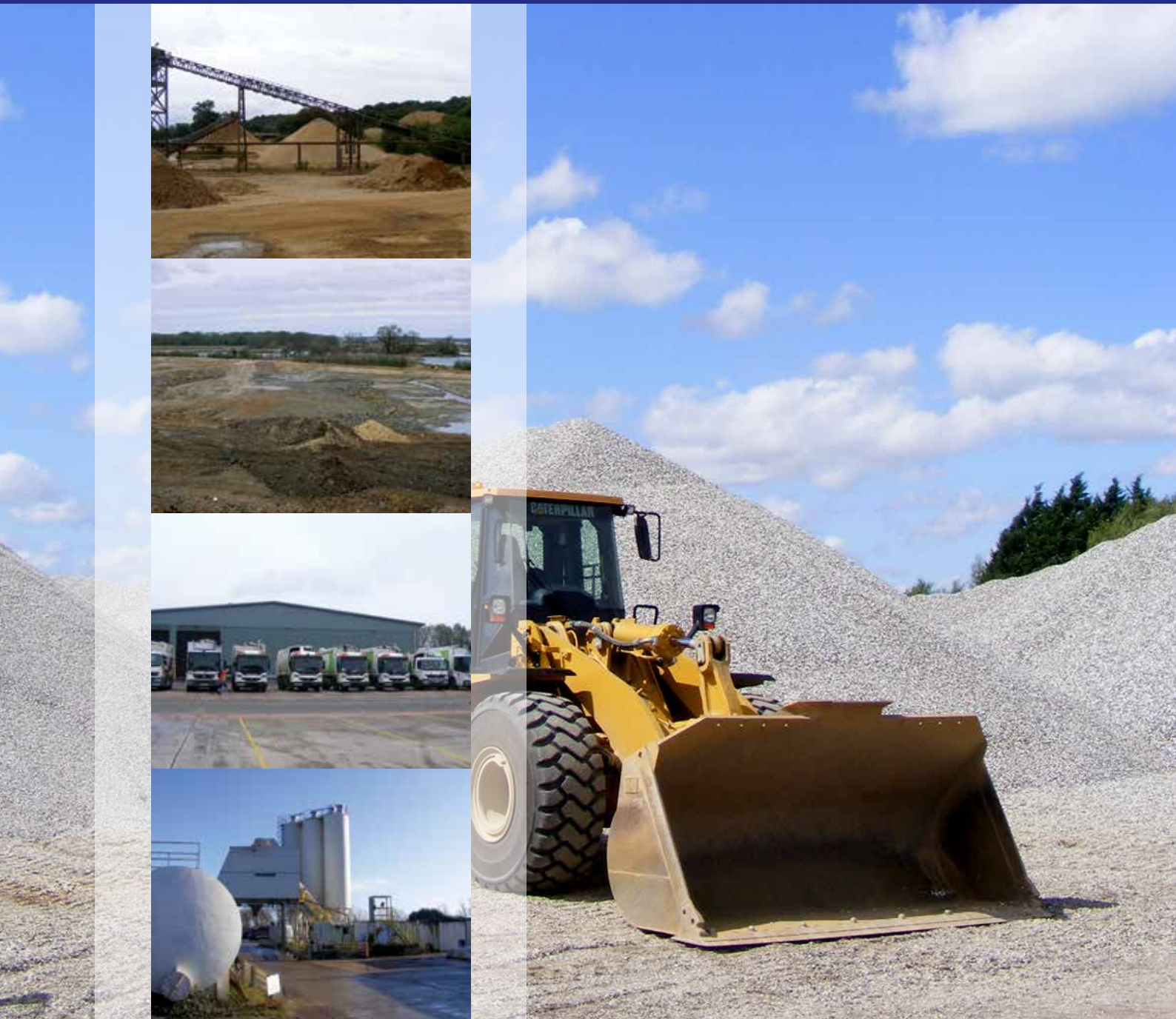


West Berkshire Minerals and Waste Development Plan Document

Sustainability Appraisal / Strategic Environmental
Assessment Scoping Report, August 2013 (updated November 2013)

West Berkshire Local Plan



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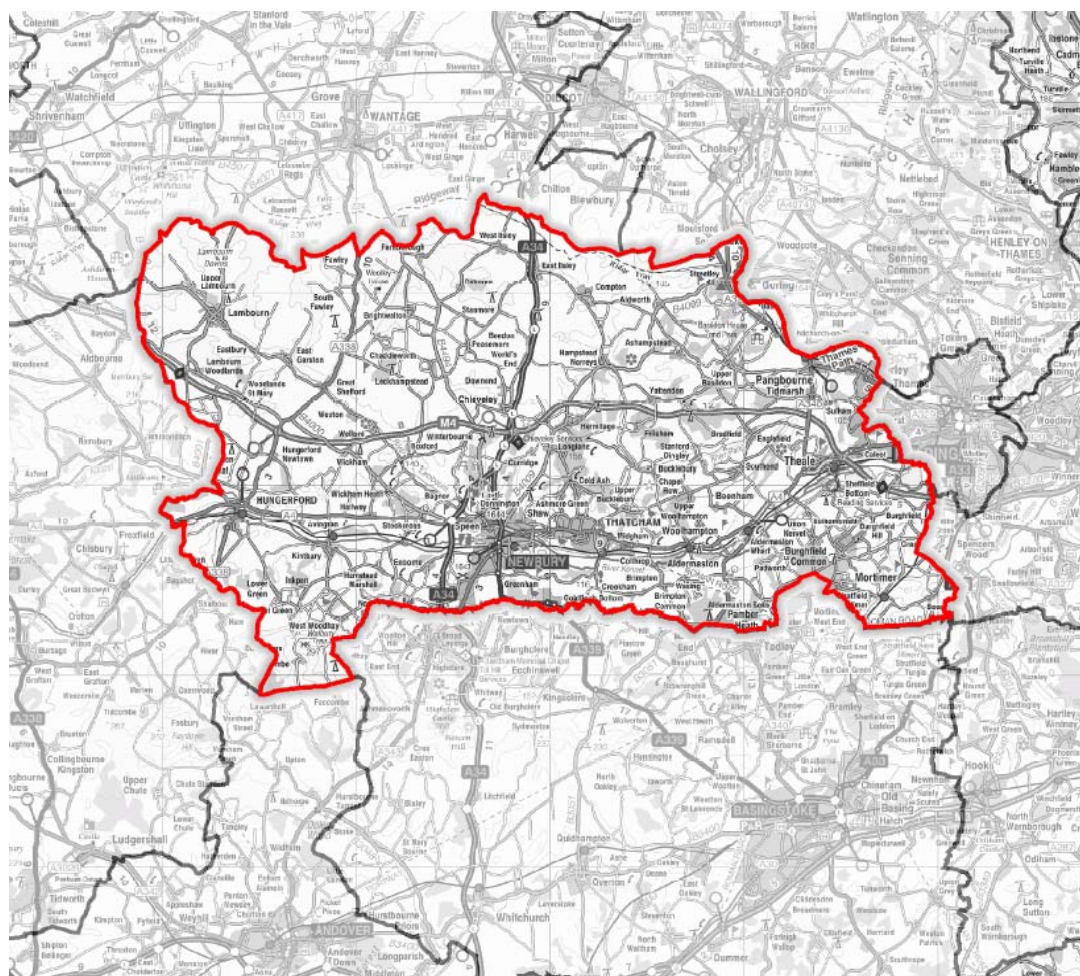
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i Glossary / Acronyms

AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
BOA	Biodiversity Opportunity Area
C&D	Construction and Demolition
C&I	Commercial and Industrial
CDEW	Construction Demolition and Excavation Waste
CRoW	Countryside and Rights of Way Act
cSAC	Candidate Special Area of Conservation
DAFOR	Dominant, Abundant, Frequent, Occasional, Rare
DCLG	Department for Communities and Local Government
DECC	Department of Energy and Climate Change
DEFRA	Department of Environment Food and Rural Affairs
DM	Development Management
DPD	Development Plan Documents
EA	Environment Agency
EC	European Commission
EU	European Union
GDP	Gross Domestic Product
GWh	Gigawatt hour
HWRC	Household Waste Recycling Site
ILW	Intermediate Level Radioactive Waste
IPC	Infrastructure Planning Commission
IPPC	Integrated Pollution Prevention and Control
JMWCS	Joint Minerals and Waste Core Strategy
JNCC	Joint Nature Conservation Committee
LCA	Landscape Character Assessment
LDS	Local Development Scheme
LLW	Low Level Radioactive Waste
LNR	Local Nature Reserve
MRF	Material Recovery Facility
MSW	Municipal Solid Waste
MWMS	Municipal Waste Management Strategy
NNR	National Nature Reserve
NPPF	National Planning Policy Framework (March 2012)
NPS	National Policy Statement
NSIP	National Significant Infrastructure Project
ODPM	Office of the Deputy Prime Minister
PDL	Previously Developed Land
PFA	Pulverised Fuel Ash
PM10	Particulate Matter ($\leq 10 \mu\text{m}$)
PPG	Planning Policy Guidance
PPS	Planning Policy Statement
PPS 10	Planning Policy Statement 10: Planning for Sustainable Waste Management (July 2005, amended March 2011)
RIGGS	Regionally Important Geological and Geomorphological Sites
RMLP	The Replacement Minerals Local Plan for Berkshire Incorporating the Alterations adopted in December 1997 and May 2001 (Saved Policies 2007)
RSS	Regional Spatial Strategy
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SCI	Statement Community Involvement
SEA	Strategic Environmental Assessment
SFRA	Strategic Flood Risk Assessment
SM	Scheduled Monument
SOA	Super Output Area
SPA	Special Protection Area
SPZ	Source Protected Zone

SR	Scoping Report
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Urban Drainage Systems
TPO	Tree preservation order
VLLW	Very Low Level Radioactive Waste
WBDC	West Berkshire District Council
WBCS	West Berkshire Core Strategy
WBMWDPD	West Berkshire Minerals and Waste Development Plan Document
WEEE	Waste Electrical and Electronic Equipment
WLPB	Waste Local Plan for Berkshire 1998 (Saved Policies 2007)
WPA	Waste Planning Authority
WSSD	World Summit on Sustainable Development
WTS	Waste Transfer Station

Map 1: West Berkshire Plan Area



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1. Introduction

1. This Scoping Report (SR) forms the first part of the Sustainability Appraisal (SA), incorporating the requirements of the Strategic Environmental Assessment (SEA), for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD). The plan area has been shown in Map 1. The requirements for both the SA and SEA can be carried out in one appraisal process. In order to avoid any confusion, for the purposes of this report the terms SA and SEA are interchangeable. This SR is in line with the guidance produced by ODPM¹ on how to produce an SA which also covers the requirements of the European Directive on the SEA².
2. This SR relates to the emerging WBMWDPD within this report. For the purpose of this document 'the plan area' refers to the West Berkshire unitary area.
3. The purpose of the SA is to promote sustainable development through better integration of sustainability considerations in the preparation and adoption of plans. It is an iterative process that identifies and reports on the likely significant effects of each development plan document and the extent to which implementation of the policies it contains will achieve agreed social, environmental, economic and resource management objectives.
4. In the context of West Berkshire, the SA will focus on the significant sustainability issues that are likely to result from the WBMWDPD and consider alternatives that take into account the social, environmental and economic objectives, and the geographical scope of the document. Future trends in terms of the state of the environment in the absence of the WBMWDPD will also be outlined.
5. This SR sets out the background information and proposed strategic objectives that will be used to appraise the WBMWDPD in the context of SA. In doing so, the document complies with the requirements for the content of a scoping report as set out in the Environmental Assessment of Plans and Programmes Regulations 2004 (as amended) (the SEA regulations). It builds upon a substantial amount of work already undertaken by West Berkshire District Council (WBDC) for the SA relating to the West Berkshire Core Strategy (WBCS) which was formally adopted on 16 July 2012.
6. This SR provides an opportunity for the Statutory Consultees to express their views upon the scope of the SA/SEA process that will inform and underpin the development of the WBMWDPD.

Background of minerals and waste policy in West Berkshire

7. West Berkshire previously worked together with the other unitary authorities that made up the former county of Berkshire on minerals and waste plan making. As such the Replacement Minerals Local Plan for Berkshire (RMLP) and Waste Local Plan for Berkshire (WLPB) currently form the development

¹ ODPM (2005) A Practical Guide to the Strategic Environmental Assessment Directive

² EC (2001) Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (as amended)

plan that guides minerals and waste developments in the former county area and provides the framework for making development management decisions on minerals and waste planning applications. Some of the policies within these plans have been saved to provide the basis for planning decisions until they are replaced. Since the adoption of the Replacement Minerals Local Plan for Berkshire, and the Waste Local Plan for Berkshire, the way in which the future is planned for has changed significantly.

8. Since 1998 the County of Berkshire has been governed by the six unitary authorities of Bracknell Forest Borough Council, Reading Borough Council, Royal Borough of Windsor and Maidenhead, Slough Borough Council, West Berkshire District Council and Wokingham Borough Council. These six unitary authorities are the Mineral Planning Authorities and Waste Planning Authorities for their respective areas. Following the transferral of the minerals and waste development plan making responsibilities to the Berkshire Unitary Authorities in 1998 from the County, the six authorities continued to work together in respect of Minerals and Waste Planning Policy, with this work being coordinated through the Joint Strategic Planning Unit (JSPU).
9. The JSPU led on the production and submission of a Joint Minerals and Waste Core Strategy (JMWCS) that aimed to set out the overarching strategy for minerals and waste planning across Berkshire, which was submitted to the Secretary of State for consideration and examination in February 2009.
10. The Joint Minerals and Waste Core Strategy was considered at an Examination in Public in April 2009. During the examination the inspector expressed serious concerns relating to the delivery of the waste strategy and after discussions between all six Berkshire unitary authorities the JMWCS was formally withdrawn. Whilst work continued on the production of a revised JMWCS for Berkshire substantive progress was not made due to the uncertainty regarding the upcoming "localism" agenda being promoted by central government at that time. Therefore in March 2011 all work on the production of a revised JMWCS was suspended.
11. The JSPU closed on the 30th September 2011, therefore the work on a JMWCS ceased and no further consultations or publications were undertaken. The minerals and waste plan-making function has therefore passed to the Berkshire unitary authorities. There have been a number of discussions undertaken between the Berkshire unitary authorities in respect of the future of minerals and waste development plans and, at this stage, it is understood that a number of the authorities remain undecided in respect of the way forward, although discussions of joint working between some authorities are understood to have taken place.
12. West Berkshire Council approved the production of a West Berkshire specific Minerals and Waste Local Plan in 2012. This will include a 'call for site' nominations. Since that date much of the effort has been directed towards the collection and collation of the necessary evidence base to support the production of such a plan. This has involved the drafting of a local aggregates assessment for West Berkshire and a local waste assessment for West Berkshire. A draft Issues and Options Paper for minerals and waste planning in West Berkshire will be finalised subsequent to responses being received from the statutory consultees on the SA SR, and these comments being incorporated.

13. A draft vision for the WBMWDPD has been developed, although depending on the outcome of the consultation processes this may be updated. The vision, as currently drafted, has been informed by the existing local and national planning policy:

“To facilitate the planned delivery of mineral resources and waste management capacity which meet the requirements for West Berkshire in accordance with national planning policy. In particular to plan for the delivery of mineral resources and waste management capacity in locations which meet the needs of the communities and economy of West Berkshire, in the most sustainable way.”

Legal basis of Sustainability Appraisal / Strategic Environmental Assessment

14. The SEA Directive was adopted in June 2001 with a view to increase the level of protection for the environment, integrate environmental considerations into the preparation and adoption of plans and programmes, and to promote sustainable development. Annex F of this SR sets out the relevant requirements of the SEA Directive Annex 1 (Information referred to in SEA Directive Article 5(1)), indicating which parts of the SR meet these requirements.

15. Article 2a of the SEA Directive requires a Strategic Environmental Assessment to be carried out for all plans and programmes which are:

‘subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government,’

and

‘required by legislative, regulatory or administrative provisions’.

16. Pursuant to the requirements of the Planning and Compulsory Purchase Act 2004 (as amended) the production of the WBMWDPD is a statutory requirement as a local development documents for minerals extraction and waste management, to be prepared in accordance with the local development scheme.

17. The SEA should be carried out for plans and programmes which are likely to have significant environmental effects as set out in Article 3(2a) and Annex II. It is stated that:

‘An environmental assessment shall be carried out for all plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning and which set the framework for future development consent of projects listed in Annexes I and II, or

which in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of Directive 92/43/EEC.’

18. The few exceptions are detailed in Article 3 (8, 9) of the SEA Directive. The aim of the SEA is to identify potentially significant environmental effects created as a result of the implementation of the plan or programme on issues such as

'biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors'

as specified in Annex 1(f) of the Directive. The Directive was transposed into English legislation by the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulations'), which came into force on 21 July 2004. Sustainability Appraisals are mandatory for all DPDs in accordance with the Planning and Compulsory Purchase Act 2004 as amended.

2. Methodology

19. This Scoping Report incorporates the requirements of the Strategic Environmental Assessment into the Sustainability Appraisal process and has been developed in accordance with the following guidance:

- The European Directive 2001/42/EC, (EC, 2001)
- A Practical Guide to the Strategic Environmental Assessment Directive, (ODPM, 2005)

20. The proposed plan has been screened against the Directive and it has been determined that an SEA is required. The appraisal of the WBMWDPD is an integral part of the plan preparation and has five sequential stages. These main stages and the tasks for each stage are listed in Table 1 below. This report is the main SA/SEA scoping report document and appended to this report is a SA/SEA Baseline appendix and the SA/SEA Assessment of plans and policies appendix.

Table 1 – Relationship between Plan making process and SA/SEA stages.

Development Plan Document Stage	SA/SEA Stage	
Pre-production (In progress)	A	Setting the context and objectives, establishing the baseline and deciding on the scope
	A1	Identify other relevant policies, plans and programmes, and sustainability objectives
	A2	Collect baseline information
	A3	Identify sustainability issues and problems
	A4	Develop the SA framework
	A5	Consult on the scope of the SA
Production	B	Developing and refining options and assessing effects
	B1	Test the DPD objectives against the SA framework
	B2	Develop the DPD options
	B3	Predict the effects of the DPD
	B4	Evaluate the effects of the DPD
	B5	Consider mitigation measures and ways to maximise beneficial effects
	B6	Propose measures to monitor the significant effects of implementing the DPD
	C	Preparing the SA Report
	C1	Prepare the SA Report
	D	Consulting on the preferred options of the DPD and SA Report
	D1	Public participation on the preferred options of the DOD and the SA Report
	D2(i)	Appraise significant changes
Examination, Adoption and Monitoring	D2(ii)	Appraise significant changes resulting from representations
	D3	Make decisions and provide information
	E	Monitoring the significant effects of implementing the DPD

	E1	Finalise aims and methods for monitoring
	E2	Respond to adverse effects

Methodology for Stage A1 - Identify other relevant policies, plans and programmes, and sustainability objectives.

21. The SEA Directive requires the provision of:

“an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;” (Annex 1(a))

22. The Council must therefore take account of relationships between the WBMWDPD and other relevant policies, plans, programmes and sustainability objectives and also take into account environmental protection objectives established at international, European Community and national levels. All of these may influence the options to be considered in the preparation of the WBMWDPD. By reviewing these relationships, inconsistencies and constraints can be addressed and potential synergies can be exploited.

23. The SA process requires these relationships to be reviewed on an ongoing basis as the WBMWDPD is prepared, and also whilst future DPDs are prepared.

24. This SR assumes that higher and lower level plans are in conformity with each other and therefore only the most appropriate level plan need be referred to. International level plans will have been reviewed and taken into account for the production of national level plans, for example.

25. There are common themes covered by more than one national policy document. Therefore the SA process does not seek to mention every case where an issue is raised, rather to highlight the major issues of relevance for the WBMWDPD and in particular where these will not be dealt with by other plans, programmes or strategies.

26. The list in the tables in section 3 below includes relevant national planning guidance, and Development Plan Documents of neighbouring Local Planning Authorities. It is assumed that lower level plans will be in conformity with national level plans and programmes and therefore the objectives of these are not assessed. The findings of the relevant international, national and local policy guidance, plans and strategies highlight a number of objectives and targets of relevance to this SA’s objectives. The key emerging objectives, targets and issues which have been considered for the SA objectives are included in the assessment of the relevant documents is included in Appendix 1 to this report.

Methodology for Stage A2 – Baseline Information

27. The SEA Directive requires the provision of information on:

“relevant aspects of the current state of the environment and the likely evolution therefore without implementation of the plan or programme”

and

“the environmental characteristics of areas likely to be significantly affected;”

(Annex 1(b) and (c) respectively)

28. The collation of existing environmental and sustainability information (baseline data), in Appendix 2, has helped to identify the sustainability issues that are facing West Berkshire, and has set the context for appraising the WBMWDPD.
29. The baseline data for the SA/SEA includes existing environmental and sustainability information from a range of sources which is both quantitative and qualitative. The information provides the basis for assessing the potential impact of the plan’s policies, objectives and options (including site options) and will aid development of appropriate mitigation measures, together with future monitoring data. The baseline information profile will include baseline data pertaining to the following:
- the latest available data for the plan area for each topic;
 - comparators: national, regional and county level data (where relevant);
 - likely future trends in respect of the topic area;
 - data limitation where relevant; and
 - considering the likely future trends, the existing challenges for the WBMWDPD.
30. This SR is based on information that was available at the time of publication, and is presented as a consultation draft. Additional information that comes to light during the course of the consultation procedure will, where relevant, be incorporated into the assessment process. In drawing together this SR it is important to highlight the limitations and difficulties that have been found, particularly with regard to the minerals and waste baseline data. There are a number of difficulties associated with gathering complete, reliable, up-to-date data for use in minerals waste planning in West Berkshire. The Environment Agency (EA) collects information on waste deposited at regulated waste facilities in West Berkshire but this does not include all wastes. The EA also has to make assumptions for outstanding waste handling figures from a number of waste operators and there is the likelihood that some waste is double counted as it may pass through a transfer station before arriving at a treatment facility. In the absence of figures for Commercial and Industrial (C & I) waste, and Construction, Demolition and Excavation waste (C, D & E) established models have been used to obtain indicative estimates for likely arisings in West Berkshire. Further, due to minerals and waste data being collected at a Berkshire-wide level as opposed to a West Berkshire level until very recently figures are estimated using a number of different sources. Although due diligence has been taken to ensure the data is as accurate as possible, and the indicative estimates are as realistic as possible, care must be taken when interpreting the information presented.

Methodology for Stage A3 - Identifying Sustainability Issues and Problems

31. The SEA Directive requires the provision of information on:

“any existing problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance such as areas designated pursuant to Directives 79/409/EEC and 92/43/ECC.” (Annex 1(d))*

*New Birds Directive 2009/147/EC has replaced 79/409/EEC

32. Key sustainability issues (section 5 below) have been identified through the assessment of the baseline information and review of the relevant plans and programmes. This identification process has provided the opportunity to define the key issues for the WBMWDPD and to improve the objectives and the options for the plan.

Methodology for Stage A4 – Developing the SA Framework

33. Developing the SA framework provides a way in which sustainability effects can be described, analysed and compared, and forms a central part of the SA process. The SA Framework is made up of a set of sustainability objectives and their indicators (see Table 8 below). The indicators are a method of measuring the extent to which the objectives are achieved. These objectives and indicators can also then be used to monitor the implementation of the WBMWDPD.

Methodology for Stage A5 – Consultation

34. The SEA Directive (Article 5.4) requires views to be sought from the three statutory environmental consultation bodies designated in the SA Regulations (Environment Agency, Natural England, and English Heritage) on the scope and level of detail of the environmental information in the SA. This consultation stage will help to ensure that the SA will be comprehensive and robust in its support of the WBMWDPD.

Methodology for the next stages of the SA

35. When Stage A5, consultation on the SR, has been completed the development of the SA will move on to Stage B, developing and refining options and assessing effects, with Stages C, D and E to follow (for more information on this please see Table 1). The SR is the first stage of the SA Process. An 'Interim Environmental Report' will be produced in conjunction with the 'WBMWDPD Issues and Options' The full SA/SEA Environmental Report will then be produced and made available at the 'WBMWDPD Preferred Options' stage and then updated (where necessary) for the 'WBMWDPD Submission' stage. The SA Process is an iterative process that will be undertaken alongside the production of the WBMWDPD in an informative capacity.

3. Stage A1: Other relevant policies, plans and programmes

36. As detailed above in table 1 the first stage of the SA/SEA scoping process involves the identification of other relevant policies, plans and programmes, and sustainability objectives to enable the consideration of the relationships between the WBMWDPD and other relevant policies, plans, programmes and sustainability objectives and also take into account environmental protection objectives established at international, European Community and national levels.

37. The following tables (tables 2-7) detail those other policies plans and programmes that have been identified as being relevant to the development of the WBMWDPD along with clarifying the relevance to the WBMWDPD.

Table 2: International level policies, plans and programmes

It is assumed that these plans and programmes have already been 'scoped' during the production of the more recent UK National Plans.

Title	Author	Date	Relevance
Declarations/Strategies			
The Johannesburg Declaration of Sustainability Development	United Nations	2002	Context
EU Biodiversity Strategy to 2020	European Community	2011	Context
Bern Convention on the Conservation of European Wildlife and Natural Habitats	European Community	1979	Context
Ramsar Convention on Wetlands of International importance, especially waterfowl habitats	Ramsar Convention	1971	Context
Bonn Convention on the Conservation of Migratory Species of Wild Animals	United Nations	1979	Context
The European Convention on the Protection of Archaeological Heritage (Valetta Convention)	European Community	1992	Context
The Convention for the Protection of the Architectural Heritage of Europe (Granada Convention)	European Community	1985	Context
EU/EC Directives			
EC Hazardous Waste Directive (Directive 91/689/EEC) (as amended)	European Commission	1991	Context
EC Waste Electrical and Electronic Equipment (WEEE) Directive (Directive 2002/96/EC) (as amended)	European Commission	2002	Context
EC End of Life Vehicles Directive (Directive 2000/53/EC) (as amended)	European Commission	2000	Context
EC Restriction of Hazardous Substances (ROHS) Directive (Directive 2002/95/EC) (as amended)	European Commission	2002	Context
EC Packaging and Packaging Waste Directive (Directive 94/62 EC) (as amended)	European Commission	1994	Context

Title	Author	Date	Relevance
EC Directive on Incineration of Waste (Directive 2000/76/EC) (as amended)	European Commission	2000	Context
EC Integrated Pollution and Prevention and Control (IPCC) Directive (2008/1/EC) (as amended)	European Commission	2008	Context
EC Directive on Waste to Landfill (Directive 99/31/EC) (as amended)	European Commission	1999	Context
EC Directive on Conservation of Wild Birds (Directive 79/409/EEC) (as amended)	European Commission	1979	Context
EC Animal By-Products Regulations (EC 1774/2002) (as amended)	European Commission	2002	Context
Conservation of Natural Habitats and Wild Fauna and Flora (Directive 92/43/EC) (The Habitats Directive) (as amended)	European Commission	1994	Context
EC Water Framework Directive (Directive 2000/60/EC) (as amended)	European Commission	2000	Context
Urban Waste Water Treatment Directive (as amended)	European Commission	1991	Context
Air Quality Framework Directive (Directive 96/62/EC) (as amended)	European Commission	1996	Context
Kyoto Protocol and the UN Framework Convention on Climate Change	United Nations	1999/1997	Context
Directive to promote Electricity from Renewable Energy (Directive 2001/77/EC)	European Commission	2001	Context
Directive concerning the protection of waters against pollution caused by nitrates from agricultural sources (Nitrates Directive) (as amended)	European Commission	1991	Context
The Convention on Biological Diversity, Rio de Janeiro	United Nations	1992	Context
Directive on Ambient Air Quality and Management	European Commission	1966	Context
European Spatial Development Perspective, Towards Balanced and Spatial Development of the Territory of the European Union	European Commission	1999	Context
Waste Framework Directive (Directive 2008/98/EC) (as amended)	European Commission	2008	Context
Environment 2010: Our Future, Our Choice, EU Sixth Environment Action Programme, 2001-2010	European Commission	2001	Context
Groundwater Directive (80/68/EEC) (as amended)	European Commission	1991	Context
Mining Waste Directive (2006/21/EC) (as amended)	European Commission	2006	Context
Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment	European Commission	2001	Context

Table 3: National level policies, plans and programmes

It is assumed that these plans and programmes have already been ‘scoped’ during the production of the more recent National, Regional and Local Planning Guidance.

Title	Author	Date	Relevance
Legislation			
Town and Country Planning Act (as amended)	UK Government	1990	Context
Environment Act (as amended)	UK Government	1995	Context
Wildlife and Countryside Act (as amended)	UK Government	1981	Context
Countryside and Rights of Way Act 2000 (CRoW) (as amended)	UK Government	2000	Context
The Water Act (as amended)	HMSO	2003	Context
Hazardous Waste Regulations (England and Wales) (as amended)	UK Government	2005	Context
The Environmental Protection (Duty of Care) Regulations (as amended)	UK Government	1991	Context
Air Quality Standards Regulations (as amended)	UK Government	2010	Context
The Habitats Regulations (as amended)	UK Government	1994	Context
Waste (England and Wales) Regulations	UK Government	2011	Context
The Climate Change Act	UK Government	2008	Context
The Environmental Assessment of Plans and Programmes Regulations 2004 (Statutory Instrument 2004 No.1633) (as amended)	UK Government	2004	Context
The Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended)	UK Government	2012	Context
Ancient Monuments and Archaeological Areas Act 1979 (as amended)	UK Government	1979	Context
Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended)	UK Government	1990	Context
National Policy Statements			
EN-1: Overarching National Policy Statement for Energy	DECC	July 2011	Strategic
EN-2 - National Policy Statement for Fossil Fuel Electricity Generating Infrastructure	DECC	July 2011	Strategic
EN-3: National Policy Statement for Renewable Energy Infrastructure	DECC	July 2011	Strategic
EN-4: National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines	DECC	July 2011	Strategic
EN-5: National Policy Statement for Electricity Networks Infrastructure	DECC	July 2011	Strategic
EN-6: National Policy Statement for Nuclear Power Generation – Annexes	DECC	July 2011	Strategic
National Policy Statement for Waste Water	DEFRA	March 2012	Strategic

Title	Author	Date	Relevance
National Policy Statement for Hazardous Waste	DEFRA	June 2013	Strategic
Planning Policy			
National Planning Policy Framework	DCLG	2012	Strategic
Planning Policy Statement 10 – Planning for Sustainable Waste Management (published 2005 and revised 2011)	DCLG	2011	Strategic
Waste Management Plan for England – Consultation draft	DEFRA	2013	Strategic
Minerals Planning Guidance 4: Revocation, modification, discontinuance, prohibition and suspension orders (1997)	ODPM	1997	Strategic
Minerals Planning Guidance 8: Planning and Compensation Act 1991 – Interim development order permissions (IDOS): statutory provisions and procedures	ODPM	1991	Strategic
Minerals Planning Guidance 9: Planning and Compensation Act 1991 - Interim development order permissions (IDOS): conditions	ODPM	1992	Strategic
Minerals Planning Guidance 14: Environment Act 1995: review of mineral planning permissions	ODPM	1995	Strategic
Marine Mineral Guidance 1: Extraction by dredging from the English seabed	ODPM	2002	Strategic
Strategies, Action Plans, and Guidance			
Planning for Sustainable Waste Management: A Companion Guide to Planning Policy Statement 10	DCLG	2005	Strategic
Securing the Future – Delivering UK Sustainable Development Strategy	HM Government	2005	Context
Climate Change: The UK Programme	DEFRA	2006	Context
Air Quality Strategy: Working Together for Clean Air	DETR	2000 (updated 2007)	Context
Strategic Environmental assessment and Biodiversity: Guidance for Practitioners	CCC, EN,EA, and RSPB	2004	Context
UK Biodiversity Action Plan	UK Biodiversity Partnership and UK Government	1994	Context
The 'UK Post-2010 Biodiversity Framework' (July 2012)	JNCC and DEFRA	2012	Context
Government forestry policy statement	DEFRA	2013	Context
The Carbon Plan: Delivering our low carbon future	HM Government	2011	Context
Safe Guarding our soils: A strategy for England 2030	DEFRA	2011	Context
The Natural Choice: Securing the Value of Nature	DEFRA	2011	Context
Biodiversity 2020 – A Strategy for England's Wildlife and Ecosystem Services	DEFRA	2011	Context

Table 4: Regional level policies, plans and programmes

Title	Author	Date	Relevance
Retained South East Plan Policy NRM6 – Thames Basin Heaths Special Protection Area - Strategic	DCLG – Government Office for the South East	2009	Strategic
River Basin Management Plan for the Thames Basin District	Environment Agency, Defra, Welsh Assembly	2009	Strategic
South East Biodiversity Strategy	South East England Biodiversity Forum	2009	Context

Table 5: County level policies, plans and programmes

Title	Author	Date	Relevance
The Berkshire Biodiversity Strategy	Berkshire Local Nature Partnership	2012	Strategic
Replacement Minerals Local Plan for Berkshire incorporating Alterations adopted 1997 and May 2001	Berkshire Unitary Authorities' Joint Strategic Planning Unit	1995	Context
Waste Local Plan for Berkshire	Berkshire Unitary Authorities' Joint Strategic Planning Unit	1998	Context
North Wessex Downs AONB Integrated Landscape Character Assessment Technical Report	Land Use Consultants and Berkshire Unitary Authorities' Joint Strategic Planning Unit	2002	Context
Berkshire Landscape Character Assessment	Berkshire Joint Strategic Planning Unit	2003	Context

Table 6: West Berkshire / Unitary level policies, plans and programmes

Title	Author	Date	Relevance
West Berkshire Council Strategy 2013 - 17	West Berkshire Council	2013	Direct
The Adopted West Berkshire Core Strategy	West Berkshire Council	2012	Direct
West Berkshire Council Strategic Flood Risk Assessment (SFRA)	West Berkshire Council	2008	Direct
West Berkshire District Local Plan 1991-2006 (Saved Policies 2007)	West Berkshire Council	2007	Direct
Statement of Community Involvement	West Berkshire Council	2006	Direct
Local Transport Plan for West Berkshire 2011 - 2026	West Berkshire Council	2011	Direct
Local Transport Plan for West Berkshire 2011 – 2026 – Active Travel Strategy	West Berkshire Council	2011	Direct

Title	Author	Date	Relevance
Sustainable Community Strategy – A Breath of Fresh Air (2008) (Incorporating Draft Refresh 2009)	West Berkshire Partnership	2008	Direct
Newbury Vision 2025	West Berkshire Partnership	October 2003	Direct
Draft Newbury Vision (2026) refresh	West Berkshire Partnership	2013	Direct
Kennet and Thames Vision	West Berkshire Council	October 2006	Direct
Housing Strategy 2010-2015	West Berkshire Council	2010	Direct
North Wessex Downs AONB Management Plan	North Wessex Downs AONB Council of Partners	January 2004	Direct
West Berkshire Historic Environment Character Zoning	West Berkshire Council	2008	Direct
West Berkshire Historic Environment Action Plan.	West Berkshire Heritage Forum	2011	Direct

Table 7: Neighbouring Authorities policies/plans

It is assumed that each Local Authority has had regard to their existing Local Plans and Community Strategies in developing their emerging Development Plan Documents.

Each of these documents contain strategic policy objectives and land use development proposals for their area and the WBMWDPD will need to consider if there are any cross-boundary issues. This will be more relevant when sites for minerals and waste development are being assessed as part of the plan-making process.

Title	Author	Date	Relevance
Oxfordshire Minerals and Waste Local Plan 1996 - 2006 (Saved Policies 2007)	Oxfordshire County Council	September 2007	Strategic
South Oxfordshire Core Strategy (to 2027)- Adopted	South Oxfordshire District Council	December 2012	Strategic
South Oxfordshire Local Plan 2011 – Saved Policies	South Oxfordshire District Council	January 2006	Strategic
Vale of White Horse Local Plan 2011 – Saved Policies	Vale of White Horse District Council	July 2006	Strategic
Vale of White Horse Local Plan 2029 – Consultation ended May 2013	Vale of White Horse District Council	February 2013	Strategic
Wiltshire Core Strategy 2026 – submission stage	Wiltshire County Council	July 2012	Strategic
South Wiltshire Core Strategy - Adopted	Wiltshire County Council	February 2012	Strategic

Title	Author	Date	Relevance
Wiltshire and Swindon Structure Plan 2016 – Saved Policies	Wiltshire County Council and Swindon Borough Council	April 2006	Strategic
Wiltshire and Swindon Minerals Local Plan - Saved Policies	Wiltshire County Council and Swindon Borough Council	November 2001	Strategic
Wiltshire and Swindon Minerals Core Strategy	Wiltshire County Council and Swindon Borough Council	June 2009	Strategic
Wiltshire and Swindon Waste Core Strategy	Wiltshire County Council and Swindon Borough Council	June 2009	Strategic
Wiltshire and Swindon Minerals Development Control Policies	Wiltshire County Council and Swindon Borough Council	September 2009	Strategic
Wiltshire and Swindon Waste Development Control Policies	Wiltshire County Council and Swindon Borough Council	September 2009	Strategic
Wiltshire and Swindon Minerals Site Allocations	Wiltshire County Council and Swindon Borough Council	May 2013	Strategic
Wiltshire and Swindon Waste Site Allocations	Wiltshire County Council and Swindon Borough Council	February 2013	Strategic
Swindon Borough Local Plan 2011 – Saved Policies	Swindon Borough Council	July 2006	Strategic
Swindon Borough Local Plan 2026 – Submission Stage	Swindon Borough Council	June 2013	Strategic
Kennet Local Plan 2011 – Saved Policies	Kennet District Council	April 2004, Saved Sept 2007	Strategic

Title	Author	Date	Relevance
Revised Test Valley Borough Local Plan -	Test Valley Borough Council	February 2013	Strategic
Test Valley Borough Local Plan 2006 – Saved Policies (June 2009)	Test Valley Borough Council	2006, saved March 2009	Strategic
Hampshire Minerals and Waste Plan (found sound by Inspector subject to some main modifications)	Hampshire County Council	June 2013	Strategic
Hampshire, Portsmouth, Southampton and New Forest National Park Minerals and Waste Core Strategy	Hampshire County Council, Portsmouth City Council, Southampton City Council, New Forest National Park Authority	2007	Strategic
Hampshire, Portsmouth, Southampton Minerals and Waste Local Plan – Saved Policies	Hampshire County Council, Portsmouth City Council and Southampton City Council	1998	Strategic
Hampshire County Structure Plan 1996-2011 (Review) – Saved Policies	Hampshire County Council, Portsmouth City Council and Southampton City Council	March 2000, Saved Sept 2007	Strategic
Basingstoke and Deane Borough Local Plan (1996 – 2011) – Saved Policies	Basingstoke & Deane Borough Council	July 2006, saved July 2009	Strategic
Hart District Council Local Plan (Replacement, Incorporating 'First Alterations 2006') 1996-2006 – Saved Policies	Hart District Council	2002, Saved Sept 2007	Strategic
Hart District Council Core Strategy – Submission stage, hearings completed 19 July 2013	Hart District Council	July 2013	Strategic
Wokingham District Local Plan – Saved Policies	Wokingham District Council	March 2004, Saved Sept 2007	Strategic
Wokingham Borough Core Strategy (Adopted)	Wokingham Borough Council	January 2010	Strategic
Reading Borough Local Plan (1991-2006) – Saved Policies	Reading Borough Council	1998, Saved Sept 2007	Strategic
Reading Borough Core Strategy	Reading Borough Council	January 2008	Strategic

Title	Author	Date	Relevance
Reading Central Area Action Plan	Reading Borough Council	2009	Strategic
Reading Proposals Map	Reading Borough Council	2012	Strategic
Reading 2020 – Making it Happen, Community Strategy	Reading Partnership	2004	Local
The Vale Community Strategy 2008-2016	The Vale Strategic Partnership	October 2008	Strategic

4. Stage A2: Baseline Information

38. The appended baseline report (Appendix II) considers the West Berkshire Authority area. The report seeks to describe the current state of plan area's various environmental aspects, and the likely future conditions of West Berkshire's environment should no plan be put in place. The report draws upon a vast amount of evidence gained through research, and makes use of national, regional, and local studies, plans and programmes, in order to gain a comprehensive baseline of evidence. The report also draws upon specific areas that may be significantly affected as a result of no plan being put in place, and where applicable looks past the physical boundary of the plan area. Areas where baseline information has been difficult to obtain, as well as challenges identified for the Plan, are highlighted throughout Appendix II.
39. The report looks at various aspects of the environment which needs to be considered as part of the Sustainability Appraisal. The baseline report covers key environmental, social, and economic/material assets. The Environmental issues covered are: climatic factors; biodiversity and geodiversity; landscape and townscape; soils; cultural heritage (including architectural and archaeological heritage); air; water (including flooding, water quality and water resources); noise pollution; and light pollution. Social issues that are covered are human health; and other social considerations (including population, education, housing, deprivation, crime and safety). Economic / material asset issues include transport; renewable energy; minerals; waste; and other economic considerations.

5. Stage A3 – Identify Sustainability Issues and Problems

40. The SEA Directive requires the production of the following information:

“any existing problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance such as areas designated pursuant to Directives 79/409/EEC and 92/43/ECC”; and

“the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors”. (Annex 1(d) and (f) respectively)

41. Sustainability issues have been identified through the review of relevant plans and programmes (appendix 1 to this report) and also from the baseline information (appendix 2 to this report). Identifying the sustainability issues and problems during the Scoping Stage ensures that they are addressed in the sustainability objectives, indicators and targets which make up the SA framework. The key issues and existing problems relating to the WBMWDPD that have been identified are as follows.

Environmental

Climatic factors

42. The UK is likely to see more extreme weather events, including hotter and drier summers, flooding and rising sea-levels. One of the main challenges for West Berkshire is to mitigate for the impacts of climate change for example through flood water storage or the provision of green infrastructure.

43. Waste management, and mineral extraction/processing generate greenhouse gases and other air pollutants contributing to climate change. It is acknowledged that there is a requirement for waste management and mineral extraction to continue but it is necessary for this to be carried out with greater reference to the waste hierarchy.

Biodiversity and Geodiversity

44. Of the 51 SSSIs in West Berkshire 21 of them were considered to be in 'favourable' condition, 12 were considered to be 'unfavourable recovering', 1 was considered to be 'unfavourable declining', while the remaining sites were a combination of these conditions (i.e. partially 'favourable' and partially 'unfavourable'). See table 1 in Appendix 2 for more information on SSSIs.

45. There is a need to protect and enhance biodiversity, ensuring the connectivity of species populations and habitats across West Berkshire, and maximising opportunities for creating and improving habitats. West Berkshire's geodiversity also should be conserved and enhanced where possible.

Landscape and townscape

46. Nearly three quarters of West Berkshire is designated as the North Wessex Downs AONB. High priority needs to be given to conserving and enhancing their land, specific character and setting.
47. There is a need to prevent urban sprawl and settlement coalescence to protect West Berkshire's rural character.

Soils

48. There is a need to protect West Berkshire's 'Best and Most Versatile Agricultural Land'. Many existing and potential mineral sites are located on high quality agricultural land within West Berkshire.
49. Due to the hydrogeological conditions along the Kennet Valley it may be necessary to import inert material for restoration in order that land can be restored back to agriculture where appropriate, and soils can be conserved.

Cultural heritage (including Architectural and Archaeological Heritage)

50. Within West Berkshire there are 1877 listed buildings, 54 conservation areas, approximately 100 Scheduled Monuments, 13 registered Parks and Gardens, and 2 Historic Battlefields
51. The 2013 English Heritage Heritage at Risk Register identifies three buildings, six Scheduled Monuments, three historic parks and gardens, and one battlefield at risk.
52. There is a need to conserve and enhance West Berkshire's rich historic environment and diverse historic landscape character.

Air

53. There are only two areas acknowledged as having poor air quality (designated as Air Quality Management Areas) in West Berkshire. These are at one section of the A339 in central Newbury and a section of the A4 in Thatcham. Traffic movements and processing associated with minerals and waste facilities could impact on air quality in some instances.
54. Being situated in close proximity to a strategic road network is ideal for businesses and other services to locate, presenting a challenge for locating minerals and waste facilities.
55. Sites that offer sustainable transport opportunities such as rail, river or canal would be preferable to help reduce air quality impacts caused by road congestion. There is potential for improvements in air quality to impact positively on SSSIs.

Water (including Flooding, Water and Water Resources)

56. Although mineral working may be flood zone compatible, there is a need to avoid and reduce the impacts of river and groundwater flooding in parts of West Berkshire, as well as all other sources of flooding. With climate change,

the frequency, patterns and severity of flooding are forecast to change and become more damaging.

57. There is also a need to protect and enhance water quality and conserve water supplies, including influencing minimising per capita water consumption in West Berkshire, where possible. This is due to there being substantial levels of water stress within West Berkshire.
58. There is a need to reduce the amount of major and significant pollution incidents which have affected the quality of West Berkshire's water resources. These can have significant implications for flora and fauna in West Berkshire.

Noise, Light Pollution

59. Noise pollution may be an issue for people who live in close proximity to the M4 or the A34 due to current levels of traffic. This may also be an issue for people in West Berkshire living near to railway lines and sites where industrial activities are undertaken.
60. Light pollution may be an issue for residents living in the more rural parts of West Berkshire (e.g. farms, hamlets and small villages in the AONB). The illumination of the sky within the more urbanised areas of West Berkshire may present a problem for residents.

Social

Human health

61. The more deprived areas in the district in terms of health deprivation are concentrated in some the more urban areas in Newbury and Thatcham as well as the Reading fringe areas around Calcot and Purley on Thames. There are some more rural areas across the district which are ranked higher for health deprivation, including around Mortimer, Aldermaston and the Lambourn Valley.
62. There are negative perceptions by members of the public about noise and air pollution and the potential health impacts associated with certain types of minerals and waste development. Negative impacts for minerals and waste development can however generally be controlled through the planning system and the environmental permitting regime.
63. Sanitation is affected by regular waste collections. Mineral is required to ensure an adequate supply of housing in order that people are housed to minimise detriment to human health.

General social considerations – Population, Education, Housing, Deprivation, Crime and Safety

64. The population of West Berkshire (the plan area) is projected to increase to 170,100 by 2021³ and the West Berkshire Core Strategy plans for an additional 10,500 new homes between 2006 and 2026. This is likely to result in greater demands on resources and minerals supply, and waste infrastructure.

³ ONS Population Projections (2011)

65. The number of people aged 85+ is expected to rise by 41% by 2021⁴, which will have implications on adult social care provision within the district and on the amount of one-bedroom properties that will be required. This high requirement is for one bedroom accommodation, which reflects the increasing numbers of single person households trying to get on the property ladder, places a greater demand on the need for minerals for the construction industry. It is likely that waste management services will also be required to plan for this need.
66. The main deprivation issue facing the area is that of barriers to housing and services. The need for affordable housing is likely to increase over the coming years.
67. Although the level of crime is of importance to the residents of the area, it is antisocial behaviour that is of more concern as this has a direct effect on the quality of life and general appearance of the area.

Economic / Material Assets

Transport

68. West Berkshire experiences traffic congestion on the strategic road network (mainly on the M4 and trunk roads) as well as congestion associated with access to the strategic road network during peak periods.
69. A key challenge is to encourage the use of sustainable transport modes throughout West Berkshire for minerals and waste movements. Current waste management techniques through transfer stations are likely to add to this stress. There is potential for the WBMWDPD to place greater emphasis on waste recovery / disposal processes close to source
70. The likely route of vehicles accessing sites should be carefully considered to avoid problems of congestion, severance, increased costs of maintaining rural roads and safety issues. Opportunities to utilise West Berkshire's rail depots should also be encouraged, where appropriate and sustainable. As such, safeguarding of these sites is critical.

Renewable and low-carbon energy

71. The majority of energy used in West Berkshire is understood to be generated by fossil fuels which emit greenhouse gases, contributing to the greenhouse effect. New renewable and low-carbon energy development will be positive in terms of sustainability. There is potential for the WBMWDPD to adopt a policy approach such that low-carbon energy technologies are encouraged.

Minerals

72. Mineral working has a number of key environmental effects which must be considered by the Plan. These include; noise, air quality; mineral waste; dust; visual intrusion on the local setting and wider landscape; archaeological and heritage features; traffic; groundwater; surface water; landscape character;

⁴ ONS, (Interim 2011) sub-national population projections

and internationally, nationally and locally designated sites, protected or sensitive species and plant and wildlife habitats⁵.

73. Diminishing land won mineral supplies coupled with the general extent of environmental constraints is likely to cause difficulties in maintaining some mineral reserves at the level specified in National guidance in West Berkshire.
74. The reserves of primary aggregates in West Berkshire are declining and it is possible that the WBMWDPD may need to consider a shift in strategy to meet the need for aggregates over the plan period away from the reliance on land won sources.
75. Safeguarding of viable or potentially viable mineral deposits from sterilisation by surface development, which would preclude their possible extraction at some future date, is an important component of sustainable development.
76. The acceptability of mineral extraction in the AONB needs to be given consideration due to the sensitive nature of the designation.
77. The issue of whether West Berkshire should pursue a strategy aiming for the provision of minerals to construction and manufacturing businesses solely within West Berkshire, or whether the wider role that West Berkshire has in supplying minerals to other areas that have fewer resources should be acknowledged and accounted for in the WBMWDPD.
78. Future mineral working and the development of the WBMWDPD presents an opportunity for ensuring that site restoration proposals in West Berkshire are suitable for the particular context (i.e. whether it will be 'wet' or 'dry' restoration or a mixture).

Waste

79. Waste management, and associated activities generate greenhouse gases and other air pollutants. Climate change is a major sustainability consideration. The Plan should seek to reduce the impacts on climate change through the promotion of more sustainable methods of waste management.
80. Population growth in West Berkshire will increase pressures on the current waste management facilities and may mean new facilities need to be provided. This could also result in an increase in competition for land for waste management facilities.
81. In the preparation of the WBMWDPD consideration will have to be given to whether existing permitted permanent sites, proposed preferred areas for waste development, and existing industrial areas should be safeguarded from alternative uses.
82. Consideration needs to be given to the waste hierarchy and waste management sites currently available to meet this need. Similarly thought will have to be given to whether small-scale and strategic waste facilities will be encouraged or discouraged from locating in the AONB in terms of policy in the WBMWDPD.

⁵ Planning and Minerals: Practice Guide (2006)

General economic considerations

83. There is a need to ensure the infrastructure is in place in West Berkshire to continue to attract and retain investment and business.
84. The WBMWDPD should seek to identify facilities that generate employment in areas of relative high unemployment, however this is a challenge in itself, as areas that are densely populated, may also create the largest opposition to minerals and waste sites being located nearby.
85. Areas of high population density in West Berkshire also create the issue of greater competition for the minerals and waste sites from other land uses which may result in higher returns in a shorter period of time.
86. Waste facilities should be located to meet the demands of a growing population and these facilities should be located in accessible areas, particularly for those typically less mobile such as the elderly.

