of this initial assessment, require an archaeological field evaluation of the site to determine the appropriate means for mitigating the impact of extraction on the archaeological assets.
- 5.29 Where proposals for minerals development involve a site which includes heritage assets, appropriate desk based and / or field evaluations should be undertaken in order to identify and determine the nature, extent, and level of significance of each heritage asset, the contribution of its setting to that significance, as well as any potential impacts on the asset or its setting.

5.30 Policy C6: Historic environment and archaeology

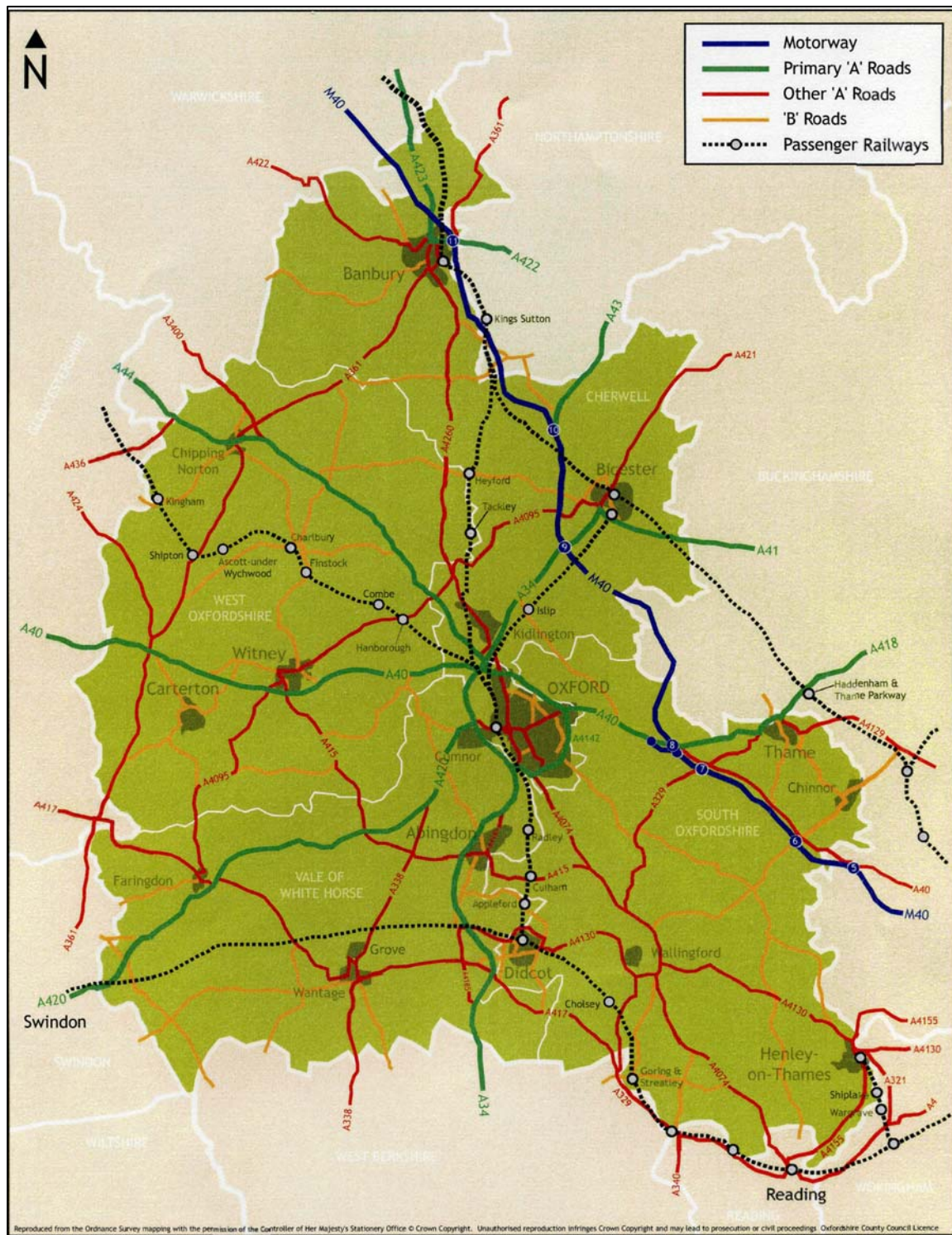
Proposals for minerals and waste development will be considered in the light of the need to protect and conserve Oxfordshire's historic assets and the setting of those assets, including Blenheim Palace, scheduled ancient monuments, listed buildings, conservation areas, historic battlefields, and registered parks and gardens.

