

Wiltshire and Swindon Waste Site Allocations Development Plan Document

Evidence base part A: Spatial context

January 2012

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1 Chapter 1: Introduction & Summary of Content

Purpose of this report

1.1 In September 2004 the Planning and Compulsory Purchase Act introduced a revised approach to preparing local land use plans. Local Authorities must review the content of Local Plans and replace them with a suite of Development Plan Documents (DPDs), which together will form a Local Development Framework (LDF) for their area. Wiltshire and Swindon have made significant progress towards replacing the Minerals and Waste Local Plans and have so far adopted the following DPDs:

- ***Minerals Core Strategy DPD 2006 - 2026***
- ***Waste Core Strategy DPD 2006 - 2026***
- ***Minerals Development Control Policies DPD***
- ***Waste Development Control Policies DPD***

1.2 Two further DPDs have now been prepared for submission, these are:

- ***The Waste Site Allocations DPD***
- ***The Aggregate Minerals Site Allocations DPD***

1.3 In accordance with paragraph 4.36 of PPS12 all DPDs must be founded on a robust and credible evidence base. In accordance with section 17 (having regard to sections 13 and 14) of the Planning and Compulsory Purchase Act the evidence must reflect:

- a. the principle physical, economic, social and environmental characteristics of the local area;
- b. the principal purposes for which land is used in the area;
- c. the size, composition and distribution of the population of the area;
- d. the communications, transport system and traffic of the area; and
- e. any other considerations which may be expected to affect those matters.

1.4 In addition and in accordance with section 19 (2) of the Planning and Compulsory Purchase Act, Local Authorities must also have regard to:

- a. national policies and advice contained in guidance issued by the Secretary of State;
- b. the RSS for the region in which the area of the authority is situated, if the area is outside Greater London;
- c. the spatial development strategy if the authority are a London Borough or if any part of the authority's area adjoins Greater London;
- d. the RSS for any region which adjoins the area of the authority;
- e. the Wales Spatial Plan if any part of the authority's area adjoins Wales;
- f. the community strategy prepared by the authority;
- g. the community strategy for any other authority whose area comprises any part of the area of the local planning authority;
- h. any other local development document which has been adopted by the authority;
- i. the resources likely to be available for implementing the proposals in the document; and
- j. such other matters as the Secretary of State prescribes.

- 1.5** Therefore, data from local authorities and Regions both in and around Wiltshire and Swindon must be collated, and the potential impacts upon local areas must be considered, both in relation to and in combination with the policies of the Minerals and Waste DPDs.
- 1.6** As a core element of the evidence base, the purpose of this report is to provide a clear, robust and up to date collation of information and data that can be used to inform and contribute to the continuing development of minerals and waste planning policy.
- 1.7** The evidence included in this report will be used, along with other separate evidence base documents, by the Local Planning Authorities (LPAs) of Wiltshire and Swindon to demonstrate that a minerals or waste DPD submitted to the Secretary of State for independent examination is 'sound'. It will present certain data and information relied upon by the Local Planning Authorities for DPD preparation.

Structure and content of Evidence Base

- 1.8** This introductory chapter sets out the structure of this document and a brief summary of the content of each chapter. The councils intend that this document remains relevant and up to date and should therefore undergo continual review. To assist with this process, each chapter will aim to be relatively self-contained so that they can be reviewed independently.
- 1.9** The Core Evidence Base is divided into 3 parts:
- Part A: Spatial context
 - Part B: Waste (separate volume)
 - Part C: Minerals (separate volume)
- 1.10** The Evidence Base for Wiltshire and Swindon's Minerals and Waste Development Framework also comprises other supporting documents which include (but not limited to):
- Sustainability Appraisals (incorporating Strategic Environmental Assessment)
 - Strategic Flood Risk Assessment
 - Habitat Regulations Assessments / Appropriate Assessments
 - Detailed Site Assessments undertaken by Wiltshire Council and/or external consultants
 - Equality Impact Assessments
 - Soundness 'Self-Assessments'
- 1.11** This report (Part A) is divided into chapters dealing with specific contextual issues as set out in the summary of content below:

Chapter 2: Spatial Planning and Sustainable Development

- 1.12** Chapter 2 looks at how a spatial planning approach applies to the plan area. One of the main objectives of a spatial planning approach is to integrate all five of the guiding principles of sustainable development into the plan preparation process. A spatial planning approach also requires the integration of the objectives of other plans and strategies with land use implications, both vertically (from national down to local level) and horizontally (adjacent) across a number of sectors (Regional Economic Strategies, Local Transport Plans, etc.).
- 1.13** Planning Policy Statement 10 encourages Waste Planning Authorities, in the interests of sustainable development, to drive waste up the waste hierarchy. This basically involves encouraging, as the top priority, reduction of waste generated, followed by reuse of materials, recovery and finally disposal.

- 1.14** In a similar approach Minerals Policy Statement 1 now encourages Mineral Planning Authorities to consider a 'hierarchical approach to minerals supply' with the highest priority to reduce consumption of minerals, followed by use of recycled material, and then finally use of primary resources.

Chapter 3: Population

- 1.15** Chapter 3 considers the effects of a growing population both within and around the plan area. Based on current evidence, local key areas of growth in the plan area are likely to be Swindon, Chippenham, Trowbridge and Salisbury. However, the smaller market towns will also accommodate growth over the period to 2026. Outside of the plan area, the West of England⁽¹⁾ is expected to see high levels of population growth up to 2026.
- 1.16** The main conclusion to draw from this chapter is that population growth will inevitably have an impact on the plan area both in terms of continued demand for minerals resources and the creation of waste. For this reason, there will be a need to monitor and assess how this growth is being manifested spatially as a result of policy intervention. Other chapters in this report will therefore consider the policy direction of the Development Plans with respect to factors such as housing and employment land provision.

Chapter 4: Housing

- 1.17** This chapter brings together the housing provisions allocated in existing Structure Plans for Wiltshire & Swindon and surrounding authorities, and also the policies in the Draft Regional Spatial Strategies (RSSs) for the South West and the South East. References to the Draft South West Regional Strategy are retained in this evidence base document for now, although it is recognised that the Localism Act will revoke Regional Strategies.
- 1.18** The emerging Core Strategies for Wiltshire and Swindon indicate how predicted population growth will be managed and steered into what is believed to be the most sustainable pattern of development. Within the plan area, Swindon will be expected to accommodate a significant proportion of this growth, approximately 25,000 additional dwellings between 2006 and 2026. The emerging Wiltshire Core Strategy makes provision for around 37,000 additional homes in Wiltshire between 2006 and 2026. New housing development will be focused in the Principal Settlements of Chippenham, Trowbridge and Salisbury⁽²⁾. These are strategically important centres and the primary focus for development.
- 1.19** In neighbouring areas, the West of England group of Unitary Authorities will be expected to focus development in and around Bristol.
- 1.20** The main conclusions to draw from this chapter is that where the geography of future housing development is likely to result in a draw on demand for minerals and, in combination with existing development, will act as hot spots for waste generation. These conclusions help to provide an important context or basis upon which we can begin to make assessments of resource flows and management.

Chapter 5: Economy

- 1.21** This chapter looks at the economic context for the plan area, mainly focusing on the likely implications for resource management. The evidence demonstrates that Swindon is home to the largest share of employment land (61% of the total) currently in use, which may represent a significant source of industrial and commercial waste arisings.

1 Unitary authorities of Bristol, Bath & North East Somerset, South Gloucestershire and North Somerset.

2 These three settlements are defined by the Draft RSS for the South West as Strategically Significant Cities and Towns (SSCTs).

- 1.22** In terms of recent construction activity (1998-2008) in the plan area, Swindon Borough has seen the highest level of employment land development, followed by West Wiltshire.
- 1.23** Future economic growth is likely to be concentrated in the SSCTs identified in the Draft South West RSS⁽³⁾, with Swindon expected to accommodate a significant proportion of overall growth for the plan area. Policies for minerals and waste will need to take these factors into account when considering the suitable locations for development.
- 1.24** Economic performance measured in Gross Value Added (income minus costs) shows that Swindon is performing relatively well (above the national and regional levels) whereas Wiltshire is showing growth below that of England and the South West Region.

Chapter 6: Transport

- 1.25** The transport of minerals and waste within Wiltshire and Swindon is predominantly dependant on the strategic and local lorry route network. There is currently only one Rail Aggregate Depot in operation within the plan area, importing crushed limestone from the Mendip area to Royal Wootton Bassett near Swindon.
- 1.26** The transportation of minerals and waste can lead to adverse impacts on the local and global environment, through emissions of greenhouse gases, local air pollution, noise and infrastructure damage. In addition, the capacity of the road network to accommodate any increases in minerals and waste traffic will need to be assessed through plan making and all subsequent planning application processes.

Chapter 7: Landscape

- 1.27** Wiltshire and Swindon are located within an extremely rich and varied landscape comprising 38 different landscape areas. Over 68% of Wiltshire and Swindon is designated for its landscape value, particularly in the south and east of Wiltshire, with 3 Areas of Outstanding Natural Beauty covering 43% of the plan area. The New Forest National Park lies to the south of Wiltshire which may potentially lead to cross-boundary impacts associated with minerals and waste development.
- 1.28** The underlying geology that contributes to the formation of the landscape also provides mineral resources that are used to create the distinctive local building vernacular. This geology, to a large extent, also dictates the location of minerals and certain waste developments which, being prevalent in rural locations, can exacerbate the potential for impacts upon the landscape.
- 1.29** Minerals and waste sites in Wiltshire and Swindon will need to be sympathetic to the locality and restored to an appropriate landform and landscape character, taking on board the aims and objectives of the Wiltshire Landscape Character Assessment.

Chapter 8: Cultural Heritage

- 1.30** The plan area is home to the World Heritage Site of Stonehenge and Avebury, nearly 20,000 archaeological sites, an historic battlefield, approximately 15,000 listed buildings; 44 historic parks and gardens; and more than 270 conservation areas.

3 SSCTs of Swindon, Salisbury, Chippenham and Trowbridge.

- 1.31** In terms of the historic environment, all development is potentially damaging but can uncover archaeological remains and help preserve such findings by recording and ensuring their protection. The Cotswold Water Park demonstrates how quarrying can have a positive influence on an area; and how it can be enhanced in terms of recreation, tourism and the wider economy.