Transboundary Issues

87. No transboundary issues have currently been identified to date, although as the WBMWDPD emerges this will be kept under review.

6. Stage A4 – The SA Framework

88. The sustainability appraisal framework consists of a set of sustainability objectives and indicators derived from consideration of information in stage A3. The indicators can be used during Stage E to monitor the implementation of the WBMWDPD. Annex D shows how the SA Objectives are related to environmental, social and economic issues. Annex E indicates the relationship between the SA objectives and the aspects of the environment set out in Annex 1(f) of the SEA Directive.

Table 8 - West Berkshire Minerals and Waste Development Plan Document Sustainability Objectives

Objective	Potential Indicators	Topic area
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	<p>Distance from identified sites to the nearest:</p> <ul style="list-style-type: none"> -SSSIs -Ancient and/or Species Rich Hedgerows -Ancient Woodland -SPAs (none in West Berkshire however Thames Basin Heath SPA is 5km from south-west border -SACs -cSACs -LNRs -WHSs; <p>Condition of the nearest sensitive receptors (where viable);</p> <p>Monitoring of Berkshire BOAs in West Berkshire as part of Berkshire Biodiversity Strategy</p> <p>Status / condition of priority species and habitats (Berkshire Biodiversity Strategy)</p> <p>Condition of SSSIs;</p> <p>Changes in woodland and farmland bird species;</p> <p>Site visit surveys on typical abundance and frequency of habitats (DAFOR scale);</p> <p>Ecological potential site assessments;</p> <p>Mitigation measures related to West Berkshire rivers that have defined ecological potential.</p>	Biodiversity and Geodiversity; Minerals; Waste
2) To maintain and enhance water quality and resources	<p>Ecological status of rivers/canal/lakes;</p> <p>Chemical status of rivers/canal/lakes;</p> <p><i>The Water Framework Directive (WFD) aims for</i></p>	Water (Water Quality); Biodiversity; Minerals; Waste

Objective	Potential Indicators	Topic area
	<p><i>'good ecological and chemical status' for all ground and surface waters in the EU by 2015. The status of surface waters are assessed according to criteria prescribed in the WFD.</i></p> <p>Resource availability status for units of groundwater in Catchment Abstraction Management Strategy Areas;</p> <p>Resource availability status at low flows for units of surface water and / or surface water combined with groundwater, in Catchment Abstraction Management Strategy Areas;</p>	
<p>3) To minimise the risk and impact of flooding</p>	<p>Proximity and suitability of development to floodplains;</p> <p>SFRA identified sites/areas which will result in least detrimental impact from flooding;</p> <p>Incidences of flood warnings in site area;</p> <p>Distance to 'Areas susceptible to surface water flooding' – EA Maps;</p> <p>On site and nearby topography via ordnance survey mapping;</p> <p>Incorporation of Sustainable drainage systems.</p> <p>Survey of vegetation on site to assess capability of plant-life to mitigate flooding</p>	<p>Water (Flooding); Minerals; Waste</p>
<p>4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land</p>	<p>Location and extent of agricultural land grades 1, 2 and 3a;</p> <p>Location and extent of contaminated land;</p> <p>Location and extent of development on previously developed land;</p> <p>Standard of restoration schemes back to agriculture</p>	<p>Soils; Minerals; Waste</p>
<p>5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance</p>	<p>The number of designated heritage assets</p> <p>The number and percentage of designated heritage assets at risk from minerals or waste development</p> <p>The number of applications for minerals or waste development approved contrary to the advice of the Council's conservation</p>	<p>Cultural heritage (including Architectural and Archaeological Heritage); Minerals; Waste</p>

Objective	Potential Indicators	Topic area
	<p>or archaeological advisor, or statutory consultee (i.e. English Heritage)</p> <p>Site allocation proximity to, and (potential) impact on the significance of any:</p> <ul style="list-style-type: none"> - Scheduled Monuments - Listed Buildings - Conservation Areas - Historic Parks or Gardens - Historic Battlefields - Sites identified in the Historic Environment Record <p>Archaeological assessment reports associated with minerals planning applications / site allocations</p>	
<p>6) To minimise the impact on landscape and townscape character</p>	<p>Height of proposed new or existing development;</p> <p>Allocations/developments permitted contrary or in line with 'Landscape character guidelines' in Berkshire LCA (2003) or landscape advice</p> <p>Number and extent of field boundaries affected or return to historic field patterns;</p> <p>Extent of Landscape Character Areas affected;</p> <p>Assessment of on site and nearby topography via ordnance survey mapping;</p> <p>Extent of current hedgerows, trees, woodlands, landform and built development (based on Berkshire Landscape Character Assessments);</p> <p>Number of TPOs that would be affected;</p> <p>Number of minerals and waste developments on greenfield, brownfield land;</p> <p>Developments within, or adversely affecting, North Wessex Down AONB</p>	<p>Landscape and townscape; Minerals; Waste</p>
<p>7) To protect air quality in West Berkshire</p>	<p>Location and extent of AQMAs in relation to infrastructure requirements and likely routes to / from sites;</p> <p>Proposed mode of travel;</p>	<p>Air; Human health; Minerals; Waste</p>

Objective	Potential Indicators	Topic area
	<p>Findings from air dispersion modelling if undertaken (e.g. effects on SSSIs);</p> <p>Location and extent of potentially significant junctions in relation to infrastructure requirements and likely routes;</p> <p>Location of rail links to proposal;</p> <p>Complete annual air quality survey (WBDC)</p>	
<p>8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change</p>	<p>Consideration of typical energy production (GwH) or heat production from various waste facilities allocated or permitted (i.e. PV, wind turbines etc);</p> <p>Amount of new renewable energy capacity being provided each year (TV Energy Installations database).</p>	<p>Renewable and low-carbon energy; Air; Climatic factors; Landscape</p>
<p>9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste.</p>	<p>Tonnage / % of waste recycled;</p> <p>Tonnage / % of waste composted;</p> <p>Tonnage / % of waste recovered;</p> <p>Tonnage / % of waste to be landfilled;</p> <p>Allocations or permissions granted for various types of waste development (tonnage capacity)</p>	<p>Waste; Human health; Landscape; Renewable and low-carbon energy; Climatic factors; Other social considerations</p>
<p>10) To promote the sustainable transport of minerals and waste within West Berkshire</p>	<p>Number of developments where a green travel plan is submitted as a condition of development;</p> <p>Method of transportation proposed;</p> <p>Proximity to waste arisings / market for mineral;</p> <p>Proximity to strategic transport network</p>	<p>Waste; Minerals; Health; Air; Climatic factors; Transport</p>
<p>11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of</p>	<p>Site waste management plans submitted as part of development proposals</p> <p>Monitoring development within identified safeguarding areas (contrary to / in accordance with)</p> <p>Monitor development permitted against Mineral Planning Authority objection.</p>	<p>Minerals; Waste</p>

Objective	Potential Indicators	Topic area
recycled aggregate where possible and appropriate	Tonnage capacity of sites to manage recycled aggregate	
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	<p>Monitor compliance with dust control conditions;</p> <p>Monitor compliance with noise control conditions;</p> <p>Monitor compliance with emissions to air;</p> <p>Check location and extent of public rights of way and public open space contrary to / in accordance with consultee comments;</p> <p>Enhancement of public access to nature (either as linear routes or open space) as part of minerals/waste site working and restoration schemes</p> <p>Distance between proposal and sensitive uses</p>	Minerals; Waste; Population; Health; Landscape, Biodiversity; Other social considerations
13) To minimise public nuisance from waste treatment and disposal, and from access to and from facilities.	<p>Monitor complaints regarding odour (WBDC/EA);</p> <p>Monitor complaints regarding dust (WBDC/EA);</p> <p>Monitor complaints regarding noise (WBDC/EA);</p> <p>Monitor complaints regarding light pollution (WBDC)</p> <p>Monitor complaints regarding traffic issues: times, days, frequency, size of vehicles, speed (WBDC)</p> <p>Check conditions on planning permissions regarding hours of operation, emission/release parameters, and transport agreements etc;</p> <p>Define/monitor location of Strategic Lorry Routes.</p>	Waste; Minerals; Population; Health; Landscape; Biodiversity; Air; Light; Noise; Other social considerations; Transport
14) To minimise public nuisance from minerals development and associated	<p>Monitor complaints regarding odour (WBDC/EA);</p> <p>Monitor complaints regarding dust (WBDC/EA);</p>	Waste; Minerals; Population; Health; Landscape;

Objective	Potential Indicators	Topic area
activities including transportation.	<p>Monitor complaints regarding noise (WBDC/EA);</p> <p>Monitor complaints regarding light pollution (WBDC)</p> <p>Monitor complaints regarding traffic issues: times, days, frequency, size of vehicles, speed (WBDC)</p> <p>Monitor conditions on planning permissions regarding location of site, hours of operation, emission/release parameters, transport agreements, depth of working etc;</p> <p>Define location of strategic lorry routes.</p>	<p>Biodiversity; Air; Light; Noise; Other social considerations; Transport</p>
15) To support opportunities for economic development, including jobs, arising from waste and minerals related activities.	<p>Where assessments are carried out - Employment land availability in West Berkshire;</p> <p>Typical amount of job creation (jobs per ha) within different use classes.</p> <p>Whether jobs are permanent / temporary (i.e. for construction / operational period)</p>	<p>Waste; Minerals; Population; Other economic considerations</p>

WBMWDPD Minerals and Waste Objectives

89. The approach to minerals and Waste in the WBMWDPD is going to be based on a set of objectives to give a clear statement of what the plan is seeking to achieve. The following objectives are currently proposed for the WBMWDPD. These are draft and have not been subject to public consultation to date. The objectives therefore may be subject to change at later stages in the plan making process. The following draft objectives are suggested:

- Minerals Objective A - To encourage the most appropriate use of all mineral resources and the re-use of recycled minerals and secondary aggregates, having regard to the need to ensure that there is a sufficient supply, whilst maintaining the long term conservation of primary aggregates;
- Minerals Objective B - To attain the principles of sustainable development set out in the NPPF by taking into consideration the demand for all mineral resources and the need to protect and seek to improve the quality of life of residents, the quality and diversity of areas of nature conservation interest, historic and heritage assets, water environment and landscape character;
- Minerals Objective C - Where practicable to locate minerals development in appropriate locations in order that the potential negative impact from flooding is minimised;

- Minerals Objective D - To maintain a stock of permitted reserves (a landbank) for aggregate minerals, in accordance with current Government advice to ensure an adequate and steady supply of minerals from outside the North Wessex Downs Area of Outstanding Natural Beauty, Scheduled Monuments, Special Areas of Conservation, Registered Historic Parks and Gardens, Battlefields and Conservation Areas.
- Minerals Objective E - To identify Preferred Areas for future mineral extraction which will provide for the continued extraction of minerals, having regard to the need to avoid demonstrable harm to interests of acknowledged importance;
- Minerals Objective F - To prevent the unnecessary sterilisation of proven mineral resources by other forms of development and to safeguard existing and planned rail head sites together with existing and planned concrete batching facilities, coated road stone manufacturing facilities and sites that handle, process and distribute recycled and secondary aggregates ;
- Minerals Objective G - To provide for the recovery and reuse of aggregate from construction and demolition waste in order to reduce the requirement for new primary resources to a minimum; and
- Minerals Objective H - To ensure that mineral sites are progressively restored to a high standard, beneficial and viable after-use.
- Waste Objective I - To seek to prevent the generation of waste arisings at source, and to support and encourage initiatives designed to achieve this;
- Waste Objective J - To increase the overall waste management in West Berkshire in line with the Waste Hierarchy through the provision of capacity for the re-use of waste materials, the preparation for the reuse of materials, the recycling of waste and the recovery of materials that cannot be recycled and to minimise the quantities of residual waste needing final disposal while recognising that this will continue to be required;
- Waste Objective K - To provide a flexible approach to the delivery of waste management facilities of appropriate capacity and type to achieve net self-sufficiency within West Berkshire area
- Waste Objective L - To enable the delivery of the West Berkshire Waste Management strategy and increase the proportion of waste managed further up the waste hierarchy;
- Waste Objective M - To locate waste management facilities so that wherever possible they minimise the distances that waste is transported for management and disposal, and to minimise adverse traffic effects of waste management development;
- Waste Objective N - To safeguard existing waste management facilities, which are appropriately located, from competing forms of development that might otherwise constrain their continued operation or lead to their loss;

- Waste Objective O - To ensure appropriate protection of the quality of life of those who live and work in West Berkshire from the adverse effects of waste management related development;
- Waste Objective P - To ensure appropriate protection of the natural and cultural heritage in West Berkshire from the adverse effects of waste management related development in accordance with the NPPF;
- Waste Objective Q - Where practicable to locate waste development in appropriate locations in order that the potential negative impact from flooding is minimised.

Compatibility of Sustainability Objectives

90. A total of 15 sustainability appraisal objectives have been derived for the appraisal of the WBMWDPD (see table 8 above). They are based on policy advice and guidance and related to the assessment of the current state of the plan area.
91. A Practical Guide to the Strategic Environmental Assessment Directive (ODPM, 2005) states that it would be useful to test the compatibility of SA objectives against one another in order to highlight any areas where potential conflict or tensions may arise. To test the internal compatibility of the sustainability objectives a compatibility assessment of those sustainability objectives has been undertaken.
92. In the compatibility matrix (Figure 1) the 15 SA objectives are numbered in sequence along each axis and they represent a balance of economic/material assets; social and environmental factors.
93. In the compatibility matrix (Figure 2) the 15 SA objectives have been tested against the draft WBMWDPD objectives.
94. The function of SA/SEA and assessing compatibility is to identify benefits and minimise detrimental impacts. Instances of uncertainty between objectives are explained further. Where it is indicated that the interaction between objectives is 'neutral', although they do not conflict it is considered that they do not impact on each other or the extent to which they do is negligible.

Key for Figures 1 and 2

Compatible
Incompatible
Neutral
Uncertain

Figure 1 - Compatibility of the SA objectives with each other

SA Objective	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1		Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Neutral	Compatible	Compatible	Compatible	Uncertain
2			Compatible	Compatible	Neutral	Neutral	Neutral	Compatible	Compatible	Compatible	Neutral	Compatible	Compatible	Compatible	Compatible
3				Compatible	Compatible	Compatible	Neutral	Compatible	Compatible	Compatible	Neutral	Compatible	Compatible	Compatible	Compatible
4					Compatible	Compatible	Neutral	Neutral	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
5						Compatible	Compatible	Uncertain	Compatible	Compatible	Neutral	Compatible	Compatible	Compatible	Compatible
6							Compatible	Uncertain	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible
7								Compatible	Compatible	Compatible	Neutral	Compatible	Compatible	Compatible	Compatible
8									Compatible	Compatible	Neutral	Compatible	Neutral	Neutral	Compatible
9										Compatible	Neutral	Compatible	Compatible	Compatible	Compatible
10											Neutral	Compatible	Compatible	Compatible	Compatible
11												Neutral	Neutral	Neutral	Compatible
12													Compatible	Compatible	Uncertain
13														Compatible	Uncertain
14															Uncertain
15															

95. In general terms the SA objectives are very compatible with each other with none of them being classed as 'incompatible'. The statutory consultees made recommendations that there should be very minor additions in wording to the SA objectives. These minor changes were made and in terms of compatibility of the SA objectives with each other this made no difference. It therefore remains the case that the majority of interactions between objectives are classed as 'compatible' and 'neutral'. As can be seen from the chart, it is 'uncertain' whether objectives 1 – biodiversity / geodiversity, 2 - water quality, 3 – flooding, 4 – protection of land / soils, 5 - cultural heritage, 6 – landscape / townscape, 7 - air quality, 10 – sustainable transport, 13 – minimising public nuisance from waste activities, and 14 - minimising public nuisance from minerals activities are compatible with objective 15 – supporting economic development. The reason for this is that development, which is positive in economic terms, will not always be positive in terms of environmental impacts. This is something which needs to be judged on a case by case basis, balancing economic, environmental and social factors. In many cases, particularly in relation to minerals and waste development, potential harmful impacts can be picked up at the pre-application stage, and during determination. These harmful effects can then be mitigated so that the economic benefits can be taken full advantage of, while protecting the environment.

96. It is also 'uncertain' whether objectives 5 – cultural heritage, and 6 – landscape/townscape are compatible with objective 8 – maximising

renewable and low carbon energy sources. The reason for this is that despite these sources of energy being greener and cleaner their fossil fuel counterparts, some types of renewable and low-carbon energy technology can have harmful effects, particularly in terms of landscape and visual impacts. Sites, monuments and buildings (and their settings) which are designated for their cultural heritage value can also be negatively impacted on by renewable energy installations. Examples of such technologies are wind turbines, and large solar farms. Again, where applications are submitted for such development, they need to be judged on a case by case basis balancing economic, environmental and social factors. Potential harmful impacts can be picked up at the pre-application stage, and during determination, and can then be mitigated.

- 97. The statutory consultees made recommendations that there should be very minor additions in wording to some of the SA objectives and WBMWDPD objectives. These minor changes were made and in terms of the compatibility of the SA objectives with the draft WBMWDPD objectives this made no difference. The EA recommended that there should be an objective to locate minerals and waste development in appropriate locations that will not impact on flooding, where practicable. Two additional objectives have therefore been added (Minerals Objective C and Waste Objective Q) to address this issue, and these have also been tested against the SA Objectives.
- 98. It remains the case that the SA objectives are shown to be generally very compatible with the draft WBMWDPD objectives (see Figure 2) with none of them being classed as 'incompatible'. The majority of interactions between objectives are classed as 'compatible' and 'neutral'.

Figure 2 - Compatibility of the WBMWDPD draft objectives and the SA objectives

SA Objective	WBMWDPD draft objective																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Yellow	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Green	Green
2	Yellow	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green
3	Yellow	Green	Green	Yellow	Green	Green	Yellow	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green
4	Yellow	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Green	Yellow	Green	Green	Green	Green
5	Yellow	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green
6	Yellow	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green
7	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow	Green	Yellow	Green	Green	Green
8	Yellow	Green	Green	Green	Green	Blue	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green
9	Green	Green	Yellow	Yellow	Green	Blue	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Yellow
10	Yellow	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Green	Green	Yellow
11	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
12	Yellow	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green
13	Yellow	Green	Yellow	Green	Green	Yellow	Yellow	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Green	Green
14	Yellow	Green	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow
15	Yellow	Blue	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Blue	Green	Blue	Blue	Yellow

- 99. Minerals Objective B relates to the principles of sustainable development set out in the NPPF, and striking a balance between the demand for all mineral resources and the need to protect the quality of life of residents, the quality

and diversity of areas of nature conservation interest, historic and heritage assets, water environment and landscape character. Waste Objective M is concerned with minimising adverse traffic effects of waste management development. The crux of Waste Objective O is ensuring appropriate protection of residents' quality of life from the adverse effects of waste management development. Waste Objective P is about ensuring the protection of natural and cultural heritage from the adverse effects of waste related development.

100. As can be seen from the chart it is 'uncertain' whether Minerals Objective B, and Waste Objectives M, O and P are compatible with SA objective 15 – supporting economic development. The reason for this is that even though minerals and waste development may be positive in terms of the economy there can be resulting harmful environmental effects. Often in individual planning applications these harmful impacts can be addressed and controlled through mitigation. In this way economic benefit can be achieved without compromising environmental or social issues.
101. Minerals Objective F is concerned with preventing the unnecessary sterilisation of mineral by other forms of development and safeguarding rail head sites, concrete batching facilities, coated road stone manufacturing facilities and sites that handle, process and distribute recycled and secondary aggregates.
102. It is 'uncertain' whether Minerals Objective B is compatible with SA objectives 8 - maximising renewable and low carbon energy sources, and 9 - managing waste in line with the 'waste hierarchy' principle. The reason for this is that where proposals for renewable/low carbon energy facilities come forward in certain locations, they could potentially be refused on the grounds of 'unnecessary sterilisation of mineral' or because a rail head or minerals associated facility may cease to exist as a result. It is possible that these locations would, apart from the conflict with Minerals Objective B, be suitable locations for renewable/low carbon facilities. This is something that would need to be judged as applications come in.

7. Stage A5 – Consultation

103. As stated above the SEA Directive (Article 5.4) requires views to be sought from the three statutory environmental consultation bodies designated in the SA Regulations (Environment Agency, Natural England, and English Heritage) on the scope and level of detail of the environmental information in the SA.
104. This report forms the principal document that comprised the key consultation document and was subject to a 5-week consultation period with the 3 statutory consultation bodies.
105. The consultees have been specifically requested to comment upon the following questions:
 - Are there any additional relevant plans and policies beyond those covered that you think are relevant to this appraisal?
 - Do you think that the sustainability objectives are appropriate?
 - Do the objectives cover all the areas of interest without repeating each other?
 - Do you or your organisation have information that you feel would add to the assessment of the objectives or increase the robustness of the baseline data?
106. The statutory consultation period of 5 weeks ran from 20 September to 28 October. The consultees responded and where relevant this has been incorporated into the SR.

8. The next stages of the SA

107. When Stage A5, consultation on the SR, has been completed the development of the SA will move on to Stage B, developing and refining options and assessing effects, with Stages C, D and E to follow (for more information on this please see Table 1).
108. The SA process is an iterative process that will be undertaken alongside the production of the WBMWDPD in an informative capacity. The SR and the Interim Environmental Report will be made available to stakeholders during the WBMWDPD Issues and Options consultation for comment. The full Environmental Report will subsequently be made available to stakeholders in conjunction with the Preferred Options stage of plan-making. This approach will provide the relevant authorities and the public, early and effective opportunity to express their opinions on the Environmental Report as per Article 6(2).

West Berkshire Minerals and Waste Development Plan Document

SA/SEA Scoping Report

Appendix 1 – Assessment of relevant plans, policies and programmes

The Johannesburg Declaration of Sustainability Development (2002) United Nations	
Web link	http://www.unescap.org/esd/environment/rio20/pages/Download/johannesburgdeclaration.pdf
Overall aim or purpose	<p>The Johannesburg Declaration on Sustainable Development was adopted at the World Summit on Sustainable Development (WSSD), sometimes referred to as Earth Summit 2002, at which the Plan of Implementation of the WSSD was also agreed upon.</p> <p>The Johannesburg Declaration builds on earlier declarations made at the United Nations Conference on the Human Environment at Stockholm in 1972, and the Earth Summit in Rio de Janeiro in 1992. While committing the nations of the world to sustainable development, it also includes substantial mention of multilateralism as the path forward.</p>
Objectives / Targets	<p>The intention of the Summit and the Declaration was to bring:</p> <p>“...together a rich tapestry of peoples and views in a constructive search for a common path towards a world that respects and implements the vision of sustainable development. The Johannesburg Summit has also confirmed that significant progress has been made towards achieving a global consensus and partnership among all the people of our planet.” (Johannesburg Declaration 10)</p> <p>Declaration 11 indicated that it was recognised that:</p> <p>“...poverty eradication, changing consumption and production patterns and protecting and managing the natural resource base for economic and social development are overarching objectives of and essential requirements for sustainable development.”</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The overarching objective of the WBMWDPD should reflect the intentions of the Declaration in terms of a desire to achieve sustainable development.
EU Biodiversity Strategy to 2020	
Web link	http://ec.europa.eu/environment/nature/biodiversity/comm2006/2020.htm
Overall aim or purpose	In May 2011, the European Commission adopted a new strategy that lays down the framework for EU action over the next ten years in order to meet the 2020 biodiversity headline target set by EU leaders in March 2010. The strategy is built around six

	mutually supportive targets which address the main drivers of biodiversity loss and aim to reduce the key pressures on nature and ecosystem services in the EU. Each target is further translated into a set of time-bound actions and other accompanying measures.
Objectives / Targets	<p>The six mutually supportive targets are to:</p> <ul style="list-style-type: none"> • Fully implement the Birds and Habitats Directives; • Maintain and restore ecosystems and their services; • Increase the contribution of agriculture and forestry to maintaining and enhancing biodiversity; • Ensure the sustainable use of fisheries resources; • Combat Invasive Alien Species; and • Help avert global biodiversity loss
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development has the potential to negatively impact on biodiversity. In order to minimise biodiversity loss and to reduce pressure on nature and ecosystem services it will be necessary for these 'targets' to be reflected in the WBMWDPD.

Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979) European Community	
Web link	http://conventions.coe.int/Treaty/en/Treaties/Html/104.htm
Overall aim or purpose	The Bern Convention on the Conservation of European Wildlife and Natural Habitats, also known as the Bern Convention (or Berne Convention), is a binding international legal instrument in the field of Nature Conservation, it covers the natural heritage in Europe, as well as in some African countries. The Convention was open for signature on September 19, 1979 and came into force on June 1, 1982. It is particularly concerned about protecting natural habitats and endangered species, including migratory species.
Objectives / Targets	<p>The convention has three main aims, which are stated in Article 1:</p> <ul style="list-style-type: none"> • to conserve wild flora and fauna and their natural habitats • to promote cooperation between states • to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species
Implications for the West	Minerals and waste development has the potential to negatively impact on flora and fauna. In order to mitigate these negative

Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	impacts, the three main aims of the Convention will be reflected in the WBMWDPD throughout the plan-making process and after its adoption.
Ramsar Convention on Wetlands of International importance, especially waterfowl habitats (1971) Ramsar Convention	
Web link	http://www.ramsar.org/cda/en/ramsar-home/main/ramsar/1_4000_0
Overall aim or purpose	The Ramsar Convention (The Convention on Wetlands of International Importance, especially as Waterfowl Habitat) is an international treaty for the conservation and sustainable utilization of wetlands. It is named after the city of Ramsar in Iran, where the Convention was signed in 1971.
Objectives / Targets	The main objective of the Convention is to stem the progressive encroachment on and loss of wetlands now and in the future, recognizing the fundamental ecological functions of wetlands and their economic, cultural, scientific, and recreational value.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste developments can have potentially long-term and permanent impacts. How the sites are landscaped, worked and restored (where relevant) is paramount in stemming the progressive encroachment on, and loss of wetlands. The objectives of this Treaty will be reflected in the WBMWDPD throughout the plan-making process and after its adoption.
Bonn Convention on Migratory Species of Wild Animals (1979) United Nations	
Web link	http://www.cms.int/documents/convtxt/cms_convtxt.htm
Overall aim or purpose	The Convention on the Conservation of Migratory Species of Wild Animals (also known as CMS or the Bonn Convention) aims to conserve terrestrial, marine and avian migratory species throughout their range. It is an intergovernmental treaty, concluded under the aegis of the United Nations Environment Programme, concerned with the conservation of wildlife and habitats on a global scale.
Objectives / Targets	Contracting Parties work together to conserve migratory species and their habitats by providing strict protection for endangered migratory species (listed in Appendix I of the Convention), concluding multilateral Agreements for the conservation and management of migratory species which require or would benefit from international cooperation (listed in Appendix II), and by undertaking cooperative research activities. The UK ratified the Convention in 1985. The legal requirement for the strict protection of Appendix I species is provided by the

	Wildlife & Countryside Act (1981 as amended). In addition the Countryside and Rights of Way Act 2000 (CRoW) was enacted in England and Wales to strengthen the protection of certain species by increasing penalties and enforcement powers; and strengthened the protection of sites from damage caused by third parties. The UK has currently ratified four legally binding Agreements under the Convention, namely the Agreement on the Conservation of Populations of European Bats (EUROBATS); the African-Eurasian Migratory Waterbird Agreement (AEWA); and the Agreement on the Conservation of Small Cetaceans in the Baltic, North-East Atlantic, Irish and North Seas (ASCOBANS), and the Agreement on the Conservation of Albatrosses and Petrels (ACAP).
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development in West Berkshire has the potential to impact negatively on migratory species and their habitats. In order to avoid any migratory species becoming endangered, and to protect endangered migratory species, the objectives of the Bonn Convention will be reflected in the WBMWDPD throughout the plan-making process and after its adoption

The European Convention on the Protection of Archaeological Heritage (Valletta Convention)	
Web link	http://conventions.coe.int/Treaty/en/Treaties/Html/143.htm
Overall aim or purpose	The Valletta Treaty (formally the European Convention on the Protection of the Archaeological Heritage (Revised), also known as the Malta Convention) is a multilateral treaty of the Council of Europe. The 1992 treaty aims to protect the European archaeological heritage. It deals with the protection, preservation and scientific research of archaeological heritage in Europe. In particular, the revised Convention focuses on the problem of conservation of archaeological heritage in the face of development projects.
Objectives / Targets	The objectives of the revised Convention are: <ul style="list-style-type: none"> • To integrate the conservation and archaeological investigation of archaeological heritage in urban and regional planning policies; • To establish a co-operation and consultation processes between archaeologists, and project developers; • To set standards for funding and archaeological and conservational methods used in studying the “knowledge of the history of mankind”; • To promote educational actions and public awareness of the necessity of the protection and investigation of archaeological heritage in Europe; and • To foster international co-operation and joint action among all European countries in the field of archaeological resource management by means of developing and exchanging relevant scientific information, technologies and expertise.
Implications for the West	Minerals and waste development in West Berkshire has the potential to impact negatively on assets valued for their

Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	archaeological heritage. In order to avoid any detrimental impact on assets valued for their archaeological heritage the objectives of the Valletta Convention will be reflected in the WBMWDPD throughout the plan-making process and after its adoption.
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The Convention for the Protection of the Architectural Heritage of Europe (Granada Convention) (1985)	
Web link	http://conventions.coe.int/Treaty/en/Treaties/Html/121.htm
Overall aim or purpose	The Convention for the protection of the architectural heritage of Europe is a legally binding instrument which set the framework for a consistent conservation approach within Europe.
Objectives / Targets	The issues addressed in this convention are defined by the following objectives: <ul style="list-style-type: none"> • Support the idea of solidarity and cooperation among European Parties, in relation to heritage conservation • It includes principles of "conservation policies" within the framework of European cooperation • Strengthen and promote policies for the conservation and development of cultural heritage in Europe
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development in West Berkshire has the potential to impact negatively on assets valued for their architectural heritage. In order to avoid any detrimental impact on assets valued for their architectural heritage the objectives of the Granada Convention will be reflected in the WBMWDPD throughout the plan-making process and after its adoption.

EU Hazardous Waste Directive (Directive 91/689/EEC) (Amended by Directive 2002/96/EC) (as amended)	
Web link	http://ec.europa.eu/environment/waste/hazardous_index.htm
Overall aim or purpose	The object of this Directive, drawn up pursuant to Article 2 (2) of Directive 75/442/EEC, is to approximate the laws of the Member States on the controlled management of hazardous waste.
Objectives / Targets	Member States ensure that hazardous waste is recorded and identified; they also ensure that different categories of hazardous waste are not mixed and that hazardous waste is not mixed with non-hazardous waste.
Implications for the West Berkshire Minerals and	The issue of waste is important in the context of sustainability. This document can be utilised in the SA in an informative capacity and in the form of recommendations.

Waste Development Plan Document (WBMWDPD)	
EU Waste Electrical and Electronic Equipment (WEEE) Directive (Directive 2002/96/EC) (as amended)	
Web link	http://ec.europa.eu/environment/waste/weee/index_en.htm
Overall aim or purpose	The Waste Electrical and Electronic Equipment Directive (WEEE Directive) is the European Community directive 2002/96/EC on waste electrical and electronic equipment (WEEE) which became European Law in February 2003. The WEEE Directive set collection, recycling and recovery targets for all types of electrical goods.
Objectives / Targets	The Directive has undergone a number of minor revisions since its inception in 2002. These include updates in 2006 and 2009. On December 20, 2011 the European Parliament and the European Council agreed on amendments to the Directive, subject to a second-reading vote, which was taken on January 19, 2012. The changes affect the method for calculating collection rates, which were previously four kg per inhabitant per year. To provide a transitional period of seven years to introduce the revised method of calculation, the present method is retained for the first four years from the time the amended Directive comes into force. For the next three years, commencing with the fifth year after the amendment, the calculation of collection rates will be revised to 45% of the weight of E&E products entering the market. Once this seven years transitional period is over, EU member states will individually select the actual collection options they wish to use.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The issue of waste is important in the context of sustainability. This document can be utilised in the SA in an informative capacity and in the form of recommendations.
EU End of Life Vehicles Directive (Directive 2000/53/EC) (as amended)	
Web link	http://ec.europa.eu/environment/waste/elv_index.htm
Overall aim or purpose	In 1997, the European Commission adopted a Proposal for a Directive which aims at making vehicle dismantling and recycling more environmentally friendly, sets clear quantified targets for reuse, recycling and recovery of vehicles and their components and pushes producers to manufacture new vehicles also with a view to their recyclability.

<p>Objectives / Targets</p>	<p>This Directive aims to decrease the quantity of waste arising from vehicles. It, therefore, encourages vehicle manufacturers and importers of vehicles into the European Union to:</p> <ul style="list-style-type: none"> • limit the use of hazardous substances in their new vehicles; • design and produce vehicles which facilitate re-use and recycling; • develop the integration of recycled materials. <p>Since 1 July 2003, the use of mercury, hexavalent chromium, cadmium and lead in the components of vehicles placed on the market has been prohibited. However, these substances may be used for certain applications if the use of these substances is unavoidable (see Annex II to the Directive 2000/53/EEC).</p> <p>Priority must be given to the re-use and recovery (recycling, regeneration, etc.) of vehicle components. The aim of this Directive is to increase the rate of re-use and recovery.</p> <p>The rate of re-use and recovery (in average weight per vehicle and year) should reach:</p> <ul style="list-style-type: none"> • 85 % no later than 1 January 2006; • 95 % no later than 1 January 2015. <p>The rate of re-use and recycling (in average weight per vehicle per year) should reach:</p> <ul style="list-style-type: none"> • 80 % no later than 1 January 2006; • 85 % no later than 1 January 2015. <p>For vehicles produced before 1980, the targets are lower.</p>
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>The issue of waste is important in the context of sustainability. This document can be utilised in the SA in an informative capacity and in the form of recommendations.</p>

<p>EU Restriction of Hazardous Substances (ROHS) Directive (Directive 2002/95/EC) (as amended)</p>	
<p>Web link</p>	<p>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:037:0019:0023:en:PDF</p>
<p>Overall aim or purpose</p>	<p>The RoHS directive took effect on 1 July 2006, and is required to be enforced and become law in each member state. This directive restricts (with exceptions) the use of six hazardous materials in the manufacture of various types of electronic and electrical equipment. It is closely linked with the Waste Electrical and Electronic Equipment Directive (WEEE) 2002/96/EC which sets collection, recycling and recovery targets for electrical goods and is part of a legislative initiative to solve the problem of huge</p>

	amounts of toxic e-waste.
Objectives / Targets	<p>RoHS restricts the use of the following six substances:</p> <ol style="list-style-type: none"> 1. Lead (Pb) 2. Mercury (Hg) 3. Cadmium (Cd) 4. Hexavalent chromium (Cr6+) 5. Polybrominated biphenyls (PBB) 6. Polybrominated diphenyl ether (PBDE) <p>PBB and PBDE are flame retardants used in several plastics. Hexavalent chromium is used in chrome plating, chromate coatings and primers, and in chromic acid. The maximum permitted concentrations in non-exempt products are 0.1% or 1000 ppm (except for cadmium, which is limited to 0.01% or 100 ppm) by weight.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The RoHS Directive is closely linked with the Waste Electrical and Electronic Equipment Directive (WEEE) 2002/96/EC. The intention of this is to solve the problems of huge amounts of e-waste. The issue of waste is important in the context of sustainability. This document can be utilised in the SA in an informative capacity and in the form of recommendations.
EU Packaging and Packaging Waste Directive (Directive 94/62 EC) (as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31994L0062:EN:NOT
Overall aim or purpose	This Directive aims to harmonise national measures in order to prevent or reduce the impact of packaging and packaging waste on the environment and to ensure the functioning of the Internal Market. It contains provisions on the prevention of packaging waste, on the re-use of packaging and on the recovery and recycling of packaging waste.
Objectives / Targets	In 2004, the Directive was reviewed to provide criteria clarifying the definition of the term 'packaging' and increase the targets for recovery and recycling of packaging waste. In 2005, the Directive was revised again to allow new Member States transitional periods for attaining the recovery and recycling targets.
Implications for the West Berkshire Minerals and Waste Development Plan Document	The issue of waste is important in the context of sustainability. This document can be utilised in the SA in an informative capacity and in the form of recommendations.

(WBMWDPD)	
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EU Waste Incineration Directive (2000/76/EC) (as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32000L0076:en:HTML
Overall aim or purpose	The Waste Incineration Directive (2000/76/EC) is a Directive issued by the European Union and relates to standards and methodologies required by Europe for the practice and technology of incineration.
Objectives / Targets	The aim of this Directive is to minimise the impact of negative environmental effects on the environment and human health resulting from emissions to air, soil, surface and ground water from the incineration and co-incineration of waste. The requirements of the Directive have been developed to reflect the ability of modern incineration plants to achieve high standards of emission control more effectively
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The issue of waste and how it is dealt with is important in the context of sustainability. This document can be utilised in the SA in an informative capacity and in the form of recommendations.

EU Integrated Pollution and Prevention and Control (IPPC) Directive (2008/1/EC) (as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:024:0008:0029:en:PDF
Overall aim or purpose	This Directive (“the IPPC Directive”) requires industrial and agricultural activities with a high pollution potential to have a permit. This permit can only be issued if certain environmental conditions are met, so that the companies themselves bear responsibility for preventing and reducing any pollution they may cause. Integrated pollution prevention and control concerns new or existing industrial and agricultural activities with a high pollution potential, as defined in Annex I to the Directive (energy industries, production and processing of metals, mineral industry, chemical industry, waste management, livestock farming, etc.).
Objectives / Targets	In order to receive a permit an industrial or agricultural installation must comply with certain basic obligations. In particular, it must: <ul style="list-style-type: none"> • use all appropriate pollution-prevention measures, namely the best available techniques (which produce the least waste, use less hazardous substances, enable the substances generated to be recovered and recycled, etc.);

	<ul style="list-style-type: none"> • prevent all large-scale pollution; • prevent, recycle or dispose of waste in the least polluting way possible; • use energy efficiently; • ensure accident prevention and damage limitation; • return sites to their original state when the activity is over. <p>In addition, the decision to issue a permit must contain a number of specific requirements, including</p> <ul style="list-style-type: none"> • emission limit values for polluting substances (with the exception of greenhouse gases if the emission trading scheme applies - see below); • any soil, water and air protection measures required; • waste management measures; • measures to be taken in exceptional circumstances (leaks, malfunctions, temporary or permanent stoppages, etc.); • minimisation of long-distance or transboundary pollution; • release monitoring; • all other appropriate measures.
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>Minerals and waste development has a high pollution potential and will often require environmental permits to be issued by the Environment Agency. This is important in the context of sustainability, and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.</p>

<p>EC Directive on Waste to Landfill (Directive 99/31/EC) (as amended)</p>	
<p>Web link</p>	<p>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0031:EN:HTML</p>
<p>Overall aim or purpose</p>	<p>The Landfill Directive's overall aim is to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from the landfilling of waste, during the whole life-cycle of the landfill. This legislation also has important implications for waste handling and waste disposal.</p>
<p>Objectives / Targets</p>	<p>Biodegradable Municipal Waste sent to landfill:</p> <ul style="list-style-type: none"> • By 2010 to reduce BMW landfilled to 75% of that produced in 1995

	<ul style="list-style-type: none"> • By 2013 to reduce BMW landfilled to 50% of that produced in 1995 • By 2020 to reduce BMW landfilled to 35% of that produced in 1995
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Landfilling of inert waste as a means of mineral site restoration has been undertaken in West Berkshire in the past. 'Non-hazardous' and 'hazardous' waste material is transported out of West Berkshire to be placed into landfill. This has the potential to pollute the environment. This is important in the context of sustainability, and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

EC Directive on Conservation of Wild Birds (Directive 2009/147/EC) (Codified version of Directive 79/409/EEC as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:020:0007:0025:en:PDF
Overall aim or purpose	The directive recognises that habitat loss and degradation are the most serious threats to the conservation of wild birds. It therefore places great emphasis on the protection of habitats for endangered as well as migratory species (listed in Annex I), especially through the establishment of a coherent network of Special Protection Areas (SPAs) comprising all the most suitable territories for these species. Since 1994 all SPAs form an integral part of the NATURA 2000 ecological network.
Objectives / Targets	<p>The main provisions of the Directive include:</p> <ul style="list-style-type: none"> • The maintenance of the populations of all wild bird species across their natural range (Article 2) with the encouragement of various activities to that end (Article 3); • The identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex I of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance (Article 4). (Together with Special Areas of Conservation designated under the Habitats Directive, SPAs form a network of European protected areas known as Natura 2000); • The establishment of a general scheme of protection for all wild birds (Article 5); • Restrictions on the sale and keeping of wild birds (Article 6); • Specification of the conditions under which hunting and falconry can be undertaken (Article 7). (Huntable species are listed on Annex II of the Directive); • Prohibition of large-scale non-selective means of bird killing (Article 8); • Procedures under which Member States may derogate from the provisions of Articles 5-8 (Article 9) — that is, the conditions under which permission may be given for otherwise prohibited activities; • Encouragement of certain forms of relevant research (Article 10 and Annex V);

	<ul style="list-style-type: none"> Requirements to ensure that introduction of non-native birds do not threatened other biodiversity (Article 11).
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development in West Berkshire has the potential to impact negatively on endangered and migratory bird species, and their habitats. In order to protect endangered and migratory bird species, this document will be utilised in the SA in an informative capacity and in the form of recommendations.

EC Animal By-Products Regulations (EC 1774/2002) (as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2002R1774:20070724:EN:PDF
Overall aim or purpose	These Regulations lay down health rules concerning animal by-products not intended for human consumption, establishing strict health rules for their use, so as to ensure a high level of health and safety.
Objectives / Targets	<p>This Regulation lays down the health and surveillance rules applicable to:</p> <ul style="list-style-type: none"> the collection, transport, storage, handling, processing and use or disposal of animal by-products; the placing on the market and, in certain specific cases, the export and transit of animal by-products and products derived therefrom.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The disposal of animal by-products / waste has the potential to impact negatively on human health and the environment. This is important in the context of sustainability, and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

Conservation of Natural Habitats and Wild Fauna and Flora (Directive 92/43/EC) (The Habitats Directive) (as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0043:EN:html
Overall aim or purpose	The main aim of the Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those habitats and species of European importance. In applying these measures Member States are required to take account of economic, social and cultural requirements, as well as regional and local characteristics.

Objectives / Targets	<p>The provisions of the Directive require Member States to introduce a range of measures, including:</p> <ul style="list-style-type: none"> • Maintain or restore European protected habitats and species listed in the Annexes at a favourable conservation status as defined in Articles 1 and 2; • Contribute to a coherent European ecological network of protected sites by designating Special Areas of Conservation (SACs) for habitats listed on Annex I and for species listed on Annex II. These measures are also to be applied to Special Protection Areas (SPAs) classified under Article 4 of the Birds Directive. Together SACs and SPAs make up the Natura 2000 network (Article 3); • Ensure conservation measures are in place to appropriately manage SACs and ensure appropriate assessment of plans and projects likely to have a significant effect on the integrity of an SAC. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest. In such cases compensatory measures are necessary to ensure the overall coherence of the Natura 2000 network (Article 6); • Member States shall also endeavour to encourage the management of features of the landscape that support the Natura 2000 network (Articles 3 and 10); • Undertake surveillance of habitats and species (Article 11), • Ensure strict protection of species listed on Annex IV (Article 12 for animals and Article 13 for plants). • Report on the implementation of the Directive every six years (Article 17), including assessment of the conservation status of species and habitats listed on the Annexes to the Directive.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	<p>Minerals and waste development has the potential to negatively impact on biodiversity. In order to give adequate protection to natural habitats and wild species listed in the Directive it will be necessary for this document to be utilised in the SA in an informative capacity and in the form of recommendations.</p>
EC Water Framework Directive (Directive 2000/60/EC) (as amended)	
Web link	<p>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2000:327:0001:0072:EN:PDF</p>
Overall aim or purpose	<p>The Water Framework Directive (Directive 2000/60/EC commits European Union member states to achieve good qualitative and quantitative status of all water bodies (including marine waters up to one nautical mile from shore) by 2015. It is a framework in the sense that it prescribes steps to reach the common goal rather than adopting the more traditional limit value approach.</p>
Objectives / Targets	<p>The Directive aims for 'good status' for all ground and surface waters (rivers, lakes, transitional waters, and coastal waters) in the EU. The ecological and chemical status of surface waters are assessed according to the following criteria:</p>

	<ul style="list-style-type: none"> • Biological quality (fish, benthic invertebrates, aquatic flora) • Hydromorphological quality such as river bank structure, river continuity or substrate of the river bed • Physical-chemical quality such as temperature, oxygenation and nutrient conditions • Chemical quality that refers to environmental quality standards for river basin specific pollutants. These standards specify maximum concentrations for specific water pollutants. If even one such concentration is exceeded, the water body will not be classed as having a 'good ecological status'. <p>The Water Framework Directive stipulates that groundwater must achieve 'good quantitative status' and 'good chemical status' (i.e. not polluted) by 2015. Groundwater bodies are classified as either 'good' or 'poor'.</p>
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>Minerals and waste development has the potential to negatively impact on ground and surface water within West Berkshire. In order to give adequate protection to ground and surface water in West Berkshire it will be necessary for this document to be utilised in the SA in an informative capacity and in the form of recommendations.</p>

<p>Urban Waste Water Treatment Directive (Directive 91/271/EEC) (as amended)</p>	
<p>Web link</p>	<p>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1991:135:0040:0052:EN:PDF</p>
<p>Overall aim or purpose</p>	<p>The Urban Waste Water Treatment Directive (Directive 91/271/EEC) concerns the 'collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors'. Its stated objective is 'to protect the environment from the adverse effects of urban waste water discharges and discharges from certain industrial sectors'.</p>
<p>Objectives / Targets</p>	<p>The Directive established a timetable for the provision of collection and treatment systems for urban waste water in agglomerations corresponding to the categories laid down in the Directive. The main deadlines are as follows:</p> <ul style="list-style-type: none"> • 31 December 1998: all agglomerations of more than 10 000 "population equivalent"* (p.e.) which discharge their effluent into sensitive areas must have a proper collection and treatment system; • 31 December 2000: all agglomerations of more than 15 000 p.e. which do not discharge their effluent into a sensitive area must have a collection and treatment system which enables them to satisfy the requirements in Table 1 of Annex I; • 31 December 2005: all agglomerations of between 2 000 and 10 000 p.e. which discharge their effluent into sensitive areas, and all agglomerations of between 2 000 and 15 000 p.e. which do not discharge into such areas must have a collection and treatment system.

	<p>Annex II requires Member States to draw up lists of sensitive and less sensitive areas which receive the treated waters. These lists must be updated regularly.</p> <p>The treatment of urban water is to be varied according to the sensitivity of the receiving waters.</p> <p>The Directive lays down specific requirements for discharges from certain industrial sectors of biodegradable industrial waste water not entering urban waste water treatment plants before discharge to receiving waters.</p> <p>Member States are responsible for monitoring both discharges from treatment plants and the receiving waters. They must ensure that the competent national authorities publish a situation report every two years. This report must also be sent to the Commission.</p> <p>Member States must set up national programmes for the implementation of this Directive and must present them to the Commission.</p> <p>The Directive also provides for temporary derogations.</p>
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>Minerals and waste development can involve the discharge of waste water to water bodies. This has the potential to cause pollution and is therefore important in terms of sustainability considerations. This document will be utilised in the SA in an informative capacity and in the form of recommendations.</p>
<p>Kyoto Protocol to the UN Framework Convention on Climate Change (1995)</p>	
<p>Web link</p>	<p>http://unfccc.int/resource/docs/convkp/kpeng.pdf</p>
<p>Overall aim or purpose</p>	<p>In 1992, countries joined an international treaty, the United Nations Framework Convention on Climate Change, to cooperatively consider what they could do to limit average global temperature increases and the resulting climate change. By 1995, countries realized that emission reductions provisions in the Convention were inadequate. They launched negotiations to strengthen the global response to climate change, and, two years later, adopted the Kyoto Protocol. The Kyoto Protocol legally binds developed countries to emission reduction targets. The Protocol's first commitment period started in 2008 and ended in 2012. The second commitment period began on 1 January 2013 and will end in 2020.</p>

Objectives / Targets	<p>The principal concepts of the Kyoto Protocol are:</p> <ul style="list-style-type: none"> • Binding commitments for the Annex I Parties - The main feature of the Protocol is that it established legally binding commitments to reduce emissions of greenhouse gases for Annex I Parties. The commitments were based on the Berlin Mandate, which was a part of UNFCCC negotiations leading up to the Protocol. • Implementation - In order to meet the objectives of the Protocol, Annex I Parties are required to prepare policies and measures for the reduction of greenhouse gases in their respective countries. In addition, they are required to increase the absorption of these gases and utilize all mechanisms available, such as joint implementation, the clean development mechanism and emissions trading, in order to be rewarded with credits that would allow more greenhouse gas emissions at home. • Minimizing Impacts on Developing Countries by establishing an adaptation fund for climate change. • Accounting, Reporting and Review in order to ensure the integrity of the Protocol. • Compliance - Establishing a Compliance Committee to enforce compliance with the commitments under the Protocol.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	<p>Minerals and waste development has the potential to produce greenhouse gases which are damaging to the environment and this is therefore important in terms of sustainability considerations. This document will be utilised in the SA in an informative capacity and in the form of recommendations.</p>

Directive to promote Electricity from Renewable Energy (Directive 2001/77/EC) (as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0077:EN:NOT
Overall aim or purpose	<p>This Directive is concerned with the promotion of electricity from renewable energy sources within the European Union for several reasons, including the security and diversification of energy supply, environmental protection and social and economic cohesion.</p>
Objectives / Targets	<p>The Directive follows up the 1997 White Paper on renewable energy sources which set a target of 12% of gross inland energy consumption from renewables for the EU-15 by 2010, of which electricity would represent 22.1%. With the 2004 enlargement, the EU's overall objective became 21%. The Directive also constitutes an essential part of the package of measures needed to comply with the commitments made by the EU under the Kyoto Protocol on the reduction of greenhouse gas emissions. The Directive concerns electricity produced from non-fossil renewable energy sources such as wind, solar, geothermal, wave, tidal, hydroelectric, biomass, landfill gas, sewage treatment gas and biogas energies.</p>
Implications for the West	<p>For the purposes of ensuring the security of energy supply, promoting the diversification of energy sources, environmental</p>

Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	protection and social and economic cohesion, this document will be utilised in the SA in an informative capacity and in the form of recommendations.
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The Convention on Biological Diversity, Rio de Janeiro (1992)	
Web link	http://www.cbd.int/doc/legal/cbd-en.pdf
Overall aim or purpose	The Convention was opened for signature at the Earth Summit in Rio de Janeiro on 5 June 1992 and entered into force on 29 December 1993. Its objective is to develop national strategies for the conservation and sustainable use of biological diversity.
Objectives / Targets	The convention has three main goals: 1.conservaion of biological diversity (or biodiversity); 2.sustainable use of its components; and 3.fair and equitable sharing of benefits arising from genetic resources
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development has the potential to negatively impact on biodiversity. This is important in the context of sustainability and therefore it will be necessary for this document to be utilised in the SA in an informative capacity and in the form of recommendations.