Scheduled Ancient Monuments, other archaeological remains of national importance and their settings should be preserved in situ. For all other remains of regional or local importance preservation in situ will be preferred; where this is not appropriate, and for all other remains, adequate provision should be made for their excavation and recording.

Transport

- 5.31 The Oxfordshire Local Transport Plan 2011 – 2030 (LTP3) notes that the County Council will seek to enable development through securing infrastructure and services, to reduce carbon emissions from transport, improve air quality and reduce other environmental impacts, and to ensure that the operation of the transport network balances the protection of the local environment with efficient and effective access for freight and distribution.
- 5.32 Figure 8 shows the Oxfordshire transport network. The impact on the local environment and amenity from traffic associated with minerals development is an important matter to be taken into account in considering proposals. An objective of this plan is to minimise the distances minerals need to be transported, to achieve a commensurate reduction in air pollution, greenhouse gas emissions and impact on environmental and residential amenity.

Figure 8: The Oxfordshire transport network



5.33 The impacts of transporting minerals and waste can be reduced by encouraging the uptake of alternative transport methods such as rail, conveyor, pipeline and water. But these are usually only practicable where movement of large quantities between particular points or over long distances is involved. Crushed rock is brought into Oxfordshire by rail to the aggregates rail depots at Banbury, Kidlington and Sutton Courtenay; and waste from London is delivered

by rail to the Sutton Courtenay landfill. However, most of the quarries and waste facilities in Oxfordshire are not able to take advantage of alternative methods of transport. Even where an alternative mode of transport is potentially available, it may not be economically viable or practicable given that most of the minerals extracted in Oxfordshire are distributed to local markets and most of the waste handled at facilities in the county is produced locally. Therefore the main method of transporting aggregates and waste in Oxfordshire is expected to continue to be by road.

- 5.34 Lorries can damage highways and lead to a need for more frequent maintenance. Where this is likely the Council will seek contributions to improvements before development starts and may seek commuted sums towards ongoing maintenance. The impact of lorry traffic in environmentally sensitive locations and settlements can be reduced by routeing agreements to control traffic movements. Routeing agreements will direct development traffic onto the primary road network by the most appropriate route available taking into account road standard, settlements, road safety issues and other factors, although this needs to be balanced against potentially making vehicles drive further and therefore increasing carbon emissions and pollution.

5.35 **Policy C7: Transport**

Minerals and waste development will only be permitted where provision is made for convenient access to and along the primary road network in a way that maintains or improves:

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

Proposals for mineral working and waste facilities should:

- a) wherever possible, transport minerals or waste by rail, water, pipeline or conveyor, rather than by road;
- b) as far as possible, minimise the distance of mineral workings from locations of demand for aggregates, via roads suitable for lorries;
- c) as far as possible, minimise the distance of waste facilities from locations of waste production, via 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

- 5.36 The Oxfordshire Rights of Way Improvement Plan has been incorporated into the Oxfordshire Local Transport Plan 2011 – 2030. That plan states that the County Council will 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. The plan also notes 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.

- 5.37 Proposals to enhance, promote and improve the rights of way network and to increase access to the countryside should be encouraged as part of restoration plans for mineral workings. Operators and landowners will be expected to contribute to an extended period of aftercare and management of rights of way.
- 5.38 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, 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.

5.39 **Policy C8: Rights of way**

The integrity of the rights of way network should be maintained and if possible retained in situ in safe and useable condition. Diversions should be safe, attractive and convenient and, if temporary, should 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 be encouraged and public access will be sought to restored mineral workings, especially if this can be linked to wider provision of green infrastructure.

6. IMPLEMENTATION AND MONITORING

Implementation of the waste strategy

- 6.1 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.
- 6.2 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 and this is largely a matter for the waste industry; and waste management technologies are likely to develop and change through the plan period.
- 6.3 The waste planning strategy does not directly address the government's aim of reducing the amount of waste produced. This is largely beyond the remit of a plan for land use. 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 programme for South East England. Locally, the Oxfordshire Waste Partnership has produced a Waste Prevention Strategy 2010-2020.
- 6.4 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.
- 6.5 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.
- 6.6 The waste 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.