Chapter 9: Biodiversity and Geodiversity

- 1.32** Notable high profile biodiversity sites within Wiltshire and Swindon include North Meadow Special Area of Conservation; the chalk steams and rivers of the Avon system; Parsonage Down National Nature Reserve; and the ancient forests of Savernake, Cranbourne Chase and Braydon Forest. North Meadow SAC is of particular relevance to minerals development as it is located within the vicinity of a concentration of mineral workings in the Upper Thames Valley. The potential for cross boundary biodiversity impacts of minerals and waste development, for example upon the New Forest SAC/SPA/Ramsar must be considered.
- 1.33** The public place great weight on the protection of biodiversity, naming “land with important or endangered wildlife” as the most important type of land to protect from development. The Minerals and Waste DPDs should aim to maintain, enhance, restore or positively add to biodiversity and geological conservation interests.
- 1.34** The reclamation of minerals and waste sites can make an important contribution to the biodiversity and geological value of Wiltshire and Swindon. The targets set within local Biodiversity Action Plans (BAPs) and the South West BAP and South West Nature Map provide a basis for considering the contribution that minerals and waste development can make to the biodiversity and geological value of Wiltshire and Swindon.

Chapter 10: Environmental Impacts

- 1.35** The evidence shows that the environmental quality of the plan area is improving. Water quality has improved noticeably since 1990 and there has been a general reduction in emission of gases and particulate matter associated with local air quality.
- 1.36** However, minerals and waste development can also lead to significant negative impacts on the environment if not properly managed. This can include emissions to air, water, and may lead to the contamination and degradation of soils. Noise can also be an issue associated with minerals and waste development, although data relating to the plan area on this matter is limited.
- 1.37** Sustainable development will be key to achieving many of the objectives of other plans and strategies (such as the Waste Strategy for England, Safeguarding our Soils: Strategy for England, Air Quality Strategy and the objectives of the Water Framework Directive) including some of the aspirations of local communities expressed through community strategies.



2 Chapter 2: Spatial Planning and Sustainable Development

Introduction

- 2.1** The councils are committed to delivering the objectives of sustainable development, which in part will be achieved through the preparation and implementation of the Minerals and Waste DPDs. Planning Policy Statement 1: Delivering Sustainable Development (PPS1) considers that the key to achieving sustainable development will be through the adoption of a spatial plan making approach (PPS1, para 13 (iii)). This approach will require a wide ranging outlook, involving working with others across many sectors and at many levels, ensuring that the councils consider whether the policies of the Minerals and Waste DPDs can help to deliver the objectives of other plans and strategies in the interest of sustainable development.
- 2.2** As part of this spatial plan making approach all DPDs will be assessed through the process of Sustainability Appraisal⁽⁴⁾ (SA), which in essence considers the likely/potential impacts of a DPD against the principles and objectives of sustainable development. An additional component of the SA process is the requirement for Strategic Environmental Assessment (SEA) which provides greater focus on environmental objectives and potential impacts of a DPD both within and outside of the plan area, including the consideration of the possible impacts upon the delivery of objectives of other plans and programmes. Although it is not the councils' intention to repeat information contained within SA/SEA Reports, the evidence base for both the plan making process and SA/SEA will include many similar components. However, where the SA/SEA reports will focus on the likely impacts of DPDs, this report is concerned with the identification of issues relevant to minerals and waste development and potential options for the plan area.
- 2.3** This chapter will set out the sustainable development framework, from the national through to the local level, including relevant documents from adjacent local authority areas. It will also provide links between the principles of sustainable development and many of the issues covered in the following chapters in this report. The documents considered as part of the evidence gathering process will be referenced in this or other chapters and are summarised in Appendix 1 of this document, forming an integral part of the evidence base for Wiltshire and Swindon's Minerals and Waste DPDs.

Legal Framework

Planning and Compulsory Purchase Act 2004

- 2.4** Section 39(2) of the Planning and Compulsory Purchase Act 2004, in relation to preparation of RSSs and DPDs, states that "*The person or body [i.e. planning officer, Regional Planning Body or Local Planning Authority] must exercise the function [i.e. the function of preparing an RSS or DPD] with the objective of contributing to the achievement of sustainable development*", and Section 19 (5) effectively makes it a statutory requirement to carry out a sustainability appraisal of DPDs to ensure that the objectives of sustainable development are being met through the plan making process.
- 2.5** Section 19 (2) of the Act also requires Local Planning Authorities to have regard to:
- National policies and advice contained in guidance issued by the Secretary of State;
 - The RSS for any region which adjoins the area of the authority; and

4 Incorporating the requirements of Strategic Environmental Assessment (SEA)

- both the community strategy prepared by the authority and the community strategies for any other authority whose area comprises any part of the area of the local planning authority.

National Policy

Securing the Future: Delivering UK Sustainable Development Strategy

2.6 In 2005 the Government published *Securing the Future: delivering UK sustainable development strategy*. The document represents a review of progress towards delivering the principles of the first Sustainable Development Strategy published in 1999, concluding that often out of the four original key principles (shown below), agencies were focusing on just one or two.

- Social progress that recognises the needs of everyone;
- Effective protection of the environment;
- Prudent use of natural resources; and
- Maintenance of high and stable levels of economic growth and employment.

2.7 The 2005 strategy presented a new ‘framework goal’ for sustainable development which is now underpinned by five new ‘guiding principles’, shown in table 2.1.

2.8 The document goes on to say that *“These principles will form the basis for policy in the UK. For a policy to be sustainable, it must respect all five of these principles, though we recognise that some policies, while underpinned by all five, will place more emphasis on certain principles than others.”* (DEFRA, *Securing the Future*, 2005). The document also acknowledges that there is a need to uncouple the link between economic growth and environmental degradation through more efficient use of resources, which builds upon the Governments *‘Changing Patterns: UK Government Framework for Sustainable Consumption and Production’* published in 2003.

2.9 The Sustainable Development Strategy has influenced many of the topics covered in this report. However aspects relating to efficient resource use and management are likely to receive a greater degree of attention due to the focus of minerals and waste planning. The potential broader issues for minerals and waste are listed below:xxx

Table 2.1 Guiding Principles of Sustainable Development (*Securing the Future: delivering UK sustainable development strategy*)

Examples of Issues identified in this report for minerals and waste with respect to Wiltshire and Swindon	
Living within environmental limits	<p>A need to reduce consumption of primary resources and promote more efficient use of waste produced.</p> <p>The plan area is subject to significant coverage with regard to environmental constraints (68% of total area). In the interest of preserving these areas, a greater pressure to</p>

	<p>share the burden of development ⁽⁵⁾ is likely to be felt in Swindon Borough and north and west Wiltshire. This will be contrasted with strong competition for land within highly constrained areas like the east and south of Wiltshire.</p> <p>Impacts on localised flooding associated with the Upper Thames Valley, Bristol Avon and Salisbury Avon.</p> <p>Global implications of development in terms of climate change. Locating developments that reduce the need to travel.</p>
Ensuring a strong, healthy and just society	Community involvement will be an essential tool to ensure that this objective is achieved, and will also help to ensure that people are not adversely affected by the impacts of minerals and waste development. The councils currently hold a consultation database of over 2,500 contacts representing organisations, groups and individuals in and around the plan area.
Achieving a sustainable economy	Sustainable Consumption and Production (SCP) seems to be the key to

5 The Draft RSS considers the east of the south west region as suitable to meet the regional need for hazardous waste disposal. This is likely to put significant pressure on the north eastern part of Wiltshire near to the Swindon boundary. The RSS also includes requirement to make provision in Wiltshire and Swindon for 1.85 million tonnes of primary aggregates per annum to 2016. This is significant in terms of increase in current production, and the capacity of the plan area to meet this requirement. This figure is, however, currently the subject of review. As of April 2006, part of the plan area now forms part of the New Forest National Park (NFNP) Authority precluding the potential for this area and also potentially areas in proximity to the NFNP, to contribute to meeting demand.

	<p>the delivery of a sustainable economy. For the plan area, this will mean ensuring that resources are available and managed efficiently whilst promoting materials reuse and recycling. Also minerals and waste development provide a source of employment and make a contribution to GDP. Again the opportunities for achieving these aims will be in the larger developed areas of Swindon, Chippenham, Salisbury and Trowbridge.</p>
Promoting good governance	<p>Community involvement will be an essential tool to ensure that this objective is achieved. The councils currently hold a consultation database of over 2,500 contacts representing organisations, groups and individuals in and around the plan area.</p>
Using sound science responsibly	<p>The purpose of the evidence base report is to ensure that the councils' policies are founded on robust and credible evidence. Where insufficient evidence is available the precautionary principle should be adopted</p>

The National Planning Policy Framework

- 2.10** The Government has recently published the draft National Planning Policy Framework (NPPF) for consultation. This sets out the Government's economic, environmental and social planning policies for England and will replace the existing national planning policy guidance and statements. The intention is for this new framework to be less complex and more accessible. The public consultation closed on the 17th October 2011. Current planning policy guidance and statements remain in place until the final NPPF is published but the proposals in the draft NPPF must be taken account.

Planning Policy Statement 1: Delivering Sustainable Development

2.11 The principles of sustainable development are central to the purpose of the review and publication of national planning policy. The core document in translating these principles into land use objectives is *PPS1*, which “sets out the overarching planning policies on delivery of sustainable development through the planning system” (ODPM, 2005), through the following six key principles (PPS1, para 13).

- i. Development plans should ensure that sustainable development is pursued in an integrated manner, in line with the principles for sustainable development set out in the UK strategy. Regional planning bodies and local planning authorities should ensure that development plans promote outcomes in which environmental, economic and social objectives are achieved together over time.
- ii. Regional planning bodies and local planning authorities should ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change – through policies which reduce energy use, reduce emissions (for example, by encouraging patterns of development which reduce the need to travel by private car, or reduce the impact of moving freight), promote the development of renewable energy resources, and take climate change impacts into account in the location and design of development.
- iii. A spatial planning approach should be at the heart of planning for sustainable development.
- iv. Planning policies should promote high quality inclusive design in the layout of new developments and individual buildings in terms of function and impact, not just for the short term but over the lifetime of the development. Design which fails to take the opportunities available for improving the character and quality of an area should not be accepted.
- v. Development plans should also contain clear, comprehensive and inclusive access policies – in terms of both location and external physical access. Such policies should consider people’s diverse needs and aim to break down unnecessary barriers and exclusions in a manner that benefits the entire community.
- vi. Community involvement is an essential element in delivering sustainable development and creating sustainable and safe communities. In developing the vision for their areas, planning authorities should ensure that communities are able to contribute to ideas about how that vision can be achieved, have the opportunity to participate in the process of drawing up the vision, strategy and specific plan policies, and to be involved in development proposals.

Planning Policy Statement 10: Planning for Sustainable Waste Management

2.12 The principles of PPS1 are reflected in *PPS10* which encourages Waste Planning Authorities (WPAs) to “help deliver sustainable development through driving waste management up the waste hierarchy”. This hierarchy is shown in the table below with some examples of the role of waste planning in delivering this aim.