Directive on Ambient Air Quality and Management (Directive 2008/50/EC) (as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:0044:EN:PDF
Overall aim or purpose	The main aim of the 2008 ambient air quality directive (2008/50/EC) is to manage and improve air quality.
Objectives / Targets	The Directive sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter (PM ₁₀ and PM _{2.5}) and nitrogen dioxide (NO ₂). As well as having direct effects, these pollutants can combine in the atmosphere to form ozone, a harmful air pollutant (and potent greenhouse gas) which can be transported great distances by weather systems.

<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>Minerals and waste development has the potential to emit air pollutants that will negatively impact on the environment. This is important in the context of sustainability and therefore it will be necessary for this document to be utilised in the SA in an informative capacity and in the form of recommendations.</p>
<p>European Spatial Development Perspective, Towards Balanced and Spatial Development of the Territory of the European Union (May 2009)</p>	
<p>Web link</p>	<p>http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/pdf/sum_en.pdf</p>
<p>Overall aim or purpose</p>	<p>The European Spatial Development Perspective (ESDP) is a legally non-binding document forming a policy framework with 60 policy options for all tiers of administration with a planning responsibility. The strategic aim of the ESDP is for planning authorities in Member States to achieve a balanced and sustainable spatial development strategy.</p>
<p>Objectives / Targets</p>	<p>The ESDP sets out spatial development guidelines:</p> <ul style="list-style-type: none"> • development of a polycentric and balanced urban system and strengthening of the partnership between urban and rural areas. This involves overcoming the outdated dualism between city and countryside. • Promotion of integrated transport and communication concepts, which support the polycentric development of the EU territory and are an important pre-condition for enabling European cities and regions to pursue their integration into EMU. Parity of access to infrastructure and knowledge should be realised gradually. Regionally adapted solutions must be found for this. • Development and conservation of the natural and the cultural heritage through wise management. This contributes both to the preservation and deepening of regional identities and the maintenance of the natural and cultural diversity of the regions and cities of the EU in the age of globalisation.
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>The strategic aim of the ESDP is for planning authorities in Member States to achieve a balanced and sustainable spatial development strategy. This is desirable in context of the production of the WMMWLP. Therefore this document to be utilised in the SA in an informative capacity and in the form of recommendations.</p>

Waste Framework Directive (Directive 2008/98/EC) (as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:0030:en:PDF
Overall aim or purpose	The purpose of this Directive is to provide a legal framework aimed at the whole waste cycle from generation to disposal, placing the emphasis on recovery and recycling.
Objectives / Targets	<p>Waste hierarchy</p> <p>In order to better protect the environment, the Member States should take measures for the treatment of their waste in line with the following hierarchy which is listed in order of priority:</p> <ul style="list-style-type: none"> • prevention; • preparing for reuse; • recycling; • other recovery, notably energy recovery; • disposal. <p>Member States can implement legislative measures with a view to reinforcing this waste treatment hierarchy. However, they should ensure that waste management does not endanger human health and is not harmful to the environment.</p> <p>Waste management</p> <p>Any producer or holder of waste must carry out their treatment themselves or else must have treatment carried out by a broker, establishment or undertaking. Member States may cooperate, if necessary, to establish a network of waste disposal facilities. This network must allow for the independence of the European Union with regard to the treatment of waste.</p> <p>Dangerous waste must be stored and treated in conditions that ensure the protection of health and the environment. They must not, in any case be mixed with other dangerous waste and must be packaged or labelled in line with international or Community regulations.</p> <p>Permits and registrations</p> <p>Any establishment or undertaking intending to carry out waste treatment must obtain a permit from the competent authorities who determine notably the quantity and type of treated waste, the method used as well as monitoring and control operations.</p>

	<p>Any incineration or co-incineration method aimed at energy recovery must only be carried out if this recovery takes place with a high level of energy efficiency.</p> <p>Plans and programmes</p> <p>The competent authorities must establish one or more management plans to cover the whole territory of the Member State concerned. These plans contain, notably, the type, quantity and source of waste, existing collection systems and location criteria.</p> <p>Prevention programmes must also be drawn up, with a view to breaking the link between economic growth and the environmental impacts associated with the generation of waste.</p> <p>These programmes are to be communicated by Member States to the European Commission.</p> <p>Context</p> <p>The generation of waste is increasing within the European Union. It has therefore become of prime importance to specify basic notions such as recovery and disposal, so as to better organise waste management activities.</p> <p>It is also essential to reinforce measures to be taken with regard to prevention as well as the reduction of the impacts of waste generation and waste management on the environment. Finally, the recovery of waste should be encouraged so as to preserve natural resources.</p>
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>The issue of waste and how it is managed is important in the notion of sustainability and obviously in the preparation of the WBMWDPD. This document will therefore be utilised in the SA in an informative capacity and in the form of recommendations..</p>
<p>Environment 2010: Our Future, Our Choice, EU Sixth Environment Action Programme, 2001-2010</p>	
<p>Web link</p>	<p>Not found</p>
<p>Overall aim or purpose</p>	<p>This Environment Action Programme defines the priorities and objectives of European environment policy up to 2010 and beyond and describes the measures to be taken to help implement its sustainable development strategy.</p>

<p>Objectives / Targets</p>	<p>The Sixth Environment Action Programme of the European Community entitled "Environment 2010: Our Future, Our Choice" covers the period from 22 July 2002 to 21 July 2012. This is the most recent programme and a more up to date one has yet to be produced.</p> <p>The Communication proposes five main avenues for strategic action:</p> <ul style="list-style-type: none"> • improving the implementation of existing legislation; • integrating environmental concerns into other policies; • working in partnership with business; • empowering citizens and changing their behaviour; • taking account of the environment in land-use planning and management.
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>The overarching objective of the WBMWDPD should reflect the intentions of the Programme in terms of a desire to achieve sustainable development. This document will therefore be utilised in the SA in an informative capacity and in the form of recommendations.</p>
<p>Groundwater Directive 80/68/EEC (as amended)</p>	
<p>Web link</p>	<p>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31980L0068:EN:HTML</p>
<p>Overall aim or purpose</p>	<p>The purpose of this Directive is to prevent the discharge of certain toxic, persistent and bioaccumulable substances into groundwater.</p>
<p>Objectives / Targets</p>	<p>There are two lists of dangerous substances drawn up for the protection of groundwater:</p> <ul style="list-style-type: none"> • direct discharge of substances in List I is prohibited. This list includes organohalogen, organophosphorus and organotin compounds, mercury and cadmium and their compounds, and hydrocarbons and cyanides; • discharge of substances in List II must be limited. This list includes certain metals such as copper, zinc, lead and arsenic, and other substances such as fluorides, toxic or persistent organic compounds of silicon, and biocides and their derivatives not appearing in List I. <p>All indirect discharges of substances in List I and all direct or indirect discharges of substances in List II are subject to prior</p>

	<p>authorisation. Such authorisation:</p> <ul style="list-style-type: none"> • is granted after an investigation into the receiving environment; • is granted for a limited period and subject to regular review; • lays down the conditions that have to be met for discharges. If they have not been or cannot be met, the authorisation is withdrawn or refused. <p>Monitoring of compliance with these conditions and of the effects of discharges on groundwater is the responsibility of the competent authorities of the Member States.</p>
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>Minerals and waste development in West Berkshire has the potential to pollute groundwater. This is important in the context of sustainability and therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.</p>

<p>Mining Waste Directive (2006/21/EC) (as amended)</p>	
<p>Web link</p>	<p>http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:102:0015:0033:en:PDF</p>
<p>Overall aim or purpose</p>	<p>This Directive applies to waste resulting from the extraction, treatment and storage of mineral resources and the working of quarries. Waste covered by this Directive no longer falls within the scope of Directive 1999/31/EC on the landfill of waste.</p>
<p>Objectives / Targets</p>	<p>No extractive industry waste facility may operate without a permit issued by the competent authorities. In order to obtain this type of authorisation, the operator of the facility must comply with the provisions of this Directive.</p> <p>The competent authorities must inform the public of applications for permits that are submitted. This provision enables the public to submit comments and to participate in the assessment procedure for authorisation requests.</p> <p>When a new waste facility is built or an existing one modified, the competent authority must ensure that the following measures are taken:</p> <ul style="list-style-type: none"> • the facility must be suitably located; • its physical stability must be ensured and soil, air and water pollution prevented; • it must be monitored and inspected by competent persons;

	<ul style="list-style-type: none"> • arrangements must be made for the closure of the facility, the rehabilitation of the land and the after-closure phase. <p>Operators of waste facilities presenting a potential risk for public health or for the environment (Category A) must draw up:</p> <ul style="list-style-type: none"> • a policy for preventing major accidents; • a safety management system; • an internal emergency plan specifying the measures to be taken on-site in the event of an accident.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals development in West Berkshire (as with anywhere else in the world) generates waste material and will often require environmental permits to be issued by the Environment Agency. These types of activities have a high pollution potential. This is important in the context of sustainability, and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (as amended)	
Web link	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:NOT
Overall aim or purpose	This Directive requires certain plans and programmes, which are likely to have significant effects on the environment, to be subject to an environmental assessment. This assessment specifically enables environmental considerations to be integrated in the preparation and adoption of these plans and programmes. It also contributes to sustainable development. This assessment includes the introduction of an environmental report (detailing the likely significant environmental effects and reasonable alternatives), as well as carrying out consultations (with the public, the authorities with environmental responsibilities and other Member States in the case of significant cross-border effects). The report on environmental effects and the results of consultations shall be considered before the plan or programme is adopted.
Objectives / Targets	<p>This Directive applies to the following public plans and programmes (as well as their amendments) which have been prepared and/or adopted by a competent authority and which are subject to legislative, regulatory and administrative provisions:</p> <ul style="list-style-type: none"> • plans and programmes which are prepared for specific sectors (agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning and land use) and which set the framework for development consent of projects under the EIA Directive; • plans and programmes for which an assessment is required under Articles 6 and 7 of the "Habitats" Directive (Directive 92/43/EEC);

	<ul style="list-style-type: none"> •plans and programmes which set the framework for future development consent of projects other than those under the EIA Directive (not limited to the sectors listed above) and which Member States have identified as likely to have significant environmental effects. Member States shall determine this either through case-by-case examination or by specifying types of plans and programmes or by combining both approaches. •Minor modifications to plans and programmes and the plans and programmes for small areas at local level, only if they are likely to have significant environmental effects. <p>It states that the environmental report shall contain the following information:</p> <ul style="list-style-type: none"> •the contents of the plan or programme and its main objectives and links to other relevant plans and programmes; •the existing environmental situation and its likely development if the plan or programme is not implemented; •the environmental characteristics of any area likely to be significantly affected by the plan or programme; •any existing environmental problems which are relevant to the plan or programme, specifically those relating to zones in the Natura 2000 network; •the national, Community or international environmental protection objectives which are relevant to the plan or programme in question; •the likely significant environmental effects of implementing the plan or programme; •the measures envisaged to prevent, reduce and offset any significant adverse effects on the environment; •an outline of the reasons for selecting other alternatives; •a description of how the assessment was carried out ; •the envisaged monitoring measures; •a non-technical summary of this information.
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>The principle of SA/SEA comes from this Directive. Therefore, this document and the resulting transposed legislation that applies in England 'The Environmental Assessment of Plans and Programmes Regulations 2004 (SI 2004 No. 1633)' are intrinsic to carrying out the SA/SEA process throughout, and subsequent to the preparation of the WBMWDPD.</p>

Town and Country Planning Act 1990 (as amended)	
Web link	http://www.legislation.gov.uk/ukpga/1990/8/contents
Overall aim or purpose	This is the current planning legislation for England and Wales.
Objectives / Targets	This is the overarching legislation for the regulation of planning matters throughout England and Wales.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	This is the overarching legislation for the regulation of minerals and waste planning, including the creation of development plans relating to minerals and waste development. It is imperative that the WBMWDPD is prepared in line with the requirements of the Act.
Environment Act 1995 (as amended)	
Web link	http://www.legislation.gov.uk/ukpga/1995/25/contents
Overall aim or purpose	The Environment Act 1995 is a United Kingdom Act of Parliament which created a number of new agencies and set new standards for environmental management.
Objectives / Targets	The Environment Act 1995 updates much of the earlier legislation on the areas that it extends to. The Act comprises: Part 1 the Environment Agency and the Scottish Environmental Protection Agency, Part II Contaminated Land and Abandoned Mines, Part III National Parks, Part IV Air Quality, Part V Miscellaneous, General and Supplemental Provisions (e.g. waste, mineral planning permissions, hedgerows, drainage, fisheries etc.).
Implications for the West	The Environment Act is concerned primarily with environmental issues relating to minerals and waste. The Act also in effect

Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	created the Environment Agency which are a statutory consultee in the SA process. This is important in the context of sustainability, and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.
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Wildlife and Countryside Act 1981 (as amended)	
Web link	http://www.legislation.gov.uk/ukpga/1981/69
Overall aim or purpose	The Wildlife and Countryside Act 1981 (as amended) is the principle mechanism for the legislative protection of wildlife in Great Britain.
Objectives / Targets	<p>This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats (the 'Bern Convention') and the European Union Directives on the Conservation of Wild Birds (79/409/EEC) and Natural Habitats and Wild Fauna and Flora (92/43/FFC) are implemented in Great Britain. The Wildlife and Countryside Act is divided into four parts.</p> <ul style="list-style-type: none"> • Part I is concerned with the protection of wildlife, • Part II relates to the countryside and national parks (and the designation of protected areas), • Part III covers public rights of way, • Part IV deals with miscellaneous provisions of the Act.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and Waste development in West Berkshire has the potential to impact on wildlife, the North Wessex Downs AONB, and on public rights of way. This is important in the context of sustainability, and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

Countryside and Rights of Way Act 2000 (CRoW Act 2000) (as amended)	
Web link	http://www.legislation.gov.uk/ukpga/2000/37/contents
Overall aim or purpose	The Countryside and Rights of Way Act 2000 (CRoW Act 2000) received Royal Assent on 30 November 2000, with the provisions it contains being brought into force in incremental steps over subsequent years. Its primary aims were to allow more public access to land, and to give greater protection to statutorily protected land and wildlife.

Objectives / Targets	The Act provides for public access on foot to certain types of land, amends the law relating to public rights of way, increases measures for the management and protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation, and provides for better management of Areas of Outstanding Natural Beauty (AONB).
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and Waste development in West Berkshire has the potential to impact on wildlife, the North Wessex Downs AONB and other statutorily protected land, and on public rights of way. This is important in the context of sustainability, and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

The Water Act 2003 (as amended)	
Web link	http://www.legislation.gov.uk/ukpga/2003/37/contents
Overall aim or purpose	The Water Act 2003 controls the abstraction and impounding of water.
Objectives / Targets	It aimed to improve protection of the environment and to provide a more flexible process of regulation, through making changes to existing licences; abstraction licence applications, variations and transfers; impoundings; renewal of time limited licences, removal of exemptions; the register of exempt public rights; and for water companies.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development in West Berkshire has the potential involve the abstraction and impounding of water. This is important in the context of sustainability, and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

Hazardous Waste Regulations (England and Wales) 2005 (as amended)	
Web link	http://www.legislation.gov.uk/uksi/2005/894/contents/made
Overall aim or purpose	This legislation presents a regime to control and track the movement of hazardous waste with a view to implementing the Hazardous Waste Directive.
Objectives / Targets	The Regulations removed the need to pre-notify the Environment Agency before hazardous waste can be moved off site, and

	include a simpler method for tracking wastes once they have been moved. They include a new system to ensure that certain sites where hazardous waste is produced are notified to the Environment Agency. This will improve the whole regulation of the hazardous waste chain from source site to waste site. Part 4 bans the mixing of hazardous waste unless it is permitted as part of a disposal or recovery operation.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Hazardous waste is generated within West Berkshire and its management raises sustainability issues. Therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

The Environmental Protection (Duty of Care) Regulations 1991 (as amended)	
Web link	http://www.legislation.gov.uk/ukxi/1991/2839/contents/made
Overall aim or purpose	This act exists to ensure responsibility is taken by the producers of waste for managing their waste and avoiding harm to human health or environment.
Objectives / Targets	<p>The act aims to reduce or eradicate harmful acts of waste crime such as fly tipping. The act encourages householders to work with their local council to combat fly-tipping and other illegal waste dumping.</p> <p>The Duty of Care incorporates a responsibility on anyone who produces, imports, carries, keeps, treats or disposes of controlled waste to ensure it is only ever transferred to someone who is authorised to receive it. This is aimed to eradicate the problem of fly tippers posing as authorised waste disposal teams.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	As part of minerals development and waste development by its nature, waste material will be generated and it will be necessary for it to be managed. This is important in the context of sustainability and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

The Air Quality Standards Regulations 2010	
Web link	http://www.legislation.gov.uk/ukxi/2010/1001/contents/made
Overall aim or purpose	The objective of ambient air quality legislation is to improve air quality by reducing the impact of air pollution on human health and ecosystems.

Objectives / Targets	This will be achieved by setting air quality standards for key pollutants and obliging member states to provide air quality plans demonstrating how air quality standards will be achieved and maintained when compliance is breached, legislation on ambient air quality has contributed to the improvement of air quality throughout the European Union.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	As part of minerals development and waste development there is potential to generate air borne pollutants. This has implications in the context of sustainability and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.
The Habitats Regulations 1994 (as amended)	
Web link	http://www.legislation.gov.uk/uksi/2010/490/contents/made
Overall aim or purpose	The Conservation of Habitats and Species Regulations 2010 consolidate all the various amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law.
Objectives / Targets	The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites. Under the Regulations, competent authorities i.e. any Minister, government department, public body, or person holding public office, have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	As part of minerals development and waste development there is potential to negatively impact on habitats, flora and fauna. This has implications in the context of sustainability and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.
Waste (England and Wales) Regulations 2011	
Web link	http://www.legislation.gov.uk/uksi/2011/988/contents/made
Overall aim or purpose	These regulations implement the revised EU Waste Framework Directive 2008/98 which sets requirements for the collection, transport, recovery and disposal of waste.

Objectives / Targets	The Waste (England and Wales) Regulations 2011 require businesses to confirm that they have applied the waste management hierarchy when transferring waste and include a declaration to this effect on their waste transfer note or consignment note. They introduce a two-tier system for waste carrier and broker registration, including the new concept of waste dealer. They make amendments to hazardous waste controls. They exclude some categories of waste from waste controls.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	As part of the collection, transport, recovery and disposal of waste there is potential to negatively impact on the environment. This has implications in the context of sustainability and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

The Climate Change Act 2008 (as amended)	
Web link	http://www.legislation.gov.uk/ukpga/2008/27/contents
Overall aim or purpose	This Act is a long term, legally binding framework to tackle the dangers of climate change.
Objectives / Targets	The Act will create a new approach to managing and responding to climate change in the UK through: setting ambitious targets, assuming powers to help achieve them, strengthening the institutional framework, enhancing the UK's ability to adapt to the impact of climate change and establishing clear and regular accountability to the UK, Parliament and devolved legislatures.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development has the potential to impact negatively on the environment in terms of emissions and this may contribute to climate change. This has implications in the context of sustainability and therefore this document can be utilised in the SA in an informative capacity and in the form of recommendations.

The Environmental Assessment of Plans and Programmes Regulations 2004 (Statutory Instrument 2004 No.1633) (as amended)	
Web link	http://www.legislation.gov.uk/uksi/2004/1633/contents/made
Overall aim or purpose	The aim of these regulations is to implement the provisions of the SEA Directive in England.
Objectives / Targets	This Directive requires certain plans and programmes, which are likely to have significant effects on the environment, to be

subject to an environmental assessment. This assessment specifically enables environmental considerations to be integrated in the preparation and adoption of these plans and programmes. It also contributes to sustainable development. This assessment includes the introduction of an environmental report (detailing the likely significant environmental effects and reasonable alternatives), as well as carrying out consultations (with the public, the authorities with environmental responsibilities and other Member States in the case of significant cross-border effects). The report on environmental effects and the results of consultations shall be considered before the plan or programme is adopted.

This Directive applies to the following public plans and programmes (as well as their amendments) which have been prepared and/or adopted by a competent authority and which are subject to legislative, regulatory and administrative provisions:

- plans and programmes which are prepared for specific sectors (agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning and land use) and which set the framework for development consent of projects under the EIA Directive;
- plans and programmes for which an assessment is required under Articles 6 and 7 of the "Habitats" Directive (Directive 92/43/EEC);
- plans and programmes which set the framework for future development consent of projects other than those under the EIA Directive (not limited to the sectors listed above) and which Member States have identified as likely to have significant environmental effects. Member States shall determine this either through case-by-case examination or by specifying types of plans and programmes or by combining both approaches.
- Minor modifications to plans and programmes and the plans and programmes for small areas at local level, only if they are likely to have significant environmental effects.

It states that the environmental report shall contain the following information:

- the contents of the plan or programme and its main objectives and links to other relevant plans and programmes;
- the existing environmental situation and its likely development if the plan or programme is not implemented;
- the environmental characteristics of any area likely to be significantly affected by the plan or programme;
- any existing environmental problems which are relevant to the plan or programme, specifically those relating to zones in the Natura 2000 network;
- the national, Community or international environmental protection objectives which are relevant to the plan or programme in question;
- the likely significant environmental effects of implementing the plan or programme;
- the measures envisaged to prevent, reduce and offset any significant adverse effects on the environment;
- an outline of the reasons for selecting other alternatives;
- a description of how the assessment was carried out ;
- the envisaged monitoring measures;

	•a non-technical summary of this information.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The principle of SA/SEA comes from Directive 2001/42/EC. The Directive has been transposed into English legislation through these Regulations. Both the Directive and the Regulations are intrinsic to carrying out the SA/SEA process throughout, and subsequent to the preparation of the WBMWDPD.

The Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended)	
Web link	http://www.legislation.gov.uk/uksi/2012/767/made
Overall aim or purpose	These regulations govern the process by which local councils prepare their local plan and associated documents.
Objectives / Targets	The Government objectives in revising the regulations were: i) to respond to reforms set out in the Localism Act; ii) to consolidate changes made to the 2004 regulations into a single document; and iii) to ensure the regulations are as effective and simple as possible.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	These regulations are the statutory basis for preparing planning policy documents at a local level. The WBMWDPD is one of these documents and therefore this document can be utilised in the SA in a regulatory and informative capacity.

The Ancient Monuments and Archaeological Areas Act 1979 (as amended)	
Web link	http://www.legislation.gov.uk/ukpga/1979/46
Overall aim or purpose	The Ancient Monuments and Archaeological Areas Act 1979 was a law passed by the British government, the latest in a series of Ancient Monument Acts legislating to protect the archaeological heritage of Great Britain.
Objectives / Targets	This Act made damage to an ancient monument a criminal offence and required that any works taking place within an ancient monument require Scheduled Monument Consent from the Secretary of State.

	<p>The Act also provides for taking monuments into the care of the Secretary of State – the concept of 'guardianship' where a monument remains in private ownership but the monument is cared for and (usually) opened to the public by the relevant national heritage body.</p> <p>The Act (in Part II) also introduced the concept of Areas of Archaeological Importance, city centres of historic significance which receive limited further protection by forcing developers to permit archaeological access prior to building work starting.</p>
<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>Minerals and waste development in West Berkshire has the potential to impact negatively on assets valued for their archaeological heritage. In order to avoid any detrimental impact on assets valued for their archaeological heritage this document can be utilised in the SA in a regulatory and informative capacity.</p>

<p>Planning (Listed Buildings and Conservation Areas) Act 1990</p>	
<p>Web link</p>	<p>http://www.legislation.gov.uk/ukpga/1990/9/contents</p>
<p>Overall aim or purpose</p>	<p>The Planning (Listed Buildings and Conservation Areas) Act 1990 is an Act of Parliament of the United Kingdom that altered the laws on granting of planning permission for building works, notably including those of the listed building system in England and Wales.</p>
<p>Objectives / Targets</p>	<p>With regard to listed buildings, this Act refers to:</p> <ul style="list-style-type: none"> • the listing of special buildings; • the authorisation of works affecting listed buildings; • the rights of owners; • enforcement • prevention of deterioration and damage. <p>With regard to conservation areas, this Act refers to:</p> <ul style="list-style-type: none"> • Designation • General duties of planning authorities • Control of demolition • Grants • Town schemes

	Other general provisions are made within the Act.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development in West Berkshire has the potential to impact negatively on listed buildings and conservation areas. In order to avoid any detrimental impact on listed buildings and conservation areas this document can be utilised in the SA in a regulatory and informative capacity.

EN-1: Overarching National Policy Statement for Energy (2011)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47854/1938-overarching-nps-for-energy-en1.pdf
Overall aim or purpose	Government policy on hazardous and non-hazardous waste is intended to protect human health and the environment by producing less waste and by using it as a resource wherever possible. Where this is not possible, waste management regulation ensures that waste is disposed of in a way that is least damaging to the environment and to human health.
Objectives / Targets	<p>Sustainable waste management is implemented through the “waste hierarchy”, which sets out the priorities that must be applied when managing waste:</p> <ul style="list-style-type: none"> a) prevention; b) preparing for reuse; c) recycling; d) other recovery, including energy recovery; and e) disposal. <p>Disposal of waste should only be considered where other waste management options are not available or where it is the best overall environmental outcome.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The National Policy Statements (NPSs) provide the primary basis for decisions by the Infrastructure Planning Commission (IPC) on applications it receives for certain defined nationally significant development proposals. In the context of waste management and sustainability, it is crucial that the WBMWDPD is in line with Central Government policy. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

EN-2 - National Policy Statement for Fossil Fuel Electricity Generating Infrastructure (2011)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47855/1939-nps-for-fossil-fuel-en2.pdf
Overall aim or purpose	This document sets out Government policy for the development of nationally significant fossil fuel electricity generating infrastructure.
Objectives / Targets	<p>Relevant issues include:</p> <p>EN-2 specifies how residue from coal-fired generating stations should be managed. The combustion of coal in the form of pulverised fuel gives rise to both coarse furnace bottom ash and fine pulverised fuel ash (pfa). Both types of ash must be removed and disposed of according to waste regulations.</p> <p>The by-product of the limestone/gypsum FGD process is “de-sulpho gypsum”. This is used in the manufacture of building materials such as plasterboard. Generally furnace bottom ash is sold for concrete or road fill. Low carbon content pfa is used for pre-cast concrete. Higher carbon content pfa may be re-burned to recover some of the residual calorific value.</p> <p>The IPC should be satisfied that waste management arrangements minimise the amount of residue that cannot be used for commercial purposes. Schemes that propose reclamation of derelict land through ash disposal should be the preferred mitigation for residues that cannot be used for commercial purposes. However alternative waste management arrangements may be acceptable.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The National Policy Statements (NPSs) provide the primary basis for decisions by the Infrastructure Planning Commission (IPC) on applications it receives for certain defined nationally significant development proposals. In the context of waste management and sustainability, it is crucial that the WBMWDPD is in line with Central Government policy. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

EN-3: National Policy Statement for Renewable Energy Infrastructure (2011)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47856/1940-nps-renewable-energy-en3.pdf
Overall aim or purpose	This NPS taken together with the Overarching National Policy Statement for Energy (EN-1), provides the primary basis for decisions by the IPC on applications it receives for energy from waste developments with a capacity of more than 50MW.
Objectives / Targets	This NPS is concerned with impacts and other matters which are specific to biomass and energy from waste (EfW), onshore and offshore wind energy, or where, although the impact or issue is generic and covered in EN-1, there are further specific

	<p>considerations arising from the technologies covered here.</p> <p>The recovery of energy from the combustion of waste, where in accordance with the waste hierarchy, will play an increasingly important role in meeting the UK's energy needs. Where the waste burned is deemed renewable, this can also contribute to meeting the UK's renewable energy targets. Further, the recovery of energy from the combustion of waste forms an important element of waste management strategies in both England and Wales.</p> <p>The combustion generating stations covered by this NPS are those which generate electricity:</p> <ul style="list-style-type: none"> • using waste (possibly including non-renewable sources of waste) and/or biomass as a fuel; and • generate more than 50MW of electricity.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The National Policy Statements (NPSs) provide the primary basis for decisions by the Infrastructure Planning Commission (IPC) on applications it receives for certain defined nationally significant development proposals. In the context of waste management and sustainability, it is crucial that the WBMWDPD is in line with Central Government policy. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

EN-4: National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (2011)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47857/1941-nps-gas-supply-oil-en4.pdf
Overall aim or purpose	This document sets out Government policy for the development of nationally significant gas supply infrastructure, and gas and oil pipelines.
Objectives / Targets	EN-4 refers to EN-1 setting out generic considerations for impacts on biodiversity, coastal change (including the impact of dredging and dredge spoil deposition), waste management, water quality and resources. These are relevant across a range of energy infrastructure projects. Further considerations are provided in relation to the impacts of dredging and spoil deposition at an LNG facility.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The National Policy Statements (NPSs) provide the primary basis for decisions by the Infrastructure Planning Commission (IPC) on applications it receives for certain defined nationally significant development proposals. In the context of minerals and waste management and sustainability, it is crucial that the WBMWDPD is in line with Central Government policy. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

EN-5: National Policy Statement for Electricity Networks Infrastructure (2011)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47858/1942-national-policy-statement-electricity-networks.pdf
Overall aim or purpose	This document sets out Government policy for the development of nationally significant electricity infrastructure.
Objectives / Targets	This NPS covers above ground electricity lines whose nominal voltage is expected to be 132kV or above. Any other kind of electricity infrastructure (including lower voltage overhead lines, underground or sub-sea cables at any voltage, and associated infrastructure as referred to above) will only be subject to the Planning Act 2008 – and so be covered by this NPS – if it is in England, and it constitutes associated development for which consent is sought along with an NSIP such as a generating station or relevant overhead line.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The National Policy Statements (NPSs) provide the primary basis for decisions by the Infrastructure Planning Commission (IPC) on applications it receives for certain defined nationally significant development proposals. It is crucial that the WBMWDPD is in line with Central Government policy. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

EN-6: National Policy Statement for Nuclear Power Generation – Annexes (2011)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47859/2009-nps-for-nuclear-volume1.pdf
Overall aim or purpose	This NPS has effect in relation to nuclear power generation with a capacity of more than 50 megawatts (MW) on a site listed within this NPS.
Objectives / Targets	<p>In regard to radioactive (and other) wastes, the provisions of EN-6 are set out below.</p> <p>On the presumption of a once through fuel cycle (and therefore assuming no reprocessing of spent fuel), “higher activity waste” will consist of spent fuel and intermediate level waste. Geological disposal is the way in which higher activity waste will be managed in the long term. This will be preceded by safe and secure interim storage until a geological disposal facility can receive waste.</p> <p>New nuclear power stations will also produce other waste streams: low level waste, liquid and gaseous discharges, and non-radioactive wastes. The Government considers that arrangements already exist for the effective management and disposal of</p>

	wastes in these categories, as demonstrated by the UK's experience of dealing with such wastes from existing nuclear power stations.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The National Policy Statements (NPSs) provide the primary basis for decisions by the Infrastructure Planning Commission (IPC) on applications it receives for certain defined nationally significant development proposals. In the context of waste management and sustainability, it is crucial that the WBMWDPD is in line with Central Government policy. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
National Policy Statement for Waste Water (2012)	
Web link	https://www.gov.uk/government/publications/national-policy-statement-for-waste-water
Overall aim or purpose	This document sets out Government policy for the development of nationally significant infrastructure in the waste water sector.
Objectives / Targets	<p>The Planning Act 2008 sets out the thresholds for nationally significant infrastructure in the waste water sector to which this NPS will be relevant. The Act empowers the examination of applications and subsequent decisions on the following waste water NSIPs in England:</p> <ul style="list-style-type: none"> • construction of waste water treatment plants which are expected to have a capacity exceeding a population equivalent of 500,000 when constructed; or • alterations to waste water treatment plants where the effect of the alteration is expected to be to increase by more than a population equivalent of 500,000 the capacity of the plant. <p>This NPS sets out Government policy on need for waste water infrastructure, general Factors for examination and determination of applications, and information on the impacts from waste water infrastructure.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The National Policy Statements (NPSs) provide the primary basis for decisions by the Infrastructure Planning Commission (IPC) on applications it receives for certain defined nationally significant development proposals. In the context of waste management and sustainability, it is crucial that the WBMWDPD is in line with Central Government policy. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
National Policy Statement for Hazardous Waste (2013)	
Web link	https://www.gov.uk/government/publications/hazardous-waste-national-policy-statement

Overall aim or purpose	The Hazardous Waste National Policy Statement (NPS) sets out the Government policy on the development of nationally significant infrastructure for the management of hazardous waste.
Objectives / Targets	<p>The Hazardous Waste National Policy Statement (NPS) was published by the Secretary of State and sets out the strategic need and justification of Government policy for the provision of such infrastructure. It will be used to guide decisions made by the Planning Inspectorate.</p> <p>New, nationally significant infrastructure for the management of hazardous waste is needed to protect the environment and human health and to allow us to manage hazardous waste in a more sustainable way, recycling and recovering the waste where possible.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The National Policy Statements (NPSs) provide the primary basis for decisions by the Infrastructure Planning Commission (IPC) on applications it receives for certain defined nationally significant development proposals. In the context of hazardous waste management and sustainability, it is crucial that the WBMWDPD is in line with Central Government policy. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

National Planning Policy Framework (2012)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf
Overall aim or purpose	The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied. It sets out the Government's requirements for the planning system only to the extent that it is relevant, proportionate and necessary to do so. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.
Objectives / Targets	<p>Para 7 states:</p> <p>There are three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:</p> <ul style="list-style-type: none"> • an economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure; • a social role – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet

	<p>the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and</p> <ul style="list-style-type: none">• an environmental role – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy. <p>Para 14 states:</p> <p>At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.</p> <p>For plan-making this means that:</p> <ul style="list-style-type: none">• local planning authorities should positively seek opportunities to meet the development needs of their area;• Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless: <p>-any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or</p> <p>-specific policies in this Framework indicate development should be restricted.</p> <p>Para 17 sets out 12 core planning principles:</p> <p>Within the overarching roles that the planning system ought to play, a set of core land-use planning principles should underpin both plan-making and decision-taking. These 12 principles are that planning should:</p> <ul style="list-style-type: none">• be genuinely plan-led, empowering local people to shape their surroundings, with succinct local and neighbourhood plans setting out a positive vision for the future of the area. Plans should be kept up to date, and be based on joint working and co-operation to address larger than local issues. They should provide a practical framework within which decisions on planning applications can be made with a high degree of predictability and efficiency;• not simply be about scrutiny, but instead be a creative exercise in finding ways to enhance and improve the places in which people live their lives;• proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet the housing, business and other development needs of an area, and respond positively to wider opportunities for growth. Plans should take account of market signals, such as land prices and housing affordability, and set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of the residential and business communities;
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- always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings;
- take account of the different roles and character of different areas, promoting the vitality of our main urban areas, protecting the Green Belts around them, recognising the intrinsic character and beauty of the countryside and supporting thriving rural communities within it;
- support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy);
- contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should prefer land of lesser environmental value, where consistent with other policies in this Framework;
- encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value;
- promote mixed use developments, and encourage multiple benefits from the use of land in urban and rural areas, recognising that some open land can perform many functions (such as for wildlife, recreation, flood risk mitigation, carbon storage, or food production);
- conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations;
- actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable; and
- take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs.

Para 143 states:

In preparing Local Plans, local planning authorities should:

- identify and include policies for extraction of mineral resource of local and national importance in their area, but should not identify new sites or extensions to existing sites for peat extraction;
- so far as practicable, take account of the contribution that substitute or secondary and recycled materials and minerals waste would make to the supply of materials, before considering extraction of primary materials, whilst aiming to source minerals supplies indigenously;
- define Minerals Safeguarding Areas and adopt appropriate policies in order that known locations of specific minerals resources of local and national importance are not needlessly sterilised by non-mineral development, whilst not creating a presumption that resources defined will be worked; and define Minerals Consultation Areas based on these Minerals Safeguarding Areas;
- safeguard:

- existing, planned and potential rail heads, rail links to quarries, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterways of minerals, including recycled, secondary and marine-dredged materials; and
- existing, planned and potential sites for concrete batching, the manufacture of coated materials, other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material.
- set out policies to encourage the prior extraction of minerals, where practicable and environmentally feasible, if it is necessary for non-mineral development to take place;
- set out environmental criteria, in line with the policies in this Framework, against which planning applications will be assessed so as to ensure that permitted operations do not have unacceptable adverse impacts on the natural and historic environment or human health, including from noise, dust, visual intrusion, traffic, tip- and quarry-slope stability, differential settlement of quarry backfill, mining subsidence, increased flood risk, impacts on the flow and quantity of surface and groundwater and migration of contamination from the site; and take into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality;
- when developing noise limits, recognise that some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction; and
- put in place policies to ensure worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place, including for agriculture (safeguarding the long term potential of best and most versatile agricultural land and conserving soil resources), geodiversity, biodiversity, native woodland, the historic environment and recreation.

Para 145 states:

Minerals planning authorities should plan for a steady and adequate supply of aggregates by:

- preparing an annual Local Aggregate Assessment, either individually or jointly by agreement with another or other mineral planning authorities, based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources);
- participating in the operation of an Aggregate Working Party and taking the advice of that Party into account when preparing their Local Aggregate Assessment;
- making provision for the land-won and other elements of their Local Aggregate Assessment in their mineral plans taking account of the advice of the Aggregate Working Parties and the National Aggregate Coordinating Group as appropriate. Such provision should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate;
- taking account of published National and Sub National Guidelines on future provision which should be used as a guideline when planning for the future demand for and supply of aggregates;
- using landbanks of aggregate minerals reserves principally as an indicator of the security of aggregate minerals supply,

	<p>and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans;</p> <ul style="list-style-type: none"> • making provision for the maintenance of landbanks of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised. Longer periods may be appropriate to take account of the need to supply a range of types of aggregates, locations of permitted reserves relative to markets, and productive capacity of permitted sites; • ensuring that large landbanks bound up in very few sites do not stifle competition; and • calculating and maintaining separate landbanks for any aggregate materials of a specific type or quality which have a distinct and separate market.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	It is imperative that the WBMWDPD is line with Government policy on planning. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

Planning Policy Statement 10 – Planning for Sustainable Waste Management (published 2005 and revised 2011)	
Web link	https://www.gov.uk/government/publications/planning-for-sustainable-waste-management-planning-policy-statement-10
Overall aim or purpose	Planning Policy Statement 10 (PPS10) sets out the government’s policy to be taken into account by waste planning authorities.
Objectives / Targets	<p>Para 3 sets out key planning objectives:</p> <ul style="list-style-type: none"> – help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be adequately catered for; – provide a framework in which communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet the needs of their communities; – help implement the national waste strategy, and supporting targets, are consistent with obligations required under European legislation and support and complement other guidance and legal controls such as those set out in the Waste Management Licensing Regulations 1994; – help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations; – reflect the concerns and interests of communities, the needs of waste collection authorities, waste disposal authorities and business, and encourage competitiveness;

	<ul style="list-style-type: none"> - protect green belts but recognise the particular locational needs of some types of waste management facilities when defining detailed green belt boundaries and, in determining planning applications, that these locational needs, together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission; - ensure the design and layout of new development supports sustainable waste management.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	It is imperative that the WBMWDPD is line with Government policy on planning. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
Waste Management Plan for England – Consultation draft (2013)	
Web link	https://www.gov.uk/government/consultations/the-waste-management-plan-for-england
Overall aim or purpose	This 'Consultation draft' Plan provides an overview of waste management in England and fulfils the revised WFD Article 28 mandatory requirements, and other required content as set out in Schedule 1 to the Waste (England and Wales) Regulations 2011.
Objectives / Targets	<p>The Government position is set on pg 4:</p> <p>There are comprehensive waste management policies in England which taken together deliver the objectives of the revised Waste Framework Directive: to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and improving the efficiency of such use. It is not, therefore, the intention of the Plan to introduce new policies or to change the landscape of how waste is managed in England. Its core aim is to bring current policies under the umbrella of the one national plan.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	It is acknowledged that this document is in a draft format, however, it is imperative that the WBMWDPD is line with Government policy on planning. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

Minerals Planning Guidance 4: Revocation, modification, discontinuance, prohibition and suspension orders (1997)	
Web link	https://www.gov.uk/government/publications/revocation-modification-discontinuance-prohibition-and-suspension-orders-minerals-planning-guidance-4
Overall aim or purpose	Minerals Planning Guidance 4 (MPG4) gives guidance on the orders and effects of the Town and Country Planning (Compensation for Restrictions on Mineral Working and Mineral Waste Depositing) Regulations 1997.
Objectives / Targets	This document give guidance on the processes for revocation, modification, discontinuance, prohibition and suspension orders in the context of minerals development.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	It is imperative that the WBMWDPD is line with Government policy on planning. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

Minerals Planning Guidance 8: Planning and Compensation Act 1991 – Interim development order permissions (IDOS): statutory provisions and procedures	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7757/157464.pdf
Overall aim or purpose	The Planning and Compensation Act 1991 (the "1991 Act") received Royal Assent on 25 July 1991. With effect from 25 September 1991, the provisions of section 22 and Schedule 2 introduce new procedures for dealing with permissions for the winning and working of minerals or the depositing of minerals waste, originally granted under Interim Development Orders (IDOS). These were permissions granted after 21 July 1943 and before 1 July 1948, which have been preserved by successive planning Acts as valid planning permissions in respect of development which had not been carried out by 1 July 1948. They are referred to in the 1991 Act as "old mining permissions".
Objectives / Targets	This documents give guidance on the processes for the statutory provisions and procedures for mineral planning authorities in regard to the Planning and Compensation Act 1991 – Interim development order permissions (IDOS):
Implications for the West Berkshire Minerals and Waste Development Plan Document	It is imperative that the WBMWDPD is line with Government policy on planning. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

(WBMWDPD)	
Minerals Planning Guidance 9: Planning and Compensation Act 1991: interim development order permissions, conditions	
Web link	https://www.gov.uk/government/publications/planning-and-compensation-act-1991-interim-development-order-permissions-conditions-minerals-planning-guidance-9
Overall aim or purpose	Minerals Planning Guidance 9 (MPG9) gives advice on the considerations to be taken into account by applicants and minerals planning authorities in preparing and determining the conditions to which registered IDO permissions should be subject.
Objectives / Targets	This MPG gives advice on the considerations to be taken into account by applicants and mpas in preparing and determining the conditions to which registered permissions should be subject. It is for applicants in the first place to submit schemes of conditions for the consideration of the mpa, and for the mpa to determine whether the submitted conditions are acceptable or should be modified or added to in the light of the particular circumstances of the case and the following guidance. Applicants have a right of appeal to the Secretary of State against the imposition of unreasonable conditions. But in all cases, it is expected that applicants will seek to submit conditions which provide proper environmental protection and ensure that future operations are carried out to an acceptable standard having regard to the reasonable expectations of both residents and mineral operators.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	It is imperative that the WBMWDPD is line with Government policy on planning. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
Minerals Planning Guidance 14: Environment Act 1995: review of mineral planning permissions	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7738/155844.pdf
Overall aim or purpose	Minerals Policy Guidance 14 (MPG14) gives advice to mineral planning authorities and the minerals industry on the statutory procedures to be followed and the approach to be adopted to the preparation and consideration of updated planning conditions in the review process.

Objectives / Targets	The Environment Act 1995 introduced new requirements for an initial review and updating of old mineral planning permissions and the periodic review of all mineral permissions thereafter. The requirements will come into force on 1 November 1995. This guidance note gives advice to mineral planning authorities and the minerals industry on the statutory procedures to be followed and the approach to be adopted to the preparation and consideration of updated planning conditions in the review process.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	It is imperative that the WBMWDPD is line with Government policy on planning. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
Marine Mineral Guidance 1: Extraction by dredging from the English seabed (2002)	
Web link	https://www.gov.uk/government/publications/extraction-by-dredging-from-the-english-seabed-minerals-planning-guidance-1
Overall aim or purpose	Marine Mineral Guidance 1 (MMG1) provides a statement of the Government’s policies on the extraction of marine sand and gravel.
Objectives / Targets	<p>The Government wishes to see the continued use of marine dredged sand and gravel to the extent that this remains consistent with the principles of sustainable development. To achieve this, the dredging industry requires sufficient access to suitable long-term resources to meet its varied and fluctuating markets and to provide it with sufficient confidence to invest in new ships and wharves. At the same time, it is important that dredging activities do not significantly harm the environment or fisheries or unacceptably affect other legitimate uses of the sea.</p> <p>The Government believes this can be achieved by:</p> <ul style="list-style-type: none"> • minimising the total area licensed/permitted for dredging; • the careful location of new dredging areas; • considering all new applications in relation to the findings of an Environmental Impact Assessment (EIA) where such an assessment is required; • adopting dredging practices that minimise the impact of dredging; • requiring operators to monitor, as appropriate, the environmental impacts of their activities during, and on completion of, dredging; and • controlling dredging operations through the use of conditions attached to the dredging licence or dredging permission.
Implications for the West	It is imperative that the WBMWDPD is line with Government policy on planning. West Berkshire is a landlocked unitary area and

Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	therefore it has no coast where marine dredging would take place, however marine minerals are imported to West Berkshire. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
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Planning for Sustainable Waste Management: A Companion Guide to Planning Policy Statement 10	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7780/150805.pdf
Overall aim or purpose	The guide's principal aim is to assist in the delivery of the key planning objectives for waste management set out in PPS10. The document is a companion guide to be used alongside PPS10. It focuses on the 'how to', and does not set or interpret policy.
Objectives / Targets	The guide aims to assist: <ul style="list-style-type: none"> • regional planning bodies in the development of regional spatial strategies; • planning authorities in the preparation of local development documents; • planning authorities in the consideration of planning applications; and • potential developers in understanding the requirements of the spatial planning system for waste management.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	This is a companion guide to be used alongside PPS 10. It is imperative that the WBMWDPD is line with Government policy on planning. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

Securing the Future – Delivering UK Sustainable Development Strategy 2005	
Web link	https://www.gov.uk/government/publications/securing-the-future-delivering-uk-sustainable-development-strategy
Overall aim or purpose	Our Strategy for sustainable development aims to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations.
Objectives / Targets	The Strategy sets out UK principles for sustainable development: <ul style="list-style-type: none"> • Living Within Environmental Limits • Ensuring a Strong, Healthy and Just Society • Achieving a Sustainable Economy

	<ul style="list-style-type: none"> • Promoting Good Governance • Using Sound Science Responsibly
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The concept of sustainable development underpins the WBMWDPD This Strategy will be utilised in the SA in an informative capacity and in the form of recommendations

Climate Change: The UK Programme 2006	
Web link	http://jncc.defra.gov.uk/pdf/BRAG_CC_ClimateChangeTheUKProgramme.pdf
Overall aim or purpose	This Climate Change Programme sets out our Government policies and priorities for action in the UK and also internationally.
Objectives / Targets	<p>The UK Government will:</p> <ul style="list-style-type: none"> • build on the progress made at the G8 Summit in Gleneagles and the Montréal Climate Change Conference to strengthen the international regime to tackle climate change; • in partnership with the EU enhance our efforts to help India, China and other developing countries evolve as low-carbon economies; • work to build international consensus on the scale of global action needed to stabilise the climate and avoid dangerous climate change; • work with EU partners to secure agreement to further action in the EU, in particular strengthening the Emissions Trading Scheme beyond 2012 and making it the heart of a global carbon market; and • support international collaboration and coordination to ensure the successful expansion of new technologies, through action in key areas such as product standards and research development.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	As part of minerals development and waste development there is potential for emissions to contribute to climate change, and this has implications in the context of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

Air Quality Strategy: Working Together for Clean Air 2000 (updated 2007)	
Web link	http://www.scotland.gov.uk/Resource/Doc/1052/0051687.pdf

Overall aim or purpose	This document provides an overview and outline of the UK Government and devolved administrations' ambient (outdoor) air quality policy. It sets out a way forward for work and planning on air quality issues, details objectives to be achieved, and proposes measures to be considered further to help reach them.
Objectives / Targets	Standards and objectives were set for the following pollutants: <ul style="list-style-type: none"> - Benzene - 1,3 Butadiene - Carbon Monoxide (CO) - Lead (Pb) - Nitrogen Dioxide (NO2) - Fine Particulates (PM10) - Sulphur Dioxide (SO2)
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	As part of minerals development and waste development there is potential for emissions to contribute to climate change, and this has implications in the context of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

Strategic Environmental assessment and Biodiversity: Guidance for Practitioners (2004)	
Web link	http://www.rspb.org.uk/Images/SEA_and_biodiversity_tcm9-133070.pdf
Overall aim or purpose	This guidance aims to ensure that biodiversity considerations are appropriately addressed in Strategic environmental assessments.
Objectives / Targets	The guidance runs through the definition of SEA and its legal requirements, and the how biodiversity fits in. It explains step by step how biodiversity implications can be considered in SEA. The links between SEA and other procedures: sustainability appraisal, "appropriate assessment" under the Habitats Directive, and project environmental impact assessment are also examined.
Implications for the West Berkshire Minerals and Waste Development	As part of minerals and waste development there is potential for biodiversity to be negatively impacted upon, and this has implications in the context of sustainability. This document provides guidance specifically about biodiversity in the context of SEA. Therefore this document will be utilised to inform the process of the SA.

Plan Document (WBMWDPD)	
A Practical Guide to the Strategic Environmental Assessment Directive (2005)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf
Overall aim or purpose	This document provides Practical guidance on applying European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment”
Objectives / Targets	<p>The Guide includes sections on:</p> <ul style="list-style-type: none"> • Background and context of the Directive; • Consultation; • SEA and sustainable development; and • The steps in the SEA process. <p>The publication also includes answers to frequently asked questions, a glossary of SEA terms, a series of appendices on matters of detail, a Quality Assurance checklist, and the SEA Directive itself.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	This document provides practical guidance on how to implement the SEA Directive. Therefore this document will be utilised to inform the process of carrying out the SA.