- 6.7 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.
- 6.8 The waste planning strategy identifies the provision for additional waste management capacity that needs to be made over the plan period (policy W4) and the broad locations where the additional waste management facilities to meet this requirement should be located (policy W5). Sites that would be suitable for facilities to enable this provision to be made will be identified in the waste site allocations document.
- 6.9 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 draft plan. These potential sites have informed the generation of the options for provision of waste facilities, which have in turn led to the draft waste planning strategy.
- 6.10 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 published before the waste plan is submitted for examination. (A more detailed assessment of sites will be carried out when the waste site allocations document is prepared.)
- 6.11 Some proposals for waste facilities may come forward in locations that are not identified in the plan. Government guidance (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.
- 6.12 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.

- 6.13 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.
- 6.14 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. Where possible, such requirements will be identified in the waste site allocations document. 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.
- 6.15 The Government Review of Waste Policy in England 2011¹⁴ 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.
- 6.16 The strategy depends on permitted permanent waste facility sites being available to operate to their full capacity throughout the plan period and not being sterilised by other development. Existing and proposed permanent waste management sites will be safeguarded for waste use (policy W10). The District Councils should consult the County Council on applications for other development that would prevent or prejudice the use of a safeguarded site. Delivery of this part of the strategy will require liaison with the District Councils.
- 6.17 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 strategy

- 6.18 The Waste Planning Strategy is based on current circumstances and currently available information, but it must be able to respond to changing circumstances

¹⁴ Government Review of Waste Policy in England 2011, Defra, June 2011

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.

- 6.19 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.
- 6.20 The Council will produce an Annual Monitoring Report on its minerals and waste plans each year, in accordance with the Planning and Compulsory Purchase Act 2004. These reports will include an assessment of:
- the extent to which the policies in minerals and waste plans 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 plans.
- Any relevant changes in government or other policy will be addressed through the annual monitoring reports.
- 6.21 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.
- 6.22 The Council will also make use of monitoring and survey work undertaken by and information available from other agencies, such as Defra, the Environment Agency and Natural England, and on other work carried out within the Council such as for transport planning and biodiversity, to monitor change.
- 6.23 Observations recorded in the annual 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 and site allocations, a review of the strategy may be required.
- 6.24 The implementation and monitoring framework for the waste planning strategy is set out in table 5. Monitoring will focus on the performance of the strategy's policies for waste development to 2030. The indicators and targets have been developed to provide a consistent basis for monitoring the performance of the strategy, in particular in identifying whether policies are having the desired effect. The indicators reflect the intent of the strategy objectives, taking into

account recommendations in the Sustainability Appraisal Report. The table also sets the triggers for when consideration should be given to a review of each policy.

- 6.25 In the case of some of the common core policies it is not possible to set a specific target. However, it is still possible to assess the effectiveness of these policies in relation to waste development.
- 6.26 The results of monitoring against the implementation and monitoring framework will be reported in the annual monitoring reports.

Table 5: Waste Strategy Implementation and Monitoring Framework

Waste Strategy Policy	Related Waste Planning Objectives	Indicators	Targets	Implementation Partners
WASTE CORE POLICIES				
W1: The amount of waste to be provided for	i	Actual or estimated annual production of municipal, commercial & industrial and construction, demolition & excavation wastes	Estimates of waste to be managed 2010 – 2030 in table 1.	Waste operators; Environment Agency; SEWPAG
W2: Waste imports	iii, iv, v	Amount of waste received annually at landfills from London and elsewhere outside Oxfordshire Number of developments and additional capacity permitted providing for treatment of waste from outside Oxfordshire.	Estimates of waste imports in table 3 No permissions for waste treatment granted contrary to policy	Waste operators; Environment Agency; SEWPAG; London Authorities
W3: Waste management targets	ii, vii	Actual or estimated annual percentages of municipal, commercial & industrial and construction, demolition & excavation wastes composted, recycled, treated and landfilled Capacities of existing and permitted waste management facilities relative to actual or estimated amounts of wastes to be managed	Waste management targets in policy W3	Waste operators; Environment Agency; SEWPAG