Table 2.2 The National Waste Hierarchy

Waste Hierarchy	Examples of issues for waste with respect to the plan area
Reduction	This requires Local Authorities to work closely with producers to help eliminate the production of waste. Reducing the volume of packaging used for products is an example of elimination.

Reuse	This places the emphasis on reusing materials in order to reduce waste. Reusing materials during the construction and demolition of developments is a good example of reuse.
Recovery	Recovery is the next step down the hierarchy and requires WPAs to find suitable sites for processes such as Mechanical Biological Treatment (MBT) and Energy from Waste (EfW). These procedures result in a usable product from the waste. The Landfill Allowance Trading Scheme (LATS) has introduced a greater demand for recovery facilities as only a limited amount can be disposed to landfill under the scheme.
Disposal	There is likely to be a continued need for disposal facilities for waste. Recovery facilities generally produce a small amount of residual waste that needs to be disposed of. The LATS sets out tonnages per year that can be landfilled, with severe penalties if these targets are not met. Disposal facilities will need to be provided in-line with the LATS targets. The draft South West Regional Spatial Strategy (RSS) also sets out sub-regional apportionments for Recycling, Recovery and Disposal.

Minerals Policy Statement 1: Planning and Minerals

2.13 This document encourages Minerals Planning Authorities (MPAs) to adopt “...a *hierarchical approach to minerals supply*” (para 1), which involves firstly reducing the quantity of material used and waste produced, secondly utilising as much secondary and recycled material as possible, before finally relying on primary resources.

Table 2.3 The National Minerals Hierarchy

Minerals Hierarchy	Examples of issues for minerals development with respect to the plan area
Reduce	This extends the traditional boundaries of minerals planning to include the potential for use of non-mineral resources to be considered. However, any alternatives suggested will have to represent a more sustainable option in terms of distance from market (timber can be sourced from Norway for example), cost, availability (i.e. capacity of resource to accept additional demand, is resource renewable, etc), and suitability to local environment (consideration of local built vernacular and alternative building material is adequate for local environmental conditions).
Recycle	Construction and demolition waste is being recycled within the plan area but the exact extent is unknown. Secondary aggregate is not produced in the plan area in significant quantities. However, it may be acceptable to import some secondary material for use as aggregate, as suggested in the Wiltshire & Swindon Structure Plan 2016 (para 10.27), subject to capacity of the local transport infrastructure.
Use of primary resources	The Wiltshire and Swindon provision requirement for sand and gravel is currently set by the Draft RSS at 1.85 million tonnes per annum, subject to environmental testing. This provision requirement is currently under review in light of the revised national

and regional guidelines 2005 - 2020, published in 2009 and is being challenged through the preparation of the Minerals Site Allocations DPD.

Other Relevant Plans and Strategies

- 2.14** The impacts of minerals and waste development can extend beyond the point of origin, often because resources are transported across administrative boundaries, sometimes over long distances. Due the proximity of the plan area to the South East Region, the councils will consider the implications for Wiltshire and Swindon of both the South West and the South East Regional Spatial Strategies, and the relevant plans and strategies that are specific to these areas. For the South East Region this will only include those plans and strategies adjacent to the plan area, but this will potentially involve dialogue with many different organisations and the consideration of numerous documents at a variety of levels.
- 2.15** It is anticipated that as the Minerals and Waste Development Framework (MWDF) evolves our knowledge and understanding of the plan area and the needs of our communities will grow. This can only be achieved through continued and wide ranging consultation with representatives at all levels.

National Strategies

- 2.16** National strategies tend to focus on particular issues (like Air Quality, for example), and therefore will be considered in the relevant chapter in this report as set out below:

Table 2.4 Key National Plans and Strategies

Relevant National Plans and Strategies	Evidence Base Chapter
Future Water: The Government's water strategy for England	Chapter 10:Environmental Impacts
Water for people and the environment: Water Resources Strategy for England and Wales	Chapter 10:Environmental Impacts
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland	Chapter 10:Environmental Impacts
The England Rural Development Programme	Chapter 10: Environmental Impacts
Safeguarding our Soils: A Strategy for England	Chapter 10:Environmental Impacts
Sustainable Distribution: A Strategy	Chapter 6: Transport
The UK Biodiversity Action Plan	Chapter 9: Biodiversity and Geodiversity
Climate Change: the UK Programme	Chapter 6: Transport Chapter 10: Environmental Impacts
The Waste Strategy 2007 for England and Wales	Part B: Waste

Regional Plans and Strategies and the Localism Bill

- 2.17** The Planning and Compulsory Purchase Act (2004) introduced the requirement for Regional Assemblies to produce Regional Spatial Strategies (RSS).
- 2.18** The Regional Spatial Strategy (RSS) for the South West represented the higher level policy framework that all DPDs within the South West must be in conformity with. Prior to the commencement of the 2004 Act, Regional Assemblies produced Regional Planning Guidance, which as a result of the commencement of the Act, qualified as Regional Spatial Strategies until replaced by the new RSS process.
- 2.19** Although the RSS for the South East does not cover any part of the plan area, there is a shared boundary between regions which coincides with the eastern boundaries of Wiltshire and Swindon. The cross-border links that exist between minerals and waste planning authorities mean that consideration had to be given to the strategic policies contained within this document (in accordance with Section 19 of the Planning & Compulsory Purchase Act 2004).
- 2.20** The Regional Economic Strategy of the South West of England sets the economic objectives of the South West Regional Development Agency (RDA). The Strategy will be implemented in part by the RDA and in part through sub-regional Local Strategic Partnerships.
- 2.21** The Localism Bill was introduced to Parliament on 13 December 2010 and was given Royal Assent on 15 November 2011 becoming an Act. The Act will shift power from central government back into the hands of individual, communities and councils. It proposes a suite of changes to the manner in which local communities can influence local decisions and so the mechanism by which Regional Strategies will be revoked is now in place. However, orders by the Secretary of State are still required before revocation is enacted. For this reason, references to the Draft South West Regional Spatial Strategy are retained in this evidence base document.
- 2.22** The Localism Bill included the intended removal of the primary legislation which sets the basis for Regional Strategies (RS) (otherwise known as RSSs). When the Bill became the Localism Act in November 2011 the first stage of this process had the effect of removing the regional planning tier, including Leaders' Boards whose responsibility it was to prepare the relevant Regional Strategy (RS).
- 2.23** The second stage is to abolish each existing RS outside London and saved county structure plan policies by Order, but this is subject to the outcome of the environmental assessments that Department for Communities and Local Government (DCLG) voluntarily undertook, on which consultation closed on 20 January 2012. Decisions on the revocations will not be made until the Secretary of State and Parliament have had the opportunity to consider the outcome of the environmental assessment process.
- 2.24** Despite the government's intention to revoke RSs, the government has advised that the evidence which informed the preparation of the RSSs could still be used as material consideration in the preparation of DPDs and local decision making⁽⁶⁾.

Local Land Use Planning Policy

- 2.25** There are currently two tiers of planning policy in place at the local level. At the county/borough level there are:

6 See letters from CLG, regarding the Abolition of Regional Spatial Strategies:
<http://www.communities.gov.uk/publications/planningandbuilding/responseabolitionregional>

- 2.26** **Structure Plans** set out the strategic land use policy framework that extant policies of Local Plans (including Minerals and Waste Local Plans - which have been superseded in Wiltshire and Swindon), produced under the pre-2004 planning system must be in conformity with. The Structure Plan also sets out guidance for economic growth, including employment land and housing in Wiltshire and Swindon. The Structure Plan outlines by former district area, provisions for projected requirements for employment land and housing.
- 2.27** In accordance with the Planning and Compulsory Purchase Act (2004), the Wiltshire and Swindon Structure Plan was only in place until April 2009. An application was made to the Secretary of State to 'save' those policies that need to be retained until the new RSS and/or a new Wiltshire Core Strategy is in place. A schedule of the Saved Policies is available on the Wiltshire Council website.
- 2.28** The second stage of implementing the Localism Act seeks to abolish saved county structure plan policies by Order. It is the Government's intention to lay orders in Parliament revoking the saved structure plan policies as soon as possible, but this is subject to the outcome of environmental assessments. Nevertheless, until the revocation of saved policies takes place the document remains important as it guides all other plans in Wiltshire and Swindon, including Minerals and Waste LDDs.
- 2.29** **Minerals and Waste Local Plans** set out the county wide land use policy framework for minerals and waste development. Certain policies of the Local Plans are saved, as directed by the Secretary of State, until replaced by policies in adopted DPDs. Under the new system these documents should be replaced by **Minerals and Waste DPDs**. The minerals and waste policies of adjacent authorities are likely to have significant influence over the equivalent policies for the plan area. Opportunities for joint working, where it will prove beneficial to do so, will be explored (such as an Upper Thames Valley Joint Area Action Plan with Gloucestershire County Council). Arrangements were made for the Minerals and Waste planning responsibilities of the New Forest National Park to be undertaken by Hampshire County Council, however, this position has subsequently changed. The implications of these documents will be considered in *Part B: Waste* and *Part C: Minerals* of the evidence base. Wiltshire and Swindon have, to date, adopted four Minerals and Waste DPDs which are outlined later in this chapter.
- 2.30** At the former District / Borough level there are:
- 2.31** **Local Plans**, also produced under the pre-2004 system contain local land use policies that will be saved, as directed by the Secretary of State, until replaced by policies in DPDs. For the plan area Local Plans were produced by Swindon Borough Council and the four District Councils of Wiltshire and these are currently being reviewed under the requirements of the P&CP Act to be replaced with **Local Development Frameworks**.
- 2.32** **Local Transport Plans**, although prepared under separate legislation, operate at the county/unitary level and provide a policy framework for transport for their respective areas (identifying suitable roads for HGV traffic for example). Transport is a key issue for minerals and waste development and will therefore play a significant role in formulating minerals and waste policy.
- 2.33** There are also 11 adjacent Districts/ Borough Councils responsible for preparing Local Development Frameworks, which may influence or be influenced by the minerals and waste DPDs. Where the New Forest National Park (NFNP) falls within the southern party of Wiltshire, the planning responsibility for this area regarding the LDF is now the responsibility of the NFNP Authority.

- 2.34** In April 2009, the four districts and county council of Wiltshire were abolished to create a single unitary authority 'Wiltshire Council'. As a result, Wiltshire Council has inherited the Local Plans produced by the former district councils in Wiltshire. These will remain in place until superseded by policies in the Wiltshire Core Strategy, which will be adopted in autumn 2012.
- 2.35** Swindon Borough Local Plan was adopted and effectively 'saved' in July 2006 under the transitional arrangements of the Planning and Compulsory Purchase Act 2004 for a period of three years ending on 19 July 2009. Swindon Borough Council applied to the Secretary of State to save some of the policies within the Local Plan for a further period until such time they are replaced by the Swindon Core Strategy and the Site Allocations Development Plan Documents.
- 2.36** The saved Local Plan policies are currently responsible (until replaced by new development plan policies) for the protection of the environment from development and include development control policies for determining planning applications.