UK Biodiversity Action Plan (BAP) 1992 – 2012 (1994)	
Web link	http://tna.europarchive.org/20110303145238/http://www.ukbap.org.uk/default.aspx
Overall aim or purpose	This was the UK Government’s response to the Convention on Biological Diversity (CBD), which the UK signed up to in 1992 in Rio de Janeiro. The UK BAP described the biological resources of the UK and provided detailed plans for conservation of these resources.
Objectives / Targets	Action plans for the most threatened species and habitats were set out to aid recovery, and national reports, produced every three- to five-years, showed how the UK BAP was contributing to the UK’s progress towards the significant reduction of

	biodiversity loss called for by the CBD.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	As part of minerals and waste development there is potential for biodiversity to be negatively impacted upon, and this has implications in the context of sustainability. This document provides guidance specifically about preventing biodiversity loss. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
The 'UK Post-2010 Biodiversity Framework' (July 2012)	
Web link	http://jncc.defra.gov.uk/pdf/UK_Post2010_Bio-Fwork.pdf
Overall aim or purpose	Since the publication of Conserving Biodiversity – the UK approach in 2007, strategic thinking in all the four countries within the UK pursued a direction away from a piecemeal approach dealing with different aspects of biodiversity and the environment separately, towards a new focus on managing the environment as a whole, with the true economic and societal value of nature properly acknowledged and taken into account in decision-making in all relevant sectors. International drivers also changed. In October 2010, 192 governments and the European Union came together in Nagoya, Aichi Province, Japan, to reach an historic agreement to take action to halt the alarming global declines of biodiversity. The resulting Strategic Plan for Biodiversity 2011-2020, with 5 strategic goals and 20 new global 'Aichi' targets setting a new global vision and direction.
Objectives / Targets	<p>The purpose of this UK Biodiversity Framework is to set a broad enabling structure for action across the UK between now and 2020:</p> <ul style="list-style-type: none"> i. To set out a shared vision and priorities for UK-scale activities, in a framework jointly owned by the four countries, and to which their own strategies will contribute. ii. To identify priority work at a UK level which will be needed to help deliver the Aichi targets and the EU Biodiversity Strategy. iii. To facilitate the aggregation and collation of information on activity and outcomes across all countries of the UK, where the four countries agree this will bring benefits compared to individual country work. iv. To streamline governance arrangements for UK-scale activity. <p>The vision for the CBD's Strategic Plan for Biodiversity 2011-2020 is:</p> <p>'By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people'.</p>
Implications for the West Berkshire Minerals and	As part of minerals and waste development there is potential for biodiversity to be negatively impacted upon, and this has implications in the context of sustainability. This document provides guidance specifically about preventing biodiversity loss.

Waste Development Plan Document (WBMWDPD)	Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
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Government forestry policy statement (January 2013)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/221023/pb13871-forestry-policy-statement.pdf
Overall aim or purpose	The statement sets out priorities for future policy-making, focused on protecting, improving and expanding public and private woodlands in England.
Objectives / Targets	Issues addressed include the future of the Public Forest Estate, woodland creation and management, the economic development of the forestry sector, community involvement in local woodlands and tree health.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	As part of minerals and waste development there is potential for loss of woodland and also for the planting of new woodland during restoration of sites, and this has implications in the context of sustainability. This document provides guidance specifically about protecting, improving and expanding public and private woodlands in England. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

The Carbon Plan: Delivering our low carbon future (2011)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/47613/3702-the-carbon-plan-delivering-our-low-carbon-future.pdf
Overall aim or purpose	This plan sets out how the UK will achieve decarbonisation within the framework of UK energy policy: to make the transition to a low carbon economy while maintaining energy security, and minimising costs to consumers, particularly those in poorer households.
Objectives / Targets	The Plan sets out key guiding principles: <ul style="list-style-type: none"> • We should always aim for the most cost effective means to achieve our aims. • A diverse portfolio of technologies, competing against each other for market share, can drive innovation and cost reduction.

	<ul style="list-style-type: none"> • Clear long-term signals about the regulatory framework can support cost reduction. • The Government should help to tackle market failures and unblock barriers to investment to encourage growth in newer technologies. • Costs must be distributed fairly
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development has the potential to contribute to the achievement of a low carbon economy in the UK within the framework of the UK energy market. This is intrinsically linked to the concept of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

Safe Guarding our soils: A strategy for England 2030 (2011)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69261/pb13297-soil-strategy-090910.pdf
Overall aim or purpose	This Strategy provides a clear vision to guide future policy development across a range of areas and sets out the practical steps that we need to take to prevent further degradation of our soils, enhance, restore and ensure their resilience, and improve our understanding of the threats to soil and best practice in responding to them.
Objectives / Targets	<p>This vision will mean that:</p> <ul style="list-style-type: none"> • agricultural soils will be better managed and threats to them addressed; • soils will play a greater role in the fight against climate change and in helping us to adapt to its impacts; • soils in urban areas will be sufficiently valued for the ecosystem services they provide and given appropriate weight in the planning system; • where development occurs, construction practices will ensure that vital functions can be maintained; and • pollution of soils is prevented and our historic legacy of contaminated land is being dealt with.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development has the potential to negatively impact on soils. Through careful management these ill-effects can generally be mitigated. This is intrinsically linked to the concept of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

The Natural Choice: Securing the Value of Nature (2011)	
Web link	http://www.official-documents.gov.uk/document/cm80/8082/8082.pdf

Overall aim or purpose	This White Paper places the value of nature at the centre of the choices our nation must make: to enhance our environment, economic growth and personal wellbeing.
Objectives / Targets	This White Paper attempts to mainstream the value of nature across our society by: <ul style="list-style-type: none"> • facilitating greater local action to protect and improve nature; • creating a green economy, in which economic growth and the health of our natural resources sustain each other, and markets, business and Government better reflect the value of nature; • strengthening the connections between people and nature to the benefit of both; and • showing leadership in the European Union and internationally, to protect and enhance natural assets globally.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development has the potential to negatively impact on nature. Through effective management or restoration minerals and waste development can be positive in terms of nature in the long term. This is intrinsically linked to the concept of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

Biodiversity 2020 – A Strategy for England’s Wildlife and Ecosystem Services (2011)	
Web link	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf
Overall aim or purpose	This strategy will guide conservation efforts in England over the next decade, including setting our ambition to halt overall loss of England’s biodiversity by 2020. In the longer term, the ambition is to move progressively from a position of net biodiversity loss to net gain.
Objectives / Targets	Key objectives include: <ul style="list-style-type: none"> • a more integrated large-scale approach to conservation on land and at sea; • putting people at the heart of biodiversity; • reducing environmental pressures; and • improving our knowledge
Implications for the West	Minerals and waste development has the potential to negatively impact on wildlife and ecosystems. Through careful management

Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	these ill-effects can generally be mitigated. This is intrinsically linked to the concept of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
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Regional Level

A Spatial Strategy for the South East – Policy NRM6: THAMES BASIN HEATHS SPECIAL PROTECTION AREA	
Web link	http://webarchive.nationalarchives.gov.uk/20100528142817/http://www.gos.gov.uk/497648/docs/171301/815607/815696/Pages_from_RSS-3_Section_B.pdf
Overall aim or purpose	The Thames Basin Heaths Special Protection Area (SPA) is designated under European Directive 79/409/EEC because of its populations of three heathland species of birds – Dartford Warbler, Nightjar and Woodlark. This designation covers parts of 15 local authority areas and three counties and is likely to have a major impact upon the potential for development within these areas and others adjoining it.
Objectives / Targets	New residential development which is likely to have a significant effect on the ecological integrity of Thames Basin Heaths Special Protection Area (SPA) will be required to demonstrate that adequate measures are put in place to avoid or mitigate any potential adverse effects. Such measures must be agreed with Natural England.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development has the potential to alter hydrology and hydrogeology which can impact on habitats of certain species, and this has implications in the context of sustainability. This policy is concerned with the protection of the Thames Basin Heaths Special Protection Area (SPA) which covers 15 local authority areas, downstream from West Berkshire. The River Thames and Kennet flow through West Berkshire, joining in Reading. It will be utilised in the SA from a strategic perspective and in the form of recommendations.

River Basin Management Plan for the Thames Basin District (2009)	
Web link	http://www.environment-agency.gov.uk/research/planning/125035.aspx
Overall aim or purpose	The Thames River Basin Management Plan is about the pressures facing the water environment in this river basin district, and the actions that will address them.

Objectives / Targets	<p>The plan describes the river basin district, and the pressures that the water environment faces. It shows what this means for the current state of the water environment, and what actions will be taken to address the pressures. It sets out what improvements are possible by 2015 and how the actions will make a difference to the local environment – the catchments, the estuaries and coasts, and the groundwater.</p> <p>Looking towards implementation, the plan highlights the programme of investigations to be undertaken. This will identify more actions, particularly those associated with diffuse pollution, for delivery during the first cycle. New national measures, made available by government, will also lead to additional improvements. At local level, the Environment Agency will be working closely with a wide variety of organisations and individuals, not only to deliver the commitments contained in the plan, but wherever possible to expand upon them for the benefit of the water environment.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	<p>Minerals and waste development has the potential to place pressure on water environments. Traditionally the sharp sand and gravel extraction has taken place along the Kennet Valley between Newbury and Reading. The Rivers Thames and Kennet flow through West Berkshire joining in Reading. This has implications in terms of sustainability and this document will therefore be utilised in the SA from a strategic perspective and in the form of recommendations.</p>

South East Biodiversity Strategy (2009)	
Web link	http://strategy.sebiodiversity.org.uk/data/files/SEBS/seebf_regional_stratweb.pdf
Overall aim or purpose	<p>The South East Biodiversity Strategy (SEBS) provides a coherent vision and framework for action. It seeks to both inspire those individuals, groups and bodies with the power and resources to make a difference to our biodiversity assets, and to provide guidance on where the best opportunities exist for action that will make a significant difference.</p>
Objectives / Targets	<p>The South East Biodiversity Strategy is a webbased resource which aims to:</p> <ul style="list-style-type: none"> • Be a clear, coherent and inspiring vision for the South East • Provide a framework for the delivery of biodiversity targets that guide and support all those who have an impact on biodiversity in the region • Embed a landscape scale approach to restoring whole ecosystems in the working practices and policies of all partners • Create the space needed for wildlife to respond to climate change • Enable all organisations in the South East to support and improve biodiversity across the region • Be a core element within the strategies and delivery plans of organisations across the South East region
Implications for the West	<p>Minerals and waste development has the potential to negatively impact on biodiversity. Through effective management or</p>

Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	restoration minerals and waste development can be positive in terms of biodiversity in the long term. This is intrinsically linked to the concept of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
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County Level

Replacement Minerals Local Plan for Berkshire incorporating Alterations adopted 1997 and May 2001 (1995)	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=29264&p=0
Overall aim or purpose	This is the current Berkshire wide policy document to provide a basis on which to make recommendations and decisions on planning applications to extract minerals in the County.
Objectives / Targets	<p>The main issues addressed in the plan are:</p> <ul style="list-style-type: none"> • How much mineral should be dug in Berkshire? • Where should extraction be allowed? • Where should extraction not be allowed? • What should be the objectives for the restoration of future mineral workings? • How can we ensure that mineral working is carried out in the least damaging way? • How can mineral working be used to secure long term environmental and other public benefits? • How much mineral may have to be brought into Berkshire from elsewhere? • Where might depots be located to allow minerals to be brought in by rail?
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	This is the current policy used at a local level to make recommendations and decisions on planning applications to extract minerals in West Berkshire. Therefore this document will be useful for the SA in a contextual and informative capacity.

Waste Local Plan for Berkshire 1998	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=29266&p=0
Overall aim or purpose	This is the current Berkshire wide policy document to provide a basis on which to make recommendations and decisions on planning applications for waste development in the County.
Objectives / Targets	<ul style="list-style-type: none"> • To provide a framework within which the public, businesses and waste industry of Berkshire can contribute towards a sustainable strategy for dealing with waste; • To reduce the amount of waste requiring disposal (by reducing the amount of waste we produce and re-using and recycling as much as possible); and • To ensure that the handling, treatment and disposal of the remaining waste is carried out with the minimum effect upon the environment
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	This is the current policy used at a local level to make recommendations and decisions on planning applications for waste development in West Berkshire. Therefore this document will be useful for the SA in a contextual and informative capacity.

North Wessex Downs AONB Integrated Landscape Character Assessment Technical Report	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=6701&p=0
Overall aim or purpose	The assessment takes a comprehensive and coherent approach to the characterisation of the AONB landscape The North Wessex Downs AONB.
Objectives / Targets	<p>This report involved five main stages, namely:</p> <ul style="list-style-type: none"> – Data Collation; – Characterisation; – Survey; – Integration and Analysis; – Consultation. <p>It is intended to guide and shape the future character of the North Wessex Downs.</p>

Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste developments have the potential to have long term and permanent visual impacts, impacting on the character of the landscape. This may have implications in the context of sustainability. This Assessment has characterised the landscape of the AONB which covers a large proportion of West Berkshire. It will be utilised to inform the SA and in the form of recommendations.
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Berkshire Landscape Character Assessment	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=30237&p=0
Overall aim or purpose	This Character Assessment was undertaken to broaden the understanding of the Berkshire landscape to aid the JSPU in formulating development plan policy and targeting future management initiatives.
Objectives / Targets	<p>This report involved five main stages, namely:</p> <ul style="list-style-type: none"> - Data Collation; - Characterisation; - Survey; - Integration and Analysis; - Consultation. <p>It is intended to guide and shape the future character of Berkshire.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste developments have the potential to have long term and permanent visual impacts, impacting on the character of the landscape. This may have implications in the context of sustainability. This Assessment has characterised the landscape of Berkshire of which West Berkshire is part. It will be utilised to inform the SA and in the form of recommendations.

The Berkshire Biodiversity Strategy (2012)	
Web link	http://berkshirelnp.org/index.php/what-we-do/strategy
Overall aim or purpose	To take a strategic view of the challenges and opportunities for the natural environment across Berkshire. This is being done

	primarily through the identification of Biodiversity Opportunity Areas (BOAs) and the delivery of conservation action within these areas.
Objectives / Targets	<p>There are 29 Biodiversity Opportunity Areas (BOAs) in Berkshire - these make up a total area of 48,112 hectares, a large proportion of which is in West Berkshire.</p> <p>BOAs identify where the greatest opportunities for habitat creation and restoration lie, enabling the efficient focusing of resources to where they will have the greatest positive conservation impact.</p> <p>Berkshire biodiversity targets, which have evolved from previous Habitat Action Plans, are set out on the national Biodiversity Action Reporting System (BARS) website. These Berkshire-wide targets have been allocated to individual BOAs.</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development has the potential to negatively impact on biodiversity. Through effective management or restoration minerals and waste development can be positive in terms of biodiversity in the long term. This is intrinsically linked to the concept of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.

West Berkshire Council Strategy 2013 - 17	
Web link	http://www.westberks.gov.uk/index.aspx?articleid=8993
Overall aim or purpose	Sets out the Council's priorities and a realistic set of objectives that can be delivered over the next four years. The strategy's overarching vision is: Keeping West Berkshire a great place in which to live, learn, work and do business.
Objectives / Targets	<p>The strategy sets out four key priority areas which are underpinned by a set of universal principles to guide how the council are responding to the changes in policy, financial and legislative landscape. The four priority area are:</p> <ul style="list-style-type: none"> • Caring for and protecting the vulnerable • Promoting a vibrant district • Improving education • Protecting the environment
Implications for the West Berkshire Minerals and	The Council Strategy sets out the Council's priorities for the next four years. Therefore, from a sustainability perspective it is crucial that the WBMWDPD is in line with the Council Strategy.

Waste Development Plan Document (WBMWDPD)	
West Berkshire Strategic Flood Risk Assessment (SFRA)	
Web link	http://www.westberks.gov.uk/index.aspx?articleid=16930
Overall aim or purpose	A Strategic Flood Risk Assessment has been produced for West Berkshire, in consultation with the Environment Agency, to inform the preparation of the Local Development Framework.
Objectives / Targets	The primary purpose of the SFRA is to determine the variation in flood risk across the District. The SFRA is a technical document that will be submitted to the Secretary of State with the submission of the Core Strategy.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development can permanently alter the hydrology and hydrogeology of the land. Minerals development can potentially be carried out in the flood plain, while waste development is generally not considered to be compatible with the flood plain. Flooding will have implications in terms of sustainability. Therefore, from a sustainability perspective this SFRA will be useful in informing the WBMWDPD.
The Adopted West Berkshire Core Strategy (2012)	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=31506&p=0
Overall aim or purpose	It sets out a long term vision for West Berkshire to 2026 and translates this into spatial terms, setting out proposals for where development will go, and how this development will be built. The Core Strategy provides an overall framework for the more detailed policies and site specific proposals to be contained in other documents of the Local Plan.
Objectives / Targets	<p>1. Tackling Climate Change To exceed national targets for carbon dioxide emissions reduction and deliver the District's growth in a way that helps to adapt to and mitigate the impacts of climate change.</p> <p>2. Housing Growth To deliver at least 10,500 homes across West Berkshire between 2006 – 2026. These homes will be delivered in an effective and timely manner, will maximise the use of suitable brownfield land and access to facilities and services and will be developed at densities which make the most efficient use of land whilst responding to the existing built environment.</p> <p>3. Housing Needs</p>

	<p>To secure provision of affordable and market housing to meet local needs in both urban and rural areas of the District. To provide homes in a way that promotes sustainable communities, providing a mix of house sizes, types and tenures to meet identified needs, and respond to the changing demographic profile of the District.</p> <p>4. Economy To provide for a range of sizes and types of employment land and premises in the right locations to respond to the forecast changes in economic activity, the location of new residential development and the specific needs of the rural economy, including the equestrian and horseracing industries.</p> <p>5. Infrastructure Requirements To ensure that infrastructure needs (including community services and facilities) arising from the growth in West Berkshire are provided in a timely and coordinated manner, which keeps pace with development in accordance with the detail set out in the Infrastructure Delivery Plan.</p> <p>6. Green Infrastructure To ensure that West Berkshire contains a strong network of well-connected and multi-functional green infrastructure which provides an attractive environment to live, work and spend leisure time, providing benefits for health and opportunities for formal and informal recreation.</p> <p>7. Transport To put in place a sustainable transport network which supports the growth in West Berkshire, links existing and new development, prioritises walking, cycling and public transport and provides a genuine choice of modes. Traffic management measures will minimise the impact of new development on the existing network.</p> <p>8. Retail To achieve growth in retail activity and consequent increase in the vitality and vibrancy of town centres in West Berkshire. To meet the range of shopping needs for residents and visitors largely through the completion of the Parkway development and through the regeneration of Thatcham town centre. To provide for local shopping need in town, district and local centres to serve the needs of existing and future residents.</p> <p>9. Heritage To ensure that development to 2026 is planned, designed and managed in a way that ensures the protection and enhancement of the local distinctive character and identity of the built, historic and natural environment in West Berkshire's towns, villages and countryside.</p>
Implications for the West	The Core Strategy provides an overall framework for the more detailed policies and site specific proposals to be contained in

Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	other documents of the Local Plan, one of which is the WBMWDPD. Therefore, from a sustainability perspective it is crucial that the WBMWDPD is in line with the Core Strategy.
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West Berkshire District Local Plan 1991-2006 (Saved Policies 2007)	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=31615&p=0
Overall aim or purpose	The West Berkshire District Local Plan includes detailed policies and specific proposals to guide planning decisions. The remaining policies are those that were saved in September 2007 and were not superseded by policies in the Core Strategy.
Objectives / Targets	<ul style="list-style-type: none"> • To protect and enhance the urban and rural environment through the control of future development and through positive environmental improvement measures. • To secure as sharp a decrease as possible in house building rates, in order to limit the hitherto progressive urbanisation of the County and enable the provision of adequate services and infrastructure for the existing and future population; and to direct such development as is necessary to those areas which can best accommodate it and where services can most economically be provided. • To maintain and enhance the County's generally buoyant local economy.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	It should be noted that the Local Plan was introduced in 1993 and at this stage only the 'Saved Policies' apply. The objectives may not be as relevant to the situation today as they would have been twenty years ago. This will provide context and inform the SA.

Statement of Community Involvement (2006)	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=6982&p=0
Overall aim or purpose	The Statement of Community Involvement (SCI) for West Berkshire clearly sets out our policy for involving the community in: <ul style="list-style-type: none"> – the preparation and revision of planning policy documents and – in the consideration of planning applications within the District.
Objectives / Targets	Within this overall Vision the Council has established its objectives for community involvement, aiming

	<p>to:</p> <ul style="list-style-type: none"> – Build on what has worked successfully in West Berkshire in meeting the needs of local communities, whilst looking forward to new ways of involving local people, particularly those seen as hard to engage. – Learn from the experience of others in achieving community involvement, but ensuring that the local circumstances of West Berkshire remain our primary concern. – Work with existing groups or partners within the community, particularly the voluntary sector, to maximise potential and add value where we can
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The SCI sets out West Berkshire Council’s policy for involving the community in the preparation and revision of planning policy documents. The WBMWDPD will be prepared in line with the requirements of the SCI. This will help to bring to light relevant sustainability issues.
Local Transport Plan for West Berkshire 2011 - 2026	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=27344&p=0
Overall aim or purpose	<p>Sets out the Council’s transport policy framework. West Berkshire's vision for transport is:</p> <p>"to develop effective transport solutions for all by increasing choice and minimising congestion".</p> <p>This means delivering a transport system which supports the economic vitality of West Berkshire, as well as providing choice and opportunities for residents to be able to access the services they need in a sustainable way where possible that minimises harm to the environment. For transport solutions to be effective, transport networks need to be managed in a way which promotes safety and minimises the existence and impacts of congestion.</p>
Objectives / Targets	<ul style="list-style-type: none"> – To improve travel choice and encourage sustainable travel – To support the economy and quality of life by minimising congestion and improving reliability on West Berkshire’s transport networks; – To maintain, make best use of and improve West Berkshire’s transport networks for all modes of travel; – To improve access to services and facilities; – To improve and promote opportunities for healthy and safe travel; – To minimise energy consumption and the impact of all forms of travel on the environment.
Implications for the West	Minerals and waste development will always generate transport movements. It should be ensured that the WBMWDPD has

Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	regard to the vision and objectives of the Plan. West Berkshire is geographically diverse with a mix of rural and urban areas, each with its own set of issues and opportunities. The LTP uses the same spatial approach as the Core Strategy: Newbury & Thatcham, The Eastern Area, The North Wessex AONB and The East Kennet Valley
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Local Transport Plan for West Berkshire 2011 – 2026 – Active Travel Strategy	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=29679&p=0
Overall aim or purpose	This Strategy aims to increase the number of people who take part in Active Travel. Active Travel is the term given to any mode of travel which involves a degree of physical activity. This includes Walking and Cycling, and in West Berkshire Equestrian activities.
Objectives / Targets	<ul style="list-style-type: none"> – Promote better public health and well-being by increasing levels of physical activity, particularly among the most inactive people in our society – Increase accessibility and reduce congestion – Improve air quality and reduce carbon emissions
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	The restoration of mineral and landfill sites can potentially provide opportunities for walking and cycling paths as well as bridleways which can contribute to the objectives of this Strategy. It should be ensured that the WBMWDPD has regard to the vision and objectives of this Strategy.

Sustainable Community Strategy – A Breath of Fresh Air (2008) (Incorporating draft refresh 2009)	
Web link	http://www.westberks.gov.uk/index.aspx?articleid=14060
Overall aim or purpose	The purpose of the Sustainable Community Strategy is to set out a clear vision and direction for West Berkshire over the 20 years from 2008, which will focus on improving the social, economic and environmental wellbeing of the District in partnership with key local stakeholders. 'A Breath of Fresh Air' provides an overarching strategy for improving local quality of life in West Berkshire. This document outlined the progress and changes within the Partnership in the previous year and highlighted the work for the next 12 months.
Objectives / Targets	The Strategy identifies five key themes as follows: <ul style="list-style-type: none"> - Prosperous

	<ul style="list-style-type: none"> - Accessible - Greener - Safer - Stronger
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development can have economic, social, and environmental impacts. These impacts can have implications in terms of sustainability. The aim and key themes should be reflected in the WBMWDPD throughout the plan-making process and after its adoption. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
Newbury Vision 2025 (2003)	
Web link	Not found
Overall aim or purpose	This document set out West Berkshire's long-term Vision for Newbury and the role that it has to play in supporting the surrounding villages and rural area for the period 2003-2025. The Vision considered the town centre in terms of four major quarters; Urban Village Quarter, Cultural quarter, Primary Retail Quarter & Mixed Use Quarter. The identification of these quarters was against clearly defined individual town centre projects and development opportunities such as the Parkway and Market Street redevelopments.
Objectives / Targets	<ul style="list-style-type: none"> • Character - to build on Newbury's unique historic character and identity. • Quality of our public spaces - to create a centre with attractive and successful outdoor areas. • Ease of movement - a place that is easy to get to and move around. • Diversity - a place with variety and choice. • Legibility - a place that has a clear image and is easy to understand. • Adaptability - a place that can change easily. • Continuity and enclosure - a place where public and private spaces are clearly distinguished.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Development within urban centres will potentially generate demand for aggregates, and waste. This will potentially have an impact on the level of extraction at mineral sites in West Berkshire and put pressure on waste management facilities in West Berkshire. This may have implications in terms of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations. This will be reflected in the WBMWDPD throughout the plan-making process and after its adoption.

Draft Newbury Vision (2026) refresh (2013)	
Web link	http://www.westberks.gov.uk/CHttpHandler.ashx?id=33642&p=0
Overall aim or purpose	The 2013 Vision refresh does not simply exist as a rewrite of the 2003 document. Its aim is to reflect on what has been achieved, highlight new challenges and acknowledge that the landscape is very different from 2003. The Vision refresh refocuses on those unresolved issues which remain relevant and, through further and wider public consultation, aims to capture more of the same energy and drive that has been shown in delivering achievements to date. This draft document continues to set out West Berkshire's long-term Vision for Newbury but it now encompasses a wider area than the immediate town centre.
Objectives / Targets	<ul style="list-style-type: none"> • Character - to build on Newbury's unique historic character and identity. • Quality of our public spaces - to create a centre with attractive and successful outdoor areas. • Ease of movement - a place that is easy to get to and move around. • Diversity - a place with variety and choice. • Legibility - a place that has a clear image and is easy to understand. • Adaptability - a place that can change easily. • Continuity and enclosure - a place where public and private spaces are clearly distinguished.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Development within urban centres will potentially generate demand for aggregates, and waste. This will potentially have an impact on the level of extraction at mineral sites in West Berkshire and put pressure on waste management facilities in West Berkshire. This may have implications in terms of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations. This will be reflected in the WBMWDPD throughout the plan-making process and after its adoption.
Kennet and Thames Vision (2006)	
Web link	http://www.westberks.gov.uk/index.aspx?articleid=1413
Overall aim or purpose	The 'Vision for Kennet and Thames' sets out West Berkshire Council's long-term Vision for the Kennet and Thames area and the role the Council and Members play in supporting the development of the area and its residents. The 'Kennet and Thames' is the eastern area of the district of West Berkshire. It is primarily the suburban areas although includes some more rural areas on the urban fringe.
Objectives / Targets	Three main themes have been identified as the focus for this Vision - Enhancing Community Facilities; Improving Transportation and; Housing and Social Care.

<p>Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)</p>	<p>Development within the Kennet and Thames area will potentially generate demand for aggregates, and waste. This will potentially have an impact on the level of extraction at mineral sites in West Berkshire and put pressure on waste management facilities in West Berkshire. This may have implications in terms of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations. This will be reflected in the WBMWDPD throughout the plan-making process and after its adoption.</p>
<p>Housing Strategy 2010 – 2015 (2010)</p>	
<p>Web link</p>	<p>http://www.westberks.gov.uk/index.aspx?articleid=14727</p>
<p>Overall aim or purpose</p>	<p>The Council adopted a new 5-year Housing Strategy in 2010. The Strategy was developed in consultation with key stakeholders, local agencies and residents, and sets out:</p> <ul style="list-style-type: none"> • The Housing Vision for the district • The District's key Housing Aims • The reasoning behind these aims • The most pressing areas for action over the next 5 years • The resources that are available, how they will be used and how additional funds will be levered in • A summary of recent performance • An Action Plan, including targets, against which we and others can judge our performance and the timetables we have set for achieving those targets.
<p>Objectives / Targets</p>	<p>Through consultation, the vision for the district was housing services that:</p> <ul style="list-style-type: none"> • Provide Quality housing • Deliver Appropriate housing services- meeting a range of needs, tenures and sizes, with high levels of accessibility to reflect people's changing needs • Are Affordable - not just in terms of our housing costs but also in respect of running costs • Offer Support - to ensure that vulnerable households are able to sustain their homes • Are Sustainable - in terms of the environment, community and meeting future needs; and • Are Safe and Secure - building communities that are inclusive and where people have a sense of belonging. <p>The actions identified within this Housing Strategy will reflect, and contribute towards achievement of, this vision. In particular, the Council will prioritise activities that contribute to the following:</p>

	<ul style="list-style-type: none"> • Prevention of homelessness by early and proactive intervention • Provision of new affordable housing to meet urgent and immediate identified needs • Green and Sustainable activities that reduce fuel poverty and minimise domestic CO2 emissions • Focus on meeting the needs of our Rural Communities • Partnership working to maximise efficiencies, deliver holistic solutions and share risks • Performance management to monitor, review and improve our delivery of the action plan
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Housing development in West Berkshire will potentially generate demand for aggregates, and waste. This will potentially have an impact on the level of extraction at mineral sites in West Berkshire and put pressure on waste management facilities in West Berkshire. This may have implications in terms of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations. The contents of the document will be reflected in the WBMWDPD throughout the plan-making process and after its adoption.

North Wessex Downs AONB Management Plan (2004)	
Web link	http://www.northwessexdowns.org.uk/About-Us/aonb-management-plan.html
Overall aim or purpose	This document is the statutory Management Plan for the nationally designated and protected landscape of the North Wessex Downs AONB, as required under the Countryside and Rights of Way (CROW) Act 2000. It is a plan for all those that have a responsibility to look after this precious and treasured landscape.
Objectives / Targets	<ul style="list-style-type: none"> • To maintain and enhance the distinctive landscape character of the North Wessex Downs. • To raise the profile of the North Wessex Downs AONB. • To encourage initiatives that facilitate sustainable land management. • To encourage diverse and viable agriculture, forestry, horseracing and other land based enterprises that support the delivery of a wide range of public benefits, including; <ul style="list-style-type: none"> -the conservation and enhancement of the area's special qualities and features; -the provision of access opportunities; and -support for local markets.

	<ul style="list-style-type: none">• To create a diverse rural skills base to support traditional and emerging land based enterprises that enhance the special qualities and features of the North Wessex Downs.• To ensure that the characteristic habitats and species of the North Wessex Downs are conserved and enhanced.• To enhance the protection, management and setting of the archaeological and historic features, sites and landscapes that characterise the North Wessex Downs.• To promote an increased level of awareness, use and enjoyment of the historic and cultural fabric of the North Wessex Downs.• To realise the potential value of the Historic Environment data.• To conserve and improve the quality and depth of soils in the North Wessex Downs.• To ensure that the water environment, including fisheries is sustainably managed.• To encourage appropriate development that meets the economic and housing needs of the AONB and surrounding communities• To ensure that the formulation and implementation of planning policies across the North Wessex Downs takes full account of the purposes of designation and the character and quality of the AONB and its setting.• To promote a sustainable rural economy• To enable vibrant communities to develop sustainably in the North Wessex Downs by stimulating economic prosperity and local culture.• To encourage an enhanced sense of ownership and respect for the distinctive character of the North Wessex Downs amongst local people• To provide transport that is more sustainable and meets the needs of residents and visitors of the North Wessex Downs• To ensure that everyone has the opportunity to access and enjoy the special qualities of the North Wessex Downs while
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	<p>minimising the impacts of visitors</p> <ul style="list-style-type: none"> To promote a recreation and tourism sector that is well managed, sustainable and adding value to the local economy whilst respecting the special qualities of the North Wessex Downs.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	This is the Management Plan for the nationally designated and protected landscape of the North Wessex Downs AONB which covers a large proportion of West Berkshire. Minerals and waste developments have the potential to have long term and permanent visual impacts, impacting on the character of the landscape. This may have implications in terms of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations. The contents of the document will be reflected in the WBMWDPD throughout the plan-making process and after its adoption.
West Berkshire Historic Environment Character Zoning Project 2008	
Web link	http://www.westberks.gov.uk/index.aspx?articleid=13297
Overall aim or purpose	The West Berkshire Historic Environment Character Zoning (HECZ) project set out to study and map the district according to its man-made character. The aim was to provide a more comprehensive account of the historic environment resource, so that the valuable and non-renewable archaeological and historic features can be better understood and better cared for into the future.
Objectives / Targets	<p>The project was carried out because our knowledge of West Berkshire's historic environment was incomplete and in some cases outdated, and that this lack of understanding of the resource posed a threat to its appreciation and sympathetic management.</p> <p>Although the Historic Landscape Characterisation (HLC) project had provided district-wide information on past and present land-use, it was not part of its scope to consider archaeology. The HECZ work addressed this by carrying out a critical assessment of the Historic Environment Record, examining the archaeological data and analysing it against information on relief, drainage, geology, soils and patterns in HLC.</p> <p>The result of this process was the division of the district into 20 Historic Environment Character Areas (HECAs), which were further subdivided into 91 Historic Environment Character Zones (HECZs).</p>
Implications for the West Berkshire Minerals and Waste Development Plan Document	Minerals and waste development has the potential to negatively impact on the historic environment. The HECZ will be a valuable resource during preparation of the WBMWDPD in terms of minimising the detrimental impacts on the valued historical characteristics of West Berkshire.

(WBMWDPD)	
West Berkshire Historic Environment Action Plan.2011	
Web link	http://www.westberks.gov.uk/index.aspx?articleid=22062
Overall aim or purpose	A Historic Environment Action Plan (HEAP) has been drawn up for all those interested in the man-made heritage of West Berkshire.
Objectives / Targets	The Plan sought to highlight what is special and important about the local historic environment, to examine what the key challenges are, to explore what opportunities might exist in the coming years and to establish what the priorities for action should be. The HEAP is for all those interested in the historic environment of West Berkshire.
Implications for the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD)	Minerals and waste development has the potential to negatively impact on the historic environment. The HEAP will be a valuable resource during preparation of the WBMWDPD in terms of minimising the detrimental impacts on the valued historical characteristics of West Berkshire.

Minerals and Waste neighbouring

<p>Oxfordshire Minerals and Waste Local Plan 1996 - 2006 (Saved Policies 2007) Wiltshire and Swindon Minerals Local Plan - Saved Policies Wiltshire and Swindon Minerals Core Strategy (2009) Wiltshire and Swindon Waste Core Strategy (2009) Wiltshire and Swindon Minerals Development Control Policies (2009) Wiltshire and Swindon Waste Development Control Policies (2009) Wiltshire and Swindon Minerals Site Allocations (2013) Wiltshire and Swindon Waste Site Allocations (2012) Hampshire Minerals and Waste Plan (found sound by Inspector subject to some main modifications) (2013) Hampshire, Portsmouth, Southampton and New Forest National Park Minerals and Waste Core Strategy (2007) Hampshire, Portsmouth, Southampton Minerals and Waste Local Plan – Saved Policies</p>	
Web link	See relevant council website:

	<p>http://www.oxfordshire.gov.uk/cms/ http://www.wiltshire.gov.uk/index.htm http://www.swindon.gov.uk/Pages/Home.aspx http://www.hants.gov.uk/ http://www.portsmouth.gov.uk/ http://www.southampton.gov.uk/ http://www.newforestnpa.gov.uk/</p>
Overall aim or purpose	<p>These policy documents generally set out the vision, objectives, spatial strategy and core policies for meeting minerals and waste development requirements in the relevant authority area.</p>
Objectives / Targets	<p>They generally provide a policy framework for making decisions on planning applications and will also identify broad (and in some cases specific) locations for new minerals and waste development.</p> <p>Generally, these are the main issues that have come out of neighbouring authorities' minerals development plan documents:</p> <ul style="list-style-type: none"> • Meeting locally determined requirements for supply of minerals and make an appropriate contribution to wider needs. • Enable a continued supply of building stone for locally distinctive buildings and structures. • Provide a framework that is clear and flexible • Facilitate the economically and environmentally secondary and recycled materials for use in place of primary aggregates. • Consider flood risk • Minimise the distance minerals need to be transported by road and encourage alternatives • Protect important landscapes, and ecological, geological, archaeological and heritage assets from harmful impacts of mineral development and transportation. • Provide benefits to natural environment and local communities through the restoration of mineral workings • Safeguard resources of sand and gravel, crushed rock

	<ul style="list-style-type: none"> • Safeguard permanent facilities for producing secondary and recycled aggregate and for importing aggregates by rail. <p>Generally, these are the main issues that have come out of neighbouring authorities' waste development plan documents:</p> <ul style="list-style-type: none"> • Provide for waste management capacity that enables the authority area to be net self-sufficient in meeting its own waste needs and makes an appropriate contribution towards wider specialist waste needs; • Support initiatives that help to reduce the amounts of waste produced • Drive waste up the Waste hierarchy • Manage waste as close as possible to where it arises • Generally provide a broad distribution of facilities • Recognise that some types of waste management facility will need to serve a wider area due to economics. • Recognise that waste management is an integral part of community infrastructure • In some cases seeking to reduce the amount of waste coming into the relevant authority area to be landfilled • Avoid the loss of green field land and do not cause unnecessary harm to the natural and built environment. • Promote sustainable waste practice in construction and demolition work including minimising waste, managing waste on site, recycling construction waste as aggregate, • Facilitate the recovery of resources from waste and take advantage of opportunities for the use of combined heat and power. • Achieve satisfactory restoration of landfill sites and other temporary waste management sites when they are no longer required
<p>Implications for the West Berkshire Minerals and</p>	<p>More or less minerals and waste development in neighbouring authority areas could potentially have an impact on development pressures and level of extraction in West Berkshire. It is acknowledged that the majority of planning authorities that deal with</p>

Waste Development Plan Document (WBMWDPD)	'county matters' are attempting to be 'net self-sufficient' in terms of waste and maintain a steady and adequate supply of minerals in line with the NPPF. This may have implications in terms of sustainability. Therefore these documents will be utilised in the SA in an informative capacity and in the form of recommendations.
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General planning matters (Non minerals and waste)

South Oxfordshire Core Strategy (to 2027)- Adopted (December 2012) South Oxfordshire Local Plan 2011 – Saved Policies (January 2006) Vale of White Horse Local Plan 2011 – Saved Policies (July 2006) Vale of White Horse Local Plan 2029 – Consultation ended May 2013 (February 2013) The Vale Community Strategy 2008-2016 (2008) Wiltshire Core Strategy 2026 – submission stage (July 2012) South Wiltshire Core Strategy – Adopted (February 2012) Wiltshire and Swindon Structure Plan 2016 – Saved Policies (April 2006) Swindon Borough Local Plan 2011 – Saved Policies (July 2006) Swindon Borough Local Plan 2026 – Submission Stage 9 June 2013) Kennet Local Plan 2011 – Saved Policies (April 2004, saved Sept 2007) Revised Test Valley Borough Local Plan (February 2013) Test Valley Borough Local Plan 2006 – Saved Policies (2006, saved March 2009) Basingstoke and Deane Borough Local Plan (1996 – 2011) – Saved Policies (July 2006, saved July 2009) Hart District Council Local Plan (Replacement, Incorporating 'First Alterations 2006') 1996-2006 – Saved Policies (2002, Saved Sept 2007) Hart District Council Core Strategy – Submission stage, hearings completed (July 2013) Wokingham District Local Plan – Saved Policies (March 2004, Saved Sept 2007) Wokingham Borough Core Strategy (Adopted) (January 2010) Reading Borough Local Plan (1991-2006) – Saved Policies (1998, Saved Sept 2007) Reading Borough Core Strategy (January 2008) Reading Central Area Action Plan (2009) Reading Proposals Map (2012) Reading 2020 – Making it Happen, Community Strategy (2004)	
Web link	See relevant council website:

	<p>http://www.southoxon.gov.uk/ http://www.whitehorsedc.gov.uk/ http://www.wiltshire.gov.uk/index.htm http://www.swindon.gov.uk/Pages/Home.aspx www.testvalley.gov.uk/ http://www.basingstoke.gov.uk/ http://www.hart.gov.uk/ http://www.wokingham.gov.uk/ http://www.reading.gov.uk/</p>
<p>Overall aim or purpose</p>	<p>These policy documents generally set out long term visions for the relevant authority area and translates them into spatial terms, setting out proposals for where development will go, and how this development will be built.</p>
<p>Objectives / Targets</p>	<p>Generally speaking within the various policy documents topics such as:</p> <ul style="list-style-type: none"> • Tackling Climate Change; • Housing; • Economy; • Infrastructure Requirements; • Green Infrastructure; • Transport; • Retail; and • Heritage <p>are considered, and then proposals for what kind of development will be developed where, and how it will be built, are put forward.</p>
<p>Implications for the West Berkshire Minerals and</p>	<p>Development in neighbouring authority areas could potentially generate demand for aggregates, and waste. This will potentially have an impact on the level of extraction at mineral sites in West Berkshire and may put additional pressure on waste</p>

Waste Development Plan Document (WBMWDPD)	management facilities in West Berkshire. It is acknowledged however, that the majority of planning authorities that deal with 'county matters' are attempting to be 'net self-sufficient' in terms of waste and maintain a steady and adequate supply of minerals in line with the NPPF. This may have implications in terms of sustainability. Therefore this document will be utilised in the SA in an informative capacity and in the form of recommendations.
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West Berkshire Minerals and Waste Development Plan Document

SA/SEA Scoping Report

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Introduction

1. The purpose of this Baseline Report (hereafter referred to as the 'baseline report') is to support the Sustainability Appraisal Scoping Report being undertaken as part of the development of the West Berkshire Minerals and Waste Development Plan Document (WBMWDPD). The report documents key evidence and sustainability issues relevant to the delivery of the WBMWDPD.
2. The baseline report considers the West Berkshire plan area. The report seeks to describe the current state of plan areas various environmental aspects, and the likely future conditions of West Berkshire's environment should no plan be put in place. The report draws upon a vast amount of evidence gained through research, and makes use of national, regional, and local studies, plans and programmes, in order to gain a comprehensive baseline of evidence. The report also draws upon specific areas that may be significantly affected as a result of no plan being put in place, and where applicable looks past the physical boundary of the plan area. Areas where baseline information has been difficult to obtain, as well as challenges identified for the Plan, are highlighted throughout the report. As the SA/SEA process continues alongside the development of the WBMWDPD the information will be continuously reviewed and updated as necessary.
3. This report looks at various aspects of the environment which needs to be considered as part of the Sustainability Appraisal. The baseline report covers key environmental, social, and economic/material assets. The Environmental issues covered are: climatic factors; biodiversity and geodiversity; landscape and townscape; soils; cultural heritage (including architectural and archaeological heritage); air; water (including flooding, water quality and water resources); noise pollution; and light pollution. Social issues that are covered are human health; and other social considerations (including population, education, housing, deprivation, crime and safety). Economic / material asset issues include transport; renewable energy; minerals; waste; and other economic considerations.

Environmental

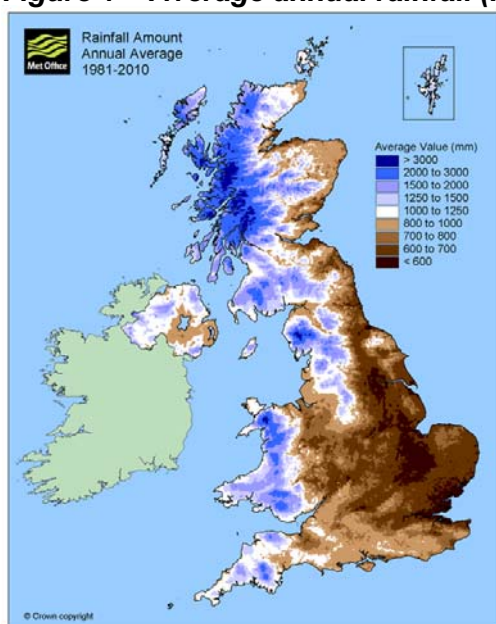
Climatic Factors

4. This section considers climate change in relation to possible impacts on West Berkshire. Climate change refers to the long-term change in average weather patterns affecting any region or the Earth as whole. The evidence supporting climate change, and that man-made emissions are its main cause, is strong and indisputable. Greenhouse gases, or emissions, 'trap' energy radiated by the Earth within the atmosphere and include carbon dioxide (CO₂), methane, nitrous oxide and fluorinated gases. CO₂ is the main greenhouse gas in the UK.
5. The World Meteorological Organization (WMO) requires the calculation of averages for consecutive periods of 30 years, with the latest covering the 1961-1990 period. However, many WMO members, including the UK, update their averages at the completion of each decade. Thirty years was chosen as a

period long enough to eliminate year-to-year variations. These averages help to describe the climate and are used as a base to which current conditions can be compared.

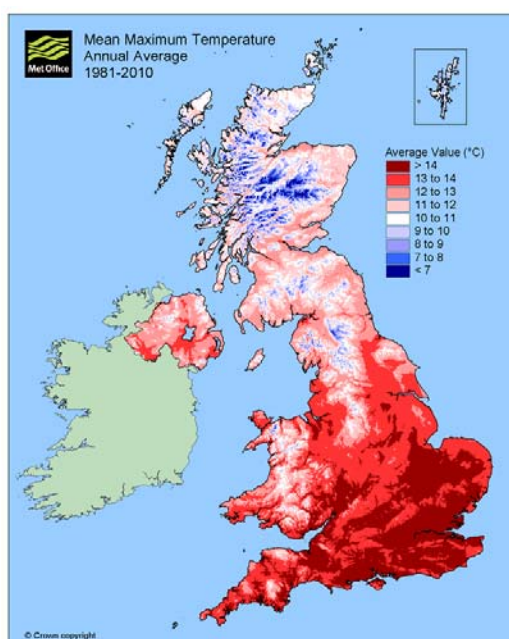
6. Changing weather patterns may be seen as direct indicators of climate change. The Met Office's average figures for the South East of England (South East and Central South) for 1981-2010 indicate that minimum daily temperatures ranged from 1.4°C in February to a minimum of 12.2°C in July, while maximum temperatures ranged from 7.5°C in January to 22.0°C in July. Average monthly rainfall in the South East varies from 51.7mm in July to 92.8mm in October with an average annual total of 787.6mm.

Figure 1 – Average annual rainfall (mm) 1981–2010



Source: Met Office (Crown copyright). www.metoffice.gov.uk

Figure 2 – Average annual maximum temp. (°C) 1981-2010



Source: Met Office (Crown copyright). www.metoffice.gov.uk

7. The next set of climate change scenarios for the UK is known as UKCIP08⁶. The climate of the United Kingdom and recent trends⁷ is the first in the UKCIP08 series of reports. Its summary of the main findings are:
- Warming of the global climate system is unequivocal, with global average temperatures having risen by nearly 0.8 °C since the late 19th century, and rising at about 0.2 °C/decade over the past 25 years.
 - It is very likely that man-made greenhouse gas emissions caused most of the observed temperature rise since the mid 20th century.
 - Global sea-level rise has accelerated between mid-19th century and mid-20th century, and is now about 3mm per year. It is likely that human activities have contributed between a quarter and a half of the rise in the last half of the 20th century.
 - Central England Temperature has risen by about a degree Celsius since the 1970s.
 - Temperatures in Scotland and Northern Ireland have risen by about 0.8 °C since about 1980, but this rise has not been attributed to specific causes.
 - Annual mean precipitation over England and Wales has not changed significantly since records began in 1766. Seasonal rainfall is highly variable, but appears to have decreased in summer and increased in winter, although with little change in the latter over the last 50 years.
 - All regions of the UK have experienced an increase over the past 45 years in the contribution to winter rainfall from heavy precipitation events; in summer all regions except NE England and N Scotland show decreases.
 - Severe windstorms around the UK have become more frequent in the past few decades, though not above that seen in the 1920s.
 - Sea-surface temperatures around the UK coast have risen over the past three decades by about 0.7 °C.
 - Sea level around the UK rose by about 1mm/yr in the 20th century, corrected for land movement. The rate for the 1990s and 2000s has been higher than this.

Likely future trends without implementation of the WBMWDPD

8. Understanding and adapting to the realities of climate change will be one of the challenges the District will be faced with. Climate change scenarios for the UK (UKCIP02) provide the best information on which to form an understanding of climate change, it shows that it is expected to be more pronounced in the South East than in any other UK region.
9. Nationally it is estimated that there will be an annual warming by the 2080s of between 1 and 5 °C, with greater summer warming in the south-east than the north-west, and with greater warming in summer and autumn than in winter and spring. Over the same period, although annual rainfall totals are not expected to show much change, winters are expected to be up to 30% wetter than at present, and summers up to 50% drier⁸.

⁶ UK 21st Century Climate Scenarios, UK Climate Impacts Programme, 2008.

⁷ The climate of the United Kingdom and recent trends, Geoff Jenkins, Matthew Perry and John Prior, Hadley Centre, Met Office, Exeter (December 2007)

⁸ UKCIP02 Climate Change Scenarios for the UK, UK Climate Impacts Programme, www.ukcip.org.uk.

10. A changing climate will bring about more storms, heavier rain, stronger winds and more summer heat-waves. It will have an impact on the landscape and our lifestyles; rare wildlife habitats and species may be threatened by the changing climate; farming could suffer from more pests, worse soil erosion and a decrease in agricultural land; more intense rain, rising sea levels and wetter soils will increase flood risk; and water supplies will be affected along with our demands made on them.
11. In West Berkshire the primary sources of emissions that will contribute to climate change are and will be CO₂ emissions from: 'site operations' (i.e. plant/machinery for winning and working of mineral or the processing of waste); and also from the transportation of minerals (including recycled aggregate) and waste. It is accepted that 'site operations' relating to minerals and waste is likely to continue and so too is the transportation of minerals and waste. The WBMWDPD presents an opportunity to encourage the use of sustainable transport for minerals and waste development, and also to promote the development of cleaner waste-related technologies (that result less harmful emissions). If the WBMWDPD was not implemented, this benefit could be forfeited.
12. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing challenges for the WBMWDPD

13. The UK is likely to see more extreme weather events, including hotter and drier summers, flooding and rising sea-levels increasing the risk of coastal erosion. Planning should contribute to reducing emissions and stabilising climate change and take every opportunity to minimise the unavoidable consequences.
14. The impact on climate change from CO₂ emissions from minerals and waste developments are from two sources. There is the operation itself which in the case of mineral extraction and/or processing is from the machinery involved in extracting, crushing and/or sorting the primary or secondary aggregates. For waste developments this will also result from machinery that sorts, processes or treats waste. Another significant source of CO₂ emissions is in the transport of the material to and from the facilities which generally is via lorries. There is also considerable potential for methane emissions from landfill operations. Energy from Waste (EFW) development will also emit CO₂ however arguably this would be offset by reducing demand for fossil fuels in electricity production.
15. To reduce resource consumption, the use of recycled materials should be encouraged and the energy use, water consumption and waste produced per unit should be reduced.
16. Waste management is vulnerable to the impact of extreme weather, from collection through to disposal. Climate change will impact the way waste will need to be managed in future, and will also change the risks associated with waste. This may, for example, mean storing waste differently as a rise in temperature may increase odour and breakdown of waste and result in increased pest problems.
17. The need to build more waste management facilities in West Berkshire provides the opportunity to locate and design facilities to be more resilient to extreme

weather. Floodplains and groundwater will need to be considered when identifying sites for waste management sites as the river catchments in West Berkshire face predicted increases in flooding.