W4: Provision of additional waste management capacity	i, ii	Existing and permitted waste management capacity for composting, recycling and residual treatment of municipal, commercial & industrial and construction, demolition & excavation wastes relative to actual or estimated amounts of wastes to be managed	Capacity for composting, recycling and residual treatment at least sufficient for amounts of wastes to be managed	Waste operators; Environment Agency; SEWPAG
W5: Provision of additional waste management facilities	i, ii, iii, iv	Number and locations of additional strategic waste facilities permitted relative to provision in policy W5	No permissions granted for strategic facilities contrary to policy	Waste operators
W6: Sites for waste management facilities	vi, viii	Number and locations of additional waste facilities permitted relative to criteria in policy W6	No permissions granted for facilities contrary to policy	Waste Operators
W7: Landfill	i, v, viii	Number, type and capacity of permissions for additional landfill for inert and non-hazardous wastes Existing and permitted landfill capacity relative to estimated requirements Number of developments permitted that would reduce non-hazardous landfill capacity	No additional capacity for inert landfill permitted contrary to policy No additional capacity for non-hazardous landfill permitted contrary to policy Existing and permitted capacity for inert and non-hazardous landfill sufficient for 10 years No net loss of non-hazardous landfill capacity	Waste operators; District Councils
W8: Hazardous waste	i, ii, iii	Number, type and capacity of existing and permitted hazardous waste facilities in Oxfordshire	No reduction in existing and permitted hazardous waste facilities	Waste operators; Environment Agency; SEWPAG

W9: Radioactive waste	iii, vi, viii	Capacity and type of radioactive waste management facilities permitted at Harwell or Culham relative to needs for dealing with Oxfordshire waste Capacity and type of any radioactive waste management facilities permitted at other locations	No permissions granted for facilities contrary to policy Sufficient capacity permitted to meet radioactive waste management requirements that need to be met in Oxfordshire	Site Licence Companies; Nuclear Decommissioning Authority; Environment Agency; SEWPAG; Other Waste Planning Authorities
W10: Safeguarding	i, ii	Number and capacity of existing and permitted permanent facilities potentially available for waste use Number of developments permitted or local plan proposals that would reduce waste management capacity	No reduction in number of or a net loss of waste management capacity at permanent facilities	Waste operators; Environment Agency; District Councils
COMMON CORE POLICIES				
C1: Flooding:	vi	Number and area of permissions in areas at risk of flooding contrary to the advice of the Environment Agency	No permissions granted contrary to Environment Agency advice	Minerals and waste industries; Environment Agency
C2: Water environment	vi	Number and area of permissions which could adversely impact on or create risk to significant water resources	No permissions granted without appropriate protection or mitigation measures	Minerals and waste industries; Environment Agency; British Waterways; District Councils
C3: Environmental and amenity protection	vi, iii	Number of permissions which could adversely impact on the environment, residential amenity or other sensitive receptor to an unacceptable extent	No permissions granted without appropriate protection or mitigation measures	Minerals and waste industries; District Councils

C4: Biodiversity and geodiversity	vi	Number and area of permissions which would adversely impact on important biodiversity or geodiversity interests Number and area of permissions for mineral working which will help to meet Oxfordshire Biodiversity Action Plan targets through enhancement of Conservation Target Areas	No permissions granted without appropriate protection or mitigation measures 75% of mineral working permissions contribute to meeting biodiversity targets	Minerals and waste industries; Natural England; other biodiversity partner organisations
C5: Landscape	vi	Number and area of permissions which would adversely impact on important landscape interests	No permissions granted without appropriate protection or mitigation measures	Minerals and waste industries; AONB Management Boards
C6: Historic environment & archaeology	vi	Number and area of permissions which would adversely impact on important historic environment assets or archaeological remains	No permissions granted without appropriate protection or mitigation measures	Minerals and waste industries; English Heritage
C7: Transport	iii, v, vi	Number of permissions which would adversely impact on the road network or on residential and environmental amenity as a result of traffic generation; and the extent of the impact Number of permissions for developments including non-road transportation of minerals or waste	No permissions granted without appropriate protection or mitigation measures, e.g. routeing agreement	Minerals and waste industries; Highways Agency; District and Parish Councils
C8: Rights of way	vi	Number and extent of permissions which would adversely impact on the rights of way network.	No permissions granted without appropriate protection of or safeguards for rights of way	Minerals and waste industries; District and Parish Councils; the Ramblers

Annex 1

How overall provision is proposed to be made for waste in Oxfordshire

A.1 Municipal waste (MSW)

A.1.1 MSW composting and food waste treatment

- Anaerobic digestion plants at Cassington (in operation) and Crowmarsh (planning permission granted);
- In-vessel composting at Ardley (in operation);
- Open-windrow composting at existing network of 3 sites with the temporary site at Hinton Waldrist being extended or replaced by 2024.