The Wiltshire and Swindon Minerals and Waste Development Framework

Wiltshire and Swindon Waste Core Strategy Development Plan Document (July 2009)

- 2.37** The adopted Wiltshire and Swindon Waste Core Strategy contains seven policies which set out the strategic direction and context for waste planning in Wiltshire and Swindon until 2026. It identifies, through analysis of projected capacity gaps, what waste management facilities will need to be delivered to meet the growth in waste arisings.

Wiltshire and Swindon Waste Development Control Policies Development Plan Document (September 2009)

- 2.38** The adopted Wiltshire and Swindon Waste Development Control Policies DPD contains 13 policies on managing waste management development until 2026. The first policy (WDC1) is broad in nature and bridges the gap between the adopted Waste Core Strategy and the emerging Waste Site Allocations DPD. The second policy (WDC2) addresses the need to reduce impacts generated from waste management developments. The remaining 11 policies are specific policies which cover these impacts and offer guidance to applicants and development control planners.

Wiltshire and Swindon Minerals Core Strategy Development Plan Document (June 2009)

- 2.39** The adopted Wiltshire and Swindon Minerals Core Strategy DPD sets out the councils' spatial vision, key objectives and overall principles for development covering minerals provision up to 2026. The Minerals Core Strategy should be read in conjunction with national, regional and local policies.

Wiltshire and Swindon Minerals Development Control Policies Development Plan Document (September 2009)

- 2.40** The adopted Wiltshire and Swindon Minerals Development Control Policies DPD aims to ensure that applications for minerals development result in sites that are operated and managed to high standards with minimum impacts to local communities and the environment. The first policy in the document (MDC1) requires applications to adhere to the principles of sustainable development. This policy encourages applicants to consider how waste can be minimised on site and the extent that the use of alternatives to primary aggregates can be promoted through new development. The remaining policies are specific policies designed to manage the impacts of minerals development.

The Sustainable Community Strategy

- 2.41** Sustainable Community Strategies are essentially a Local Government instrument for identifying key community issues and setting in place a programme, involving partnership working, to encourage the development of better and more sustainable communities. All local authorities are required to produce Community Strategies for their areas. If a DPD is to be considered sound at Examination it must have '*regard to the authority's Community Strategy*'⁽⁷⁾. For the plan area, the two Community Strategies covering the County of Wiltshire and the Borough of Swindon are:
- *A Sustainable Community Strategy for Wiltshire 2007-2016; and*
 - *A Shared Vision for Swindon 2008-2030 Sustainable Community Strategy*
- 2.42** In many respects the minerals and waste DPDs for Wiltshire and Swindon will be unable to directly assist with realising many of the aspirations currently set out in the Community Strategies. However an effective land use policy framework will play a crucial role in ensuring that many are achievable. The aims and objectives of the Community Strategies have been set out in a table and attached as Appendix 2 to this document. Where it appears that an objective of the Community Strategies can to some degree be realised through the minerals and waste DPDs, it is directed to the relevant chapter of this report for consideration.
- 2.43** With regard to the topic of sustainable development, the Wiltshire Sustainable Community Strategy includes the following objectives:
- Increased use of integrated renewables in new buildings
 - Local people involved in influencing design and delivery of public and voluntary services, that address their local priority and support community cohesion
 - A developed sense of place
 - Community cohesion built through bringing people together to address environmental issues.
- 2.44** The first objective regarding the use of integrated renewables is indirectly related to minerals and waste planning. No evidence has been found to justify a policy that can stipulate that minerals and waste developments should use renewable energy technology on what are often temporary and mobile on-site structures. This objective can therefore only in part be delivered through the minerals and waste development framework. The remainder of these objectives, also indirectly linked to minerals and waste planning, can in part be delivered through the process of consultation in accordance with the Wiltshire and Swindon's Statements of Community Involvement.
- 2.45** The Swindon Sustainable Community Strategy has the following objectives relating to the delivery of sustainable development:
- Seek to achieve a sustainable community that:
 - Balances and integrates the social, economic and environmental components of their community;
 - Meets the needs of existing and future generations; and
 - Respects the needs of other communities in the wider region, nationally or even internationally, to make their own communities sustainable.

7 Development Plans Examination – A Guide to the Process of Assessing the Soundness of Development Plan Documents, The Planning Inspectorate, Dec 2005

- To balance the needs of a growing population in a way that protects the natural environment as much as possible.
- Safeguard and enhance the built and natural environment for future generations.

2.46 Although the objectives are indirectly related to minerals and waste development, all DPDs will be rigorously assessed through Sustainability Appraisal (SA), and therefore should not conflict with these objectives.

Community Plans

2.47 Wiltshire Council in partnership with Statutory Agencies, Local Businesses and Community Groups, has facilitated the development of Community Plans for each of its 21 community areas. These plans, developed by Community Area Partnerships, identify the key concerns and priorities of local communities and set out targets and action points to address them. Many of these plans identify waste as an issue, as well as wider issues that can be associated with development such as transport, but surprisingly none consider issues specific to minerals development even in areas of high minerals production. There may be some scope for certain community aspirations to be achieved through legal agreement, negotiated with developers as part of the planning decision making process.

Other Local Authority Plan and Strategies

2.48 The table below outlines other local authority plans and strategies identified through the evidence gathering process and indicates where in this report each will be considered. The list should not be read as being exhaustive.

Table 2.5

Table 2.5: LPA Plans and Strategies	
Plan / Strategy	Evidence Base Chapter
Climate Change Action Plan for Swindon Borough 2006-2010 (Produced as a result of Swindon Community Strategy)	Chapter 10: Environmental Impacts
Wiltshire & Swindon Renewable Energy Action Plan, 2005	Chapter 10: Environmental Impacts
Wiltshire ECO Strategy 2011 - 2020	Chapter 10: Environmental Impacts
River Avon SAC Conservation Strategy	Chapter 9: Biodiversity
The Freight Quality Strategy (Freight Quality Partnership)	Chapter: 6 Transport
Swindon Biodiversity Action Plan	Chapter 9: Biodiversity
Swindon Culture & Leisure Strategy 2003 – 2013	Chapter 8: Culture and Heritage
Wiltshire Biodiversity Action Plan 2008	Chapter 9: Biodiversity and Geodiversity
Wiltshire Joint Municipal Waste Management Strategy 2006	Part B: Waste
Swindon Municipal Waste Management Strategy 2006	Part B: Waste

Other Plans and Strategies

2.49 Many documents that do not necessarily conform to the boundaries shown above will also be considered throughout this report, for example, Catchment Area Management Strategies prepared by the Environment Agency. Those included in this report are shown in the table below:

Table 2.6

Table 2.6: Other Plans and Strategies	
Plan / Strategy	Evidence Base Chapter
Area of Outstanding Natural Beauty Management Plans	Chapter 7: Landscape
Catchment Abstraction Management Strategies	Chapter 10: Environmental Impacts
Cotswold Water Park Biodiversity Action Plan	Chapter 9: Biodiversity and Geodiversity
Cotswold Water Park Master Plan (under development)	Part C Minerals
Gloucestershire Cotswolds Local Geodiversity Action Plan	Chapter 9: Biodiversity and Geodiversity
Kennet and Avon Canal Conservation Plan	Chapter 8: Culture and Heritage
New Forest National Park Management Plan: A Strategy for the New Forest (2003)	Chapter 7: Landscape Chapter 9: Biodiversity and Geodiversity
River Basement Management Plans	Chapter 10: Environmental Impacts

Relevant Data

2.50 The Government have formulated a number of indicators to measure progress towards achieving the principles of sustainable development. Sustainability Appraisal forms an integral part of the process of DPD preparation and the results of the SA will lead to the adoption of many of these indicators as part of the monitoring framework for DPDs. Some of the data will also be considered within the relevant chapters of this report.

Summary of Key Findings

- There is a need to embrace all five of the guiding principles of sustainable development. This presents a challenge for minerals and waste policy which, in terms of resource consumption and waste arisings, are undeniably linked to the economy. In terms of waste this will be in part achievable through diversion of waste from landfill, and for minerals will be through encouraging use of alternatives to primary won resources.
- A spatial planning approach will require the continual monitoring of a significant number of relevant plans and strategies, an understanding of the relationships between them, and where possible the integration of those elements of these plans and strategies with

land use implications. To be effective spatial planning also involves building stronger working relationships with those responsible for developing other relevant plans and strategies.

- DPDs must have regard to the Sustainable Community Strategies relevant to the plan area. For this reason each chapter of this document will consider the relevant aims and objectives of the community strategies and where possible suggest how these objectives may be achieved through the implementation of the minerals and waste DPDs.
- There may be scope for policy that ensures that where possible the objectives of Community and Village Plans are delivered through the development management process. This will give communities an opportunity for greater input and would mean that specific references to particular plans in DPDs would be unnecessary.

3 Chapter 3: Population

Introduction

- 3.1** Minerals and waste development, like all types of development, are driven by the demands of a changing population. How and where demand will be met by mineral resources and waste management facilities will inevitably be affected by the spatial distribution of areas of growth. This chapter will include details of what we know about the population of the plan area within the context of surrounding areas.

Legal Framework

- 3.2** Section 17 (having regard to Sections 13 and 14) of the *Planning and Compulsory Purchase Act 2004* requires Local Planning Authorities (LPAs) to reflect the principle social characteristics of the local area. Details of the composition and distribution of population in relation to the plan area should in part meet this requirement.

Relevant Plans and Strategies

Wiltshire Core Strategy

- 3.3** The emerging Wiltshire Core Strategy DPD plans for 37,000 new homes. This is expected to provide accommodation for of the order of an additional 48,000 persons from 2006 to 2026.

Swindon Core Strategy

- 3.4** The emerging Swindon Core Strategy DPD plans for 25,000 new homes to be provided between 2006 and 2026.

Strategic context

- 3.5** Although the South West Region covers the largest territory of any of the regions in England at 23,837km² it is home to a relatively modest population of approximately 5 million. The estimated population for the plan area of Wiltshire and Swindon for 2010, is 661,600 (based on mid-2010 Office for National Statistics estimates). This represents a relatively low population density compared with the national average, the region and surrounding areas. However, it does not take into consideration the various constraining environmental characteristics of the plan area that has steered development towards particular places creating denser clusters of development than would be assumed from the figures (*Re: Landscape Character and Biodiversity chapters*). For comparison the table below shows data for the South West and South East Regions and adjacent minerals and waste planning authorities.