18. Climate change may also lead to potential changes in the profile and volume of municipal waste in West Berkshire. The volume of waste from flood damaged homes for example could overwhelm the capacity of the local waste services following severe flooding. Extreme weather events may also affect vegetation growth and lead to an increase in the total volume of green waste to be managed.
19. Opportunities for the co-location of minerals and waste sites should always be considered along with the possibility of intermodal transport opportunities, such as rail, river/canal and road, to help reduce the amount of emissions released by transport in West Berkshire.

Biodiversity and Geodiversity

20. This section looks at biodiversity and geodiversity. Biodiversity is concerned with the number and variety of species found within a specified geographic region. Geodiversity is quite different to biodiversity, and is associated with the variety of rocks, minerals, fossils, soils, landforms and natural processes.

Biodiversity

21. The District has a number of designated sites of international, national, regional and local conservation importance:
 - **Special Areas of Conservation (SAC):** River Lambourn, floodplains of Rivers Kennet and Lambourn, and Kennet Valley Alderwoods.
 - **Sites of Special Scientific Interest (SSSI):** West Berkshire currently has 51 SSSIs (1,348.9 ha)⁹. See the list of West Berkshire's SSSIs and associated information below.
 - **Special Protection Areas (SPA):** There are none in West Berkshire, however the south eastern corner of the District (around the village of Beech Hill) falls within the 5km zone of the Thames Basin Heath SPA.
 - **Local Nature Reserves:** There are three sites within the District, these are Thatcham Reed Beds, Hose Hill Lake, Burghfield, and Padworth Common.
 - **Wildlife Heritage Sites (WHS):** There are 508¹⁰ sites (6,401.69 ha) designated for their Wildlife Heritage in west Berkshire.
 - **Other sites:** West Berkshire has a rich range of habitats including hedgerows, veteran trees and wildlife corridors as well as conservation verges which are managed differently to normal verges and are sympathetic to the wildlife that flourishes on them. In addition, smaller extant features, which form a mosaic of fragmented sites throughout the area, are important when considered as a whole and connections to and between such sites are also of great value.
 - **Protected species:** The water vole is Britain's fastest declining mammal. The Thames region is one of the country's strongholds for the animal and even here the decline has been dramatic. Farmland still supports large numbers of birds, but great changes have occurred to the management of farmland over the past 30 years and a downward trend can be seen.

⁹ English Nature, 2007

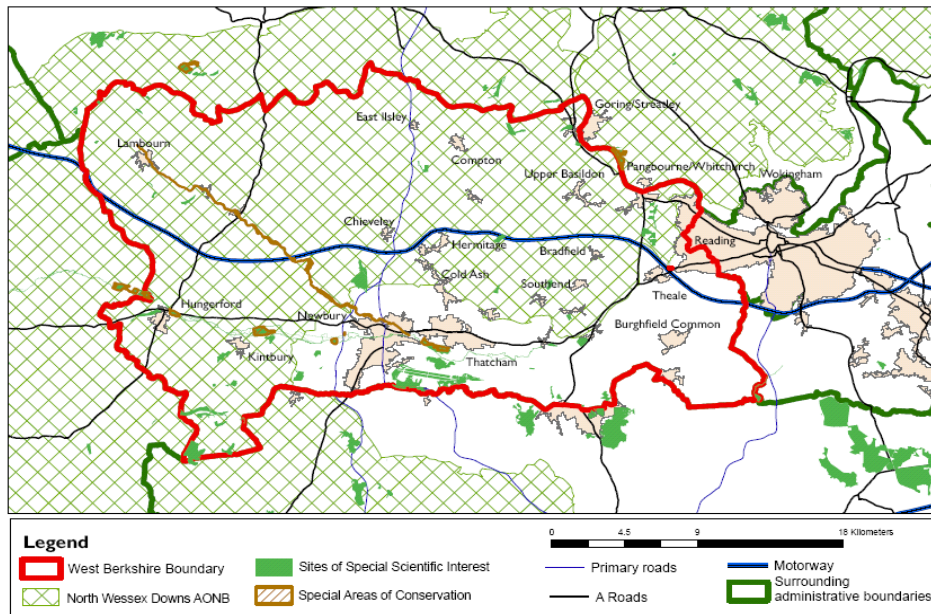
¹⁰ Thames Valley Environmental Records Centre (TVERC), 2007

Table 1 – SSSIs in West Berkshire

SSSI_NAME	CONDITION	Condition Nov 2013	Reason for designation	Habitat
Aldermaston Gravel Pits	UNFAVOURABLE RECOVERING	Unfavourable recovering	Biological	Lake & Wet Woodland
Ashridge Wood	UNFAVOURABLE RECOVERING	Unfavourable recovering	Biological	Ancient Woodland
Avery's Pightle	UNFAVOURABLE RECOVERING	Unfavourable recovering	Biological	Meadow
Bowdown & Chamberhouse Woods	UNFAVOURABLE RECOVERING	favourable	Biological	Ancient Woodland
Boxford Chalk Pit	FAVOURABLE	44% favourable, 55% unfavourable declining	Geological	Geological
Boxford Water Meadows	FAVOURABLE	Unfavourable recovering	Biological	Wet Grassland
Briff Lane Meadows	FAVOURABLE	84% favourable. 15% unfavourable Recovering	Biological	Neutral Grassland
Brimpton Pit	FAVOURABLE	favourable	Geological	Geological
Catmore & Winterly Copses	FAVOURABLE	favourable	Biological	Ancient Woodland
Chilton Foliat Meadows	UNFAVOURABLE NO CHANGE	78% unfavourable Recovering, 18% favourable. 4.4% unfavourable no change	Biological	Wet Grassland
Cleeve Hill	FAVOURABLE	favourable	Biological	Chalk Grassland
Cold Ash Quarry	FAVOURABLE	Unfavourable recovering	Geological	Geological
Combe Wood & Linkenholt Hanging	FAVOURABLE	favourable	Biological	Ancient Woodland
Coombe Wood, Frilsham	UNFAVOURABLE NO CHANGE	Unfavourable recovering	Biological	Ancient Woodland
Croker's Hole	FAVOURABLE	Unfavourable recovering	Biological	Chalk Grassland
Decoy Pit, Pools & Woods	UNFAVOURABLE RECOVERING	55% favourable, 45% unfavourable recovering	Biological	Pools & Wet Woodland
Easton Farm Meadow	FAVOURABLE	Unfavourable recovering	Biological	Neutral Grassland
Enborne Copse	UNFAVOURABLE NO CHANGE	Unfavourable recovering	Biological	Ancient Woodland
Fognam Chalk Quarry	FAVOURABLE	favourable	Geological	Geological
Freeman's Marsh	UNFAVOURABLE RECOVERING	48% favourable, 52% unfavourable recovering	Biological	Wet Grassland & Reedbed
Greenham & Crookham Commons	FAVOURABLE	72% unfavourable Recovering, 17% unfavourable no change, 10% favourable	Biological	Ancient Woodland & Heathland
Hamstead Marshall Pit	UNFAVOURABLE DECLINING	Unfavourable recovering	Geological	Geological
Hogs Hole	FAVOURABLE	favourable	Biological	Chalk Grassland
Holies Down	FAVOURABLE	favourable	Biological	Chalk Grassland
Inkpen & Walbury Hills	UNFAVOURABLE RECOVERING	92% favourable, 8% unfavourable Recovering	Biological	Chalk Grassland & Ancient

Inkpen Common	FAVOURABLE	88% unfavourable recovering, 12% favourable	Biological	woodland
Inkpen Crocus Fields	FAVOURABLE	favourable	Biological	Heathland
Irish Hill Copse	FAVOURABLE	favourable	Biological	Neutral Grassland
		69% favourable, 30% unfavourable recovering, 1%		Ancient Woodland
Kennet & Lambourn Floodplain	UNFAVOURABLE DECLINING	unfavourable no change	Biological	Wet Marsh
Kennet Valley Alderwoods	FAVOURABLE	favourable	Biological	Alder Woodlands
King's Copse	FAVOURABLE	favourable	Biological	Ancient Woodland
Lardon Chase	FAVOURABLE	favourable	Biological	Chalk Grassland
Old Copse, Beenham	FAVOURABLE	favourable	Biological	Ancient Woodland
Parkfarm Down	FAVOURABLE	favourable	Biological	Chalk Grassland & Lichens
Pincent's Kiln	FAVOURABLE	favourable	Geological	Geological
Redhill Wood	UNFAVOURABLE NO CHANGE	Unfavourable recovering	Biological	Ancient Woodland
River Kennet	UNFAVOURABLE NO CHANGE	unfavourable no change	Biological	Chalk Stream
River Lambourn	UNFAVOURABLE DECLINING	unfavourable no change	Biological	Chalk Stream
Seven Barrows	FAVOURABLE	Unfavourable recovering	Biological	Chalk Grassland
Snelsmore Common	UNFAVOURABLE RECOVERING	34% favourable, 65% unfavourable recovering	Biological	Wet Heath & Ancient Woodland
Stanford End Mill & River Loddon	FAVOURABLE	favourable	Biological	Wet Grassland & Chalk Stream
Streatley Warren	FAVOURABLE	favourable	Biological	Chalk Grassland
Sulham & Tidmarsh Woods & Meadows	FAVOURABLE	favourable	Biological	Ancient Woodland & Wet Grassland
Thatcham Reed Beds	FAVOURABLE	favourable	Biological	Reed Beds
Wasing Wood Ponds	FAVOURABLE	favourable	Biological	Ponds & Marsh
West Woodhay Down	UNFAVOURABLE RECOVERING	55% favourable, 45% unfavourable recovering	Biological	Chalk Grassland
Westfield Farm Chalk Bank	FAVOURABLE	favourable	Biological	Chalk Grassland
West's Meadow, Aldermaston	FAVOURABLE	favourable	Biological	Neutral to Acidic Grassland
White Shute	FAVOURABLE	favourable	Biological	Chalk Grassland
Winterbourne Chalk Pit	FAVOURABLE	favourable	Geological	Geological
Woolhampton Reed Bed	UNFAVOURABLE RECOVERING	unfavourable declining	Biological	Reed Beds

Figure 3 – Location of SSSIs and SACs in relation to West Berkshire and the North Wessex downs AONB.

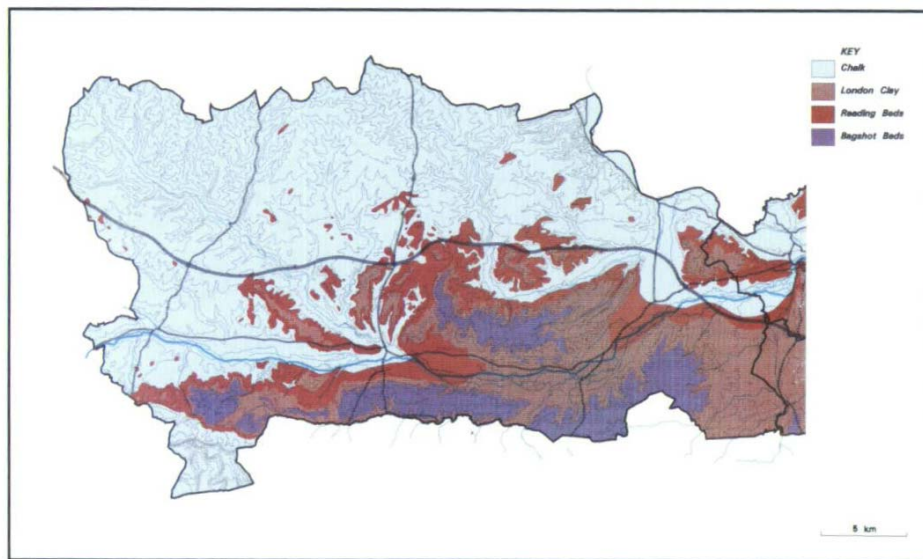


(not to scale)

Geodiversity

22. The main elements of West Berkshire’s underlying geology are Chalk, London Clay, Reading and Bagshot Beds (see Figure 4). In many areas alluvial deposits and plateau gravels are superimposed upon this geology. Chalk underlays much of the area covered by the AONB, while the Bagshot Beds are found to the south of the District stretching from the west to the east. The London Clay and Reading Beds are located in areas between the Chalk and the Bagshot Beds. Please see Figure 17 in the Minerals section for underlying and overlying geology in West Berkshire.

Figure 4 – Solid geology of West Berkshire.



Solid Geology

(not to scale)

Source: Newbury District Wide Landscape Assessment, Landscape Design Associates, 1993.

23. Rushall Farm Pit is currently the only Regionally Important Geological/Geomorphological Site (RIGS) in West Berkshire. Others are still to be designated, although some SSSIs have been identified for their geomorphological value.

Likely future trends without implementation of the WBMWDPD:

24. When the RMLP was adopted, it was considered that the Preferred Areas were capable of supplying the levels of provision set out for the Plan period. Therefore outside the Preferred Areas there is a presumption against planning permission being granted. RMLP 11 goes further, specifically stating that there will be the strongest presumption against allowing the extraction of sharp sand and gravel from the North Wessex Downs AONB. Out of the 8 Preferred Areas, 6 have been worked, and the other two are not likely to be worked. Policy 10(i) indicates that an exception to the presumption against extracting sand and gravel outside the Preferred Areas could be if there is a need to disturb particular pieces of land in order to maintain levels of production set out in Policy 3 (2.3 mtpa) or the landbank figure set out in Policy 4 (7 years).
25. With regard to 'soft sand' policy 15 of the RMLP indicates that LPAs can grant permission for extraction of up to 150,000 tpa from within the AONB, provided that Policies 6, 7, 10, 11 and 13 are given due consideration. RMLP 15 was written prior to AONBs being given the same level of landscape protection status as the National Park designation. The Countryside and Rights of Way Act 2000 (CROW Act 2000) introduced new measures for the protection of AONBs in line with those provided to National Parks by the Environment Act 1995.
26. The NPPF would not be supportive of RMLP 15 in the context of granting permission for the extraction of 150,000 tonnes of building sand per year from the AONB. Para 144 states that when determining planning applications LPAs should:
27. *"... as far as is practical, provide for the maintenance of landbanks of nonenergy minerals from outside National Parks, the Broads, Areas of Outstanding Natural Beauty and World Heritage sites, Scheduled Monuments and Conservation Areas;"*
28. This policy conflicts with the NPPF specifically in regard to considering the acceptability of mineral extraction in the AONB. Therefore, in order to adequately protect the AONB and to comply with the NPPF it is considered necessary to update the policies.
29. Due to the lack of available Preferred Areas that are potentially suitable for waste development, there is potential for proposals to come forward to meet the waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may be negative for biodiversity and geodiversity.
30. Climate change is likely to have substantial implications on biodiversity and ecosystems including an increase in surface temperature, increase in sea level

and temperature and changes in weather patterns. As a result of this climate change is forecasted to be the main driver in changing biodiversity, the predicted changes could include species distribution, population sizes, habitat loss and the timing of reproduction or migration events¹¹

31. The Berkshire Biodiversity Partnership has produced a Berkshire Biodiversity Strategy which identifies habitats and species of particular importance for Berkshire, together with topics and issues that require specific action. Biodiversity Opportunity Areas (BOAs) have been identified throughout the South East. Working with the Thames Valley Environmental Records Centre, West Berkshire Council has identified 17 Biodiversity Opportunity Areas. The Council will be concentrating its efforts to improve biodiversity corridors and stepping stones between existing LWS and other valuable habitats in these areas. Berkshire biodiversity targets, which evolved from previous Habitat Action Plans have been allocated to individual BOAs, where conservation efforts will be focused. The West Berkshire Living Landscape is on the edge of Newbury and Thatcham, and includes Greenham Common, Thatcham Reedbeds and BBOWT's (Berks, Bucks, & Oxon Wildlife Trust) Bowdown Woods Nature Reserve.
32. In terms of how West Berkshire scores for managing its conservation sites (according to the Single data list 160.00) the proportion of Local Sites where positive conservation management has been or is being implemented in 2010/11 was 43% which is just below the National average at 46%.
33. Development of minerals and waste sites has the potential to cause fragmentation or direct loss of habitat and its dependant species. Indirect effects on habitats and species may arise through hydrological changes, noise disturbance, or air, dust, light, odour or water pollution. However, development also provides many opportunities for enhancement of biodiversity, through habitat improvement and creation, and long term management. Worked mineral and waste sites can be restored to meet planning objectives, including the improvement of biodiversity as part of aftercare and restoration schemes. This may include the creation of 'ecological networks' linking important habitats.
34. The identification of such sites is of importance to enable people to understand their local geology and what has formed the landscape of West Berkshire. While there are no hard rock deposits to study in the area, there are sites which have leaf fossils, which allow us to identify what plants were growing in Berkshire hundreds of thousands of years ago.
35. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing challenges for the WBMWDPD

36. There are 51 SSSIs and 3 SACs located in West Berkshire. West Berkshire's relatively high area of designated land can restrict potential sites for minerals and waste development. The potential impact on important habitats and species in neighbouring authorities will also have to be taken into account, particularly where sites are located close to the authority boundary.

¹¹ http://www.cms.int/publications/pdf/CMS_CimateChange.pdf

37. Suitable provision in terms of policies will be required in order that if the situation arises where features of geological value are uncovered at a mineral extraction site adequate time is given for their assessment, protection, or removal where relevant.

Landscape and Townscape

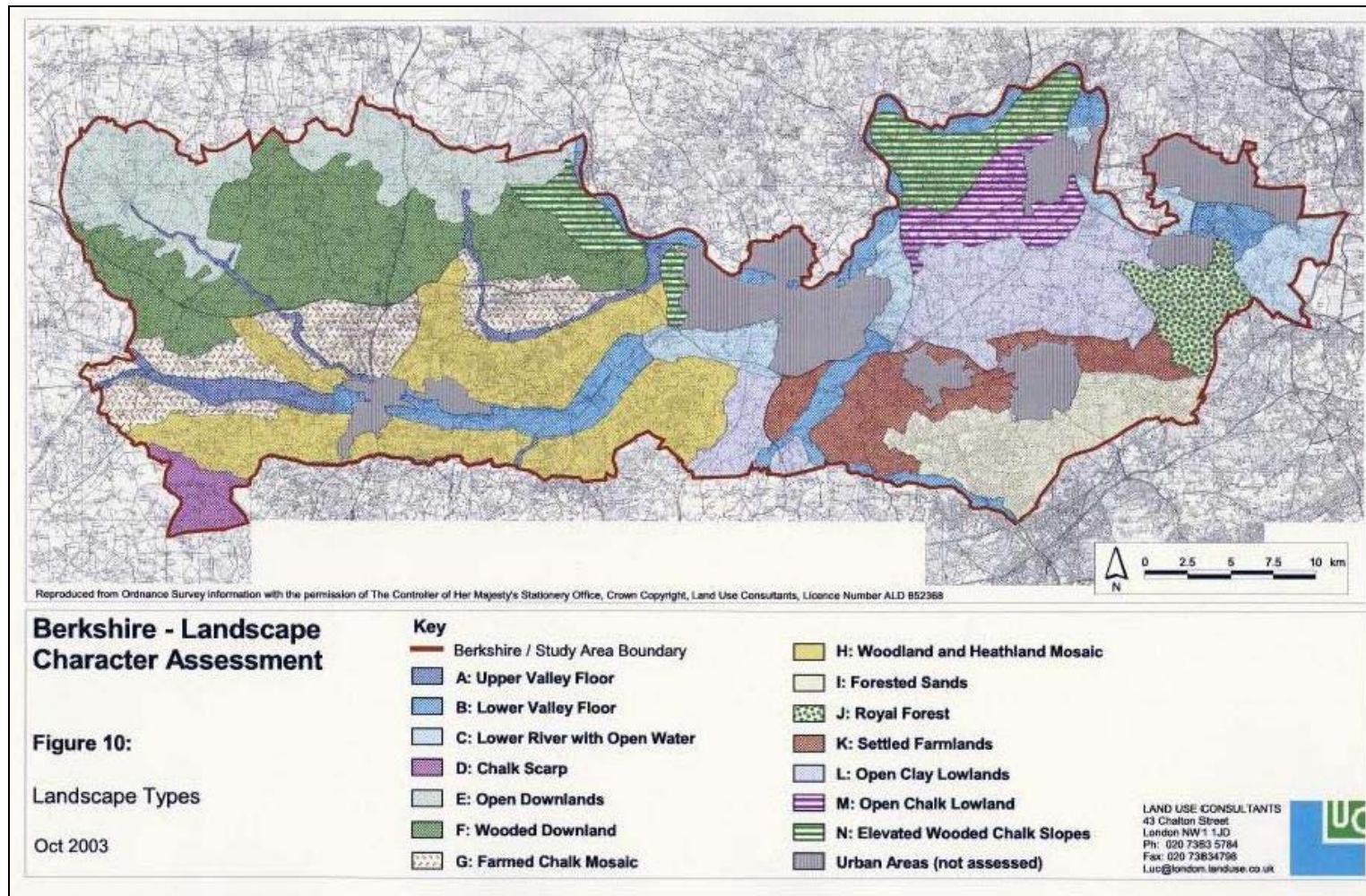
38. This section is concerned with West Berkshire's landscape. West Berkshire's landscape is exceptional in terms of the national significance of its built, natural and historic environment. This is reflected in the establishment of the North Wessex Downs AONB.
39. A broad definition of landscape is set out in the European Landscape Convention (ELC) "landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". It is important to understand what is meant by 'landscape' as Landscape is the context for, and consequence of, decision-making and provides the spatial framework through which we plan and manage change¹². The WBMWDPD and its provisions have the potential to have a direct or indirect impact on landscape and townscape.
40. Nearly three quarters of West Berkshire is within the North Wessex Downs Area of Outstanding Natural Beauty (AONB), a landscape of the highest national importance. Within the AONB the diversity and mix of landscapes ranges from the high large scale rolling chalk downland with its intensive arable farming to small hamlets clustered along fast chalk streams and floodplain with lush wetland vegetation associated with the River Kennet.
41. The District can be divided into five national Countryside Character Areas, these are Thames Basin Heaths (in the south), Hampshire Downs, Berkshire and Marlborough Downs (in the north), Chilterns (in the north-east) and Thames Valley (in the south-east)¹³.
42. The Berkshire Landscape Character Assessment¹⁴ (2003) identifies 14 landscape types which are subdivided into potential character areas.

¹² Natural England 'Guidelines for implementing the European Landscape Convention (2009)

¹³ The Character of England Landscape, Wildlife and Cultural Features Map, Natural England, 2005

¹⁴ Berkshire Landscape Character Assessment, Joint Strategic Planning Unit, 2003.

Figure 5 – Berkshire Landscape Character Assessment

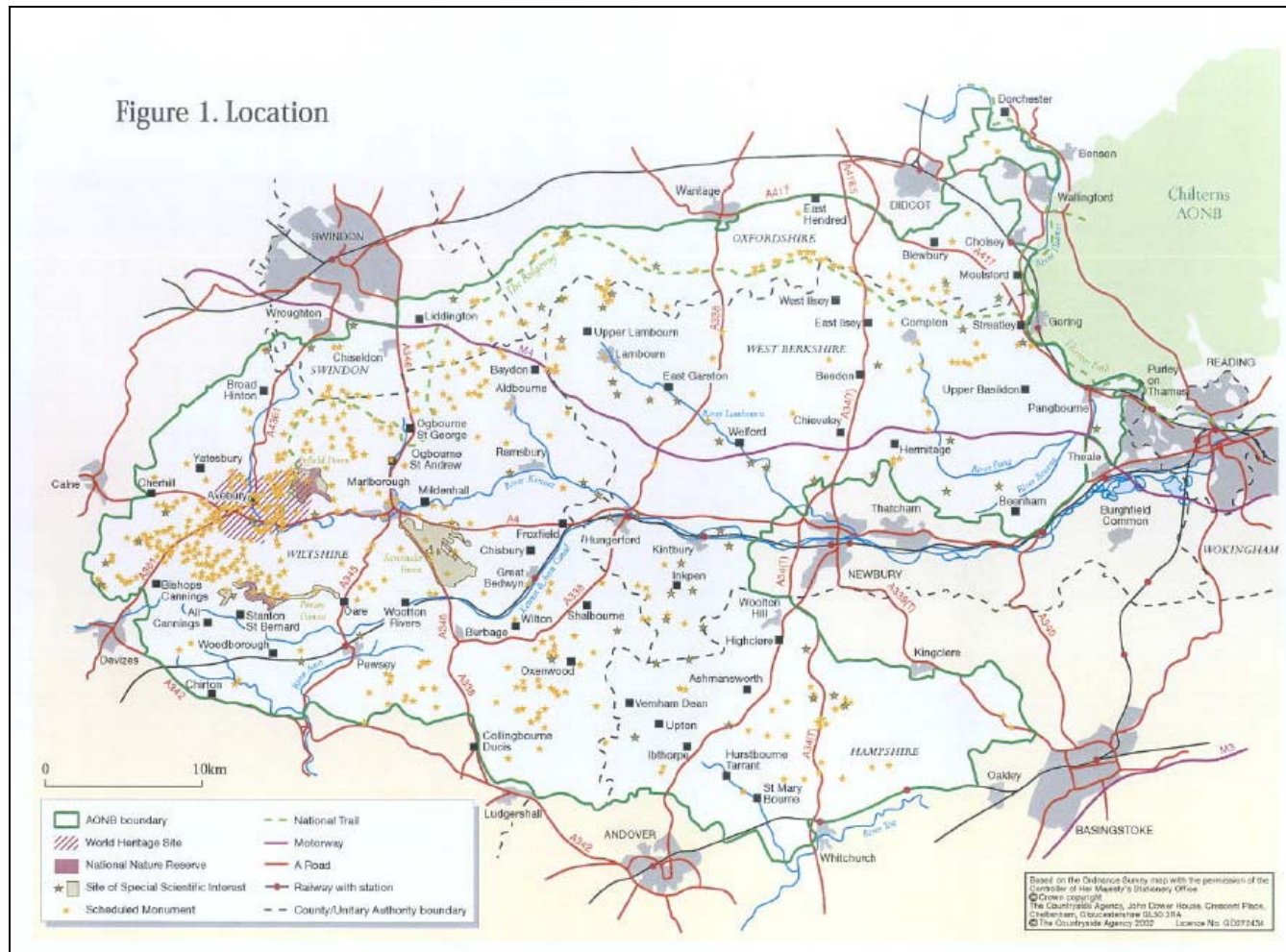


(not to scale) Source: Berkshire Landscape Character Assessment, 2003

43. 74% of West Berkshire lies within the North Wessex Downs Area of Outstanding Natural Beauty which is a landscape of national importance. Within the AONB the diversity and mix of landscapes include¹⁵: Chalk Upland; Chalk Dipslopes and Lowland and Chalk with Tertiary or Gravel Deposits; Western Wooded Chalkland; Lambourn Valley; Pang Valley; Kennet Valley; Thames Valley; Wooded Lowland Farming; Gravel Plateau Woodlands with Pastures and Heaths; Plateau-edge Transitional Matrix; London Clay with Gravel Ridges; Small scale Wooded Valley Farmland; Large scale Valley Farmland; Parkland.

¹⁵ North Wessex Downs AONB Integrated Landscape Character Assessment, 2002

Figure 6 – Map showing the location of the North Wessex Downs AONB



Source: North Wessex Downs AONB www.northwessexdowns.org.uk, 2005. (Not to scale)

Likely future trends without implementation of the WBMWDPD:

44. When the RMLP was adopted, it was considered that the Preferred Areas were capable of supplying the levels of provision set out for the Plan period. Therefore outside the Preferred Areas there is a presumption against planning permission being granted. RMLP 11 goes further, specifically stating that there will be the strongest presumption against allowing the extraction of sharp sand and gravel from the North Wessex Downs AONB. Out of the 8 Preferred Areas, 6 have been worked, and the other two are not likely to be worked. Policy 10(i) indicates that an exception to the presumption against extracting sand and gravel outside the Preferred Areas could be if there is a need to disturb particular pieces of land in order to maintain levels of production set out in Policy 3 (2.3 mtpa) or the landbank figure set out in Policy 4 (7 years).
45. With regard to 'soft sand' policy 15 of the RMLP indicates that LPAs can grant permission for extraction of up to 150,000 tpa from within the AONB, provided that Policies 6, 7, 10, 11 and 13 are given due consideration. RMLP 15 was written prior to AONBs being given the same level of landscape protection status as the National Park designation. The Countryside and Rights of Way Act 2000 (CROW Act 2000) introduced new measures for the protection of AONBs in line with those provided to National Parks by the Environment Act 1995.
46. The NPPF would not be supportive of RMLP 15 in the context of granting permission for the extraction of 150,000 tonnes of building sand per year from the AONB. Para 144 states that when determining planning applications LPAs should:
- “... as far as is practical, provide for the maintenance of landbanks of nonenergy minerals from outside National Parks, the Broads, Areas of Outstanding Natural Beauty and World Heritage sites, Scheduled Monuments and Conservation Areas;”*
- This policy conflicts with the NPPF specifically in regard to considering the acceptability of mineral extraction in the AONB. Therefore, in order to adequately protect the AONB and to comply with the NPPF it is considered necessary to update the policies.
47. Due to the lack of available Preferred Areas that are potentially suitable for waste development, there is potential for proposals to come forward to meet the waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may be negative for landscape and townscape.
48. The Berkshire Landscape Character Assessment states that the current driving forces relating to landscape change are agriculture/forestry, recreation and development. Agriculture is currently in recession and inevitable restructuring of the agricultural economy is resulting in increased farm unit sizes and expansion, or conversely land coming out of production resulting in lifestyle and hobby farms. In addition, a loss of markets in forestry has resulted in a decline in woodland management especially those of ancient origin managed under traditional regime.

49. Development is also a powerful force for change. The increasing pressure from expanding business economies and the need to accommodate housing is threatening landscape character.
50. Other potential changes to landscape character relate to energy crops, mineral extraction (although sympathetic restoration has resulted in the creation of important new wetland landscape and habitats), waste development, and telecommunications. Tourism and recreation can also threaten landscape character.
51. National policy is clear on the status of AONBs indicating that they have the highest status of protection in relation to landscape and scenic beauty. The North Wessex Downs AONB Management Plan, which was adopted by the Council and covers a 5 year period, was prepared in consultation with stakeholders and the local community by the North Wessex Downs AONB Council of Partners on behalf of the local authorities within the North Wessex Downs. The Plan is driven by the primary purpose of AONB designation - conservation and enhancement of natural beauty. The adopted West Berkshire Core Strategy (2006 – 2026) aims to allow appropriate and sustainable growth in the AONB that conserves and enhances its special landscape qualities.
52. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing challenges for the WBMWDPD

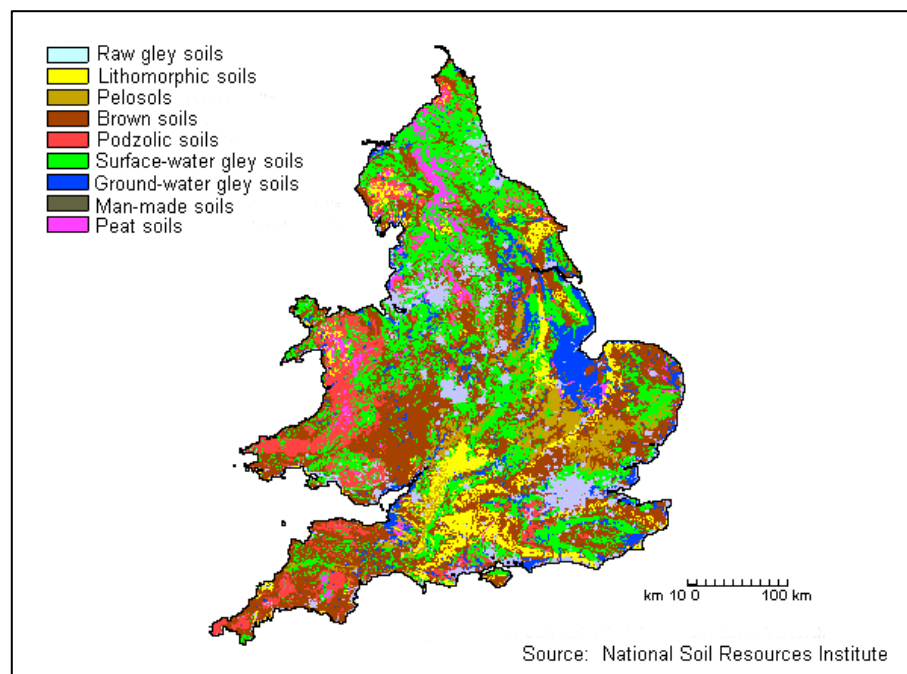
53. Minerals and waste development will only be permitted if due regard is given to:
 - the likely visual impact of the proposed development;
 - its impact on the character of the landscape or townscape where relevant; and
 - the need to maintain and enhance the distinctive character of the landscape or townscape.
54. The appraisal of minerals and waste sites should consider designated landscapes, landscape character, and the potential visual impact of the site on its surroundings.

Soils

55. The interface of the Earth's lithosphere, atmosphere, hydrosphere and biosphere is known as the pedosphere, it is the outer most layer of the earth's crust and composed of soil. Soil is valuable and finite resource which covers a large section of the surface of the earth and supports the diverse life forms.
56. West Berkshire has a number of different soil types ranging from sandy with low fertility, to loamy with high fertility. There are naturally wet soils associated with river valleys and dry well drained soils on hillsides. The Environment Agency, DEFRA, and other research bodies concerned with soil science, such as the National Soil Resources Institute, have been undertaking research on soils in the UK and are actively promoting the protection of soil health.

57. Healthy soils are vital to a sustainable environment. They produce food and timber, filter water, store carbon, support wildlife and the built landscape, and preserve records of our ecological and cultural past.

Figure 7– Soil types of England and Wales



(not to scale)

58. Erosion of soil through intensive agricultural activities, contamination by heavy metals, nutrient loss, degradation of soil biodiversity, atmospheric pollution and the effects of climate change are all threats to the ongoing sustainable use of soils in the UK. In West Berkshire, increasing urbanisation, the continuation of unsustainable agricultural activities and the potential for increased flooding due to climate change are the major concerns.

Likely future trends without implementation of the WBMWDPD:

59. Out of the 8 Preferred Areas in the RMLP, 6 have been worked, and the other two are not likely to be worked. Policy 10(i) indicates that an exception to the presumption against extracting sand and gravel outside the Preferred Areas could be if there is a need to disturb particular pieces of land in order to maintain levels of production set out in Policy 3 (2.3 mtpa) or the landbank figure set out in Policy 4 (7 years).
60. With regard to 'soft sand', no 'Preferred Areas' were designated, and policy 15 of the RMLP indicates that LPAs can grant permission for extraction of up to 150,000 tpa from within the AONB, provided that Policies 6, 7, 10, 11 and 13 are given due consideration. RMLP 15 was written prior to AONBs being given the same level of landscape protection status as the National Park designation under the CROW Act 2000. RMLP is also considered to be contrary to the NPPF.

61. Out of the 10 Preferred Areas for waste development, 6 have already been developed for waste and non-waste uses. Out of the 4 left, 3 of them are industrial sites where a waste use may be acceptable and 1 waste-specific Preferred Area which is currently the subject of an application for a waste use.
62. Due to the lack of available Preferred Areas for minerals and waste development in West Berkshire, there is potential for proposals to come forward to meet the demand for minerals, and waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may be negative for the conservation of soils.
63. There is evidence that soil degradation has taken place over the last 200 years in the England due to intensive agricultural production and industrial pollution¹⁶. DEFRA has produced 'Safeguarding our Soils, A Strategy for England' (2009). The intention of the Strategy is to increase the sustainable use of soils in England and ensure that the protection of soil health is a consideration in decisions made relating to land use planning. Soils in England continue to face three main threats: soil erosion by wind and rain; compaction of soil; and Organic matter decline.
64. There is increasingly a better understanding of the importance of soils to sustainable agriculture and food production. Sustainable agricultural techniques and organic food production methods have increased in recent years and are predicted to continue to gain importance in the future.
65. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing challenges for the WBMWDPD

66. The West Berkshire Minerals and Waste Development Plan Document should aim to avoid locating development on the 'Best and Most Versatile Agricultural Land'. This may prove to be challenging, although it is important to recognise that this only includes agricultural land which is graded.
67. Due to the hydrogeological conditions along the Kennet Valley it may be necessary to import inert material for restoration in order that land can be restored back to agriculture where appropriate, and soils can be conserved. The importation of material may have negative impacts such as increased traffic movements and associated pollution.
68. Contaminated soil waste taken from a site must be remediated before it can be used again, once treated and fully remediated the soil can be transferred back to its original site or used to restore other sites such as disused mineral workings.
69. When planning for waste facilities, priority is to be given to the re-use of previously-developed land, and redundant agricultural and forestry buildings and their curtilages¹⁷.

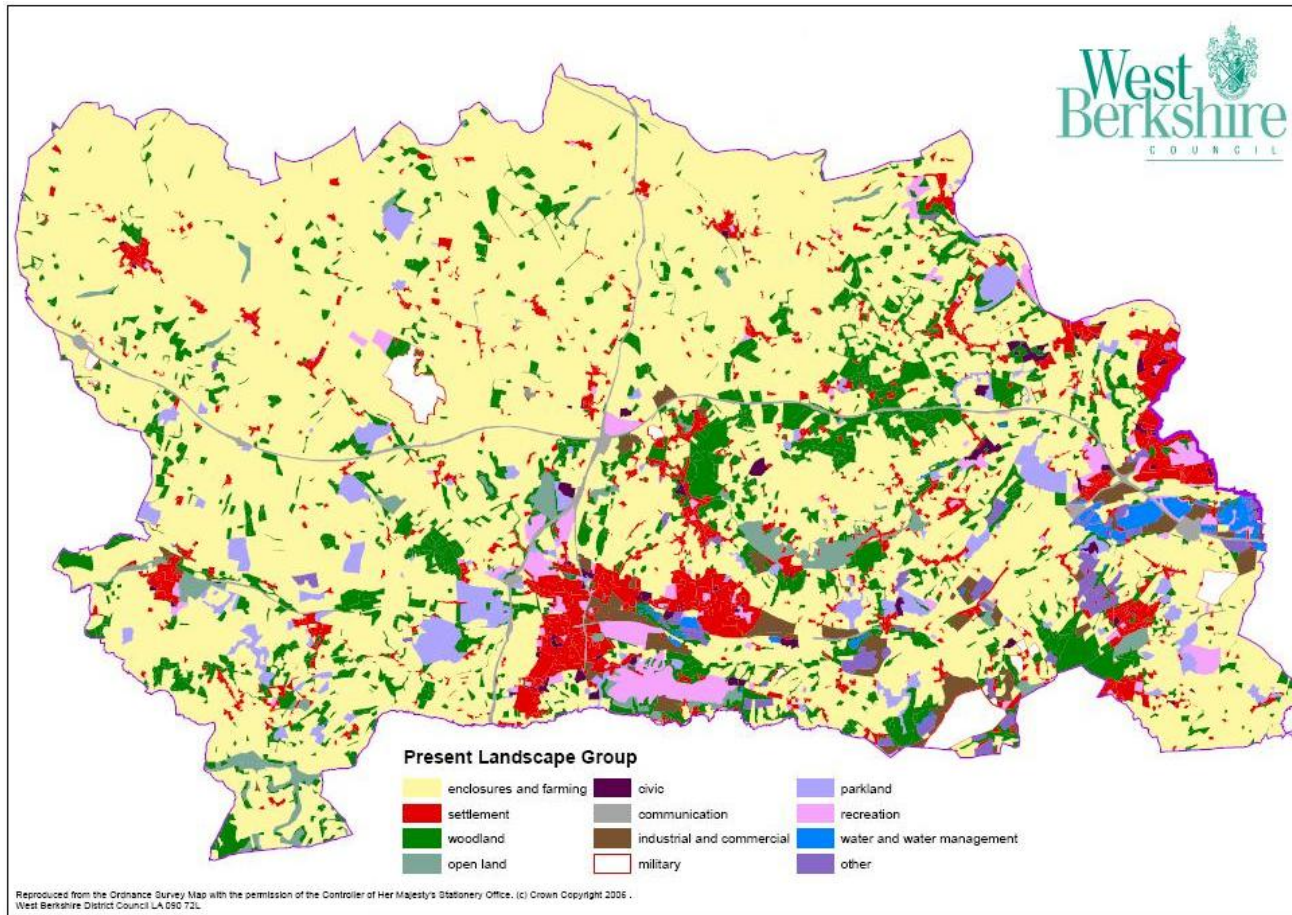
¹⁶ DEFRA (2009) 'Safeguarding our Soils, A Strategy for England'

¹⁷ Planning Policy Statement 10: Planning for Sustainable Waste Management

Cultural heritage (including Architectural and Archaeological Heritage)

70. This section considers cultural heritage in West Berkshire, including architectural and archaeological heritage and historic landscape character.
71. The UNESCO World Heritage Convention (1972) defines the scope for what is considered cultural heritage to include monuments, groups of buildings, and sites (including archaeological sites). It is important to protect architectural and archaeological heritage as it contributes to sense of place and local identity, the quality of life, recreation, education, and the tourist industry.
72. West Berkshire contains many historic environment features, many of which are of international significance. These range in date from the Mesolithic (Middle Stone Age) sites along the floor of the Kennet Valley right through to the Cruise Missile shelters at Greenham Common (now protected as a Scheduled Monument), which stand as silent witness to the international events of the Cold War.
73. West Berkshire's statutory designations include:
- Listed Buildings: The District has 1877 listed buildings; 42 Grade I, 107 Grade II*, and 1,728 Grade II. These include the Tudor mansions at Shaw House and Ufton Court, the Georgian mansion at Basildon Park, the Norman church of Avington, and the 1950's St Johns Church in Newbury. The 2012 list by English Heritage of buildings at risk included 8 listed buildings and structures at risk in West Berkshire.
 - Conservation Areas: There are 54 designated conservation areas.
 - Scheduled Monuments: Nearly 100 sites/structure are identified as Scheduled Monuments, including sites that lie across the District boundary. These include a wide range of types and chronological periods, including the Neolithic Long Barrow at Combe Gibbet, the extensive collection of Bronze Age barrows in the Lambourn Seven Barrows Group, the late medieval and Civil War site at Donnington Castle and the Cruise Missile storage facilities (GAMA Site) at Greenham Common.
 - Historic Parks and Gardens: West Berkshire has 13 registered Parks and gardens which are formally designated by English Heritage.
 - Historic Battlefields: There are two Historic Battlefields; Newbury I and II Civil War Battlefield sites.
74. There are over 5000 other heritage assets in West Berkshire and these are recorded in the Historic Environment Record.
75. The 2013 English Heritage Heritage at Risk Register identifies three buildings, six Scheduled Monuments, three historic parks and gardens, and one battlefield at risk.
76. Mapping of current and past land use has recently been undertaken for all of West Berkshire as well as for the North Wessex Downs Area of Outstanding Natural Beauty through the Historic Landscape Characterisation Project.

Figure 8 – Present land use according to the Historic Landscape Characterisation Study for West Berkshire.

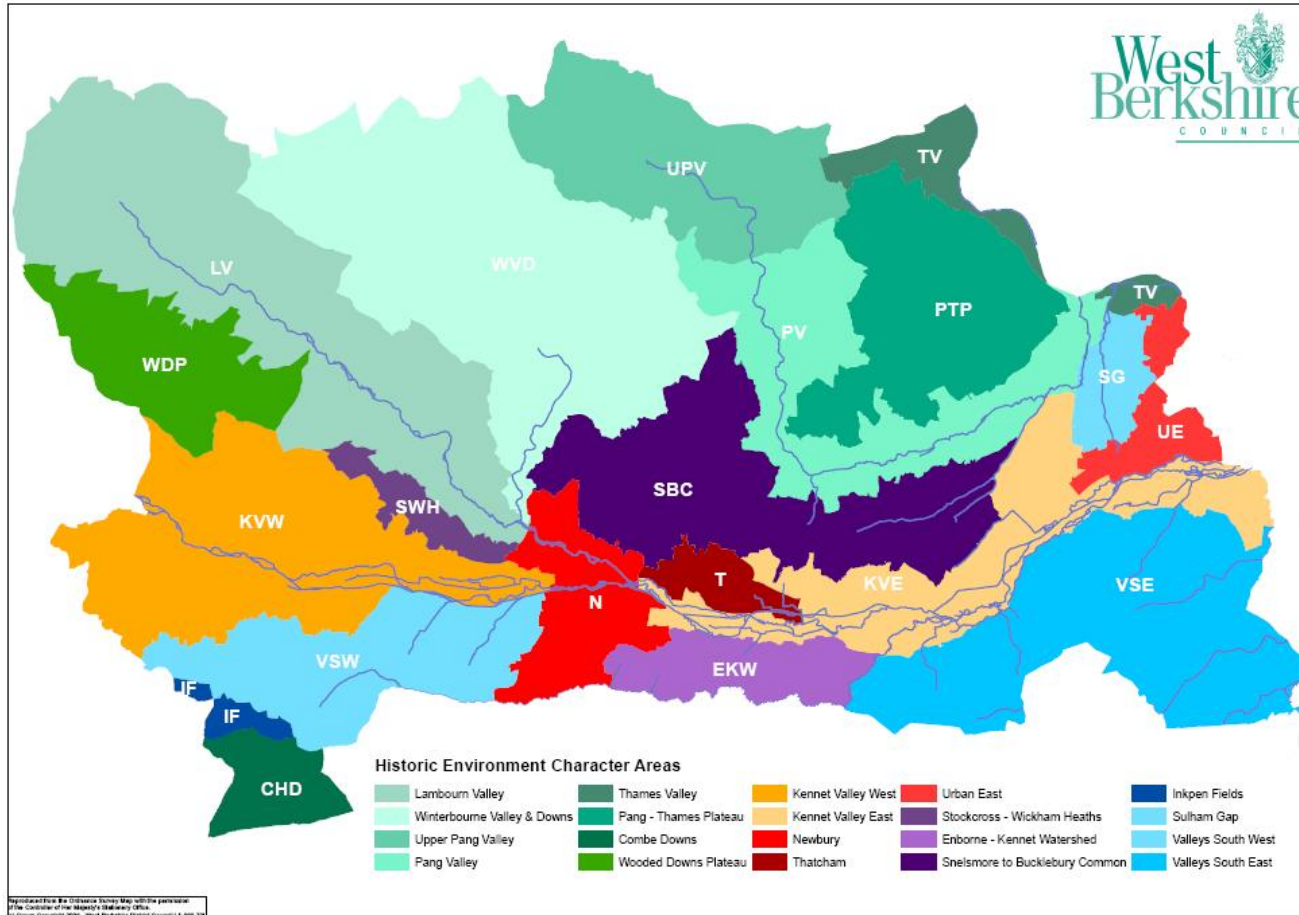


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(not to scale) / Source: Historic Landscape Characterisation Study for West Berkshire (2008)

77. The Historic Environment Character Zoning (HECZ) project carried out by West Berkshire Council's Archaeology Service aimed to identify distinct areas and zones where common characteristics could be mapped. Its objective was to provide a more comprehensive account of the historic environment resource that will enable the valuable and non-renewable historic features of the district to be better understood and better cared for into the future. The Historic Landscape Characterisation (HLC) project did not consider archaeology. The result of this process was the division of the district into 23 Historic Environment Character Areas (HECAs), which were further subdivided into 91 Historic Environment Character Zones (HECZs). Each HECA has a similar landscape history and evolution as well as geographical characteristics; HECZs were identified by having common traits in archaeological monuments, buildings, land-use or settlement patterns.

Figure 9 – Historic Landscape Character Areas for West Berkshire



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Likely future trends without implementation of the WBMWDPD:

78. Out of the 8 Preferred Areas in the RMLP, 6 have been worked, and the other two are not likely to be worked. Policy 10(i) indicates that an exception to the presumption against extracting sand and gravel outside the Preferred Areas could be if there is a need to disturb particular pieces of land in order to maintain levels of production set out in Policy 3 (2.3 mtpa) or the landbank figure set out in Policy 4 (7 years).
79. With regard to 'soft sand', no 'Preferred Areas' were designated, and policy 15 of the RMLP indicates that LPAs can grant permission for extraction of up to 150,000 tpa from within the AONB, provided that Policies 6, 7, 10, 11 and 13 are given due consideration. RMLP 15 was written prior to AONBs being given the same level of landscape protection status as the National Park designation under the CROW Act 2000. RMLP is also considered to be contrary to the NPPF.
80. Out of the 10 Preferred Areas for waste development, 6 have already been developed for waste and non-waste uses. Out of the 4 left, 3 of them are industrial sites where a waste use may be acceptable and 1 waste-specific Preferred Area which is currently the subject of an application for a waste use.
81. Due to the lack of available Preferred Areas for minerals and waste development in West Berkshire, there is potential for proposals to come forward to meet the demand for minerals, and waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may be negative for the conservation of cultural heritage.
82. Conservation Area status has contributed to the conservation of the historic character of West Berkshire, although this is difficult to quantify. The conservation of historic buildings and areas has helped to sustain the distinctive communities in the District. Conservation needs are not necessarily incompatible with building new housing for local needs if care is taken over location and design.
83. The protection of heritage relies upon the identification and designation of the site based on its architectural and/or historical importance. Heritage protection then relies on the specific legislation and the planning system to protect it by using different types of consent such as listed building consent. Most historic environment features are not protected by legislation, other than that they are a material consideration within the planning system.
84. A survey in the South East region has shown that 1,353 (51%) of its 2,629 monuments are at risk from damage, decay or loss, unless action is taken. Arable farming and natural processes, especially vegetation growth, are the main activities putting monuments at risk¹⁸
85. The West Berkshire Historic Environment Record (HER) holds information on all known archaeological and historic sites in the district, together with an index of fieldwork and excavations, bibliographic references and archaeological objects. At present approximately 7,500 monuments and 6000 objects are

¹⁸ English Heritage (2008) Monuments at risk South East

included in the record, and these figures are constantly growing. The database is maintained by the Council's archaeology service, and underpins its curatorial work promoting the appreciation and preservation of the district's historic environment resource.

86. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing challenges for the WBMWDPD

87. The potential impact on the historic environment, including the historic landscape character, historic built environment and archaeology, should be taken into consideration when identifying potential minerals and waste sites. Sites that are likely to have an impact on nationally important features, or their settings, should not normally be considered for development.
88. Archaeological sites should not be impacted upon when planning for mineral extraction, although minerals can only be extracted where they are found. Therefore where archaeology is impacted upon, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed. Where loss or harm is unavoidable, the remains should be properly recorded and the record made publicly available.