A.1.2 MSW recycling

- 6 household waste recycling centres: 4 existing facilities (Dix Pit, Redbridge, Drayton and Oakley Wood); and 2 new facilities: one in the Oxford area (planning application submitted for site at Kidlington); and one to serve Banbury (site required by 2014);
- Existing waste recycling facilities at Enstone, Witney and Culham; and potential additional recycling capacity in conjunction with provision for C&I waste.

A.1.3 MSW residual waste treatment

- All residual MSW will be treated at the Ardley energy from waste facility (planning permission granted and contract awarded) (apart from a small fraction that will be disposed direct to landfill);
- Provision for 2 transfer stations in Southern Oxfordshire (Abingdon / Didcot / Wantage & Grove) and West Oxfordshire (Witney / Carterton) (sites required by 2014).

A.1.4 MSW residual waste disposal

- Disposal of residual waste which cannot be treated at the Ardley facility to one or more of the existing non-hazardous) landfill sites in Oxfordshire (Alkerton, Ardley, Finmere, Dix Pit and Sutton Courtenay);
- Disposal of hazardous fly ash from the Ardley plant to a suitable hazardous waste landfill outside Oxfordshire (e.g. in Gloucestershire).

A.2 Commercial and industrial waste (C&I)

A.2.1 C&I composting and food waste treatment

Provision for treatment at facilities provided for municipal waste or at any anaerobic digestion facilities which may be provided in conjunction with farm waste or sewage sludge treatment (e.g. the on-farm anaerobic digestion plant proposed at Warborough which the County Council has resolved to permit).

A.2.2 C&I recycling

There are existing or permitted recycling facilities at Oxford, Banbury, Witney and Wantage & Grove. Provision is proposed to be made for additional recycling facilities located at or close to large and smaller towns in the northern Oxfordshire (Bicester) and southern Oxfordshire (Abingdon; Didcot; Faringdon; Henley; Thame). These facilities could take MSW as well, but the identified need is specifically for C&I recycling. It mainly arises from 2020, particularly from 2025 onwards, and therefore there is not an immediate need to identify sites. Facilities should be sized in relation to the quantity of waste expected from that locality. Small facilities may be acceptable on suitable sites in rural parts of the county.

A.2.3 C&I residual waste treatment

- Treatment of commercial and industrial waste from the northern part of the county will be provided for by the Ardley energy from waste facility. Additional provision for northern Oxfordshire may be provided by a proposed gasification plant at Finmere which the County Council has resolved to permit.
- Provision is proposed to be made for treatment of commercial and industrial waste from the southern part of the county by one other large facility in the Abingdon / Didcot / Wantage & Grove area. A site needs to be provided for this facility by 2015.

A.2.4 C&I residual waste disposal

As for municipal waste (paragraph A.1.4).

A.3 **Construction, demolition and excavation waste (CDE)**

A.3.1 CDE recycling

- In addition to existing and permitted permanent recycling facilities, provision is proposed to be made for additional permanent facilities from 2020, particularly at Bicester, Didcot and Wantage & Grove, but also at Oxford, Banbury, Witney, Carterton, Abingdon, Faringdon, Wallingford, Henley and Thame.
- Continued provision is proposed to be made for temporary recycling facilities at landfill and quarry sites across Oxfordshire.

A.3.2 CDE residual waste disposal

Provision is proposed to be made for 3 million cubic metres of additional inert landfill capacity for beyond 2020 at quarry sites that will require infilling to achieve restoration; this provision will be made in conjunction with identification of sites for mineral working, rather than as separate landfill sites.

A.4 Hazardous waste

A.4.1 Provision for management and disposal of hazardous waste is proposed to be made through:

- Continued use of existing hazardous waste management facilities in Oxfordshire, including transfer facilities at Ewelme, Banbury and Standlake;
- Continued landfill of non-reactive hazardous waste (mainly asbestos) at the existing facility at Ardley Landfill;
- Additional facilities for management of hazardous waste in Oxfordshire where there is a need; and
- Continued reliance on other appropriate hazardous waste management facilities outside Oxfordshire, including landfill facilities other than for non-reactive hazardous waste (mainly asbestos).

A.5 Radioactive waste

A.5.1 Provision is proposed to be made for storage of intermediate level radioactive nuclear legacy waste at Harwell, pending removal to a national disposal facility.

A.5.1 Provision is proposed to be made for temporary storage (if required) of low level radioactive nuclear legacy waste from Harwell and Culham at the source of the waste, with disposal at suitable facilities outside Oxfordshire.

A.6 Metal waste (including end of life vehicles)

A.6.1 Continued use of existing permanent waste metal recycling sites in Oxfordshire.