Table 3.1 Population density. Source: ONS.

Area	Area (km ²)	Population (ONS mid-2010 estimates)	Density (pop/km ²)
England	130,280	52,234,000	400.9
South West Region	23,837	5,273,700	221.2
Wiltshire & Swindon	3,486	661,600	189.8

Area	Area (km ²)	Population (ONS mid-2010 estimates)	Density (pop/km ²)
Gloucestershire	2,705	593,500	219.4
Somerset	3,514	525,200	149.5
Dorset ⁽⁸⁾	2,695	715,000	265.3
West of England ⁽⁹⁾	1,514	1,098,000	725.2
South East Region	19,069	8,523,100	447.0
Oxfordshire	2,606	648,700	248.9
Berkshire JSPU ⁽¹⁰⁾	1,264	865,200	684.5
Hampshire ⁽¹¹⁾	3,738	1,743,700	466.5

3.6 The distribution of population across the plan area is not uniform. There is a contrast between the more populated areas in the north and west of the plan area and the less populated 'rural' south and east. To the west lies the West of England sub-region, an area comprising four unitary authorities that have experienced significant growth in recent decades; mainly focused around the city of Bristol which now supports a population of more than half a million people (over ten per cent of the population living in the South West Region), as illustrated in Table 3.2. To the north in Gloucestershire the concentration of development is found around Cheltenham and Gloucester (population in 2001 of 110,300 and 136,200 respectively), to the northeast the city of Oxford (143,000), and to the east is Reading (369,800). The highly valued landscape of the New Forest National Park separates the major populated areas of the Bournemouth/Poole urban area (population 383,700) to the south, and Southampton (population 304,400) to the southeast of Wiltshire. The area to the southwest is relatively sparsely populated with the largest settlements supporting populations of less than 45,000, which with the exception of Swindon (155,400), is also typical for the other towns within the plan area. Map 3.1 illustrates the distribution of key urban areas in and around Wiltshire and Swindon based on 2001 census population data.

Table 3.2 Distribution of main urban areas in and around the plan area. Source: 2001 Census

Urban Area	Population (2001)
Abingdon	36,000
Andover	38,000
Bath	90,100
Basingstoke	90,200
Bournemouth/Poole	383,700

8 Including Unitary authorities of Bournemouth and Poole

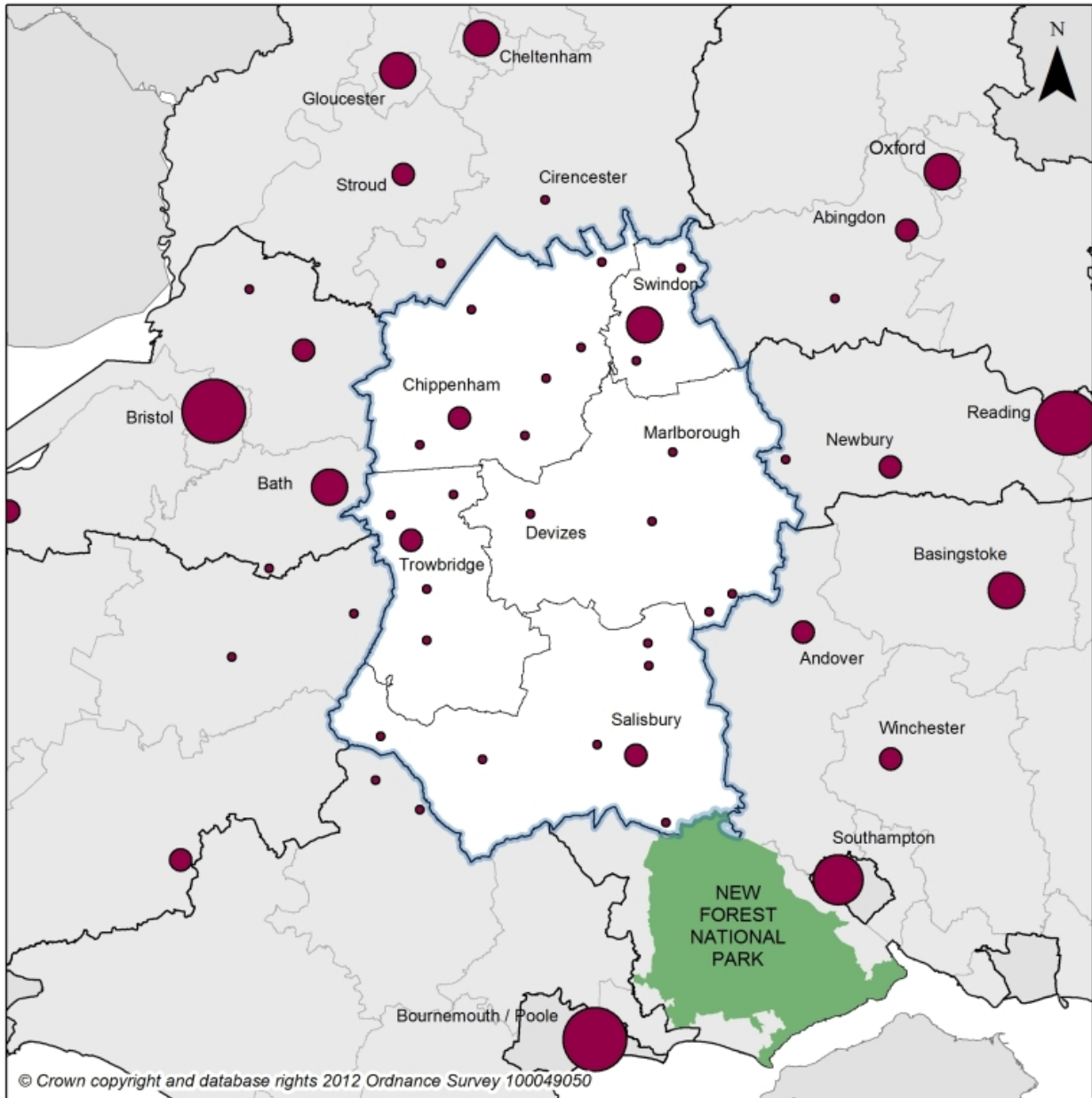
9 Unitary authorities of Bristol, Bath & North East Somerset, South Gloucestershire and North Somerset

10 Unitary authorities of Bracknell Forest Council, Reading Borough Council, Slough Borough Council, West Berkshire Council, Royal Borough of Windsor and Maidenhead, and Wokingham Borough Council

11 Including New Forest National Park Authority and Unitary authorities of Southampton and Portsmouth as well as Hampshire County.

Urban Area	Population (2001)
Bristol	551,100
Cheltenham	110,300
Chippenham	33,200
Cirencester	15,900
Devizes	14,400
Gloucester	136,200
Marlborough	7,700
Newbury	32,700
Oxford	143,000
Reading	369,800
Salisbury	43,400
Southampton	304,400
Stroud	47,300
Swindon	155,400
Trowbridge	34,400
Winchester	41,400

Figure 3.1 Distribution of main urban areas in and around the plan area



- *Note: Each circle is representative of scale of population for each urban area*

3.7 The distribution of the population plays a significant role in the nature and composition of development in an area. The County of Wiltshire is generally perceived as rural and the Borough of Swindon as urban in character. This general notion is confirmed in table 3.3, which shows Swindon as having a higher percentage of its administrative area developed than at the national level; whereas the districts of Wiltshire are noticeably less developed, particularly the former district of Kennet (East Wiltshire).

Table 3.3 Land uses by percentage of area. Source: ONS.

Area	Total area (km ²)	% area development (excluding gardens)	% area domestic gardens	% area roads, paths and rail	% area green space	% area water	% area other /un-classified
England	130,280	1.80	4.27	2.47	87.47	2.60	1.40
South West Region	23,837	1.23	3.07	1.91	90.75	1.97	1.07
Wilts and Swindon	3,486	1.10	2.78	1.56	92.87	0.58	1.10
Swindon	230	3.90	7.29	4.46	80.67	0.55	3.13
Wiltshire	3,255	0.90	2.46	1.36	93.73	0.59	0.96
North Wilts	768	1.12	2.79	1.72	92.15	0.99	1.23
South Wilts	1,004	0.75	2.24	1.19	94.46	0.54	0.82
East Wilts	997	0.62	1.82	0.97	95.55	0.33	0.70
West Wilts	517	1.41	3.61	1.87	91.28	0.54	1.30

- Note: Percentages may not sum due to rounding.

The Characteristics of Wiltshire and Swindon's Population

Urban/Rural Characteristics

3.8 Many attempts have been made to establish a definitive answer to the question of what constitutes an 'urban' or 'rural' area. The Office for National Statistics (ONS) most recent definition (for output table KS01 usual resident population) is that "*an urban area is an extent of at least 20 hectares and at least 1,500 residents at the time of the 2001 Census*" (August 2005). It follows that areas that do not meet this threshold are classed as rural in character.

3.9 It is accepted that the ONS approach does not necessarily capture the 'perceived' urban or rural nature of an area or the lifestyle of the respective inhabitants which gives them their sense of urban/rural identity. However, the ONS definition has been adopted for the purposes of this report because it will provide sufficient context for minerals and waste planning. It is assumed that a settlement capable of maintaining a 'centre' providing an essential service used by surrounding areas, such as an industrial area for example, could potentially support a small scale minerals (recycled aggregates) or waste (recycling facility, etc) site. Use of this definition also allows us to draw some basic conclusions and highlight some distinctions about the character of different parts of the plan area.

Table 3.4 Urban/Rural Population. Source: ONS.

Area	Total Pop in urban areas >1500 persons	Total Population (2001)	Urban Population % of total	Rural Population % of total
Swindon	174,098	180,061	96.7%	3.3%

Area	Total Pop in urban areas >1500 persons	Total Population (2001)	Urban Population % of total	Rural Population % of total
East Wiltshire	40,724	74,833	54.4%	45.6%
North Wiltshire	93,460	125,370	74.5%	25.5%
South Wiltshire	78,015	114,614	68.1%	31.9%
West Wiltshire	107,627	118,156	91.1%	8.9%
Wilts and Swindon	493,924	643,034	76.8%	23.2%

3.10 Table 3.4 demonstrates that East Wiltshire (former district of Kennet) has a significant proportion of its population living in smaller settlements throughout the area, meaning that the main towns of Devizes, Marlborough and Tidworth are likely to act as service centres for the surrounding rural population, many of whom will also rely on areas outside of East Wiltshire for employment, goods and services. South Wiltshire also supports a relatively large rural population, whereas Swindon Borough and West Wiltshire see high proportions of their populations concentrated in larger urban areas. North Wiltshire appears to support a similar number of rural inhabitants as East Wiltshire but is also home to a large urban population.