Air Quality

89. This section concerns air quality. Poor air quality is a major environmental factor that can affect human health and local amenity as well as altering local ecosystems.
90. Generally, healthy people do not notice the consequences of air pollution. However those with certain lung or heart conditions can be adversely affected by a variety of pollutants. Two of the major pollutants that are increasingly being measured are nitrogen dioxide (NO₂) and small airborne particles (PM₁₀). Nitrogen dioxide is formed whenever fossil fuels are burnt in air. A major contribution comes from vehicle exhausts. Particles or PM₁₀ are small airborne particles that can penetrate deep into the lungs. They come from many sources including, wind-blown soil, combustion processes (such as diesel engines) and droplet formation in the atmosphere.
91. The primary driver for national, regional and local air quality management is the protection of human health, although the impact of certain pollutants on wildlife habitats and vegetation is also a concern.
92. The Council monitors air quality within West Berkshire. The principal source of air pollution in West Berkshire is exhaust emissions from road traffic.
93. Under the Environment Act, Councils are required to review and assess air quality in their area. If any standards are being exceeded or are unlikely to be met by the required date that area should be designated an air quality management area and the Council must draw up and implement an action plan aimed at reducing levels of the pollutant.

94. National air quality objectives have been designated for priority pollutants - benzene, 1,3-butadiene, carbon monoxide, lead, nitrogen dioxide, particles (PM10), sulphur dioxide, ozone and PAH. These have been set on the basis of scientific and medical evidence on the health effects of each pollutant, and according to the practicability of meeting standards. In West Berkshire all the air quality objectives are generally being met except for nitrogen dioxide on some busy roads and intersections. As a result of two Air Quality Management Areas (AQMAs) were declared at a section of the A339 in central Newbury (May 2009), and a section of the A4 at Thatcham (November 2011). The associated Air Quality Management Plans (AQMPs) have been developed and are being implemented. Levels of nitrogen dioxide are declining, which could be associated with the improvement to emissions from vehicle exhaust as well as implementation of the AQMP.

Likely future trends without implementation of the WBMWDPD:

95. The majority of the sharp sand and gravel deposits that are worked in West Berkshire are concentrated in the Kennet valley in a corridor between Newbury and Reading. This area is also a transport corridor that benefits from being served by the primary road network (the A4), the London to south coast railway line and the Kennet and Avon canal.
96. It is the case that a significant volume of land won primary aggregates and recycled aggregates are exported from the Authority to support development in the surrounding areas. It is also understood that a significant volume of the hard rock imported to West Berkshire by rail is also exported from the Authority to support development in the surrounding areas. Therefore it is considered that there is currently a large amount of construction aggregates that are moved within the authority, and across administrative boundaries, to meet the needs of the local, and wider than local, construction industry.
97. Historically the sites in West Berkshire are understood to have relied on road based transport, to move the extracted minerals to the mineral processing plants and or markets. However if it is determined that the mineral resource area in the Kennet Valley should continue to be the focus for mineral extraction within West Berkshire then there is the potential for minerals being extracted to be transported by road, rail and waterway to the urban areas where the minerals are principally utilised.
98. It is acknowledged by the Council that the sand and gravel deposits that exist in West Berkshire are relatively shallow. Therefore the sites tend to only have a limited life and the extraction operations move through the extraction phases at a considerable pace. In addition construction aggregates are acknowledged to be a high volume, low value product so transportation costs can have a significant impact upon the viability of deposits. Water and rail borne transportation methods require a significant financial investment to deliver the necessary wharves and sidings. As such it is likely that such facilities could only serve very large deposits to ensure the economic viability of such a modal shift. Therefore, it is considered likely that road-based transport will continue to play a major part in mineral transportation in West Berkshire.
99. With regard to the transportation of waste in West Berkshire, although more sustainable modes would be seen favourably in planning and environmental terms, the majority is transported by road and this is likely to continue for the foreseeable future.

100. As air quality is directly influenced by CO2 emissions, the mode of transportation of minerals and waste will impact on air quality. More sustainable modes of transport will be supported through the development of the WBMWDPD, however as has already been stated.
101. Air quality continues to be monitored across the district, and it is possible that other Air Quality Management Areas could be declared or undeclared as a result of this ongoing assessment.
102. The likely future conditions for air quality in West Berkshire are likely to be affected by factors such as new developments and the increased traffic associated with those new developments. However, objectives for air quality are becoming more stringent and with technologies with the ability to lessen the harmful effects on the atmosphere becoming readily available, it is possible that there will be an improvement in air quality.
103. Since the majority of incidences of air pollution are associated with road transport, it is important to consider West Berkshire's LTP, which promotes road safety, improving accessibility, reducing the impact and effect of congestion and improving air quality.
104. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing challenges for the WBMWDPD

105. The Framework should seek to avoid locating facilities within, adjacent, upwind or downwind of AQMAs, where possible, although this may not always be possible to avoid. Mitigation measures may help to reduce any adverse effects.
106. Preference should be given to sites which are situated close to lorry routes suitable for transporting minerals and waste, but also away from residential areas to prevent an increase in congestion. Being situated in close proximity to a strategic road network is ideal for business and other services to locate, presenting a challenge for locating minerals and waste facilities.
107. Sites that offer sustainable transport opportunities such as rail, river or canal should be preferable to help reduce traffic impacts caused by road congestion.

Water (including Water Resources, Flooding and Water Quality)

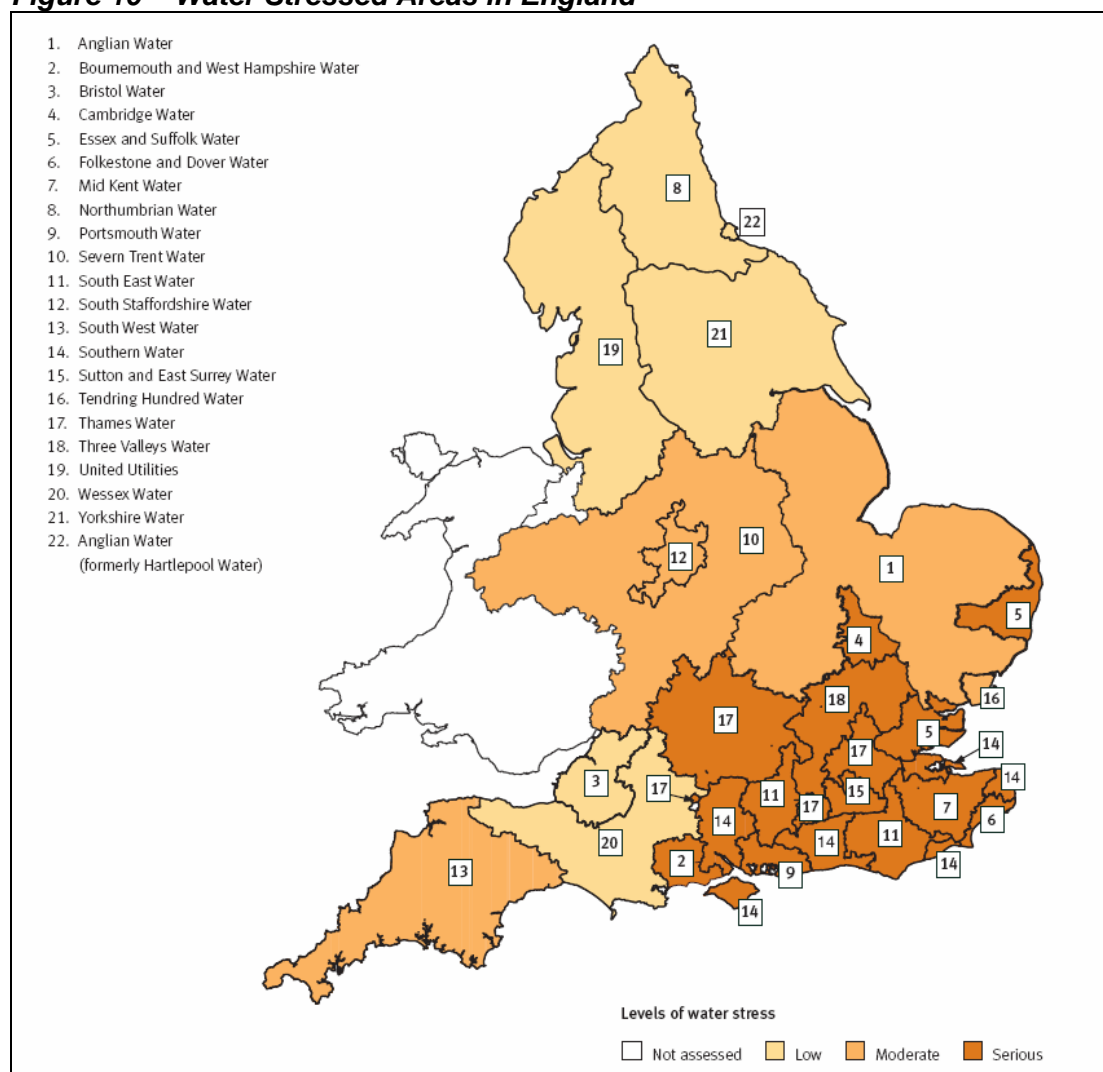
108. This section concerns water resources, flood risk and water quality issues.
109. Water is an essential element to human life, not only to maintain a healthy environment, but also in our economy, for such things as agriculture, power generation, commerce, and industry. Maintaining water resources is thus imperative to human survival and growth, thus there is an increasing pressure to ensure water resources are protected. Water is abstracted from three main sources, from groundwater, and tidal/non-tidal surface waters. Careful planning is required to avoid flooding and pollution as a result of minerals and waste activities.

110. The Water Framework Directive (WFD) established a new integrated approach to the protection, improvement and sustainable use of water bodies, introducing a statutory system of analysis and planning based upon the river basin.
111. Policy development and legislation in flood risk management has evolved over the last few years. Flood risk is assessed, managed and through wide range of legislative drivers ranging from the EU Floods Directive, Catchment Flood Management Plans through to SFRAs. West Berkshire Council produced an SFRA in 2008 as part of the development of the Core Strategy¹⁹.
112. High levels of nitrates are found in areas of poor water quality. There are no Nitrate Sensitive Areas in West Berkshire, but there are large areas covered by Nitrate Vulnerable Zones (NVZs). NVZs apply to areas where surface and/or groundwater contains nitrate concentrations in excess of 50mg/l. The widespread classification of NVZs in West Berkshire is reflective of the land use within the area and the intensive agricultural practices which are employed. As a consequence farmers within NVZs are required to comply with mandatory Action Programme measures designed to protect both ground and surface waters against pollution caused by nitrates from agriculture.

Water resources

113. Water resources within West Berkshire are managed by water and wastewater services company Thames Water. The District is located within two Water Resource Zones; the Kennet Valley Resource Zone and the Swindon and Oxfordshire Resource Zone (SWOX).
114. Above ground water resources include the rivers Pang, Lambourn and Kennet. The primary groundwater resource is the chalk aquifer that underlies much of eastern and southern England, this aquifer is tapped by a number of bores that supply potable water to the district.
115. Groundwater naturally flows from a high point to a low point, but groundwater catchment may cut across several surface water catchments, thus a change of water composition, or a polluting incident in one area may have impacts on other areas.
116. The Environment Agency, in its document Water for People and the Environment (2009), indicated that West Berkshire is within an area with “serious levels of water stress”. In addition, much of the district has water resources that are either over licensed, over abstracted or there is no water available for abstraction.

¹⁹ West Berkshire District Council (2008); Strategic Flood Risk Assessment; <http://www.westberks.gov.uk/index.aspx?articleid=16930>

Figure 10 – Water Stressed Areas in England

Source: Environment Agency (Crown Copyright). www.environment-agency.gov.uk

Flooding

117. There are various forms of flooding which all present different levels of risk. Flooding can occur from rivers, the sea, from land, groundwater, sewers, reservoirs, canals and other artificial sources. West Berkshire has undertaken a Strategic Flood Risk Assessment (SFRA) as required by the NPPF, in consultation with the Environment Agency to “determine the variation of flood risk across and from their area as the basis for preparing appropriate policies for flood risk management for these areas”.

118. The SFRA has informed the West Berkshire Core Strategy DPD and the preparation of Site Allocations DPD, and it highlights requirements for specific development sites in relation to flood and drainage infrastructure. The SFRA will also inform the development of the WBMWDPD.

119. The risk of flooding within West Berkshire is widespread, arising not only from rivers but also from surface water and groundwater flooding. The events of the summer of July 2007 were a timely reminder of the impacts that flooding can have upon the local community. A relatively large number of homes and businesses within West Berkshire are at risk of flooding, arising from a number of sources including river flooding, localised runoff, groundwater flooding and sewer flooding. The SFRA for West Berkshire has delineated the District into zones of 'low', 'medium', and 'high' probability of fluvial flooding in accordance with the requirements of PPS25 (which was extant at the time the SFRA was developed and adopted), it has modelled the impacts of climate change, and it has investigated the risk of groundwater and surface water flooding which has resulted in a series of 'Critical Drainage Areas' being identified to inform the planning process.

Water Quality

120. In OFWAT's (The Water Services Regulation Authority) most recent assessment of chemical quality 86% of the lengths of rivers in West Berkshire were found to be of good chemical quality.

121. West Berkshire Council has a duty to monitor private drinking water supplies throughout the district. Following the introduction of new regulations risk assessments and more detailed sampling have been carried on approximately 50 large supplies. This has resulted in the increased installation of treatment plants and a general improvement in drinking water quality.

122. High levels of nitrates are found in areas of poor water quality. There are no Nitrate Sensitive Areas in West Berkshire, but there are large areas covered by Nitrate Vulnerable Zones (NVZs). NVZs apply to areas where surface and/or groundwater contains nitrate concentrations in excess of 50mg/l. The widespread classification of NVZs in West Berkshire is reflective of the land use within the area and the intensive agricultural practices which are employed. As a consequence farmers within NVZs are required to comply with mandatory Action Programme measures designed to protect both ground and surface waters against pollution caused by nitrates from agriculture.

123. In September 2011 62% of England was designated as a Nitrate Vulnerable Zone (NVZ). Approximately three quarters of West Berkshire is now designated as a NVZ, including Newbury, Thatcham and the eastern part of the district including Theale and Calcot.

124. Three different types of NVZs have been identified in West Berkshire:

- Surface Water;
- Groundwater; and
- Existing.

125. The most prominent is the groundwater NVZ, which covers much of the northern and western areas of West Berkshire.

Likely future trends without implementation of the WBMWDPD:

126. In terms of the likely future trends relating to water resources in West Berkshire in the absence of the WBMWDPD, it is difficult to predict this due to site specifics, and the large number of factors involved.

127. In terms of the likely future trends relating to water quality in West Berkshire in the absence of the WBMWDPD, it is difficult to predict this due to site specifics, and the large number of factors involved.
128. In terms of the likely future trends relating to flooding in West Berkshire in the absence of the WBMWDPD, it is difficult to predict this due to site specifics, and the large number of factors involved. If mineral sites are allocated and worked, it is possible that they could play a part in mitigating the ill-effects of flooding by providing a reservoir for floodwater to be stored in temporarily. It could therefore be argued that not implementing the WBMWDPD would not allow this potential mitigation to come forward.
129. Climate change is anticipated to have an impact on water supply due to more extreme climatic variability. Hotter summers are expected to result in increased water usage and reduce the period when groundwater sources can refill, in addition, soil moisture is expected to be reduced in summer, resulting in increased use of irrigation for crops.
130. Overall, increased population and the effects of climate change are going to place greater pressures on a finite resource. The Environment Agency suggests that within less than thirty years there will be a major water shortage in the South East unless there is a reduction in the amount of water used or new resources are found. Thames Water has forecast that there will be a deficit of water of 60 million litres per day by 2030 in the SWOX zone unless new water resources are found. Water conservation measures are going to be required to ensure an adequate water supply into the future.
131. Meeting water quality standards is a challenge for the region. Together with tightening water quality standards, a growing population and development pressures, are placing extra demands on the sewerage treatment infrastructure and the waters receiving effluent. Turbidity of the water in the Kennet is also an issue locally.
132. Pollution caused by discharges from sewage works and industrial processes causes risk to the environment. The Environment Agency predict that a fifth of all water bodies (in England and Wales) are at risk of not achieving 'Good Ecological Status' by 2015 because of point source pollution²⁰. More concerning, 90% of ground water bodies are at risk of failing to achieve 'Good Ecological Status' due to diffuse pollution washed by rainfall from land²¹.
133. A considerable amount of research is being carried out worldwide in an endeavour to quantify the impacts that climate change is likely to have on flooding in future years. Climate change is perceived to represent an increasing risk to low lying areas of England, and it is anticipated that the frequency and severity of flooding will change measurably within our lifetime.
134. According to the SFRA for West Berkshire, climate change will not markedly increase the extent of river flooding within most areas of the District, however those properties (and areas) that are currently at risk of flooding may be susceptible to more frequent, more severe flooding in future years. The 'best practice' approach adopted throughout England is that Flood Zone 2 Medium

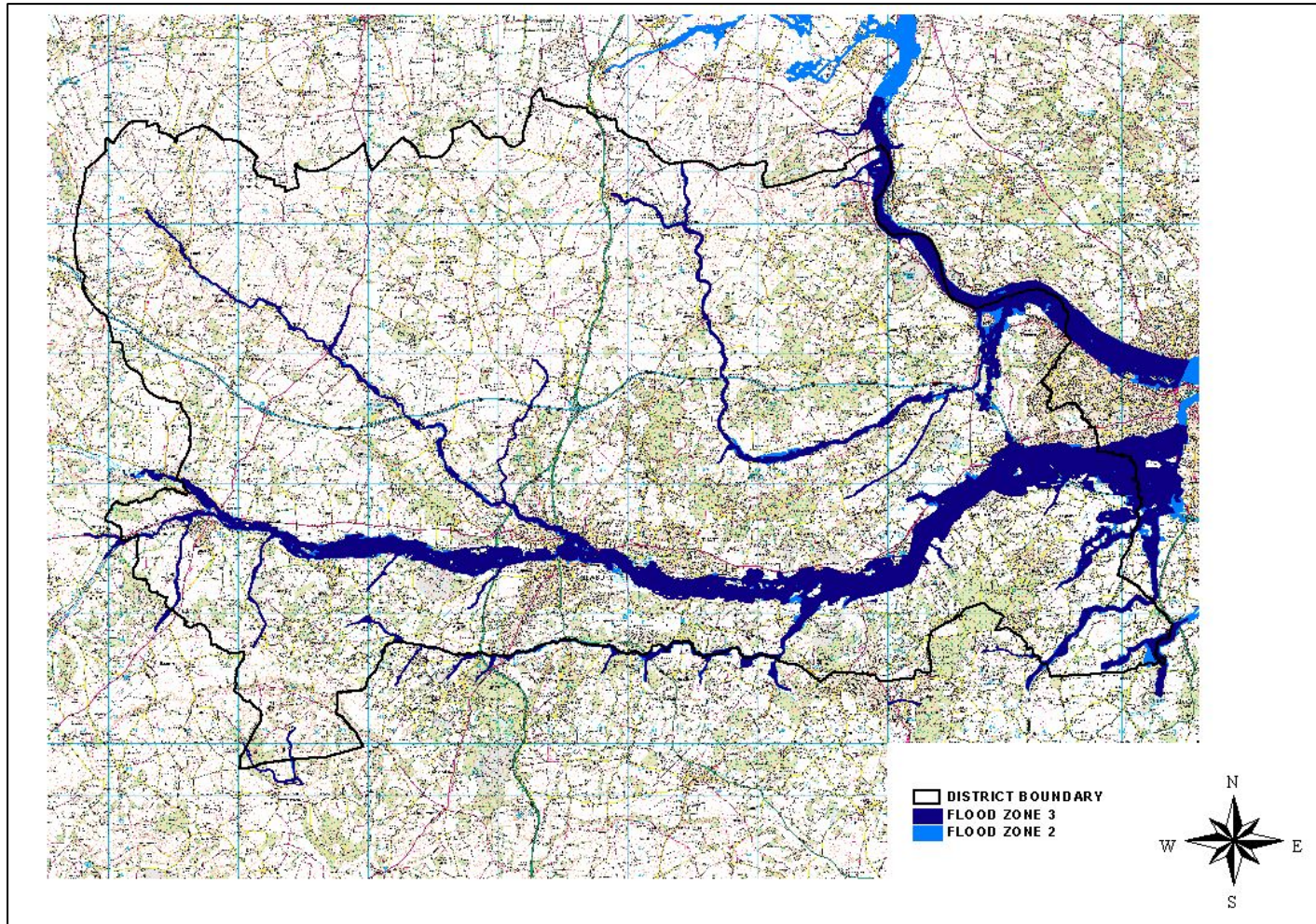
²⁰ Environment Agency (2008) Water resources in England and Wales – current state and future pressures

²¹ Environment Agency (2008) Water resources in England and Wales – current state and future pressures

Probability is considered a reasonable approximation of the likely extent of the High Probability Flood Zone in 100 years as a result of climate change. Climate change will also potentially increase the frequency and intensity of localised storms over the District, this could exacerbate localised drainage problems.

135. Climate change will increase flood risk as more intense rainfall will increase peak river flow. In the summer, dry soils are unable to absorb heavy rainfall fast enough and this results in severe localised flooding. Winter soils will tend to be wetter on average and will similarly be unable to absorb heavy rainfall fast enough. These changes in rainfall duration and intensity will have direct implications on river flooding, local flash flooding and we could see areas not previously flooded experiencing flooding for the first time.
136. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Figure 11 – Flood Zone Map of West Berkshire



Source: Environment Agency (Crown Copyright). www.environment-agency.gov.uk

Existing challenges for the WBMWDPD

137. Identifying locations for waste management sites and mineral extraction sites will need to adhere to the sequential test requirements as set out in the NPPF technical guidance²². Planning of waste sites will also need to adhere to the Environment Agency's Groundwater protection policy.
138. Mineral extraction sites in floodplains can potentially help with the storage and management of storm waters and this additional use should be taken into consideration when appraising sites as well as proposals for Sustainable Urban Drainage Systems and porous surfaces etc.
139. Floodplains (groundwater/fluvial), Source Protection Zones, minor and major aquifers, groundwater depth, type of geology and smaller abstractions (without modelled Source Protection Zones) are all constraints and will need to be taken into consideration when identifying sites.
140. The factors for considering the suitability of waste sites should take into account the targets set out within the Water Framework Directive and ensure that water quality is considered in the sites appraisal process.
141. The main threats associated with diffuse water pollution in England and Wales are those which cause high levels of nutrients in rivers, lakes, estuaries and coastal waters (through eutrophication). This can be attributed to (for example): hazardous chemicals leaking into rivers, lakes and groundwater from industrial sites; oxygen depletion in water due to organic pollution from livestock manure etc²³.
142. As population increases and the economy in West Berkshire grows throughout the plan period, it may be necessary for proposals to come forward for infrastructure related to waste water treatment.
143. When assessing potential impacts from a proposed development on a sensitive site, detailed hydrological investigations are required. This would be partaken as part of other ground condition assessments supporting a planning application. This is to avoid impacts which can occur due to hydrological connections.

Noise Pollution

144. Ambient or environmental noise is unwanted or harmful outdoor or indoor sound created by human activities such as road, rail and air traffic noise, and noise from sites of industrial activity.
145. Ambient noise in West Berkshire is generally associated with noise generated by vehicle engines or vibration on the road surface. Both of these are worsened by increased speeds and greater traffic volumes which lead to greater levels of noise.

²² National Planning Policy Framework (2012)

²³ Environment Agency (2007) The unseen threat to water quality, Diffuse water pollution in England and Wales report – May 2007

146. Noise pollution may be an issue for people who live in close proximity to the M4 or the A34²⁴. The DEFRA noise maps²⁵ also show that noise is an issue on a number transport corridors in West Berkshire including the A34, M4, A339, A4 and also from railway lines.

Data limitations

147. The amount of data currently available in relation to noise pollution is very limited. The situation will hopefully improve as new sources of information are sought out.

Likely future trends without implementation of the WBMWDPD:

148. Due to the lack of available Preferred Areas for minerals and waste development in West Berkshire, there is potential for proposals to come forward to meet the demand for minerals, and waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may be negative in terms of noise pollution, although this would obviously be assessed through noise impact assessments as part of planning applications, and controlled through other legislation.

149. Noise is recognised as an issue of increasing local concern. Complaints about noise nuisances in England and Wales have risen dramatically in recent decades, from just over 55,370 complaints in 1980 to 310,312 in 2001/02²⁶.

150. Under The Environmental Noise (England) Regulations 2006, as amended, the Government is required to prepare noise action plans to address priorities and apply to the most important areas as established by strategic noise mapping. Actions plans are therefore being prepared for major roads, major railways, major airports and agglomerations.

151. The newly developed 'Noise Maps' from DEFRA should provide an insight into trends of noise pollution within local areas. Occurrences of noise pollution will inevitably rise in coming years due to an increasing population and further developments.

152. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing Challenges for the WBMWDPD

153. According to ODPM (2004)²⁷ the following waste management facilities (including specialist facilities) have associated activities to which noise issues may be attributed. Examples include:

- Recyclables facilities and mixed waste processing;

²⁴ West Berkshire Partnership (2008); A Sustainable Community Strategy for West Berkshire to 2026 - a breath of fresh air

²⁵ DEFRA (2013) <http://services.defra.gov.uk/wps/portal/noise>

²⁶ Bell and McGillivray (2006) Environmental Law. 6th ed. Oxford. Oxford University Press.

²⁷ Planning for Waste Management Facilities: A Research Study (2004)

- Construction & Demolition waste processing (noise from conveyor & plant e.g. crushers movement/operation);
 - Electrical & Electronic equipment recycling (noise from dismantling operation (e.g. from the fragmentiser);
 - End of life vehicle Reprocessing (noise from plant movement/ operation of crusher/shredder/ fragmentiser);
 - Glass processing (noise from separation & processing of cullet (e.g. batching plant) & vehicle movement).
154. In a number of circumstances, noise is an issue likely to require detailed consideration within the planning application supporting documentation or Environmental Statement if Environmental Impact Assessment is required. Noise is an issue that is controlled under the Integrated Pollution Prevention and Control Regulations as well as under the planning regime and by Local Authority Environmental Health Departments, under Statutory Nuisance provisions. Noise from normal plant operations should be controlled to acceptable levels by careful building design.
155. Facilities that are likely to generate high levels of noise such as aggregate recycling facilities and recycling facilities should be located at a suitable distance from potential sensitive receptors to not detract from their quality of life. A number of specialist waste management facilities should avoid noise sensitive locations.

Light pollution

156. Light pollution is considered to cause a variety of ecological, aesthetic and social effects. For example, airborne species such as bats may be affected by light pollution and it may potentially disrupt plant life functions²⁸. Other damaging effects to the environment caused by excessive lighting include energy (fossil fuel) consumption. Excessive amounts of noise and lighting may be considered as a statutory nuisance under the Clean Neighbourhoods and Environment Act 2005 which came into force in relation to England on 1 October 2006.
157. Light pollution may be an issue for residents living in the more rural parts of West Berkshire (e.g. farms, hamlets and small villages in the AONB)²⁹.
158. During the period 01/04/2012 to 31/03/2013 WBDC received 9 complaints relating to 6 different commercial premises in relation to light pollution. None of these however were deemed to be statutory nuisances³⁰.

Data limitations

159. The amount of data currently available in relation to light pollution is very limited. The situation will hopefully improve as new sources of information are sought out.

²⁸ <http://www.lightpollution.org.uk/>

²⁹ West Berkshire Partnership (2008); A Sustainable Community Strategy for West Berkshire to 2026 - a breath of fresh air

³⁰ WBDC Environmental Health (2013)

Likely Future Trends without implementation of the WBMWDPD

160. Due to the lack of available Preferred Areas for minerals and waste development in West Berkshire, there is potential for proposals to come forward to meet the demand for minerals, and waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may be negative in terms of light pollution, although if necessary this would obviously be assessed through the planning process, and controlled through other legislation.
161. CPRE have highlighted through their light pollution study that light pollution is also worsening in England, with an increase of around 24% between 1993 and 2000³¹.
162. The potential for light pollution should be considered in remote rural locations, particularly those that are ecologically important and currently unspoilt and tranquil.
163. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Social Issues

Human Health

164. The World Health Organisation defines human health as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity³². To be in a state of good health one must maintain a fair balance between the physical, mental and social well-being.
165. Human health can be influenced by environmental factors such as air quality, water quality, and the space available for recreation and exercise. These environmental factors can be heavily influenced by human activities, which are to a great extent controlled by our land use planning system.
166. People in West Berkshire consider themselves relatively healthy. According to the 2011 Census, 86% of people stated that their health was 'good' - compared with 84% of people in the South East and 81% of people nationally. The map below uses ODPM's Indices of Multiple Deprivation to show relative levels of deprivation across the district in terms of selected social care factors. These include relative ages of residents, proportion of people with a limiting long term illness, proportion of people whose health is "not good" and numbers of unpaid carers providing 20 hours or more care per week.

Likely Future Trends without implementation of the WBMWDPD:

167. In terms of the likely future trends relating to human health in West Berkshire in the absence of the WBMWDPD, it is difficult to predict this due to the large number of factors involved. It is however considered unlikely that there would

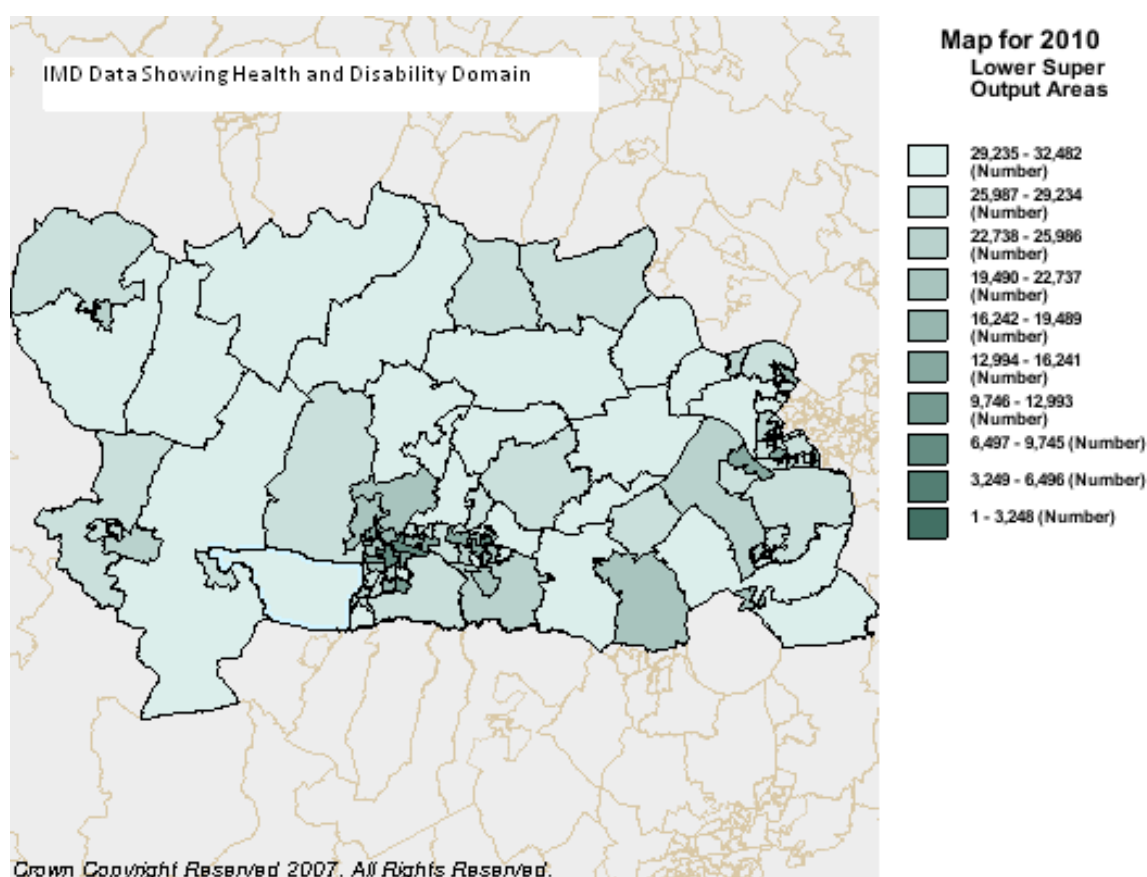
³¹ <http://www.cpre.org.uk/what-we-do/countryside/dark-skies/the-issues>

³² http://www.who.int/bulletin/bulletin_board/83/ustun11051/en/

be any perceptible negative or positive impact on human health as a result of whether or not the WBMWDPD is produced.

168. Nationally, we are living longer and have greater long-term care needs. It is acknowledged that people want quality services that meet the full range of individual need, more local care, and the ability to take greater control over their health whilst being supported to remain as independent as possible.
169. Changes in population and communities mean that we are less likely to be part of a close knit family providing support. For isolated rural communities this may mean additional transport links to services and the increased availability and use of broadband and other ICT technologies to provide local access to information about health, social care, housing and other Council services. Increased need for home adaptations or more specialised accommodation geared to allow as much independence as possible while supporting changing abilities is also likely.
170. Figure 12 below uses Department of Communities and Local Government's Indices of Multiple Deprivation (2010) to show relative levels of deprivation across the district in terms of selected social care factors. These include relative ages of residents, proportion of people with a limiting long term illness, proportion of people whose health is "not good" and numbers of unpaid carers providing 20 hours or more care per week.

Figure 12 - Relative levels of deprivation across the district in terms of selected social care factors



DCLG, Indices of Multiple Deprivation (2010)

171. Areas shaded darker show the more deprived areas in the district in terms of health deprivation. We can see these are concentrated in some of the more urban areas in Newbury and Thatcham as well as the Reading fringe areas around Calcot and Purley on Thames. There are some more rural areas across the district which are ranked higher for health deprivation, including around Mortimer, Aldermaston and the Lambourn Valley.
172. In terms of differences between rural West Berkshire and its more urban areas, OCSI (2010) found that health in rural areas does compare well. Well under a half of the West Berkshire population (41.7%) live in rural areas, and these areas account for 39.1% of all people with a limiting longterm illness in the district and a third of people receiving Disability Living Allowance.
173. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing challenges for the WBMWDPD

174. There are public concerns surrounding waste management facilities, for example composting facilities and the emission of odour. These concerns are reflected in the Environment Agency 250 metre rule with regard to sensitive receptors and the need for risk assessments and mitigation measures required for bioaerosol production. The Environment Agency as waste permitting authority requires all waste operators to assess risks to the environment and human health through the waste permitting regulations. The EA will only issue a permit if they are sure that the necessary measures to protect the environment are in place so that the activities will not pose an unacceptable risk.

Social Considerations (including Population, Education, Housing, Deprivation, Crime and Safety)

175. This section looks at social considerations. The baseline is set out separately for each of the topic areas, while the 'likely future trends' and the 'challenges for the WBMWDPD' deal with the various facets together.

Population baseline

176. In 2001 the Census showed West Berkshire with a population of just under 144,500. The mid-2011 population estimates produced by the Office for National Statistics estimates the West Berkshire population to be 154,148, while the estimate for mid-2012 was 154,486. Figures indicate that the population has increased by approximately 6.9% from 2001 to 2012. Approximately 75% of the population is concentrated in the Kennet Valley at strategic points along the A4 and on the western side of Reading. The remaining area comprises smaller settlements sitting within a diverse landscape. West Berkshire has by far the most dispersed population of all the unitary authorities in Berkshire – 219 people per km², compared to 637 per km² for Berkshire as a whole.
177. 17% of the West Berkshire population is of retirement age (65 years and over) compared with a national average of 18%. The average age in West Berkshire is 39.4 years, the same as the national average. The 20 to 34 years age group makes up 16% of the population.

178. When compared nationally, there is a significantly lower proportion of people in West Berkshire who define themselves as coming from a black or ethnic minority (BME) background (5% of West Berkshire residents as a whole, compared to 14% of people in England and Wales). Although this is a relatively small proportion of the total population, this amounts to some 8,000 residents in the District.

Education baseline

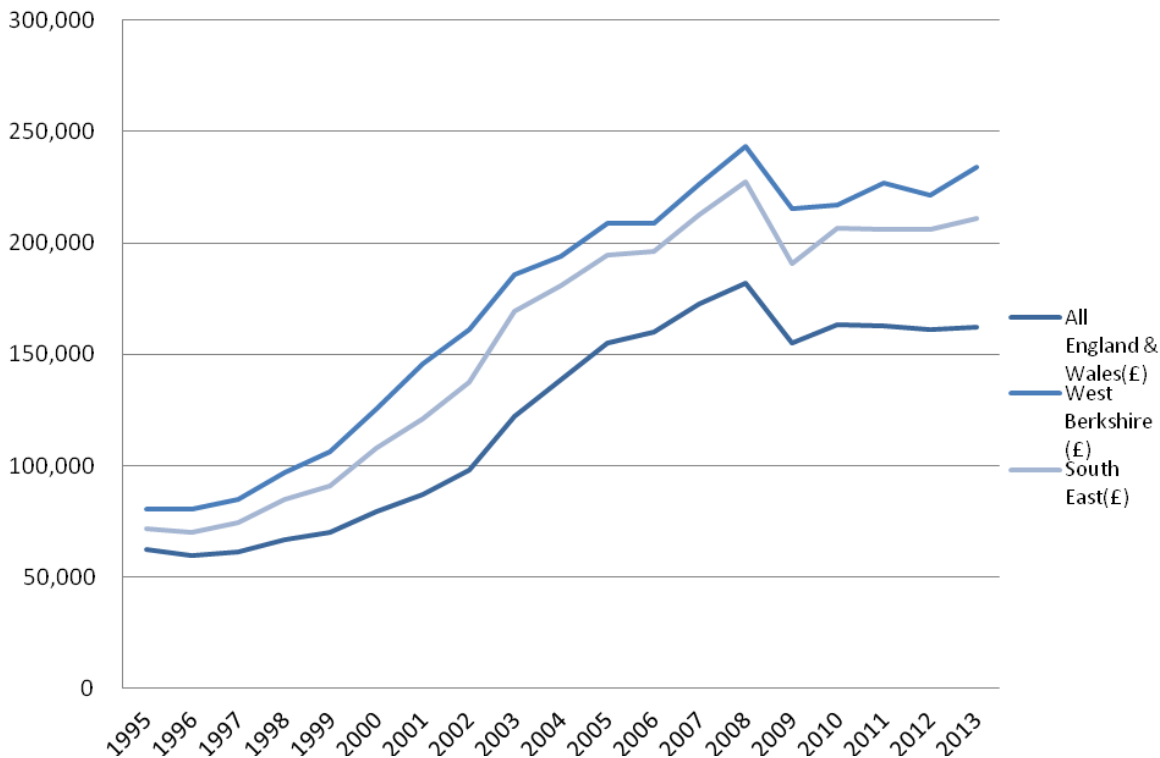
179. West Berkshire has a higher than average proportion of people with higher qualifications (HND, degree or higher); 32% of people of working age, which is above the national average. Despite the district's relatively good performance in education, significant numbers of the working population have no qualifications (17% compared to 23% nationally) and poor literacy and numeracy skills. This has important social implications since there are significant links between basic numeracy / literacy and levels of crime and health. Low levels of skills also potentially acts as a break on the economy with local employers unable to find people with the necessary skills from the local labour pool. Skills and labour gaps exist in certain key areas, particularly in the public sector, the construction industry and tourism³³.

Housing baseline

180. According to the 2011 Census, 70% of all housing in West Berkshire is owner-occupied - compared to 64% nationally. A very small proportion (1%) is being purchased under a shared ownership scheme whilst the remainder of households are in rented accommodation. About half of all rented accommodation is rented from a Registered Social Landlord (i.e. a housing association).
181. According to the 2011 Census the average size of households in West Berkshire is 2.46 people. This is roughly in line with the average in Berkshire of 2.48 although is slightly higher than the national average of 2.36. Both nationally and within the district, overall household size has been declining since the 1950s. An easily overlooked consequence of this relatively rapid decline is, of course, that more dwellings are needed to accommodate the same population.
182. House prices have risen by 194% between 1995 and 2013 making West Berkshire one of the most expensive places to buy a house outside London. Prices have fallen as a result of the economic downturn, but they are still higher than the national average and are now very similar to their 2007 values. In January 2013 the average house price in West Berkshire was £233,906. A single income household would need to earn considerably above the average wage to receive a 90% mortgage on an average flat. This highlights the increasing need for affordable housing for local people and key workers within the district.

³³ West Berkshire District Profile 2009, West Berkshire Council, www.westberks.gov.uk

Figure 13 – Average house price for West Berkshire compared to the South East and England and Wales



Source: Land Registry Price Index, landreg.gov.uk

Deprivation baseline

183. In terms of 'Barriers to Housing and Services' (one of the IMD indices), a large proportion of the District is classified as being deprived; mainly due to the rurality of the area. Communities that are highlighted as being most deprived will have limited access to services and affordable housing. The generally high affluence of the region and of West Berkshire masks pockets of deprivation and exclusion. There are communities with individuals and families who experience particular difficulties as a consequence of being poor within a generally wealthy region.

184. Overall, the district of West Berkshire ranks 288 out of 326 local authority areas, making it the 39th least deprived district in England. The wards within West Berkshire can be sub-divided into Super Output Areas (SOAs). West Berkshire has a total of 97 SOAs and the ten most deprived are shown in Table 1 below. Table 1 also shows the overall ranking out of all SOAs in the country. None of the West Berkshire SOAs fall within the top 20% most deprived in the country. The England ranking is 1 to 32,482 with 1 being the most deprived and 32,482 being the least deprived.

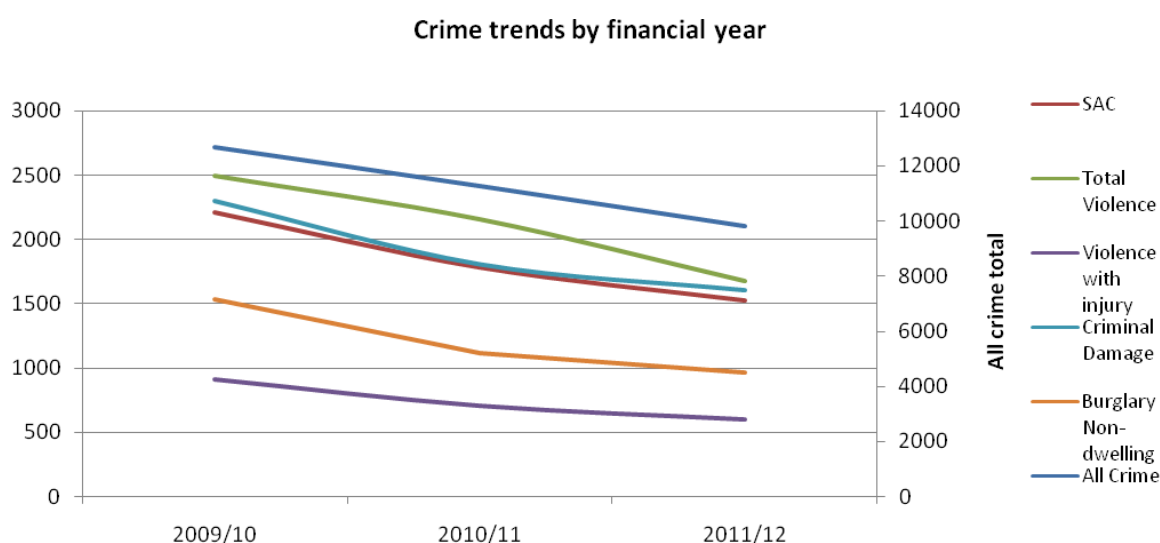
Table 2 – Top ten most deprived SOAs in West Berkshire (2010)

Rank in West Berkshire	SOA	Ward that SOA is in	Rank of IMD in England
1	E01016295	Greenham	6258
2	E01016673	Calcot	10495
3	E01016336	Thatcham North	10971
4	E01016347	Victoria	11225
5	E01016346	Victoria	11362
6	E01016325	Speen	11954
7	E01016280	Clay Hill	14190
8	E01016279	Clay Hill	14746
9	E01016312	Northcroft	14857
10	E01016340	Thatcham West	14857

185. Areas ranked as being more deprived are, overall, largely clustered around Newbury – with other areas in Calcot, and to the east of the district, Lambourn, Thatcham and Aldermaston. Areas classed as less deprived, include some of the suburban areas around Newbury, Purley and Pangbourne along the River Thames and some of the rural areas in the centre of the district.

Crime and Safety baseline

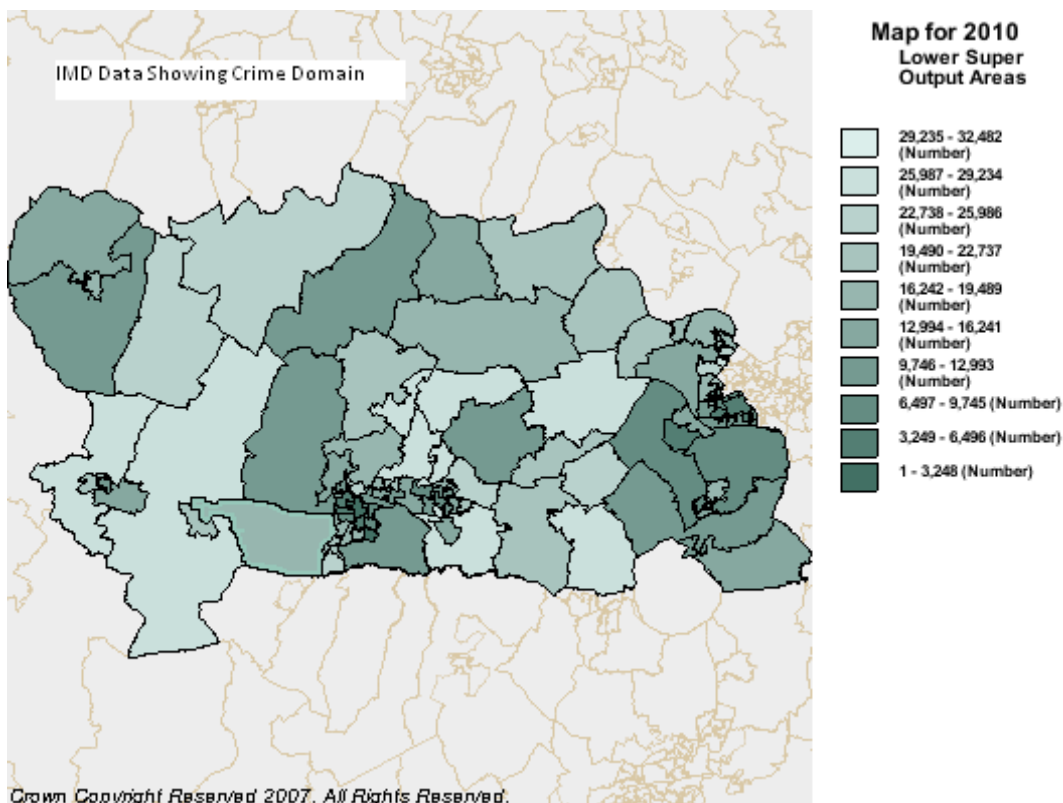
186. Overall, West Berkshire is a relatively safe place to live. Thames Valley Police crime data for West Berkshire for 2010/11 and 2011/12 show a downward trend in all crime committed. At the end of 2011/12 there had been a 13.0% reduction in all crime in West Berkshire on the previous year which means there were 1,465 less crimes compared to 2010/11 (11,267 crimes in 2010/11). Local priorities identified by the community and the police are largely associated with Speeding, Theft, Anti-Social behaviour and Rural Crime.

Figure 14 - Crime trends in West Berkshire 2009/10 – 2011/12

Source: WBDC (2013) West Berkshire District Profile

187. The number of young people who offended and received a formal outcome from the police or courts decreased from 209 (2010) to 135 (2011), a decrease of 35%. The number of offences leading to a formal outcome for young people decreased from 445 in 2010 to 323 in 2011, a decrease of 27%. The number of young people entering the formal youth justice system for the first time decreased from 120 in 2010 to 66 in 2011, a decrease of 45%. Offences of violence continue to be the most prevalent offence by young people, being 24% of the total offences leading to a formal outcome. However, the numbers of such offences fell from 126 in 2010 to 76 in 2011, a reduction of 35%. Offences of theft and handling have fallen by 39% in the same time period.
188. The map below shows crime across the district according to DCLG's Indices of Multiple Deprivation. This measures the incidence of crime for the four major crime themes (burglary, theft, criminal damage and violence) and represents the occurrence of personal and material victimisation. The darker areas show the more deprived areas of the district in terms of crime. These are mainly concentrated in the more urban areas of Newbury, Thatcham and the Reading fringe. However, there are some rural areas of the district which are ranked higher including around Theale, Bucklebury, the Leckhampstead and Peasemore area, Speen, the Lambourn Valley and Burghfield.

Figure 15 – Relative levels of deprivation across the district in terms of crime and disorder.



Source: DCLG, *Indices of Multiple Deprivation, 2007*

Likely Future trends without implementation of the WBMWDPD:

189. In terms of the likely future trends relating to: population, education, housing, deprivation, and crime and safety in West Berkshire in the absence of the WBMWDPD, it is difficult to predict this due to the large number of factors involved. It is considered unlikely however, that there would be any perceptible negative or positive impact on population, education, housing, deprivation, and crime and safety as a result of whether or not the WBMWDPD is produced.
190. In the future, there is likely to be a large increase in the proportion of older people. The population of the area as a whole is projected to rise by 10% to 170,100 by 2021, while the population of those aged over 65 will rise by 34%. The number of people aged 85+ is expected to rise by 41%, by 2021, which will have implications on adult social care provision within the district and on the amount of one-bedroom properties that will be required.
191. A Strategic Objective in the Core Strategy is to deliver 10,500 homes across West Berkshire between 2006 and 2026. Most new development will take place in Newbury, Thatcham and in the settlements in the east of the District close to Reading.
192. Educational trends are moving towards higher levels of achievement. West Berkshire has a high performance standard in primary schools with 80% of children leaving primary schools with literacy and numeracy skills. Overall, a higher proportion of 16-17 year olds remain in education and training in West Berkshire, compared to the South East more generally and to England. Significantly, West Berkshire has a much higher retention of 17 year olds in education or training than compared to either the region or nationally. An emerging issue in the near future will be the fall in the school age population. This will impact on the viability of some schools. Any resulting school closures would have led to pupils having to travel longer distances to schools lengthening the school day and leading to greater amount of traffic on roads. Schools are a vital part of local life in the towns and villages of the district.
193. In response to improving the basic skills of adults, the Council is continuing to steer provision to certain groups of the population, achieved through a combination of adult funding arrangements, fee concessions for students aged 60+, encouragement, funding and professional support for the development of provision targeted at addressing learning needs of prioritised groups and curriculum planning.
194. A single income household would need to earn considerably above the average wage to receive a 90% mortgage on an average flat, which would therefore be out of reach of many wage earners without some form of assistance. This has a major impact on the ability to find and retain younger staff in general and key workers in particular and a growing impact with the escalation in the projected need for care workers in the community. As of April 2012 there were 4076 households registered on the Common Housing Register, an increase from 2785 in April 2006. This increase is partly due to the economic downturn and it is possible that West Berkshire could experience a sharper increase in the number of applicants in the coming months. The housing transfer list for West Berkshire is held by Sovereign Housing Association. There are a high number of local people who either need a home of their own or require more suitable accommodation.