A.7 Sewage sludge

A.7.1 Continued use of existing sludge treatment centres (Banbury, Bicester, Oxford, Witney, Didcot and Wantage & Grove), with further development at these facilities if required.

Glossary

Aggregates – sand, gravel, crushed rock that is used in the construction industry to make things like concrete, mortar, drainage, and asphalt. 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.

Afteruse – The long term use that land formerly used for mineral workings is restored to. This use can be agricultural, forestry 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.

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

Apportionment – the allocation between minerals and waste authorities of the total regional amount of required mineral production or quantities of waste to be managed, for a particular period of time, 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. Examples include food, garden waste, and paper.

Biodiversity Action Plan (BAP) - strategy prepared by the local planning authority together with nature conservation organisations to 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 – These are 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 or prevent sterilisation on 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 break down 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, wherein 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 builder's waste from the construction/demolition of buildings and infrastructure. Includes masonry, rubble, and timber.

Core Strategy - sets out the long-term spatial vision for 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.

Development Plan Documents (DPDs) - Spatial planning documents that are subject to independent examination. They will have 'development plan' status. A Core Strategy DPD and a Site Allocations DPD are key parts of any Local Development Framework or Waste and Minerals Development Framework.

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 advisors that aim to protect and improve the environment (including air, land and water).

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.

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

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. Now 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).

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 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 report which (under current legislation) is binding on 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 and demolition” waste is inert waste.

Industrial waste - wastes from any factory, transportation apparatus, from 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. It can be expressed in tonnage or years.

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

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, and the allowances are tradeable between authorities.

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

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

Landraise - permanent disposal of waste material above ground, resulting in the raising of the ground level.

Local Development Framework (LDF) – folder of local development documents prepared by district councils and unitary authorities, that set out the spatial planning strategy for the local 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, and usually managed by them.

Local Plan – part of the statutory development plan that sets out detailed development policies prepared by district and unitary planning authorities. This form of plan is being replaced by Local Development Frameworks since the coming into force of the Planning and Compulsory Purchase Act 2004.

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 rather than being dug from the land.

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 where district and borough planning authorities should notify the County Council if applications for development come forward. This should prevent mineral resource 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.

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 of sufficient economic or conservation value (such as building stones) to warrant protection for generations to come.

Mineral Local Plan – a statutory development plan that sets out the policies in relation to minerals within the minerals planning authority (unitary or county council). This form of minerals plan is being replaced by Minerals Development Frameworks since the coming into force of the Planning and Compulsory Purchase Act 2004.

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

Minerals and Waste Development Framework (MWDF) – portfolio of plans and policies about waste and minerals planning.

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

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 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 any 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).

Planning permission - formal consent given by the local planning authority to develop and 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 - are derived from reprocessing waste arising from construction and demolition activities (concrete, bricks, tiles), highway maintenance (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 - obtain value from wastes 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 waste or minerals operations.

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

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

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 nine tests of soundness.

South East Aggregates Working Party (SEERAWP) - a non-executive technical group with the role of advising government (the Department for Communities and Local Government), Mineral Planning Authorities and industry on aggregates, comprising officers of the mineral planning authorities, the minerals industry through the Mineral Products Association and the British Aggregates Association, and government representatives from DCLG and the Government Office for the South East (GOSE).

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 planning issues, as proposed in the Localism Bill.

South East Plan – the Regional Spatial Strategy for the South East region, was prepared by the 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 made under the Birds Directive to conserve the best examples of the habitats of certain threatened species of birds.

Statement of Community Involvement – A 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 with on the preparation of its land use plan or in determining a planning application. Includes the Environment Agency, Natural England and English Heritage.

Sterilisation – This occurs when developments such as housing, roads or industrial parks are built over potential mineral reserves.

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 Oxfordshire County Council. The Structure Plan was largely replaced as a statutory planning document by the South East Plan in May 2009.

Sustainability / Sustainable Development - 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.

Sustainability Appraisal - a tool for appraising policies to ensure they reflect sustainable development objectives. The Planning and Compulsory Purchase Act requires a sustainability appraisal to be undertaken for all development plan documents.

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.

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

Transfer Station - a bulk collection point for waste prior to its removal 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 or 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 - a statutory document that sets out the land-use policies in relation to the management and disposal of waste within the plan area. This form of waste plan is being replaced by a Waste Development Frameworks following the coming into force of the Planning and Compulsory Purchase Act 2004.

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 quango 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
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
SEERAWP	South East Regional 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