Age and Ethnicity

3.11 Although some characteristics of the population of the plan area relating to age and ethnicity will provide very little relevance in terms of policy direction in the MWDF, the information below can provide information that is useful for consultation purposes. As part of a recent consultation exercise for Preferred Options on minerals and waste Development Plan Documents (DPDs), the councils requested background information from respondents relating to age and ethnicity. The intention was to build a picture of the characteristics of those that choose to engage in the minerals and waste planning process. However, few respondents provided the requested information and therefore the results were inconclusive.

Table 3.5 Wiltshire and Swindon Population by Age/Gender. Source: ONS mid-2010 population estimates

Age	Male (000s)	Female (000s)	Total (000s)	% Male	%Female
0	4.2	4.0	8.2	0.63	0.60
1-4	16.7	15.8	32.5	2.52	2.39
5-9	19.6	18.9	38.5	2.96	2.86
10-14	20.6	20.3	40.9	3.11	3.07
15-19	21.4	20.4	41.8	3.23	3.08
20-24	19.7	15.4	35.1	2.98	2.33
25-29	19.8	16.7	36.5	2.99	2.52
30-34	19.3	18.9	38.2	2.92	2.86
35-39	23.3	23.5	46.8	3.52	3.55

Age	Male (000s)	Female (000s)	Total (000s)	% Male	%Female
40-44	25.7	26.7	52.4	3.88	4.03
45-49	25.4	26.3	51.7	3.84	3.97
50-54	22.0	22.4	44.4	3.32	3.38
55-59	19.0	20.2	39.2	2.87	3.05
60-64	20.3	21.3	41.6	3.07	3.22
65-69	15.9	16.8	32.7	2.40	2.54
70-74	12.9	14.1	27	1.95	2.13
75-79	10.1	11.9	22	1.53	1.80
80-84	7.0	9.6	16.6	1.06	1.45
85-89	3.7	6.9	10.6	0.56	1.04
90+	1.4	3.7	5.1	0.21	0.56
Total	328.0	333.8	661.8	49.56	50.44

Figure 3.2 Wiltshire and Swindon Population Pyramid. Source: ONS mid-2010 population estimates

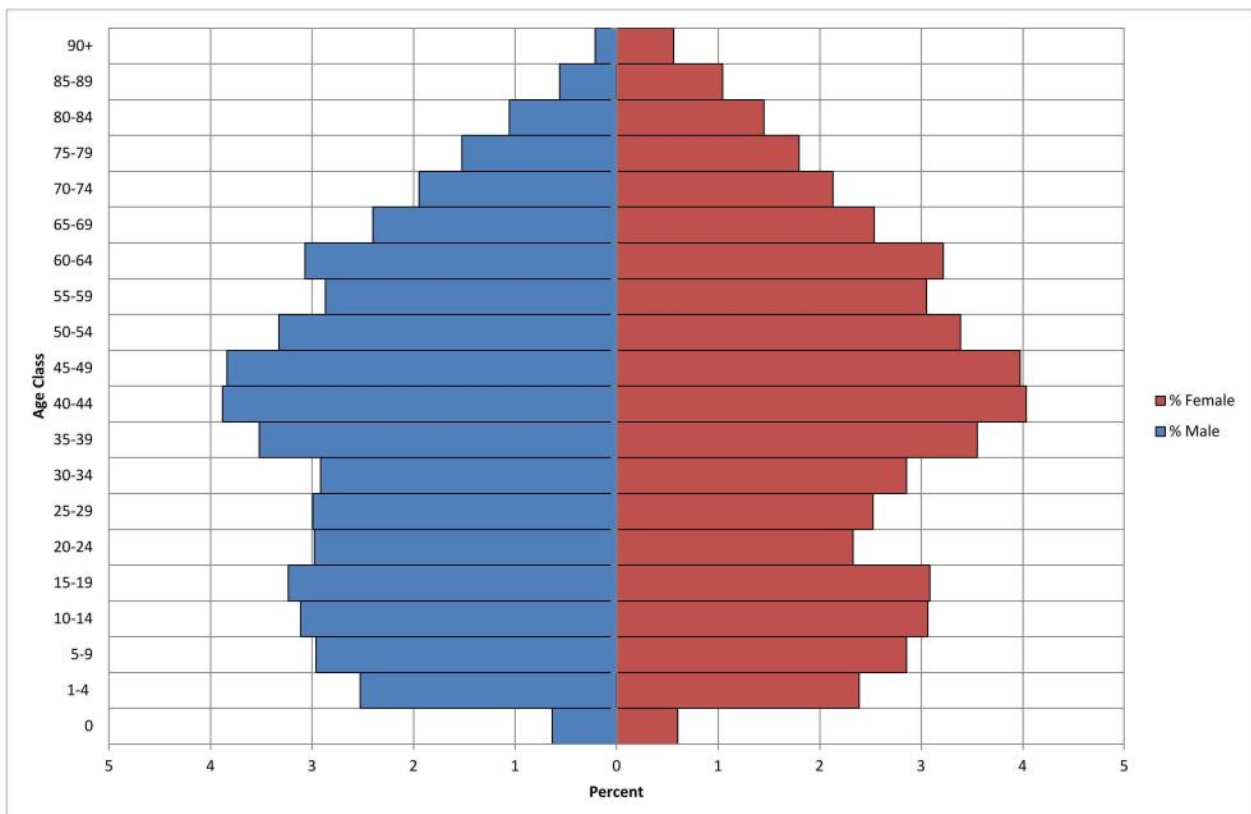


Table 3.6 Ethnicity data for Wiltshire and Swindon. Source: 2001 Census

Area	All People	White	Mixed Ethnicity	Asian or Asian British	Black or Black British	Chinese	Other Ethnic Group
England	49,138,800	44,679,400 (90.9%)	643,400 (1.3%)	2,248,300 (4.6%)	1,132,500 (2.3%)	220,700 (0.4%)	214,600 (0.4%)
South West Region	4,928,400	4,815,300 (97.7%)	37,400 (0.8%)	32,800 (0.7%)	20,900 (0.4%)	12,700 (0.3%)	9,300 (0.2%)
Wiltshire and Swindon	613,000	597,400 (97.5%)	4,900 (0.8%)	5,200 (0.8%)	2,400 (0.4%)	1,600 (0.3%)	1,500 (0.2%)
Wiltshire	433,000	426,000 (98.4%)	2,800 (0.6%)	1,400 (0.3%)	1,100 (0.3%)	800 (0.2%)	700 (0.2%)
Swindon	180,100	171,400 (95.2%)	2,000 (1.1%)	3,800 (2.1%)	1,300 (0.7%)	800 (0.4%)	800 (0.4%)

Recent Population Growth

3.12 As with many other parts of England, the population of Wiltshire and Swindon has been steadily increasing. However during the period 1981 to 2010, in percentage terms, this area has experienced higher growth than at the national level and in relation to the rest of the South West region, reflecting the high levels of net inward migration resulting from the fact that the plan area is seen as a desirable place to live.

Table 3.7 Population growth in Wiltshire and Swindon 1981-2010

Area	1981	1991	2001	2010	Difference 1981-2010	% Increase 1981-2010
England	46,820,000	47,055,200	49,138,800	52,234,000	5,414,000	11.6%
South East Region	7,245,000	7,497,700	8,000,700	8,523,100	1,278,100	17.6%
South West Region	4,381,000	4,688,000	4,943,000	5,273,700	892,700	20.4%
Wiltshire and Swindon	518,200	555,800	613,000	661,600	143,400	27.7%

3.13 Within the plan area there is a significant difference in percentage increase in population between the 'urban' areas of Swindon, West Wiltshire and North Wiltshire and the 'rural' former Kennet and Salisbury Districts. Of particular interest is the period from 2001 to 2010 where population growth in Salisbury was lower than in previous decades compared to relatively high increases for the former district of Kennet.

Table 3.8 Population growth by former District

Area	1981	1991	2001	2010	Difference 1981-2010	% increase 1981 - 2010	Difference 2001-2010	% increase 2001-2010
Kennet	62,800	69,700	74,800	80,400	17,600	28.0%	5,600	7.5%
North Wilts	101,100	113,800	125,400	134,000	32,900	32.5%	8,600	6.9%
Salisbury	99,300	106,600	114,600	117,500	18,200	18.3%	2,900	2.5%
West Wilts	98,700	108,800	118,200	127,900	29,200	29.6%	9,700	8.2%
Swindon	150,700	173,000	180,100	201,800	51,100	33.9%	21,700	12.0%

Projected Future Growth

3.14 The table below is based on ONS projected population increase to 2026 without the influence of policy intervention and shows how these pressures are likely to be distributed for Wiltshire and Swindon and the surrounding areas. The policies contained within the Development Plan for the area may cause a difference in actual patterns of growth through allocations of land for housing and employment. But based on this information, we can assume that there will almost certainly be increasing pressures exerted in terms of both resource management and competing land-uses over the plan period.

3.15 The ONS predicts that the plan area can expect to experience population growth as follows:

Table 3.9 Projected population growth to 2026 (ONS, 2006 figures)

Area	2006	2026	Difference 2006-2026	% increase 2006-2026
North Wiltshire	130,400	154,100	23,700	18.2%
South Wiltshire	115,300	126,700	11,400	9.9%
East Wiltshire	78,200	90,300	12,100	15.5%
West Wiltshire	124,800	153,700	28,900	23.2%
Swindon	186,600	224,700	38,100	20.4%

Key Findings

- Wiltshire and Swindon and surrounding areas have experienced significant population growth above the national percentage increase for more than 30 years.
- East Wiltshire is the most 'rural' part of the plan area with a high proportion (approximately 45%) of its population living in settlements with less than 1,500 inhabitants, followed by South Wiltshire at approximately 32% (2001 figures). Swindon Borough and West Wiltshire are the most urban areas, and North Wiltshire supports high urban and rural populations.

- The distribution of population in urban areas reveals the historic focal points for growth. This in turn provides a spatial indication of where minerals resources have been consumed and 'hotspots' where waste arisings are likely to originate from, both in and around the plan area. The main centres for growth for the plan area have traditionally been Swindon, Chippenham, Trowbridge and Salisbury. For nearby surrounding areas the traditional growth areas have been: Bristol/Bath, Cheltenham/Gloucester, Oxford, Reading, Southampton, and Bournemouth/Poole.
- The ONS predicts that future population growth to 2026 will be distributed unevenly within and around the plan area, with West Wiltshire and Swindon expected to see the greatest increases.
- In adjacent areas the West of England⁽¹²⁾ is expected to see the most growth up to 2026 in absolute terms.
- Although population growth is connected to 'need' for minerals resources and waste management, the exact nature of the link between policy within DPDs and population growth is difficult to define and therefore will not be a suitable measure of performance. The true measure of performance of minerals and waste policies in meeting demand is the maintenance of a sufficient land bank and void space/waste management capacity respectively.
- However, the distribution of growth does give an indication of the likely location of key areas of demand/waste production and this will affect the strategic approach to identifying future sites bearing in mind the influences of the Local Development Frameworks for the respective areas.