195. The highest requirement is for one bedroom accommodation which reflects the increasing numbers of single person households trying to get on the property ladder. A shortage of affordable housing in rural areas which are popular and attractive places to live is a particular problem. Demand for new houses is high with local people competing with new residents such as commuters, people with second homes and the retired to purchase houses. This can create unbalanced communities, drive up house prices and deny local people the chance of securing a home of their own.
196. The main deprivation issue facing the area is that of barriers to housing and services. The need for affordable housing is likely to increase over the coming years. Sufficient and affordable housing in rural areas is also likely to remain a major concern, often resulting in young adults unable to buy or rent accommodation locally.
197. Although the level of crime is of importance to the residents of the area, it is antisocial behaviour that is of more concern as this has a direct effect on the quality of life and general appearance of the area. A large number of the complaints received relate to anti-social behaviour attributed to young people and in some cases this is more to do with lack of tolerance by older residents. However, since the district is in line to see an increase in the older population, this is likely to lead to less tolerance towards the behaviour of young people.
198. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing Challenges for the WBMWDPD

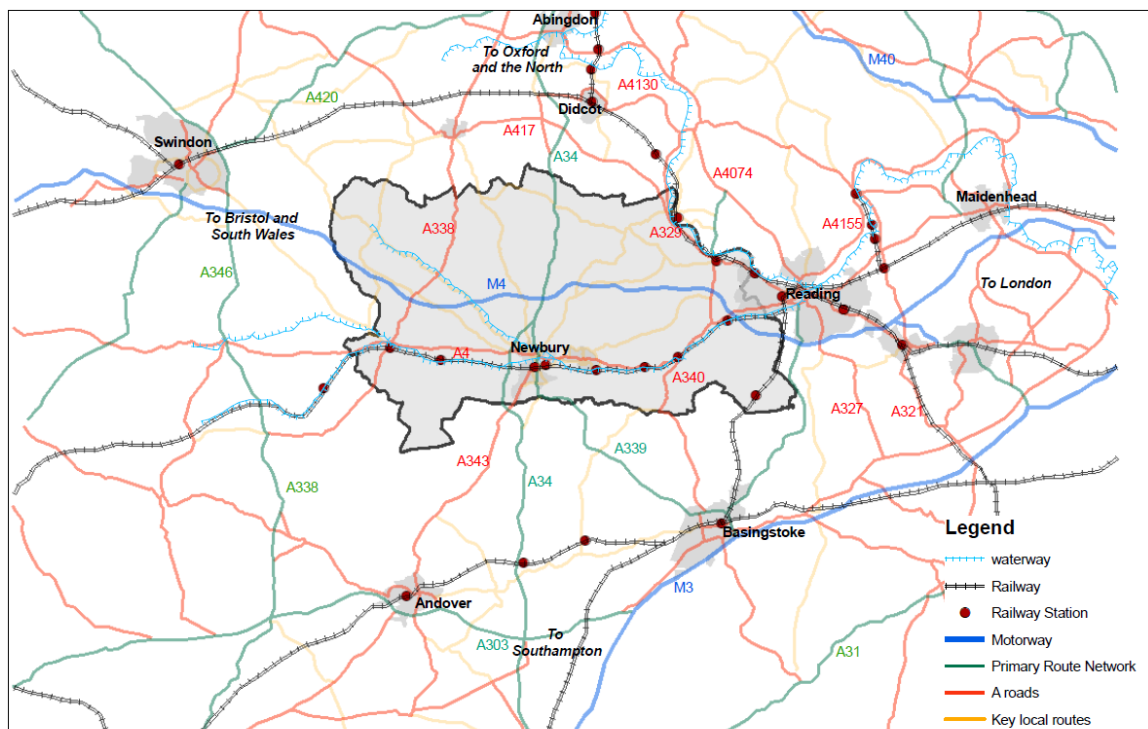
199. Consideration of demographic projections is important when planning for minerals and waste sites.
200. The building of 10,500 new homes between 2006 and 2026 is likely to impact on the level of output from mineral sites and may create pressure for development of new mineral sites to meet the demand for aggregates driven by development. New households and new employment development will generate more waste which will obviously put more pressure on existing waste management facilities.
201. New public waste facilities should be located to meet the demands of a growing population and these facilities should be located in accessible areas, particularly for those typically less mobile such as the elderly.
202. The WBMWDPD should seek to identify facilities that generate employment in areas of relative high unemployment, however this is a challenge in itself, as areas that are densely populated, may also create the largest opposition to minerals and waste sites being located nearby, albeit that such areas are also generators of more significant levels of waste.
203. Areas of high population density in West Berkshire also create the issue of greater competition for other land uses for suitable sites.

Economic / Material Assets

Transport

204. West Berkshire is served by the M4 motorway, and the A4, A34 and A339 trunk roads providing good road access to major urban areas outside of the district, including Oxford, London, Swindon and Bristol (see Figure 16 below). Although links to and from the area are good, the largely rural nature of West Berkshire makes accessibility within the district more of an issue. A large proportion of the residents live in rural towns, villages and hamlets and, through the difficulty in providing viable public transport to these areas, are dependent on the motor car for access to services and facilities.

Figure 16 – Main transport corridors in West Berkshire and the surrounding area



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(not to scale) / Source: WBDC Transport Policy Team

205. Newbury, Thatcham and the Reading corridor have a reasonable public transport service, with up to 5 buses and 3 trains per hour. Reading - just to the east of the district - is a major confluence on the strategic rail network, providing direct and efficient access to key urban centres across the country. The disabled are quite well catered for both as individuals and as groups on public transport in West Berkshire; buses have a terminal and priority access to Newbury's principal shopping street, and there is a telephone information service for bus and route times. Bus services are provided in the majority of towns and larger villages in West Berkshire. In addition there are a number of community transport schemes ranging from community buses to cars that help ensure provision and access across the district.

206. The rural nature, dispersed population and affluence of West Berkshire can be considered problematic for the provision of a frequent and financially viable bus service as people tend to sway towards the convenience of the car. There is a relatively high level of car ownership and usage in West Berkshire. The 2011 census shows that there were 132,000 vehicles licensed in the district (Department for Transport Vehicle License Data). Of these vehicles 105,000 are cars and this amounts to 1.6 cars per household in the district, compared to 1.6 for the South East, or 1.4 for England more widely.
207. The 2011 census shows that for West Berkshire, 71% of people travelled to work by car. This is significantly higher than the South East average of 66%, or for England and Wales (62.6%). A relatively lower proportion of people use public transport to get to work, perhaps reflecting the geographically dispersed nature of the population and the marginally longer distances travelled. A relatively similar proportion of people either work from home, or walk to work. Noticeable is the small proportion of people who cycle to work, although this is reflected nationally also.

Table 3 – Modes of travel to work

	West Berkshire (%)	South East (%)	England and Wales (%)
Work mainly from home	7.6	6.6	5.4
Public Transport	8.9	14.3	26
Car / Motorcycle	70.9	66.5	63.4
Bicycle	2.6	3	2.9
Walk	9.4	10.9	10.7

Source: Census 2011

208. *Accidents:* In 2012, there were 484 casualties in West Berkshire, (21% of which occurred on the A34 and M4). The number of vehicle accidents in West Berkshire resulting in fatalities or serious injuries has been decreasing over the last seven years.

Likely Future Trends without implementation of the WBMWDPD:

209. It is difficult to predict the overall impact without implementation of the WBMWDPD due to the large number of factors involved. However, due to the lack of available Preferred Areas for minerals and waste development in West Berkshire, there is potential for proposals to come forward to meet the demand for minerals, and waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may be negative in terms of transport issues.
210. There is potential for the WBMWDPD to to adopt a policy approach such that sustainable modes of transport are encouraged and were the WBMWDPD not to be implemented this potential benefit would be forfeited.
211. Research done by the (now abolished) South East England Development Agency (SEEDA), indicated that people in the South East travel further than those in any other region – 8,000 miles per year against an England average of 6,800 miles per year.

212. The West Berkshire Local Transport Plan aims to implement a number of policies relating to road, rail and public transport, in particular, increased usage of public transport and a reduction in the use of the car. There are also objectives in relation to encouraging walking and cycling.
213. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing Challenges for the WBMWDPD

214. Generally, emissions from transport of recyclable materials are a very small fraction of the total impacts, and they are dwarfed by the benefits of recycling. There are some exceptions to this, in particular aggregates, where due to low emissions associated with production and disposal, transportation becomes more significant.
215. Opportunities for sustainable forms of transport should be considered when appraising potential minerals and waste sites as well as the potential likely impacts on the surrounding transport network. The likely route of vehicles accessing sites should be carefully considered to avoid problems of congestion, severance, increased costs of maintaining rural roads and safety issues. Opportunities to utilise West Berkshire's rail depots should also be encouraged, where appropriate and sustainable.
216. Sites that are likely to generate a high number of opportunities for employment should take the local public transport network into consideration to seek to help reduce issues of congestion and to increase access to employment for those households without access to private transport.
217. West Berkshire's Local Transport Plan (LTP) of 2011, summarises key issues, challenges and goals regarding transport issues in West Berkshire. The LTP mentions issues such as increased travel demand due to further development, increased reliance on private transport, an inadequate public transport network, the movement of freight on the road and rail networks and the impact of HGV's. The challenges also include tackling the climate change and improving road safety.

Renewable and low-carbon energy

218. Renewable and low-carbon energy supplies include, but not exclusively, those from:
- biomass and energy crops;
 - Combined Heat & Power/ Combined Cooling Heat & Power (and micro-CHP);
 - energy-from-waste;
 - ground source heating and cooling;
 - Hydro generation;
 - solar thermal generation;
 - photovoltaic generation;
 - wind generation;

- anaerobic digestion (providing energy from the capture and efficient treatment of organic waste).

219. The Thames Valley (TV) Energy Installations database obtains information from electricity providers in the UK in relation to renewable energy installations that are selling energy back to the grid (see Tables 3 and 4 below). This provides an indication of the amount of new renewable energy capacity being provided each year. It can be seen that the amount of new capacity from solar photo voltaic panels was significantly more in 2011/12 (1.857 MW) when compared with 2010/11 (0.561 MW).

Table 4 - West Berkshire unitary area: new renewable energy capacity 1 April 11 - 31 March 2012, and end of year total installed capacity

Installation up until March 12

Technology	New capacity installed between 1/4/11 and 31/3/12 (MW)	Installed capacity up to 31/3/12 (MW)
Wind	0	0.033
Solar PV	1.857	2.609
Hydro	0	0
Landfill gas	0	0.346
Sewage gas	0	0
Animal biomass	0	0
Plant biomass	0	0
Biomass co-firing	0	0
MSW combustion	0	0
TOTAL	1.857	2.988

(Source: Extracted 22/11/12 from TV Energy installations database)

Table 5 - West Berkshire unitary area: new renewable energy capacity 1 April 10 - 31 March 2011, and end of year total installed capacity

Installation up until March 11

Technology	New capacity installed between 1/4/10 and 31/3/11 (MW)	Installed capacity up to 31/3/11 (MW)
Wind	0.006	0.033
Solar PV	0.561	0.752
Hydro	0	0
Landfill gas	0	0.346
Sewage gas	0	0
Animal biomass	0	0
Plant biomass	0	0
Biomass co-firing	0	0
MSW combustion	0	0
TOTAL	0.567	1.131

(Source: Extracted 22/11/12 from TV Energy installations database)

Likely Future Trends without implementation of the WBMWDPD

220. It is difficult to predict the overall impact on renewable and low-carbon energy without implementation of the WBMWDPD due to the large number of factors involved. There is potential for the WBMWDPD to adopt a policy approach such that low-carbon energy technologies are encouraged and were the WBMWDPD not to be implemented this potential benefit may be forfeited.
221. EU Directive 2009/28/EC on renewable energy sets targets for all Member States, such that the EU will reach a 20% share of energy from renewable sources by 2020 and a 10% share of renewable energy specifically in the transport sector. The UK is legally committed to:
- meeting 15% of its energy demand from renewable energy sources by 2020;
 - reducing carbon dioxide emissions by 60% from the 1990 levels by 2050 (under the Climate Change Bill and the Energy White Paper May 2007); and
 - To ensure that all new homes are built to zero carbon standards by 2016.
222. The 'Feed-in Tariff'³⁴ is a Government subsidised scheme meaning that if someone is generating electricity through certain renewable/low carbon technologies (e.g. solar panels or a wind-turbine) then they can be paid money by their electricity provider. This is likely to continue in an effort to meet renewable energy targets. This will mean that there will be more development pressure for these types of development.
223. The West Berkshire Core Strategy³⁵ (WBCS) lists the delivering of renewable energy schemes through the development of strategic sites as an opportunity. In the Spatial Vision the increased generation of renewable energy is stated as something that will contribute to a reduction of carbon emissions. Specific policies within the WBCS are also supportive of renewable energy schemes.
224. The Anaerobic Digestion Strategy and Action Plan was produced by DEFRA in 2011. Anaerobic digestion is natural process in which microorganisms break down organic matter, in the absence of oxygen, into biogas (a mixture of carbon dioxide (CO₂) and methane) and digestate (a nitrogen-rich fertiliser). The biogas can be used directly in engines for Combined Heat and Power (CHP), burned to produce heat, or can be cleaned and used in the same way as natural gas or as a vehicle fuel. It can also offer other benefits, such as recovering energy and producing valuable biofertilisers. The biogas can be used to generate heat and electricity, converted into biofuels or cleaned and injected into the gas grid. Anaerobic Digestion (AD) 'can play an important role as a means of dealing with organic waste and avoiding, by more efficient capture and treatment, the greenhouse gas (GHG) emissions that are associated with its disposal to landfill'. The level of evidence and information currently available is limited at present, due to the relative immaturity of the anaerobic digestion industry in England (other than in the waste water industry where the technology is commonly used to treat sewage sludge). However, due to the Government's commitment to address barriers identified by industry, this is likely to be a future growth area as technology, expertise and best practise develops.

³⁴ <https://www.gov.uk/feed-in-tariffs/overview>

³⁵ West Berkshire District Council (2012) West Berkshire Core Strategy

It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing Challenges for WBMWDPD

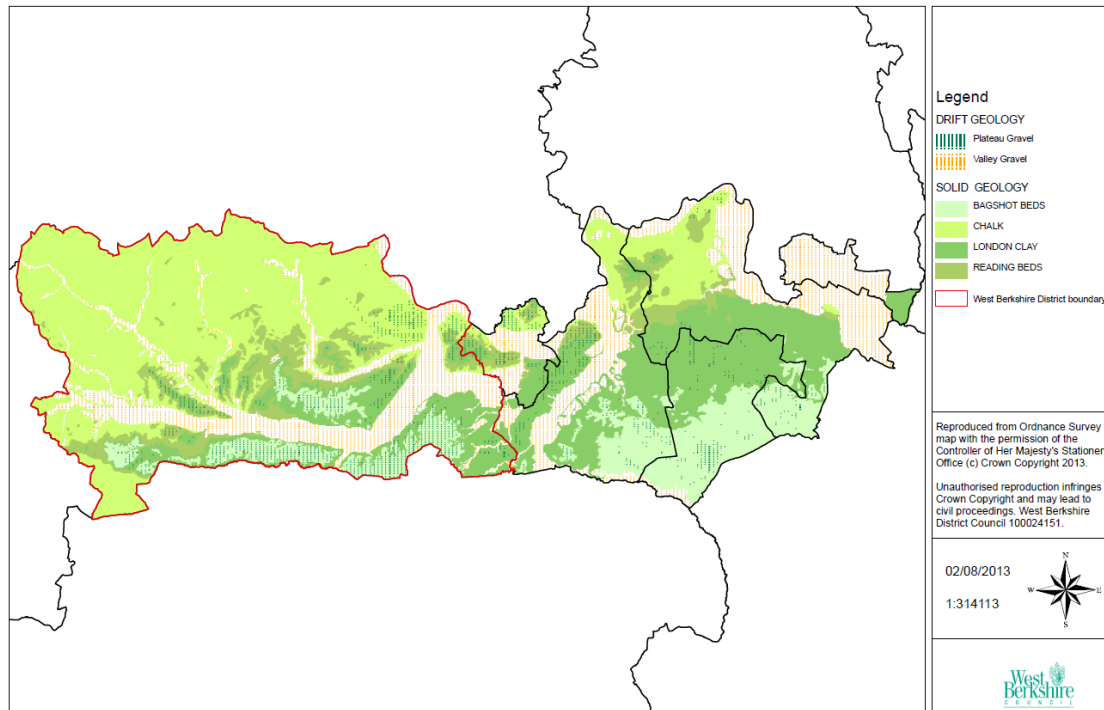
225. The NPPF (2012) indicates that renewable and low carbon energy, and associated infrastructure should be supported.³⁶
226. The potential for energy-from-waste CHP should also be considered. CHP is the simultaneous generation of usable heat and power (usually electricity) in a single process, thereby discarding less wasted heat and putting to use heat that would normally be wasted. According to ODPM (2004)³⁷ the following waste management facilities have potential for energy-from-waste generation:
- Anaerobic digestion plants (biogas, converted to heat; electricity);
 - Pyrolysis and gasification plants (electricity);
 - Small scale and large scale thermal treatment (electricity and heat);
 - Landfill gas plant (electricity).

Minerals

227. This section examines minerals resources in terms of them being material assets. Minerals are an integral component of the built environment in West Berkshire, ensuring the ability to achieve economic objectives through the building of homes, schools, offices, highways and other major infrastructure.
228. West Berkshire's most abundant resources are sharp sand and gravel, soft sand, chalk and clay. Hard rock and marine dredged sand and gravel are also supplied through the two rail depots at Theale.
229. West Berkshire has long been a major area for mineral extraction. Historically, clay and chalk were the main minerals produced, however since the beginning of the 20th Century, aggregates such as sand and gravel have been the main minerals extracted to supply the building and construction industry. Sharp sand and gravel is the most widely extracted mineral resource in West Berkshire. Sand and gravel deposits in West Berkshire are primarily situated along the Kennet Valley between Newbury and Reading.
230. There are deep deposits of oil, gas and coal underlying large areas of Berkshire. None are currently exploited, but might offer potential should future demand for these resources make them viable.

³⁶ CLG (2012) National Planning Policy Framework

³⁷ ODPM (2004) Planning for Waste Management Facilities: A Research Study (2004)

Figure 17 - Solid and Drift Geology of West Berkshire

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(not to scale)

231. Historic data for minerals output at a West Berkshire level is not easily available due to a combination of operators' reluctance to provide information, confidentiality agreements and mineral planning historically being carried out at a Berkshire-wide level (meaning that figures were collated for Berkshire as a whole).

232. In the absence of actual data for minerals output at a West Berkshire level, information has been derived from the following publicly available alternative sources:

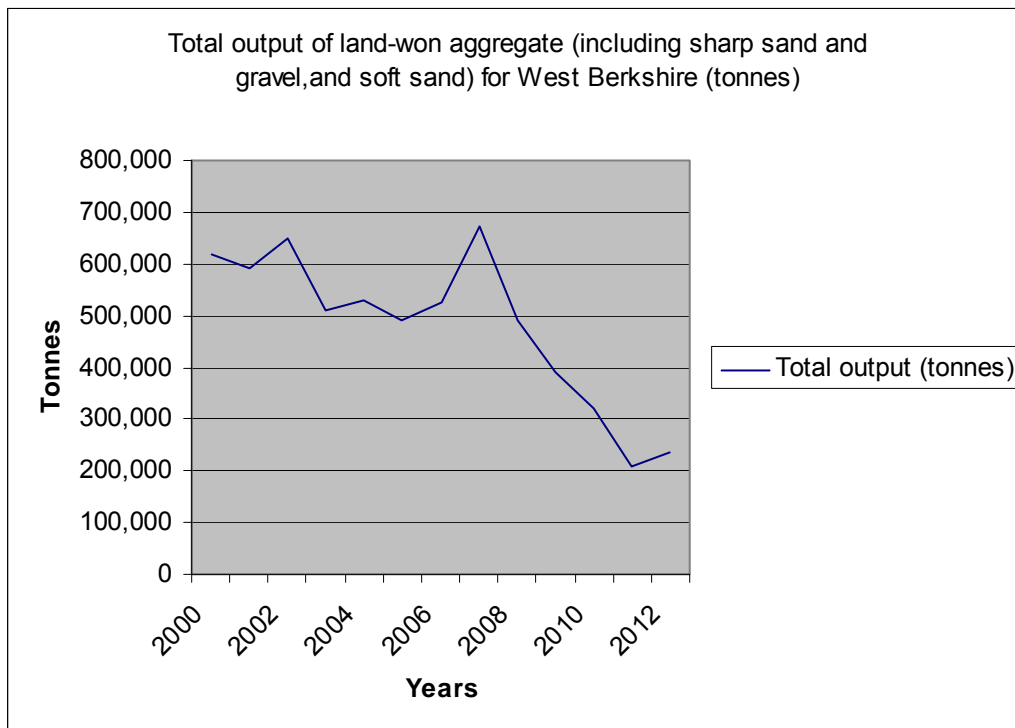
- Planning application forms.
- Written submissions accompanying planning applications.
- Proofs of evidence supporting planning appeals.
- Letters from site operators.
- Site visit photographs.
- Site visit notes (including notes of conversations with site managers).
- Aerial photography.
- Returns information provided by mineral operators
- Annual Monitoring Reports produced by the JSPU.
- Annual Monitoring Reports produced by the Aggregates Working Party.

233. Outputs of soft sand have remained relatively constant since 2000, with a slight increase in outputs in 2006, gradually reducing thereafter to the level up to 2005. The variation is due to the position that there are only two quarries

producing soft sand in West Berkshire. The increase in outputs of soft sand coincides with the opening of Copyhold Farm (see information on quarry activity below) in order to supply the Beenham Tile Factory. The rate of production from Copyhold gradually declined after the first three years, and this coincided with a decline in production at the other soft sand quarry, Old Kiln Farm. Due to confidentiality agreements in place it is not possible to publish accurate data on soft sand sales in West Berkshire but the average level of sales between 2000 and 2011 remains around 90,000 tonnes per annum (tpa).

234. On the other hand outputs of sharp sand and gravel show considerable variation, due to variations in the number of quarries in operation and also because of changes in the rate of production of individual quarries. The rate of output was variable between 2000 and 2007; there were peaks in 2002 and 2007 of over 600,000. Since then outputs have declined notably year on year until 2010. Output in 2011 was the same as in 2010. In 2001 there were 8 quarries in operation. In 2007 there were 7, in 2011 there were 4. One of those is expected to be worked out and so was not expected to produce any output in 2012.

Figure 18 - Estimated total output of land-won aggregate in West Berkshire 2000 - 2012



(Figures in Annex A)

235. It is apparent that the number of quarries that are in operation is a significant factor in the level of outputs in West Berkshire, with the level of output falling rapidly in 2010 and 2011 along side the closure of 4 quarries between 2009 and 2011.
236. The total approved reserves for extraction of sand and gravel in West Berkshire since 2000 as derived from the sources in para 4.2 are shown in Table 6 below.

Table 5 - Reserves of sharp sand and gravel and soft sand in West Berkshire, in 1,000 tonnes

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
3355	2915	4335	3850	3642	3152	3052	2391	2194	1812	1507	1287

Source: WBDC

237. As of the end of 2011 there were 6 quarries with total reserves of 1,287,000 tonnes remaining in West Berkshire. The latest assessment is that there are now (2013) only 4 quarries in operation. For most of these quarries, the amount of remaining reserves and recent levels of outputs suggest that the reserves in the current sites that are actively producing primary minerals will be worked out within the next seven years. The expectation is that in 2015, only one of these quarries will still be in operation, producing less than 100,000 tpa. In August 2013 planning permission was granted for a new mineral site, Wasing Lower Farm, which will produce 200,000 tonnes of sharp sand and gravel over a 12 year period. It is expected that operations at this site will commence by the end of 2013 and this site will go some way towards reversing the trend of a decline in output of primary minerals from sites within West Berkshire.
238. This consent, if implemented, will also provide a further 2.4 million tonnes of reserves that will be worked over the 12 year life of the site and this consent also bring West Berkshire's landbank of permitted mineral reserves to just over the 7 years years, as recommended in the NPPF.

Availability of Future Land-won Aggregate Resources

239. The Review of Minerals Supply prepared for SEERA by the BGS in 2006 included assessments of the available resources (i.e. aggregate deposits that were not already sterilised by surface development) in each MPA area in the South East. The figures were categorised according to whether the resources fell with an area subject to one or more of the following environmental designations:- SSSI, NNR, National Park, AONB, SPA or SAC. The assessments were undertaken by reference to assumed depths of deposits interpreted from local and regional geological knowledge and other considerations as explained in more detail in the report. (South East England Regional Assembly: South East Plan – Review of Mineral Supply and Demand – CR/06/147).
240. This high level assessment for West Berkshire indicated that there were 321mt of soft sand that were not subject to any of the listed environmental constraints, 983mt subject to one environmental constraint – the main one in West Berkshire being AONB - and 23mt subject to two of the listed environmental constraints.
241. The equivalent figures for concreting sand and gravel (sharp sand) were:- 312mt in areas that were not subject to any listed environmental constraint; 348mt subject to one environmental constraint and 36mt subject to two of the listed environmental constraints.
242. The resource assessments do not take account of other constraints on the availability of these resources for extraction, such as access, proximity to

sensitive uses, local nature conservation interests, protected species, water interests, landscape impact, etc but do suggest that, potentially, there are significant deposits of soft sand and sharp sand and gravel in West Berkshire that are unconstrained by environmental designations.

243. West Berkshire does not have its own resources of hard rock and therefore relies solely on imports into the unitary area to meet the need. These imports arrive at the rail depots in Theale, as does limited amounts of marine dredged sand. No accurate figures are currently available for the amount of aggregates imported to West Berkshire through the two rail depots (and accurate figures could not be published due to confidentiality agreements). However, AM2011³⁸ provides some Berkshire-wide data: in 2011 the total sales at the three active rail depots in Berkshire (two of which are at Theale, West Berkshire) were 0.9Mt. 84% of the sales was crushed rock while the remaining 16% of sales was marine dredged sand and gravel from Thames wharves. 90% of the crushed rock came from South West England, and the other 10% was from South Wales and Northern Ireland. This amounted to an overall increase of 20% on the 2010 figures.
244. Therefore the best indicative estimate currently available for sales from the rail depots in West Berkshire is to calculate two thirds of the total Berkshire figure, in line with two out of the three rail depots in Berkshire being in West Berkshire. Using the 'Berkshire-wide' percentages, it can then be estimated what the breakdown was, in terms of aggregate-type imported by rail (see below for estimated tonnages and annex B for methodology).
245. These calculations suggest that circa 500,000t of aggregate was sold from rails depots in West Berkshire in 2010. 600,000t of aggregate was sold from rails depots in West Berkshire in 2011. 504,000t of crushed rock was sold from the rails depots in West Berkshire in 2011. 453,600t of the crushed rock sold from the rails depots in West Berkshire in 2011 came from South West England. The other 50,400t of the crushed rock sold from the rails depots in West Berkshire in 2011 came from South Wales and Northern Ireland. 96,000t of aggregates sold from the rails depots in West Berkshire in 2011 were marine dredged sand and gravel from Thames wharves.
246. With regard to recycled and secondary aggregates produced in West Berkshire, secondary aggregates production is negligible, West Berkshire Council has undertaken a survey on the volume of recycled aggregates produced from sites within West Berkshire and whether they are used of aggregate or non aggregate uses. This survey returned a 83% response rate and an estimated production level (based on application data) was derived for the site that did not respond. Clearly this excludes capacity delivered through the use of mobile plant on construction sites.
247. This survey suggests that, in 2012, around 382,000 tonnes of recycled aggregates were produced at the sites in West Berkshire, of which 290,000 tonnes were used for aggregate uses and 92,000 tonnes were used for non-aggregate uses.
248. In order to give a broad indication of the various types of aggregate sold in West Berkshire as a proportion of total aggregate sales in West Berkshire for

³⁸ Berkshire Authorities (2011) Berkshire Aggregates Monitoring

2012, these indicative estimates have been drawn on to produce the chart below (Figure 19). The information is also provided in Table 7 below.

Figure 19

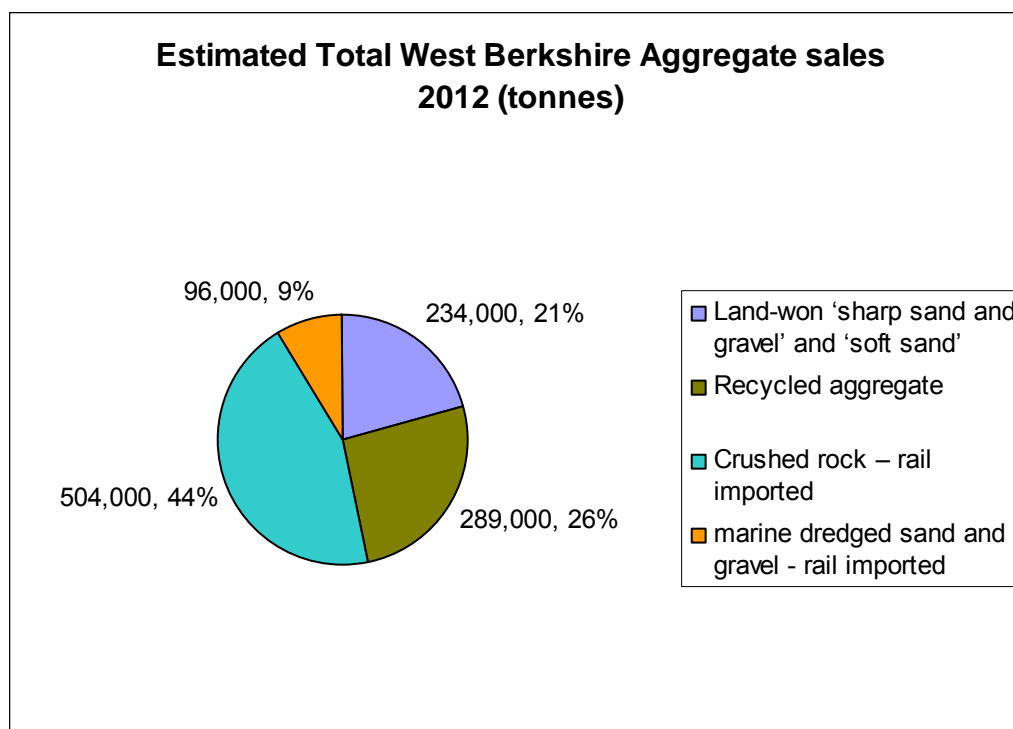
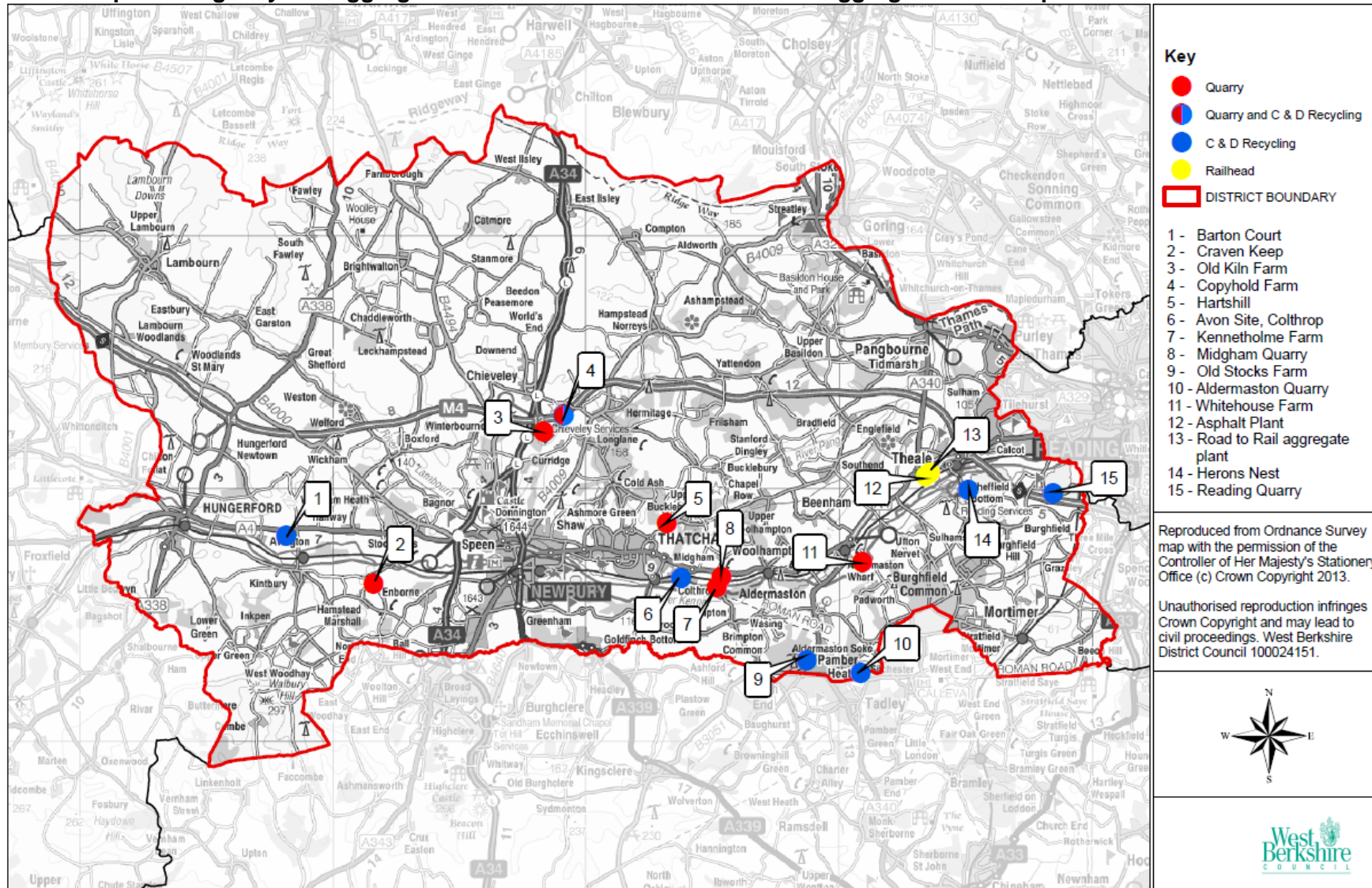


Table 7

Estimated Total West Berkshire Aggregate sales 2012 (tonnes)	
Land-won 'sharp sand and gravel' and 'soft sand'	234,000
Recycled aggregate	289,000
Crushed rock – rail imported	504,000
Marine dredged sand and gravel - rail imported	96,000
Total aggregate sales	1,123,000

Figure 20: Map showing the sites in West Berkshire with; permitted mineral reserves in 2012, producing minerals in 2012, producing recycled aggregates in 2012 and railhead sites where aggregates were imported in 2012.



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Data limitations

249. There are a number of difficulties associated with gathering complete, reliable, up-to-date data for use in minerals planning in West Berkshire.
250. Historical data for minerals output and reserves at a West Berkshire level is not easily available due to a combination of operators' reluctance to provide information, confidentiality agreements and mineral planning historically being carried out at a Berkshire-wide level (meaning that figures were collated and published for Berkshire as a whole). The use of sales data in West Berkshire as an indicator for minerals used in West Berkshire also assumes there is a balance between road/rail hauled aggregate into and out of West Berkshire.

Likely Future Trends without implementation of the WBMWDPD

251. In terms of the likely future trends relating to minerals in West Berkshire in the absence of the WBMWDPD, it is difficult to predict this due to the large number of factors involved. However, due to the lack of available Preferred Areas for minerals development in West Berkshire, there is potential for proposals to come forward to meet the demand for minerals capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may have a negative impact.
252. Whether or not proposals for minerals development would come forward in the absence of the WBMWDPD cannot be predicted. However if they were to, this would provide employment. The current development plan is somewhat dated and therefore does not provide certainty for mineral operators which is likely to be negative in economic terms.
253. Over the past 3-5 years West Berkshire has seen a significant decline in both the level of permitted sand and gravel reserves and level of primary aggregates sales. At the same time the amount of capacity available for construction and demolition waste recycling has dramatically increased. This change in pattern could be as a consequence of the current period of economic decline or it could be due to a change in building techniques and the use of materials, such as wood, that are seen as being more sustainable than concrete products.
254. This change could also mark a shift in the pattern of aggregate production with the historic levels of land won aggregate provision having resulted in a decreased level of resource available, such that there has been a shift of primary aggregate production to sites outside of West Berkshire coupled with a move towards the production of recycled aggregates to meet the local demand.
255. It is apparent that West Berkshire has, for decades, been an exporter of primary aggregates (primarily sharp sand and gravel) and the minerals extracted from West Berkshire have supported developments outside the Authority area. However it is well known that minerals can only be worked where they occur and no individual Mineral planning Authority can rely solely upon minerals from within their area to meet local demand. As such those authorities that are relatively resource rich have to acknowledge that they need to support those areas that are resource poor to facilitate the continuation of patterns of economic growth in the UK.

256. As referred to above there has been a decline in the level of permitted reserves of aggregates and the volume of minerals produced and sold from quarries within West Berkshire. Approximately 74% of West Berkshire is AONB and this Nationally important landscape designation and government guidance is clear that planning authorities should, as far as is practical, provide for the maintenance of non energy minerals from outside areas of outstanding natural beauty³⁹.
257. Sharp sand and gravel is not a particularly rare resource and it is understood that, at a national level, there are extensive deposits outside such nationally important landscapes. However there are known to be viable deposits located within the AONB, particularly along the corridor between Newbury and Reading. Much of the reserves within this corridor that is outside the AONB have already been extracted along with large areas of the terrace deposits found further to the south. This would indicate that sharp sand and gravel resources are likely to come under pressure for extraction in the future.
258. The British Geological Survey – South East Regional Assembly: South East Plan – Review of Mineral Supply and Demand Report suggests that in West Berkshire it is estimated that there are circa 1,327,000,000 tonnes of soft sand resource, albeit that 76% of this resource is constrained by environmental designations this still suggests that there remains circa 321 million tonnes of unconstrained resources of soft sand in West Berkshire.
259. However the historical pattern of soft sand is such that it has been principally worked from sites located within the North Wessex Downs AONB which indicates that although there may theoretically be very large volumes of unconstrained soft sand resources in West Berkshire, such deposits may not have been worked for other reasons, such as difficulties over access, viability, quality of the deposit or land ownership.
260. Only one new site working soft sand has been permitted in the last decade, Copyhold Farm, and this site was only permitted on the basis that the soft sand worked from this site was of sufficient quality to be used in the Marley tile factory in Beenham and at the time of that application the tile factory was understood to be importing soft sand from as far away as Dorset to meet the needs of the factory. As such it was considered that the applicant had demonstrated an overriding local need for the minerals that would be used locally to fulfil a demand that was being met from a considerable distance away at that time.
261. The NPPF is clear that great weight should be given to the conservation of landscapes such as the AONB and the NPPF sets out a presumption against major developments in such designated areas. The NPPF also confirms that the maintenance of non energy minerals should be provided for from outside National parks, the Broads and Areas of outstanding natural beauty.
262. The majority of the sharp sand and gravel deposits that are worked in West Berkshire are concentrated in the Kennet valley in a corridor between Newbury and Reading. This area is also a transport corridor that benefits from being served by the primary road network (the A4), the London to south coast railway line and the Kennet and Avon canal.

³⁹ Paragraph 144 of the NPPF

263. Historically the sites in West Berkshire have relied on road based transport, to move the extracted minerals to the mineral processing plants and or markets, however if the pattern of mineral extraction within West Berkshire is maintained there is the potential for minerals being extracted to be transported by these 3 modes of transport to the urban areas where the minerals are principally utilised.
264. The sand and gravel deposits that exist in West Berkshire are relatively shallow and as such the sites tend to only have a limited life and the extraction operations move through the extraction phases at a considerable pace.
265. Water and rail borne transportation methods require a significant financial investment to deliver the necessary wharves and sidings. As such it is likely that such facilities could only serve very large deposits to ensure the economic viability of such a modal shift.
266. There is a single railhead depot in West Berkshire, located at Wigmore Lane near Theale, very close to junction 12 of the M4. The railhead site is split into 4 depots two of which involve the importation of aggregates.
267. The first of these is a road to rail aggregates depot that is understood to import hard rock from the south west and also limited volumes of marine sand from wharves in London. Within this site are two cement batching plants that use some of the imported materials to manufacture cement. The second depot is a coated road stone plant that is understood to import hard rock from the south west for use in asphalt production such that the hard rock is understood to be exported as a “product” as opposed to as “crushed hard rock”. As shown above a significant volume of hard rock is imported into the railhead sites in West Berkshire, however it is assumed that significant volumes of the imported material are exported again by rail, to serve a wide area, or used directly in the manufacture of asphalt.
268. Examples of windfall sources of aggregates are (i) from development sites, usually for large scale projects which require the extraction of considerable volumes of material as part of the site preparation, such as the construction of a reservoir, or a flood relief scheme, and (ii) borrow pits which are temporary mineral workings opened locally to supply material for a specific construction project. By their very nature it is not possible to anticipate the likely volumes or even types of mineral that may be supplied from windfall sites.
269. The adopted Replacement Minerals Development Plan Document for Berkshire (RMLP) includes policies which allow for the supply of aggregates or other minerals from such sources, where the development project itself is justified in its own right, and in the case of borrow pits where it is considered that the borrow pit would cause less environmental disturbance than material won from established quarries, or from a Preferred Area.
270. In the main the aggregate mineral deposits in West Berkshire are concentrated along the river valley which means that potential effects on ground and surface water are major considerations in deciding the restoration scheme following mineral extraction. For a number of years the default outcome of worked out voids in this situation has been the formation of lakes, particularly in the Theale / Burghfield area, however in more recent years there has been a trend towards land based restoration.

271. There is no National requirement to maintain a landbank for chalk or clay. The RMLP provided a policy approach for proposals for these minerals to be permitted where the minerals are required to meet a specific local need which cannot be met from elsewhere and which outweighs any other environmental, agricultural, amenity and other planning constraints. There are no active sites in West Berkshire that are producing chalk or clay and since the adoption of the RMLP there have been no planning applications for the extraction of chalk or clay within West Berkshire.
272. There are no known commercial resources of oil and gas in West Berkshire, although viable reserves of oil and gas have been identified and are being worked in some neighbouring counties. The RMLP approach to the possible exploitation of oil and gas resources includes a policy (Policy 17) allowing for the control of exploratory drilling, but requires that any commercial exploitation is fully justified in terms of balancing need against environmental and other considerations, taking account of the specific arrangements for working, restoration, ancillary development and associated activities.
273. While a significant coal seam is present in the west of Berkshire, it is deep under ground and not considered to be viable for extraction. The RMLP did not include any policies for coal exploration or extraction. On the basis that the increasing price of energy is making more inaccessible sources viable, an approach similar to that to oil and gas might be adopted.
274. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing challenges for WBMWDPD

275. In regard to minerals, there are likely to be a number of challenges for the Plan which include population growth, climate change, finding unconstrained mineral resources and transport issues.
276. Population growth in West Berkshire will increase pressures on the current waste management facilities. This will also result in an increase in the demand to develop land which is underlain with minerals.
277. Climate change is a major sustainability consideration. The WBMWDPD should seek to reduce the impacts on climate change through the promotion of more sustainable methods of minerals extraction. Restoration plans for mineral sites are an opportunity to mitigate climate change impacts.
278. Minerals development has a number of key environmental effects which must be considered by the Plan. These include; noise, air quality; mineral waste; dust; visual intrusion on the local setting and wider landscape; archaeological and heritage features; traffic; groundwater; surface water; landscape character; and internationally and nationally designated, protected or sensitive special and plant and wildlife habitats⁴⁰.
279. The Minerals and Waste Development Plan Document will need to set out the strategy and framework that meets the need for aggregates in West Berkshire over the plan period, to 2032. The reserves of primary aggregates in West

⁴⁰ Planning and Minerals: Practice Guide (2006)

Berkshire is declining and it is possible that the WBMWDPD may need to consider a shift in strategy to meet the need for aggregates over the plan period away from the reliance on land won sources.

280. It is apparent that West Berkshire has, for decades, been an exporter of primary aggregates (primarily sharp sand and gravel) and the minerals extracted from West Berkshire have supported developments outside the Authority area. The WBMWDPD will need to consider whether it is appropriate and feasible to progress with a strategy whereby the aim is that the remaining reserves will be used for the construction and manufacturing industry solely within West Berkshire, or whether the wider role that West Berkshire has in supplying minerals to other areas that have fewer resources should be acknowledged and accounted for in the WBMWDPD.
281. The WBMWDPD will need to consider whether it is appropriate and feasible to progress with a strategy that seeks to meet the need for sharp sand and gravel from:
- sites outside the AONB, recognising that the viable reserves in this area have already been heavily exploited such that more constrained or sensitive sites may have to be worked or that the level of aggregates that can be produced in West Berkshire may have to be limited; or
 - sites both outside and within the AONB, and whether the WBMWDPD should identify a strategic area / areas or sites within the AONB where the extraction of sharp sand and gravel could be permissible.
282. The WBMWDPD will need to consider whether it is appropriate and feasible to progress with a strategy that seeks to meet the need for soft sand from:
- sites outside the AONB, recognising that the availability of viable reserves outside the AONB is limited such that the level of soft sand production in West Berkshire may have to be limited; or
 - sites within the AONB and whether the WBMWDPD should identify a strategic area / areas or sites within the AONB where mineral extraction could be permissible; or
 - sites outside the AONB, recognising that there may be exceptional local circumstances where extraction of soft sand from within the AONB may be acceptable if, for example, it was to meet an overriding specified local need.
283. Minerals are a valuable but limited resource that can only be won where they naturally occur. Safeguarding of viable or potentially viable mineral deposits from sterilisation by surface development which would preclude their possible extraction at some future date is an important component of sustainable development. Government advice is that planning authorities should make every effort to safeguard mineral deposits that are or may become of economic importance, against other types of development.
284. The existence of viable or potentially viable mineral deposits can be noted by designating them as Mineral Safeguarding Areas (MSAs). MSAs can also be defined around the margin of active mineral workings. Within such areas, surface development, which would be incompatible with the mineral development will not be permitted during the active life of the quarry. The WBMWDPD will need to consider how safeguarding should be catered for in policy terms.

285. The WBMWDPD will need to consider the capacity of the existing railhead sites in terms of ability to accommodate increased levels of imports, and coupled to this is whether there is the capacity on the rail network for more material to be imported to the site via the existing rail network. Further work may also have to be carried out to understand the available capacity for further trains to be introduced onto the railway network, and similarly the available capacity on the canal network to accommodate aggregate movements.
286. The WBMWDPD will need to consider how the best use of 'windfall sites' can be obtained, and how this can be addressed in terms of policy.
287. The WBMWDPD will need to consider to what extent the continuing introduction of lakes into the landscape is acceptable, and whether there is a need to consider carefully what other forms of restoration may be appropriate, and to reflect these in policy accordingly. In doing so it should be borne in mind that the scope for alternative restoration is limited for many sites due to proximity to a river or the nature of the underlying geology. Linked to this is the availability of suitable inert fill where land based restoration options are sought.
288. The WBMWDPD will need to consider what the policy approach will be with regard to the protection and/or extraction of chalk and clay in West Berkshire.
289. The policy approach in regard to the extraction of energy minerals will need to be considered in the development of the WBMWDPD.

Waste

290. This section examines waste resources in terms of them being material assets.
291. There is a requirement to move towards sustainable methods of waste management and gain as much value from resources as possible. Factors such as an increasing volume of waste, a decreasing landfill capacity, and higher targets for reuse and recycling of waste are the driving force behind this. Economic growth is currently associated with increasing waste arisings. England produces around 228 million tonnes of waste per annum⁴¹.
292. There are a number of strategic areas within West Berkshire where there is a concentration of waste management facilities. The first is the Beenham / Padworth area where the Waste management facility that manages the MSW arising in West Berkshire is located (Padworth) along with a similar suite of facilities that deal primarily with C&I waste (Beenham). Another area with a number of waste management facilities is the Theale / Burghfield area where there are a number of temporary waste facilities together with a significant CDEW facility that produces large quantities of secondary aggregates. The Tadley area, on the West Berkshire/ Hampshire border is home to a number of skip waste facilities that also manage CDEW, there are also a number of waste facilities in the Newbury / Thatcham area. Finally, and outside the south eastern section of West Berkshire there is a small concentration of specialist waste management facilities in the Lambourn woodlands area.
293. It is estimated that around 0.5 million tonnes of controlled waste was handled in West Berkshire during 2011/12 (see Table 8 and Figure 21 below). The C & I

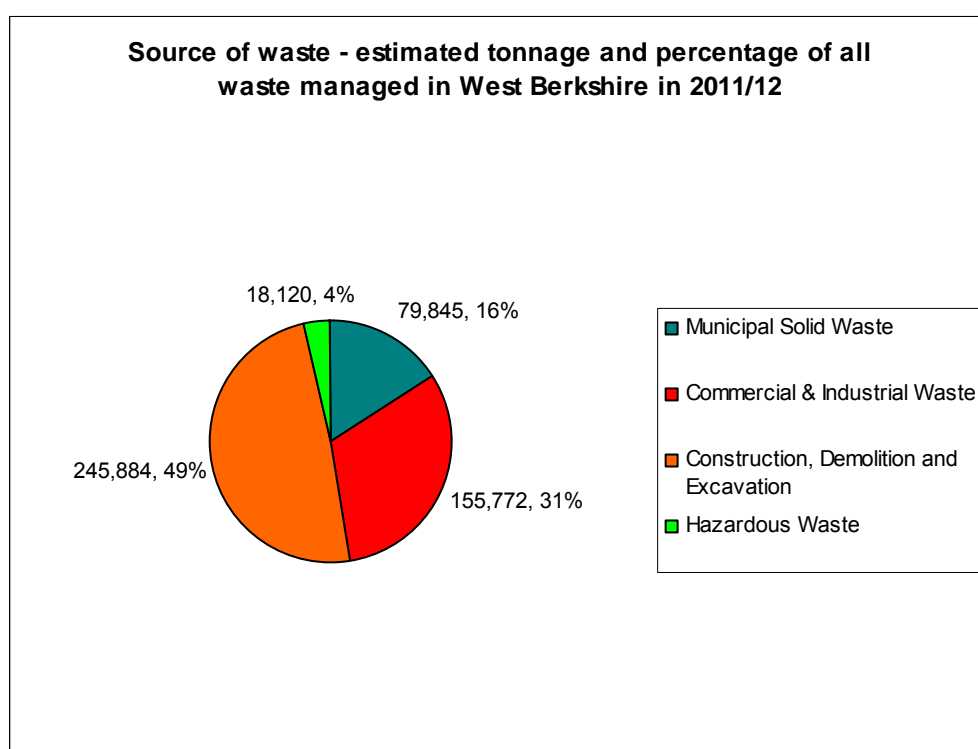
⁴¹ DEFRA (2013) Reducing and Managing Waste; <https://www.gov.uk/government/policies/reducing-and-managing-waste> (accessed 07/08/13)

figure is an indicative estimate for 2012, while the C, D & E figure is an indicative estimate for 2010. In the absence of any other data these figures will be used as indicative estimates for 2011/12.