4 Chapter 4: Housing

Introduction

- 4.1 The location of past and projected housing construction provides an indication of focal points for resource management in terms of both minerals consumption and waste arisings. This chapter will assess the likely implications of future housing allocations for the Wiltshire and Swindon Minerals and Waste DPDs.

Legal Framework

- 4.2 Section 17 (having regard to Sections 13 and 14) of the *Planning and Compulsory Purchase Act 2004* requires Local Planning Authorities to reflect the principle social characteristics of the local area. Details of the composition and distribution of housing in relation to the plan area should, in part, meet this requirement.

National Policy

Sustainable Communities Plan, 2003

- 4.3 The Department for Communities and Local Government (DCLG) is the government department responsible for developing government housing policy in England. One of the core documents that sets out national policy for development is the *Sustainable Communities Plan*, published in 2003 by the former ODPM (now DCLG). The document is essentially concerned with meeting high demand for housing and associated development particularly in the South East Region. One of the factors that will ensure that the aims of the Sustainable Communities Plan are achieved is the provision for, and support of, essential resources and resource management facilities. Both minerals and waste developments within the plan area are expected, to some extent, to make a contribution to meeting regional and national need.

Planning Policy Statement 3: Housing

- 4.4 *PPS3: Housing* sets out the national objectives for housing development. The Statement encourages Local Planning Authorities to note the importance of facilitating “*the efficient use of resources, during construction and in use*” (Paragraph 16). This is likely to influence the pattern of supply and the overall need for natural resources. An efficient minerals and waste policy framework will be essential to achieving these aims.

National Planning Policy Framework

- 4.5 In July 2011, the Government published the draft National Planning Policy Framework (NPPF) for consultation. This document represents a key part of the Government's reforms to make the planning system less complex and more accessible, and to promote sustainable growth. The Government's key objective for housing is to increase significantly the delivery of new homes. The role of the planning system in achieving this objective should be to deliver a sufficient quantity, quality and range of housing. The draft NPPF states that local planning authorities should prepare a Strategic Housing Market Assessment to assess their full housing requirements, and should identify the scale and mix of housing and range of tenures that the local population is likely to require over the plan period.

Relevant Plans and Strategies

- 4.6 Chapter 2 of this report demonstrates the importance of considering the likely impacts of other plans and strategies relevant to the plan area. Because the impacts of housing development often reach beyond administrative boundaries, the policies from the Draft RSS

for the south east region have been included in this chapter. The Regional Spatial Strategies provided target based housing allocations for local authority areas which would then be tested and translated into site specific allocations by the District and Unitary Authorities through their Local Plans/LDFs⁽¹³⁾. The regional strategic targets can only be met through provision of sufficient resource management facilities and are therefore relevant to minerals and waste planning.

4.7 Local level site specific allocations for housing may present issues where they occur in proximity to proposed minerals and waste sites. Therefore to ensure that proposed minerals and waste sites are realistic and achievable, consideration of local level policies regarding the location of future housing development is also important for minerals and waste planning.

Table 4.1 Relevant Policies of the Development Plan

Plan/Strategy	Relevant Policy	Implications for MWDF
South West RSS ⁽¹⁴⁾	Policies SR1 – SR14 and SR22- SR23	The strategic locations for housing allocated within the Draft RSS for the plan area are Swindon, Chippenham, Trowbridge and Salisbury. The RSS seeks to provide additional housing capacity for the Swindon Borough in an extension that falls within North Wiltshire District. These are unlikely to change significantly as a result of the examination process and therefore for the final adopted document. These policies will need to be considered in relation to suitable locations for future minerals and waste development. Other SSCTs in adjacent areas are Bristol, Bath, Cheltenham, Gloucester, Bournemouth and Poole.
South East RSS	Policies H1 – H7	Steers development to the cities and towns of the region with the adjacent areas of the Vale of White Horse, West Berkshire and Basingstoke and Deane allocated relatively high levels of housing development.
Wiltshire & Swindon Structure Plan ⁽¹⁵⁾	Policies DP2, DP3 and DP4	The strategic locations identified in the Wiltshire & Swindon Structure Plan are similar to those contained in the Draft RSS. Therefore, consequently for the purposes of minerals and waste planning the implications will be as above.
Swindon Borough Local Plan	Policies H1 – H6	Provides indication of specific locations for development in the Swindon Borough. The key locations for housing are the Central Urban Area (currently the subject of an adopted Area Action Plan), Southern Development Area and Commonhead (Swindon Gateway Project). These locations will be of relevance when considering potential waste management facilities and also for considering the need for particular local mineral resources.
Kennet District Local Plan	Policy PD1, Policy HC2 and	Identifies the key specific locations for development in the Kennet District as Devizes, Marlborough and Tidworth. These locations will be of relevance when considering potential waste

13 The Government has signalled its intention to revoke Regional Strategies. In this context, Wiltshire Council is progressing housing and employment requirements, using a method consistent with that used in the RSS but accounting for more up to date information.

14 The Localism Bill has now been given Royal Assent and so the mechanism by which Regional Strategies will be revoked is now in place. However, orders by the Secretary of State are still required before revocation is enacted. For this reason, references to the Draft South West Regional Spatial Strategy are retained in this evidence base document.

15 Potential revocation of saved Structure Plan Policies through Localism Act.

Plan/Strategy	Relevant Policy	Implications for MWDF
	Policies HC8 – HC33	management facilities and also for considering the need for particular local mineral resources.
North Wiltshire Local Plan	Policies H1 – H9	Identifies key specific locations for development in the North Wiltshire District as Chippenham, Wootton Bassett, Calne and Malmesbury. These locations will be of relevance when considering potential waste management facilities and also for considering the need for particular local mineral resources.
Salisbury District Local Plan	Policies H1 – H16	Identifies key specific locations for development in the Salisbury District as Salisbury and Amesbury. These locations will be of relevance when considering potential waste management facilities and also for considering the need for particular local mineral resources
West Wiltshire Local Plan	Policies H1a, H1b and H1 – H24	Identifies key specific locations for development in the West Wiltshire District as Trowbridge, Melksham, Westbury, Warminster and Bradford on Avon. These locations will be of relevance when considering potential waste management facilities and also for considering the need for particular local mineral resources.
South Wiltshire Core Strategy	SO1, SO2, CP6, CP10-11, CP14 CP16-17	<p>Core Strategy (adopted February 2012) recognises the critical role of settlements in trying to balance the needs of the environment with those of local communities. A hierarchy of settlements is identified with the settlements of Salisbury and Wilton at the top of the hierarchy.</p> <p>Strategic Objective 2 makes provision for 9,900 homes in south Wiltshire to meet demand from 2006 to 2026.</p>
Wiltshire Core Strategy	SO3, SO4, CP1, CP2, CP45	<p>Emerging Core Strategy identifies Wiltshire's Principal Settlements as Chippenham, Trowbridge and Salisbury. These are strategically important centres and the primary focus for development. Outside of the Principal Settlements, Market Towns are defined as settlements that have the ability to support sustainable patterns of living in Wiltshire. These locations will be of relevance when considering potential waste management facilities and also for considering the need for particular local mineral resources.</p> <p>Core Policy 2 seeks to deliver future development in the most sustainable manner by making provision for around 37,000 homes in Wiltshire between 2006 and 2026. New housing development will be focused in the principal settlements. Future development will be delivered through a number of sources including strategic sites and community-led plans.</p>

Plan/Strategy	Relevant Policy	Implications for MWDF
Swindon Core Strategy	SO4, DS1, CT2, CT4	Emerging Core Strategy states that by 2026 housing needs will have been met in Swindon. A more balanced well-designed mix of housing will have been provided at a range of densities that maximises brownfield redevelopment and access to facilities and services. The strategy aims to concentrate development in the Borough through a combination of realising development opportunities within Swindon's urban area and through key allocated sites. 25,000 additional homes at an annual average of 1,250 dwellings a year will be provided between 2006 and 2026.

Sustainable Community Strategies

4.8 There are no relevant objectives in the County, Borough or former District Community Strategies relating to housing that influence the Minerals and Waste Development Framework.

Other Useful Resources

4.9 The Building Research Establishment publishes guidance and criteria for achieving environmentally efficient design and construction of many forms of development. The Building Research Establishment Environmental Assessment Method (BREEAM) for *Eco-homes* is used as a tool to assess the environmental quality of housing development, including criteria for resource management. Policy WCS6 of the adopted Wiltshire and Swindon Waste Core Strategy requires a waste audit to be undertaken for certain new developments within the plan area (including any development providing ten or more dwelling units).

Past Trends

4.10 Although the numbers of people living in an area influences future housing demand, it is the number of households formed within that population that governs real need for housing development. A change towards a lower person/household composition can lead to greater pressures being exerted on the housing market to meet a resulting increase in demand. The data in this section provides additional context for development in and around the plan area.

Households

4.11 For the period 1971 to 2001 the percentage increase in number of households for the plan area is higher than both that of the South West and of England as a whole. The Borough of Swindon, and former Districts of West Wiltshire and North Wiltshire show the highest percentage increases for the plan area with the former Districts of Salisbury (South Wiltshire) and Kennet (East Wiltshire) seeing relatively low growth, but still higher than at the national level. The 2011 census data is not currently available.

Table 4.2 Households: Plan area. Source: ONS

Area	1971	1981	1991	2001	Difference 1971-2001	% Change 1971-2001
East Wiltshire	19,922	22,108	26,078	29,565	9,643	32.6%
North Wiltshire	30,710	35,371	42,814	50,275	19,565	38.9%

Area	1971	1981	1991	2001	Difference 1971-2001	% Change 1971-2001
South Wiltshire	33,231	35,668	41,274	47,408	14,177	29.9%
West Wiltshire	28,869	35,502	42,356	49,407	20,538	41.6%
Swindon	44,330	53,427	67,116	75,154	30,824	41.0%
Wiltshire & Swindon	157,062	182,076	219,638	251,809	94,747	37.6%
South West	1,388,272	1,576,987	1,859,368	2,085,984	697,712	33.4%
England	15,604,318	16,720,120	18,761,638	20,451,427	4,847,109	23.7%

4.12 An increase in the number of households will not necessarily match that of the growth in population. Table 4.3 shows that the number of people per household for the plan area has fallen from an initially high level of 3.9 persons, to a level that is more in line with national trends of 2.4 persons. This change will have led to a much greater demand for housing in relation to population increase within the plan area in comparison to many other parts of England.