Table 8 - Source of waste: breakdown and estimated tonnage of waste managed in West Berkshire in 2011/2012

Waste Stream	2011/12 (tonnes)
MSW	79,845 ⁴²
C & I (Indicative est)	155,772 ⁴³
C, D & E (Indicative est)	245,884 ⁴⁴
HAZ	18,120 ⁴⁵
Total arisings	499,621

Figure 21



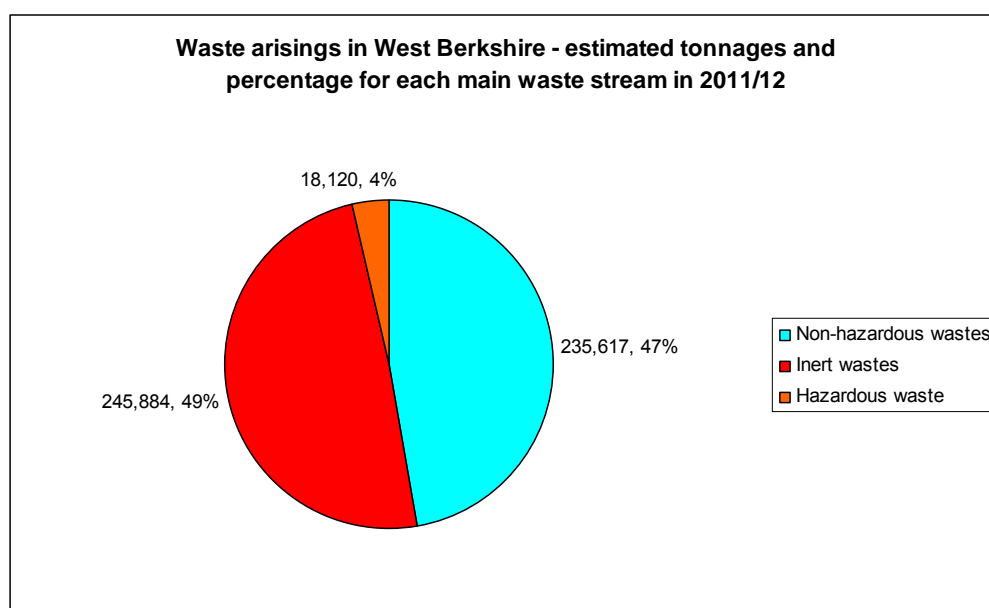
294. The majority of waste arises from inert (49%) and non-hazardous (47%) waste streams with a small amount of hazardous waste (4%) (See Figure 22 below).

⁴² WBDC (2013)

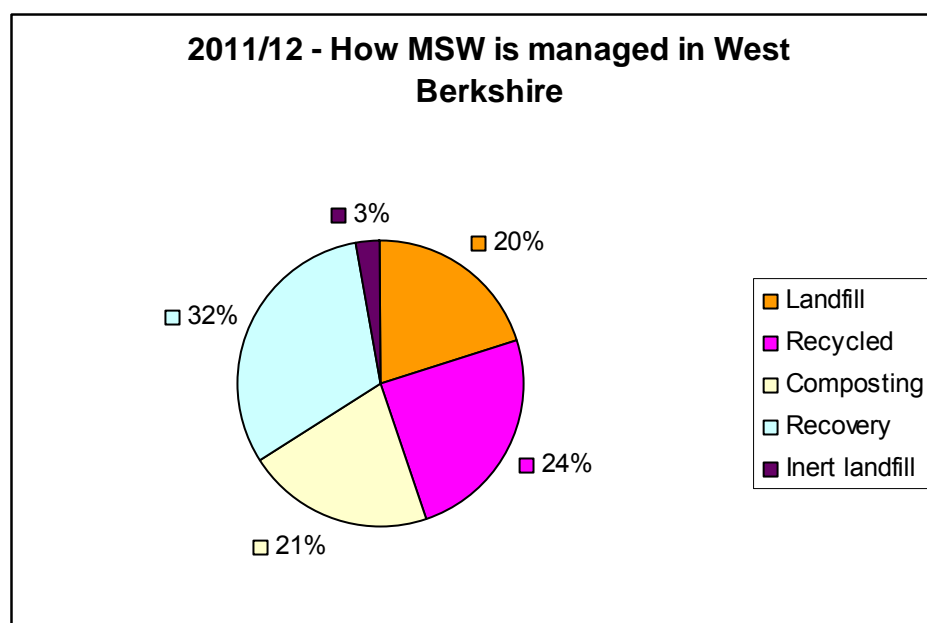
⁴³ SEWPAG C & I Waste Model (2012), 2012 figure

⁴⁴ WBDC in conjunction with Atkins (2013) LWA – DEFRA Methodology applied to West Berkshire

⁴⁵ WBDC in conjunction with Atkins (2013) LWA – EA returns data

Figure 22

295. Inert waste is mainly produced from C, D & E activities, contributing approximately half of all waste arisings in West Berkshire. A significant amount of C, D & E waste is re-used or recycled on sites under development. As waste from this source is not recorded (weighed) it is necessary to make an assumption on the amount (tonnage) of waste arising from this source (see indicative estimates in Annex C). Hazardous Waste accounts for just 4% of all waste arisings in West Berkshire.
296. The source which provides the largest volume of waste is the construction, demolition and excavation sector, followed by the commercial and industrial (businesses) and the municipal solid waste sectors.
297. Some 79,845 tonnes of MSW was generated within West Berkshire in 2011/12. Of this 79,845 tonnes, 16,136 tonnes went to landfill, 19,512 tonnes were recycled, 16,953 were composted, 25,078 were used for recovery, and 2,165 were used for inert landfill (see figure 23 below for percentages).

Figure 23

298. The way in which West Berkshire's MSW has been managed has changed over time and this is shown most significantly by the reduced reliance on landfilling, the increased proportion composted, and the increased proportion recovered (see Table 9 and Figure 24).

Table 8: Trends of how MSW has been managed in West Berkshire 2008/09 – 2011/12

Year	2008/09	2009/10	2010/11	2011/12
Percentage of MSW landfilled	65%	47%	44%	20%
Percentage of MSW recycled	31.70%	22.80%	23.20%	24.40%
Percentage of MSW composted	2.20%	16.90%	17.60%	21.20%
Percentage of MSW recovered	0.30%	11.60%	13.00%	31.40%

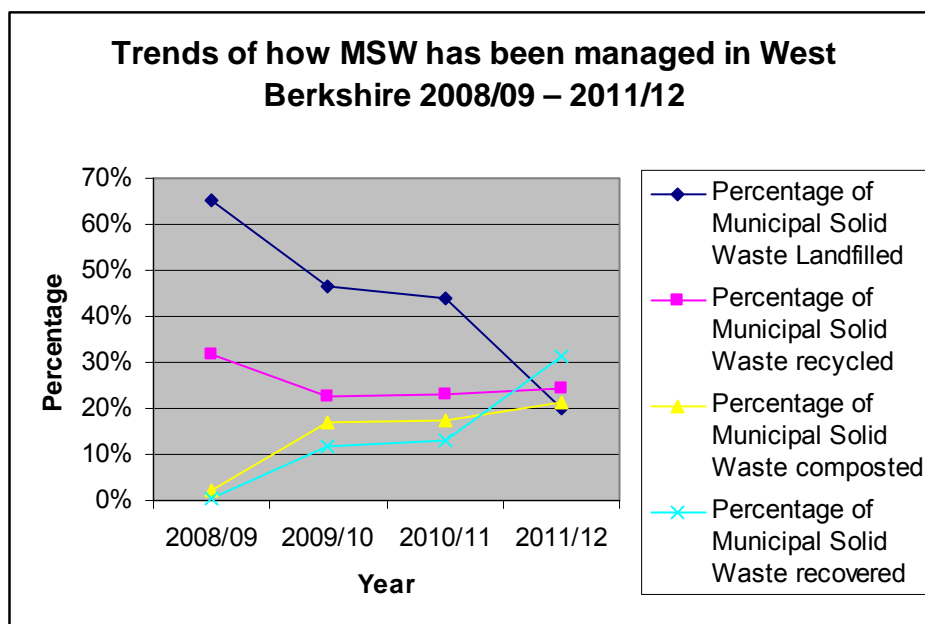
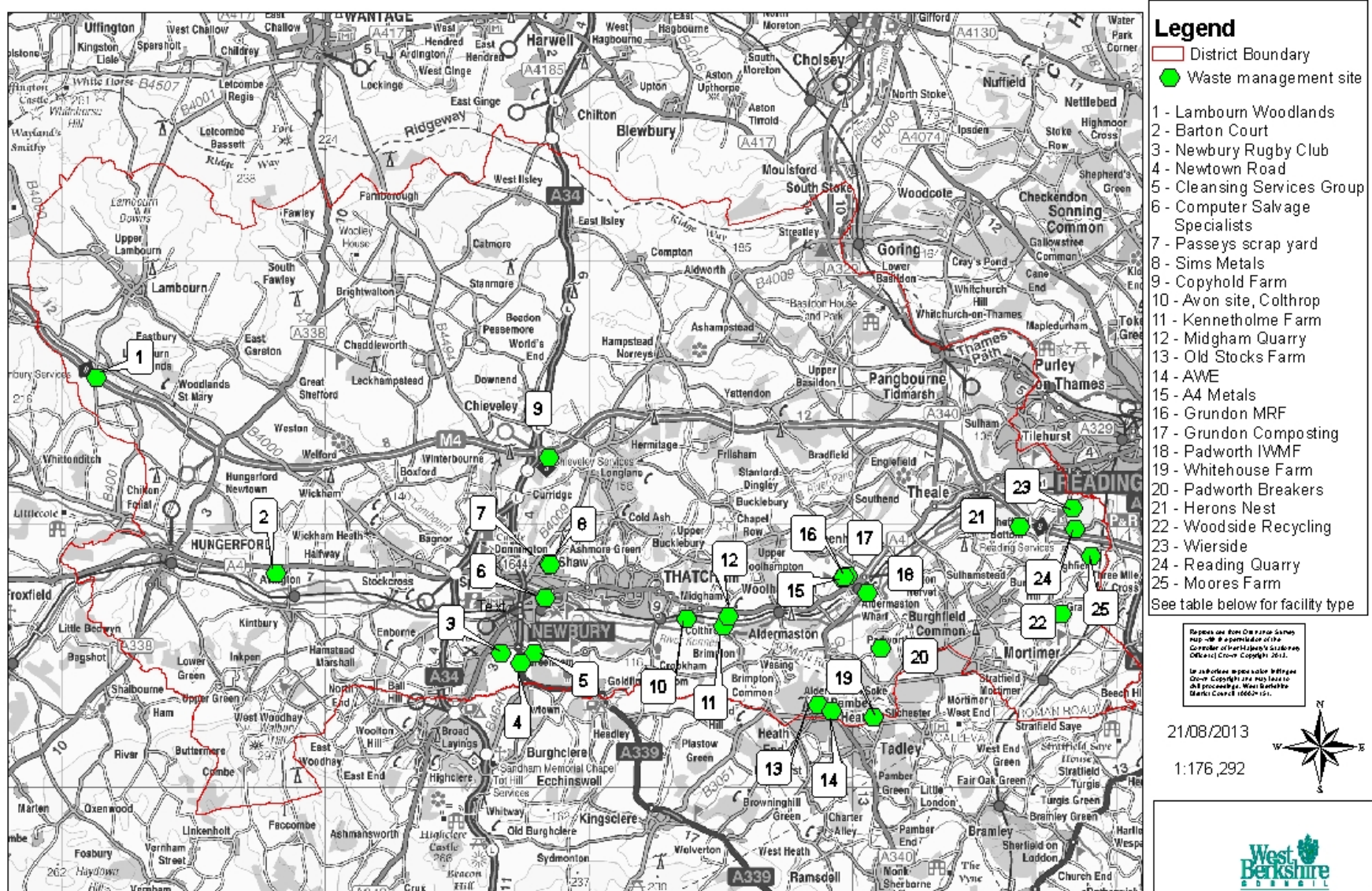
Figure 24

Figure 25

Permitted Waste Management Sites in West Berkshire 2012



Permitted Waste Management Sites in West Berkshire – facility type (read in conjunction with Figure 25)		
Corresponding number in Figure 25	Facility name	Facility type
1	Lambourn Woodlands	Specialist treatment (solvents)
2	Barton Court	C & D Recycling and skip waste
3	Newbury Rugby Football Club	Inert landfill
4	Newtown Road	HWRC
5	Cleansing Services Group	Specialist treatment (Oils)
6	Computer Salvage Specialists	WEEE
7	Passeys scrap yard	Metal recycling
8	Sims Metals	Metal recycling
9	Copyhold Farm	C & D Recycling and inert landfill
10	Avon site, Colthrop	C & D Recycling
11	Kennetholme Farm	Inert landfill
12	Midgham Quarry	Inert landfill
13	Old Stocks Farm	C & D Recycling and skip waste
14	AWE	Specialist treatment (VLLW and LLW)
15	A4 Metals	Metal recycling
16	Grundon MRF	Materials recycling facility
17	Grundon Composting	Compost
18	Padworth IWMF	Compost, MRF, HWRC and WTS
19	Whitehouse Farm	C & D Recycling and skip waste
20	Padworth Breakers	Metal recycling
21	Hérons Nest	C & D Recycling, skip waste and landfill
22	Woodside Recycling	Paper WTS
23	Weirside	Skip waste – not operating
24	Reading Quarry	C & D Recycling and inert landfill
25	Moores Farm	Inert landfill

299. The waste data interrogator database from the Environment Agency gives an indication of waste flows in and out of West Berkshire and having considered these databases for 2008, 2009, 2010 and 2011 waste from London is only recorded as being managed in West Berkshire in 2008, equating to about 2.9% of the total amount of waste recorded as being managed in West Berkshire that year. It is also understood that a small volume (circa 7000 tonnes per annum) of green waste is currently being imported into West Berkshire for processing (in 2012 – 13).

Equine Waste

300. The West Berkshire Core Strategy recognises that equestrian activities and related development, and the racehorse breeding and training industry are characteristic features of West Berkshire, with the North Wessex Downs AONB home to around 10% of Britain's racehorse trainers (a survey for the study included 55 trainers, suggesting about 550 in Britain in total) and the Lambourn area a nationally important centre of activity for the horseracing industry⁴⁶.

301. The Surrey Horse Pasture Management Project (Surrey County Council being the first in Britain to set up an advisory service on land management for horse keeper resulting in a ten year pilot project) in its section on Manure storage and disposal advice states "An average horse will produce 20.4 kilos (or 45

⁴⁶ A study of the key effects of the horseracing industry on the North Wessex Downs Area of Outstanding Natural Beauty', March 2007, prepared by Kirkham Landscape Planning Consultants, the University of Reading, and Smiths Gore

pounds) of manure each day, equating to 7.5 tonnes annually This quantity does not include the addition of soiled stable bedding material”.

302. The number of horses in West Berkshire is not known work undertaken by the British Horse Industry Confederation and the National Equine Database suggests that the number of horses in West Berkshire could range between 2615 – 7041. Based on the figure of 7.5 tonnes of waste produced by a horse each year and the presence of 7041 horses in West Berkshire then this would result in the creation of almost 53,000 tonnes of horse manure generated in West Berkshire each year.
303. However DEFRA’s website indicates that in the UK, horse manure, while subject to certain controls, is not considered waste if all of the following apply:
- “it is used as soil fertiliser,
 - that use is part of a lawful practice of spreading on clearly identified parcels of land,
 - its storage is limited to the needs of those spreading operations to be carried out on agricultural holdings, whether yours or another’s”.
304. Therefore it is considered likely that only a proportion of the estimated horse manure arising in West Berkshire may be considered as waste that needs to be “managed”.

Sewage Sludge

305. Sewage sludge is a natural by-product of the wastewater treatment process, and with a general growth in population and housing anticipated it is relevant to consider sewage sludge in this appraisal.
306. Thames Water is the private utility company which is responsible for wastewater treatment within the West Berkshire area. However published data is generally for whole of the Thames Water supply area and is generally not disaggregated to specific sites or areas. The Thames Water supply area covers West Berkshire but also completely around West Berkshire to the west, north, east and south, and also many London boroughs. Therefore it is assumed that sewage sludge management in West Berkshire will be consistent with Thames Water’s overall approach and strategy.
307. Thames Water sewage treatment works now produce more sewage sludge than they did in the past because of improved wastewater treatment standards and an increasing population and Thames Water expects that to continue. In 2009, Thames Water produced 265,682 tonnes of dry solids, with 100 per cent of that put to beneficial use, with none to landfill. Most of that sludge, i.e. 56 percent was treated and recycled to agricultural land as biosolids in order to provide soils.
308. Sewage sludge also has a high calorific content that is used to generate electricity, via two methods:
- In 'thermal destruction with energy recovery', sewage sludge – the solid content of the sewage – is dried into blocks of 'cake' and burned to generate power.
 - Methane derived from sewage sludge is burned to create heat, which in turn generates power. This is known as 'anaerobic digestion followed by CHP (combined heat and power)'.

Radioactive waste

309. Located in West Berkshire are the Atomic Weapons Establishment (AWE) sites Aldermaston and Burghfield, which undertake research and development, design, manufacturing, servicing and decommissioning of nuclear warheads. As those are particular sites with potential sources of low level radioactive waste it is relevant to consider them in this appraisal, though wastes from Burghfield are included with those from Aldermaston, from where radioactive waste storage and disposal is co-ordinated.
310. The 2010 UK Radioactive Waste Inventory: Main Report produced for the Nuclear Decommissioning Authority (NDA) and the Department of Energy & Climate Change (DECC) includes lists of radioactive waste streams, and for AWE Aldermaston (Burghfield is not listed separately) that report lists Intermediate Level Waste (ILW) as 4,630m³, and Low Level Waste (LLW) as 998m³ at 1st April 2010, though the packaged volumes are 4,730m³ and 41,900m³ respectively.
311. The LLW Repository Ltd. Report UK Management of Solid Low Level Radioactive Waste from the Nuclear Industry: Low Level Waste Strategic Review, March 2011, also provides an indication of the source of the LLW waste arisings which may arise from Aldermaston. It refers to the AWE Integrated Waste Strategy (IWS) and states:
- “Figure 4 in Section 4.3 of the AWE’s WS provides an indication of LLW arisings:
- Legacy (Pre 2010) – approx. 200m³
 - Operational (2010 – 2038) – approx. 5,500m³
 - Decommissioning (2010 -2060) – approx. 8,000m³
- (Note: waste volumes are indicative and taken from bar chart)

Historic landfill sites

312. West Berkshire has a relatively large number of former landfill sites that have been infilled and restored back to a variety of land uses, which is indicative of the legacy of extensive mineral extraction. However the material that has been deposited in the ground includes valuable materials and the re-working of landfill sites to recover such discarded material has been cited as a potential method to reclaim the value stored in old landfill sites.

Data limitations

313. There are a number of difficulties associated with gathering complete, reliable, up-to-date data for use in waste planning in West Berkshire.
314. In relation to waste, the EA collects information on waste deposited at regulated waste facilities in West Berkshire but this does not include all wastes. For instance, other waste arisings from the construction, demolition and excavation stream, and from sites exempt from a waste management licence/permit, are excluded from these figures.

315. The EA also has to make assumptions for outstanding waste handling figures from a number of waste operators and there is the likelihood that some waste is double counted as it may pass through a Transfer Station before arriving at a Treatment facility.

Likely Future Trends without implementation of the WBMWDPD

316. In terms of the likely future trends relating to waste in West Berkshire in the absence of the WBMWDPD, it is difficult to predict this due to the large number of factors involved. However, due to the lack of available Preferred Areas for waste development in West Berkshire, there is potential for proposals to come forward to meet the demand for waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may have a negative impact.
317. Whether or not proposals for waste development would come forward in the absence of the WBMWDPD cannot be predicted. However if they were to, this would provide employment. The current development plan is somewhat dated and therefore does not provide certainty for waste operators which is likely to be negative in economic terms.
318. West Berkshire Council is both an importer of waste and an exporter of waste. However it is understood that total volume of waste that is managed in West Berkshire exceeds the total amount of waste that arises within the Authority.
319. There has been a significant change approach in the way we handle waste in recent years, with a focus on sustainable development, and the protection of human health and the environment, and to move reduction, reuse, recycling and using waste as a source of energy higher up the waste hierarchy⁴⁷.
320. This suggests that there will be a further reduction in landfill and a further increase in the use of cleaner and better technologies. These include technologies such as Anaerobic Digestion and using Combined Heat and Power which are becoming more prevalent with the increasing pressures of carbon emissions reduction⁴⁸.
321. There are some types of waste management facility that are somewhat lacking within the authority area; for example there is no non inert landfill capacity within West Berkshire so all the non inert waste that arising in West Berkshire that is disposed of to land is disposed of outside West Berkshire. The reasoning behind this is related to a number of factors, the principal one being the geological make up of West Berkshire. The majority of landfill sites are former mineral extraction sites and due to the geological makeup of West Berkshire these mineral extraction sites are commonly very shallow and also located within areas at risk of flooding. The depth of the mineral deposits in West Berkshire means that it is not normally economical to develop an engineered landfill due to the costs involved in developing a non inert landfill site.
322. Similarly West Berkshire has limited waste recovery capacity, such as anaerobic digestion, incineration with energy recovery, gasification, pyrolysis

⁴⁷ Planning Policy Statement 10: Planning for Sustainable Waste Management

⁴⁸ Department for Environment Food and Rural Affairs, Designing Waste Facilities - Key Guide to Modern Design in Waste (2008)

- and so on. Therefore all the waste arising within West Berkshire that is subjected to recovery processes is recovered outside West Berkshire. One possible reason for this is that recovery facilities commonly require a significant amount of feedstock to be viable, and West Berkshire, as a relatively rural authority with a dispersed population does not generate significant volumes of waste, such that the total volumes of waste generated that might be suitable for “recovery” is, comparatively speaking, quite small.
323. The amounts of waste imported to West Berkshire from London are very small in terms of tonnage, and there is no data to indicate that this is going to change, however as waste contracts are negotiated in the open market this is impossible to control.
324. The majority of the waste management facilities in West Berkshire are concentrated in the south eastern area of the Authority, principally in and around Newbury, along the A4 corridor to Theale as well as on the A340 that links the A4 (at Aldermaston Wharf) to Tadley and beyond to Basingstoke. This pattern of facilities has developed due to the historical linkage between minerals extraction and waste development and also likely to have been influenced by the AONB landscape designation that covers a large proportion of the Authority area.
325. Historically minerals and waste development went hand in hand with the voids created by mineral extraction being infilled with waste. However there is no longer such a strong linkage now that there has been a significant move away from the landfilling of waste and the movement of waste up the waste hierarchy. As such West Berkshire has seen a move away from temporary waste operations on extraction sites to the development of permanent waste management facilities across the district in more industrial areas.
326. Waste management facilities provide a vital service that all residents and businesses in West Berkshire and without the existing, and any planned facilities, the level of demand would have to be met outside the Authority Area. Whilst it is acknowledged that there will be the cross boundary movement of waste it is considered important that West Berkshire seeks to continue to maintain the existing waste facilities in the Authority from other, possibly more lucrative development types that could hinder the ability of West Berkshire to achieve a position of net self sufficiency in waste management capacity.
327. There are currently a range of different waste management technologies that are utilised by operators managing the waste arisings. In addition there have been significant advances in the field of waste management in the past few years such that technologies and there is no sign that this trend will change.
328. This puts the planning authority in a complicated position in that it is clearly impossible to plan for emerging or unknown waste management technologies. This could be resolved by maintaining as much flexibility as possible within the policies for site identification, the protection of the environment and other factors.
329. In addition to seeing the development of new technologies West Berkshire has seen the development of industrial facilities that seek to re-use waste materials, such as furniture repair projects, as well as the development of industries that either prepares collected waste for re-use or the manufacture of processed waste to create new products.

330. At present there are a small number of temporary waste management facilities located in the AONB at sites that have linkages to existing or historic mineral extraction. There are also a small number of specialist waste facilities located at Lambourne Woodlands industrial area. Approximately 74% of West Berkshire is located within the North Wessex Downs Area of Outstanding Natural Beauty (AONB). This landscape is identified in the NPPF as having the highest status of protection in relation to landscape and scenic beauty. The NPPF is also clear that great weight should be given to the conservation of landscapes such as the AONB and the NPPF sets out a presumption against major developments in such designated areas.
331. It is considered likely that only a proportion of the estimated level of horse manure arising in West Berkshire will be considered as waste in the future. It is unclear whether this will warrant specific waste management facilities for this purpose. It is unlikely to be a significant amount of waste however.
332. In regard to sewage sludge, Thames Water's 25-year Sludge Strategy, published in December 2008, provided the framework for its sludge investment proposals. During the period 2010 – 15, Thames Water is investing in increasing its sludge processing capacity and in new enhanced digestion technology. That technology will maximise energy recovery and lessen the quantity of sludge Thames Water needs to recycle by reducing the amount of solids within it, though where there is suitable land available, recycling to land remains Thames Water's favoured option.
333. The Low Level Waste Strategic Review, March 2011, also provides some details regarding potentially contaminated land arisings, which its Figure 23 'Total Potentially Contaminated Land Arisings from 2010-2120 (M3)' for Aldermaston it indicates is 109,750m³, representing <1% of the total identified throughout the UK, 99% being in the North West. However it also states that for Aldermaston (and another site in the North West) that is based on limited analysis and further investigation work is foreseen during 2010/11 after building decommissioning work at the Aldermaston site. At present though there is no readily available updated data.
334. In essence there are two levels of radioactive waste arisings that normally need to be considered in the development of a waste development plan document, these are low level radioactive waste (LLW) and very low level radioactive waste (VLLW). The rationale behind the importance of planning for these arisings primarily surrounds the fact that the volumes of VLLW and LLW arisings are greater than the higher level radioactive waste arisings. In West Berkshire the principal generator of LLW, VLLW and indeed other, higher level radioactive waste, is the Aldermaston Weapons Research Establishment. There are clearly volumes of Intermediate Level Radioactive waste (ILW), Low Level Radioactive waste (LLW) and Very Low Level Radioactive waste (VLLW) arising in West Berkshire, principally at the AWE sites but small volumes are also likely to be generated from other commercial activities.
335. The reworking of former landfill sites can result in the generation of energy (through the recovery of energy from the removed waste) the recovery and sale of excavated materials and the increase of landfill capacity through the creation of new void space by excavating the deposited waste. The potential for the landfill sites in West Berkshire to be re-worked is currently an unknown and

considerable work would need to be undertaken to ascertain the “value” of the sites in West Berkshire.

336. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing challenges for the WBMWDPD

337. There are likely to be a number of challenges for the Plan which include population growth, climate change and transport issues.
338. Population growth, in West Berkshire will increase pressures on the current waste management facilities. This will also result in an increase in competition for land for waste management facilities.
339. Climate change is a major sustainability consideration. The Plan should seek to reduce the impacts on climate change through the promotion of more sustainable methods of waste management.
340. Although West Berkshire does not currently have any non-hazardous landfill or recovery facilities, it has to be recognised that these two waste management options are the bottom two tranches of the waste hierarchy. There is a risk that the over provision of waste management capacity at the bottom of the waste hierarchy could result in waste materials being moved down the waste hierarchy. The WBMWDPD will need to address these issues in terms of consideration of how the demand for disposal of waste to land can be met, or whether in the absence of this it is necessary to provide a greater amount of recovery and or treatment capacity.
341. The issue of whether the WBMWDPD should make provision for London’s waste will require consideration, although the distance from London is likely to prohibit large scale transportation of waste into West Berkshire.
342. There is a concentration of facilities in and around the main urban areas and along the A4 / A340 which are part of the strategic road network within West Berkshire. It will be necessary for the WBMWDPD to consider whether it is appropriate to aim to:
- Expand existing permanent facilities and co-locate new facilities with existing permanent facilities; or
 - Concentrate new facilities in key urban areas and centres of population and growth; or
 - Decentralise the distribution of facilities across all the urban areas and rural centres within West Berkshire; or
 - Concentrate new facilities in areas generating waste arisings that have limited existing capacity; or
 - Combine one of more of the above options.
343. In the preparation of the WBMWDPD consideration will have to be given to whether existing permitted permanent sites, proposed preferred areas for waste development, and existing industrial areas should be safeguarded from alternative uses.

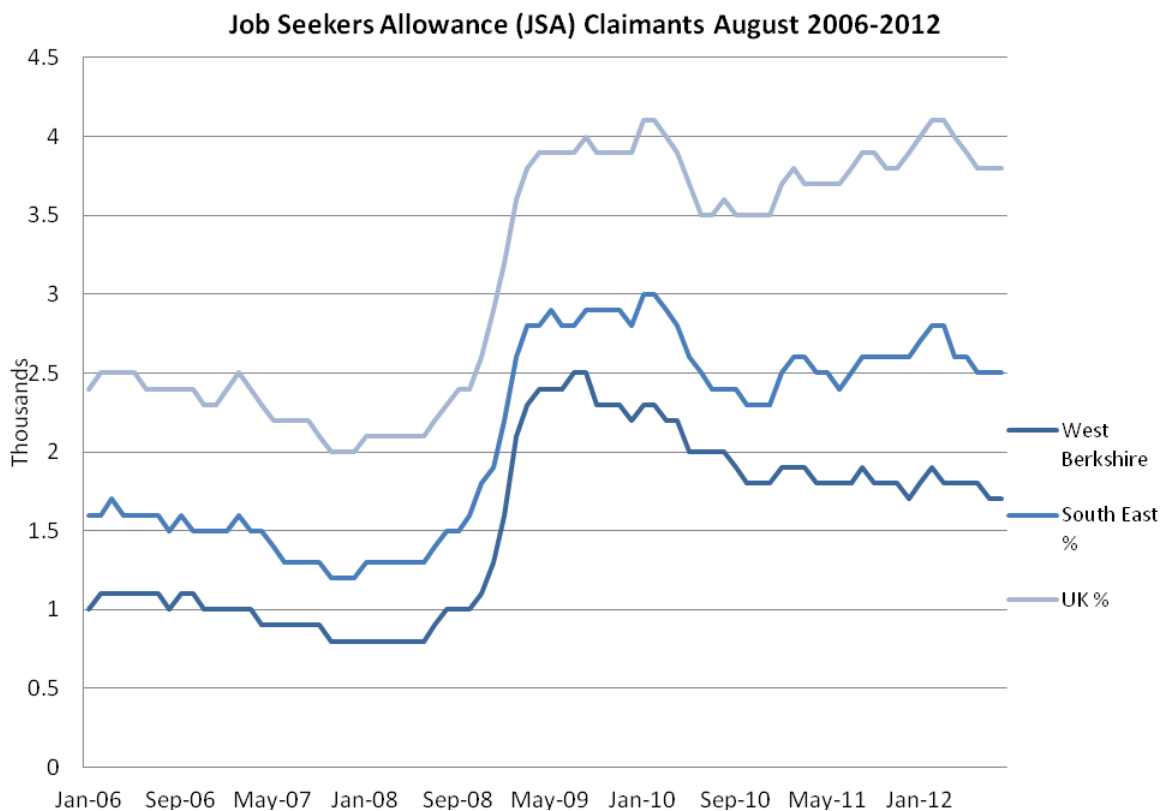
344. The WBMWDPD will have to consider how site allocations and the control of development can be managed in terms of policy for emerging/new technologies and other new recycling practices.
345. Consideration will need to be given to whether small-scale and strategic waste facilities will be encouraged or discouraged from locating in the AONB in terms of policy in the WBMWDPD.
346. The WBMWDPD will need to take into account the equine waste produced in west Berkshire, and consider whether specific facilities are required for this, and where the facilities should be located.
347. As Thames Water expects more sewage sludge there may be some sludge management related future development at Thames Water wastewater treatment sites within West Berkshire, and Thames Water plans to invest nearly £4.9bn across its region from 2010 to 2015, though its website which lists key projects does not refer to a specific sludge management project in Berkshire in that period. There is no readily available data with which to estimate the specific quantity of sewage sludge which may arise in West Berkshire or be managed and disposed in West Berkshire, though from the available information the expectation is that will align with Thames Water's overall approach. The WBMWDPD will need to take this into account.
348. Due to the limited volumes of material produced, and the specialist nature of radioactive waste and the need to manage it in accordance with strict protocols, it may not be economically viable to deliver new facilities that manage solely waste arising within West Berkshire. The WBMWDPD will have to take into account how the VLLW, LLW and ILW produced in West Berkshire is managed.
349. The WBWMLP is aiming to be as forward thinking as possible and as there is a potential for this type of operation to come forward it is considered prudent to determine whether the WBMWDPD should address this issue in more detail.

Economic Considerations (including local economy make-up, agriculture, and tourism)

350. West Berkshire is located in the Thames Valley sub region which is a world class business region and one of Europe's fastest growing economies. The Thames Valley sub-region accounts for 15% of UK computer services employment. West Berkshire shares in the overall affluence of the South East, being second in the country, after Inner London. (www.epp.eurostat.ec.europa.eu)
351. West Berkshire has a strong industrial base characterised by new technology industries with a strong service sector and several manufacturing and distribution firms. Major private sector employers in the West Berkshire area include: Arlington Securities, AWE, Bayer, Matsushita Communications, ADP, Quantel and Vodafone.
352. As is the case generally across the UK some of the largest employer organisations in the West Berkshire area are those responsible for essential public services such as health and social care, public safety and education.

353. In 2012 82.6% of the working age population in West Berkshire were economically active (i.e. either employed, or unemployed but available to start work, looking for work, or waiting to start a job) this is a slight decrease on 2010/11 (82.9%); however, still higher than the rate for both the region and nationally. As well as having a higher proportion of people economically active, the district also has a significantly larger proportion of people in employment – and as a consequence, a lower proportion of people unemployed (i.e. available to start work and had either looked for work, or were waiting to start a job).
354. West Berkshire and the South East in general have fared reasonably well in the recession in national terms. A good indicator of this is the amount of people on Job Seeker's Allowance (JSA) (see Figure 26 below). In January 2008 0.8% of working age people within West Berkshire were claiming JSA, this increased to 2.1% by February 2009 but dropped to 1.8% in October 2010 and remained at 1.8 - 1.9% to August 2012. This remained a lower proportion than in the South East and the country as a whole (in August 2012 2.5% and 3.8% respectively).

Figure 26



Source: (www.nomis.co.uk)

355. Census 2011 data (see Table 10 below) shows that in West Berkshire 14% of people employed worked in 'Information and communication, finance and insurance activities' which is higher than in the 'South East', and 'England and Wales' at 10% and 8% respectively. The proportion of people employed in 'Public admin, education and health' is lower in West Berkshire at 24% than in the 'South East', and 'England and Wales' both at 28%.

Table 10 – Employee jobs by industry

Employee jobs by industry			
	West Berkshire	South East	England & Wales
Manufacturing	8%	7%	9%
Construction	8%	8%	8%
Retail / wholesale	16%	16%	16%
Public utilities (electricity, gas, water)	2%	1%	1%
Information and communication, finance and insurance activities	14%	10%	8%
Public admin, education and health	24%	28%	28%
Professional, scientific and technical activities	8%	8%	7%
Accommodation and food service activities	4%	5%	6%
Transport and storage	4%	5%	5%
Other	13%	13%	12%

Source: ONS, [Census 2011](#)

Likely Future Trends without implementation of the WBMWDPD

356. In terms of the likely future trends relating to local economy make-up in West Berkshire in the absence of the WBMWDPD, it is difficult to predict this due to the large number of factors involved.
357. Whether or not proposals for waste development would come forward in the absence of the WBMWDPD cannot be predicted. However if they were to, this would provide employment. The current development plan is somewhat dated and therefore does not provide certainty for waste operators which is likely to be negative in economic terms.
358. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

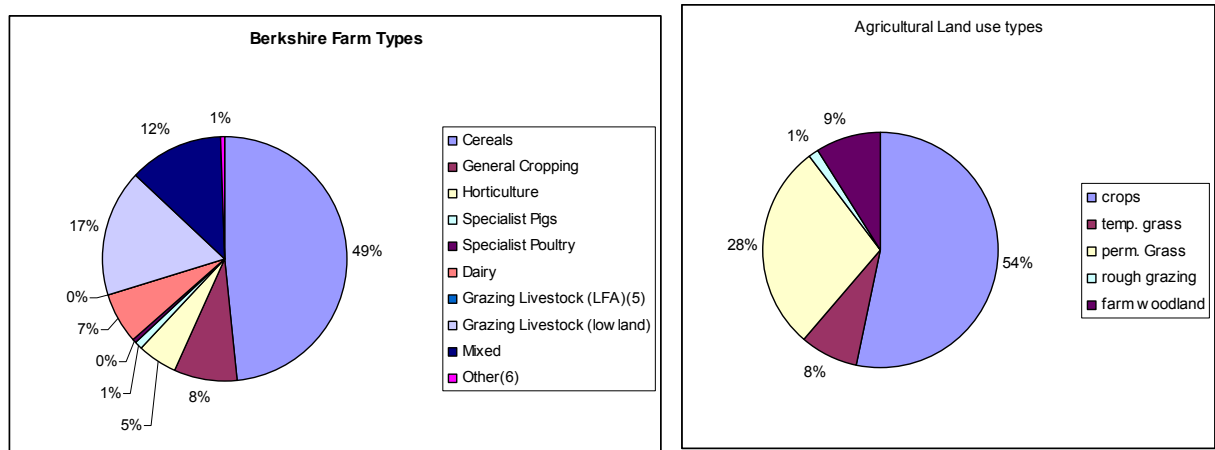
Existing Challenges for the WBMWDPD

359. Consideration of demographic projections is important when planning for minerals and waste sites.
360. The WBMWDPD should seek to identify facilities that generate employment in areas of relative high unemployment, however this is a challenge in itself, as areas that are densely populated, may also create the largest opposition to minerals and waste sites being located nearby.
361. Areas of high population density in West Berkshire also create the issue of greater competition for other land uses for suitable sites.
362. Facilities should be located to meet the demands of a growing population and these facilities should be located in accessible areas, particularly for those typically less mobile such as the elderly.

Agriculture

- 363. DEFRA's agricultural census for June 2010 shows that there were 65,580 ha of agriculturally managed land in Berkshire managed by some 635 agricultural holdings. There are 2284 people employed directly in the agricultural sector in West Berkshire.
- 364. Over half of the agricultural area was under arable cropping (54%), and around one third was grazed. Defra assigns each of the registered agricultural holdings to a main farm type on the basis of their principal outputs. This shows that nearly 50% of farms were devoted to cereal crops such as wheat, 29% were grazed livestock farms (i.e. beef and sheep). The charts below show the different agricultural land use and farm types in West Berkshire.

Figure 27 – Berkshire Farm types, and Figure 28 – Agricultural land use in Berkshire



Source: June 2010 Agricultural and Horticultural Survey – England

Likely Future Trends without implementation of the WBMWDPD:

365. It is difficult to predict the overall impact without implementation of the WBMWDPD due to the large number of factors involved. However, due to the lack of available Preferred Areas for minerals and waste development in West Berkshire, there is potential for proposals to come forward to meet the demand for minerals, and waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may be negative in terms of agriculture.
366. The Government has identified a vision for the future of British agriculture in Defra's *Farming for the Future Programme*⁴⁹. Key themes arising for this are the need to cut carbon emissions resulting from farming activities, increasing the efficiency of the management of nutrients on farms and reducing pollution. There are further plans to increase the skills to make UK farming more competitive, and achieve higher standards of animal health⁵⁰.
367. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

Existing Challenges for the WBMWDPD

368. The West Berkshire Minerals and Waste Development Plan Document should aim to avoid locating development on the 'Best and Most Versatile Agricultural Land'. This may prove to be challenging, although it is important to recognise that this only includes agricultural land which is graded.

Tourism

369. West Berkshire lies in a naturally central location – within an hour's reach of London, Bristol, Oxford and the south coast. Despite tourism not being a major industry, West Berkshire attracts a significant number of visitors each year.
370. The last economic impact survey conducted in West Berkshire was prepared by Tourism South East Research Services on behalf of West Berkshire District Council in July 2007. The report details the following information on tourism in West Berkshire and its contribution to the local economy:
- "Overall, an estimated 485,500 staying trips were spent in West Berkshire District in 2005, of which around 396,000 were made by domestic visitors (82%) and 89,700 by overseas visitors (18%).
 - Staying trips result in an estimated 1.53 million bednights in the District. Domestic visitors account for 62% of these nights and overseas visitors accounted for 38%.
 - Approximately 3.43 million tourism day trips were made to the District (lasting more than 3 hours and taken on an irregular basis) in 2005.

⁴⁹ Farming for the Future Programme, <http://www.defra.gov.uk/farm/policy/future/index.htm>

⁵⁰ Information taken from Defra Departmental Report 2008, Defra, May 2008. www.defra.gov.uk

- Total expenditure by visitors to West Berkshire is estimated to have been in the region of £199.91 million in 2005.
 - With the addition of other expenditure such as the expenditure on goods and services by friends and relatives visitors were staying with, or visiting, total expenditure associated with overnights trips to West Berkshire in 2005 was approximately £211,682,000.”⁵¹
371. Primary attractions within West Berkshire include the heritage and cultural attractions described within this section; visitors also come for the tranquillity and scenery in the surrounding countryside. Large swathes of the countryside of the district lies within the North Wessex Downs Area of Outstanding Natural Beauty (AONB) – an area of gently rolling, chalk landscape and picturesque villages.
372. Several national routes pass through the area including The Ridgeway National Trail, The Thames Path and parts of the Sustrans countryside cycling network. (*Source: National Trails and Sustrans*)
373. The Kennet and Avon Canal runs through West Berkshire on its way from Bristol and Bath, through Hungerford and Newbury to Reading and the Thames beyond. This attracts boaters and other visitors along the length of the canal. British Waterways estimate that around a million visits are made to the canal in a year. (*Source: Kennet and Avon Canal Trust*)
374. The Tourist Information Centre is located in the Newbury Town Council buildings in the Market Place. The centre deals with a variety of enquiries from visitors and locals. In 2011/12, 28,000 contacts were made with the service, mostly in person but also by email and telephone. (*Source: Tourist Information Centre*)

Likely Future Trends without implementation of the WBMWDPD:

375. Due to the lack of available Preferred Areas for minerals and waste development in West Berkshire, there is potential for proposals to come forward to meet the demand for minerals, and waste management capacity in sites which may not be suitable in planning or environmental terms. The impact would be dependant on site specifics, transport links, facility type and specific impacts, and planning conditions. This may be negative in terms of tourism.
376. One of the priorities of A Breath of Fresh Air, West Berkshire’s Sustainable Communities Strategy, is to realise the tourist potential and increase the number of tourist visitors to West Berkshire. As more people continue to take holidays in England as opposed to going abroad it is likely that the amount of tourists visiting West Berkshire is likely to continue.
377. It may be that these trends would continue with or without the implementation of the WBMWDPD due to the difficulty in predicting the impact from the large number of factors involved.

⁵¹ The Economic Impact of Tourism, West Berkshire, July 2007, Tourism South East Research Services.

Existing Challenges for the WBMWDPD

378. Where possible minerals and waste development should try to conserve and enhance the special qualities of West Berkshire that attract tourism. This can be done through a policy approach to the AONB that considers the special qualities of the landscape, and particularly through high quality, appropriate restoration schemes at mineral sites.

Annex A**Estimated sharp sand and gravel and soft sand outputs in West Berkshire**

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Totals Sharp sand and gravel	620,000	590,000	650,000	510,000	530,000	490,000	525,000	592,500	492,500	390,000	275,000	275,000	234,000
Soft sand													

Source: WBDC

This data has been derived from the following publicly available alternative sources.

- Planning application forms.
- Written submissions accompanying planning applications.
- Proofs of evidence supporting planning appeals.
- Letters from site operators.
- Site visit photographs.
- Site visit notes (including notes of conversations with site managers).
- Aerial photography.
- Returns information provided by mineral operators
- Annual Monitoring Reports produced by the JSPU.
- Annual Monitoring Reports produced by the Aggregates Working Party.

Annex B – Minerals production figures

Indicative estimate methodology for output for ‘sharp sand and gravel’ and ‘soft sand’ in West Berkshire (taken from Draft Local Aggregate Assessment for West Berkshire, 2013)

The estimated outputs have been derived from the following publicly available sources:

- Planning application forms.
- Written submissions accompanying planning applications.
- Proofs of evidence supporting planning appeals.
- Letters from site operators.
- Site visit photographs.
- Site visit notes (including notes of conversations with site managers).
- Aerial photography.
- Returns information provided by mineral operators
- Annual Monitoring Reports produced by the JSPU.
- Annual Monitoring Reports produced by the Aggregates Working Party.

Indicative estimate methodology for rail depot mineral output in West Berkshire

The best indicative estimate currently available for sales from the rail depots in West Berkshire is to calculate two thirds of the total Berkshire figure, in line with two out of the three rail depots in Berkshire being in West Berkshire. Using the ‘Berkshire-wide’ percentages it can then be estimated what the breakdown is in terms of aggregate-type.

- $900,000t \times 2/3 = 600,000t$ of aggregate sold from rails depots in West Berkshire in 2011

Therefore using the ‘Berkshire-wide’ percentages, the following can be estimated:

- $600,000t \times 84\% = 504,000t$ of crushed rock sold from the rails depots in West Berkshire in 2011
- $504,000t \times 90\% = 453,600t$ of the crushed rock sold from the rails depots in West Berkshire in 2011 came from South West England.
- $504,000t \times 10\% = 50,400t$ of the crushed rock sold from the rails depots in West Berkshire in 2011 came from South Wales and Northern Ireland.
- $600,000t \times 16\% = 96,000t$ of aggregates sold from the rails depots in West Berkshire in 2011 were marine dredged sand and gravel from Thames wharves

AM2011 states that Berkshire’s total aggregate sales in 2011 amounted to an overall increase of 20% on 2010. In order to calculate an indicative estimate for sales from the two rail depots in West Berkshire in 2010 a basic calculation can be done:

Assuming 600,000t is 120%:

- 500,000t of aggregate sold from rails depots in West Berkshire in 2010

Indicative estimate methodology for the amount of recycled aggregate produced in West Berkshire in 2012

A survey of recycled aggregate producers for the year 2012 has been undertaken which suggested that approximately 382,000 tonnes were produced in West Berkshire of which 290,000 tonnes were used for aggregate uses and 92,000 tonnes for non-aggregate (soils etc).

Annex C – Waste figures

Indicative estimate methodology for Commercial and Industrial Waste

This model was developed for SEWPAG by Urban Mines to provide an indicative estimate for the amount of C & I waste produced in a unitary area. It is based on an average amount of waste produced by certain types of business multiplied by the number of these types of business.

Indicative estimate methodology for the amount of recycled aggregate produced in West Berkshire in 2010 (taken from Draft LWA for West Berkshire, 2013)

In March 2012 DEFRA published a new methodology used for estimating total CDE waste generation, which was developed in partnership with other agencies and industry bodies and used only existing data sources. It is detailed in the DEFRA Waste Statistics Team 'Methodology for estimating annual waste generation from the Construction, Demolition and Excavation (CD&E) Sectors in England, March 2012'. It shows similar estimates for England for 2009 and 2010, but with an 18% drop from 2008.

An attempt has been made to apply that methodology to West Berkshire using available data sources or where necessary estimating for West Berkshire as a proportion of the DEFRA derived values for England.

Annex D: Sustainability Objectives	Env	Soc	Econ
1) To protect and enhance biodiversity and geological diversity throughout West Berkshire	✓		
2) To maintain and enhance water quality and resources	✓		✓
3) To minimise the risk and impact of flooding	✓	✓	✓
4) To maximise the sustainable use of land and the protection of soils, safeguarding the best and most versatile agricultural land	✓		✓
5) To conserve and enhance the character of the historical environment, cultural heritage assets, and features of archaeological importance	✓	✓	✓
6) To minimise the impact on landscape and townscape character	✓	✓	✓
7) To protect air quality in West Berkshire	✓	✓	✓
8) To maximise energy efficiency, the proportion of energy generated from renewable sources and adaptability to climate change	✓		✓
9) To ensure the sustainable management of waste, minimise the quantity of waste sent to landfill, and to maximise the re-use, recovery and recycling of waste.	✓	✓	✓

Sustainability Objectives	Env	Soc	Econ
10) To promote the sustainable transport of minerals and waste within West Berkshire	✓	✓	✓
11) To conserve mineral resources in West Berkshire through safeguarding of primary aggregates and encouragement of the use of recycled aggregate where possible and appropriate	✓		✓
12) To protect human health and well being and maintain the quality and quantity of public open space amenity across West Berkshire, and protect areas of tranquillity in the context of minerals and waste development	✓	✓	✓
13) To minimise public nuisance from waste treatment and disposal, and from access to and from facilities.	✓	✓	
14) To minimise public nuisance from minerals development and associated activities including transportation.	✓	✓	
15) To support opportunities for economic development, including jobs, arising from waste and minerals related activities.		✓	✓

Annex E

Relationship of SA Objectives to SEA Directive issues

SEA Directive issue⁵²	SA Objectives
Biodiversity	1, 2, 3, 7, 12
Population	12, 13, 14
Human health	7, 9, 10, 12, 13, 14
Fauna	1, 2, 7, 12, 13, 14
Flora	1, 2, 7, 12, 13, 14
Soil	1, 4
Water	1, 2, 3
Air	1, 7, 8, 10, 13, 14,
Climatic factors	8, 9, 10
Material assets ⁵³	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
Cultural heritage including architectural and archaeological heritage	5

⁵² EC (2001) SEA Directive 2001/42/EC; Annex 1(f)

⁵³ This SA has classed the following topic areas as 'material assets': transport; renewable energy; minerals; waste; and other economic considerations (including local economy make-up, agriculture, and tourism)

Annex F

<p>SEA Directive</p> <p>Components of Annex 1 – Information referred to in Article 5(1)</p>	
<p>Part (a) - an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;</p>	<p>-Paragraph 90 of the main report lists the draft objectives for the WBMWDPD</p> <p>-Part 3 of the main report lists (in Tables 2-7) the main other relevant plans and programmes. Their relationship with the WBMWDPD is considered in Appendix 1.</p>
<p>Part (b) - the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;</p>	<p>-Appendix 2 indicates the current state of the environment and the likely evolution thereof without implementation of the plan or programme;</p>
<p>Part (c) the environmental characteristics of areas likely to be significantly affected;</p>	<p>-Appendix 2 indicates the environmental characteristics of areas likely to be significantly affected, however this will be given more in depth consideration when potential sites come forward for minerals and waste development as part of the WBMWDPD.</p>
<p>Part (d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;</p>	<p>-Part 5 of the main report outlines relevant existing environmental problems and issues</p>
<p>Part (e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;</p>	<p>Appendix 1 outlines the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;</p>

If you require this information in an alternative format or translation,
please call 01635 42400 and ask for the Minerals and Waste Planning
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