Table 4.3 Households and Population: Plan area. Source: ONS

Area	No. Of Households 1971	Population 1971	No. Of Households 2001	Population 2001	Ratio of Population to Households 1971	Ratio of Population to Households 2001
East Wiltshire	19,922	63,648	29,565	74,833	3.76	2.53
North Wiltshire	30,710	95,039	50,275	125,370	4.08	2.49
South Wiltshire	33,231	101,236	47,408	114,614	3.45	2.42
West Wiltshire	28,869	86,834	49,407	118,156	4.09	2.39
Swindon	44,330	139,872	75,154	180,061	4.06	2.40
Wiltshire & Swindon	157,062	486,730	251,809	613,020	3.90	2.43
South West	1,388,272	4,112,000	2,085,984	4,943,000	3.56	2.37
England	15,604,318	46,412,000	20,451,427	49,138,830	3.14	2.40

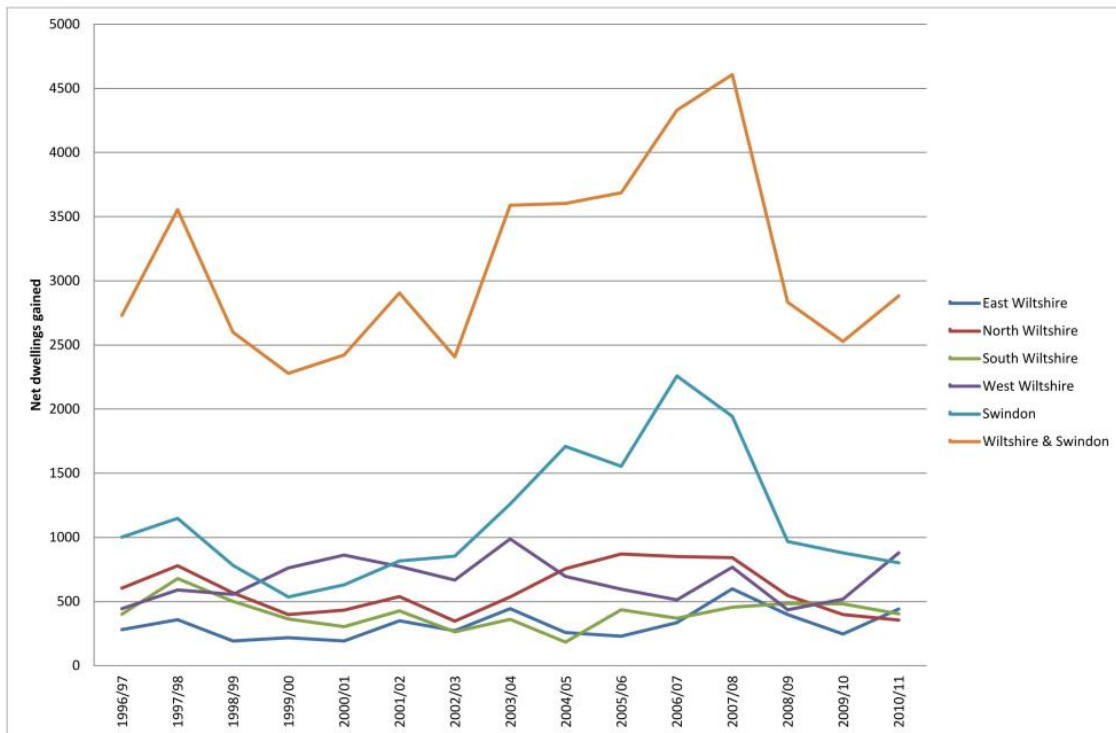
Housing Completions

4.13 The plan area has seen a general increase in net dwellings gained during the period 1996/97 to 2007/08. This increase has not been distributed evenly, with Swindon experiencing the greatest increase in dwellings completed, and the Wiltshire Districts maintaining varying but fairly steady levels of construction. Table 4.4 demonstrates that over the past three years the level of net dwellings gained is lower than that of typical mid-2000s levels (particularly in Swindon), reflective of a reduced number of housing completions in the plan area.

Table 4.4 Net dwellings gained by former districts: Plan area. Source: Wiltshire Council

Year	East Wiltshire	North Wiltshire	South Wiltshire	West Wiltshire	Swindon	Wilts & Swindon
1996/97	280	604	402	444	1,001	2,731
1997/98	359	779	679	591	1,148	3,556
1998/99	193	568	501	555	782	2,599
1999/00	218	399	363	761	537	2,278
2000/01	192	432	305	861	631	2,421
2001/02	350	539	427	773	816	2,905
2002/03	273	347	265	669	854	2,408
2003/04	444	537	362	987	1,259	3,589
2004/05	259	757	185	695	1,709	3,605
2005/06	229	872	435	596	1,554	3,686
2006/07	336	850	371	514	2,260	4,331
2007/08	598	842	457	768	1,943	4,608
2008/09	400	546	484	435	968	2,833
2009/10	247	400	482	518	880	2,527
2010/11	442	357	405	878	801	2,883
Total	4,820	8,829	6,123	10,045	17,143	46,960
Annual Mean (most recent 3 years)	363	434	457	610	889	2,748

Figure 4.1 Net dwellings gained in plan area



4.14 For adjacent local authorities, completions for the years 2008/09 to 2010/11 are included in the table below. In recent years South Gloucestershire and South Somerset have experienced the highest net additions to dwelling stock. The lowest levels of net additional dwellings over the past three years were found to be in East Dorset. These results should be considered in the context of the area, for instance rural areas such as East Dorset are likely to experience less house building than more urban authorities such as South Gloucestershire.

Table 4.5 Net additions to dwellings stock by local authority district: Surrounding areas. Source: DCLG

Local Authority	2008/09	2009/10	2010/11	3 Year Mean
Cotswold District	550	180	230	320
Stroud District	560	320	290	390
South Gloucestershire	920	740	710	790
Bath and North East Somerset	450	420	320	397
Mendip District	570	400	480	483
South Somerset District	650	510	1,060	740
North Dorset District	200	190	270	220
East Dorset District	100	80	160	113

Local Authority	2008/09	2009/10	2010/11	3 Year Mean
New Forest District	530	240	260	343
Test Valley District	150	440	390	327
West Berkshire	530	250	200	327
Vale of White Horse District	320	440	330	364
West Oxfordshire	580	380	420	460

- Note: Figures may not be the same as those later published by individual local authorities due to updates based on more recent information.

Future Growth

4.15 The development plan is the key policy framework for managing the demand for future development, and provides an indication of the quantity and spatial distribution of housing in the plan area. This section brings together all of the data relevant to this chapter based on information provided in the adopted and emerging development plans for both the South West and South East regions.

Regional Context

4.16 The Secretary of State Proposed Changes to the Draft RSS for the South West following the Examination in Public. This set out a requirement for approximately 29,600 additional houses per annum from 2006 to 2026 across the South West region. The regional approach to concentrate development in Strategically Significant Cities and Towns (SSCTs) was not affected by the conclusions of the Panel Report.

Strategic Housing Allocations

4.17 With regard to the plan area, the proposals of the Draft South West RSS (Proposed Changes) indicate that development will be concentrated in the four SSCTs of Swindon, Chippenham, Trowbridge and Salisbury, subject to the limits of environmental capacity of each area. Table 4.6 outlines the housing provisions of the Draft RSS, and the revised figures published in the Panel Report as a result of the Examination in Public held in 2007.

Table 4.6 Housing Allocations for the plan area

Administrative Area	Estimated Population (2006)	Projected Population Growth 2006-2026 (Source: ONS)	South West RSS Additional housing provision 2006-2026	Recommendations of the Panel Report	Emerging Core Strategy
Principal Settlement/Growth Area					
East Wiltshire					
Rest of area	-	-	5,000	6,000	5,500
-	78,200	12,100	5,000	6,000	5,500

Administrative Area	Estimated Population (2006)	Projected Population Growth 2006-2026 (Source: ONS)	South West RSS Additional housing provision 2006-2026	Recommendations of the Panel Report	Emerging Core Strategy
Principal Settlement/Growth Area					
North Wiltshire					
Chippenham	-	-	4,500	5,500	4,000
Urban extension to Swindon	-	-	1,000	3,000	200
Rest of area	-	-	4,500	5,200	5,530
-	130,400	23,700	10,000	13,700	9,730
South Wiltshire					
Salisbury	-	-	5,000	6,000	6,060 ⁽¹⁶⁾
Rest of area	-	-	4,200	6,400	3,840
-	115,300	11,400	9,200	12,400	9,900
Swindon Borough					
Swindon	-	-	33,000	33,000	-
Rest of Borough	-	-	1,000	1,200	-
-	186,600	38,100	34,000	34,200	24,800
West Wiltshire					
Trowbridge	-	-	5,000	6,000	5,860
Rest of area	-	-	5,500	6,300	6,010
-	124,800	28,900	10,500	12,300	11,870
TOTALS	635,300	114,200	68,700	78,600	61,800

4.18 Approximately 40% of all additional dwellings for the plan area have been allocated within or as urban extensions to Swindon (25,000 additional dwellings by 2026, according to the emerging Wiltshire and Swindon Core Strategies). If we assume that this additional housing will necessitate the provision of infrastructure to support this growth, Swindon could continue to be a significant sink for minerals resources, potentially placing a continuation or increase in demand in the Upper Thames Valley. Swindon (and other principle settlements) are also represent an increasing source of waste arisings that will need to be managed.

16 In the South Wiltshire Core Strategy, a single requirement is proposed for the settlements of Salisbury and Wilton.

Adjacent Local Authority Area Housing

4.19 The following tables detail the housing allocations for adjacent local authority areas within the South West Region as set out in the Draft RSS and relevant emerging/adopted Core Strategies.

Table 4.7 Housing Allocations for Somerset

Somerset	Estimated population (2006)	Projected population growth 2006-2026 (Source: ONS)	Draft RSS additional housing provision 2006-2026	Recommendations of the Panel Report	Emerging/adopted Core Strategy
Mendip	108,300	23,000	7,200	8,300	9,130
Sedgemoor	111,000	26,700	8,400	10,200	10,605 ⁽¹⁷⁾
South Somerset	156,700	33,900	13,600	19,700	16,600
Taunton Deane	107,400	25,400	17,300	21,800	17,000 ⁽¹⁸⁾
West Somerset	35,300	4,100	2,200	2,500	Not available
TOTALS	518,700	113,100	48,700	62,500	N/A

Table 4.8 Housing Allocations for the West of England

Administrative Area	Estimated population (2006)	Projected population growth 2006-2026	Draft RSS additional housing provision 2006-2026	Recommendations of the Panel Report	Emerging/adopted Core Strategy
SSCT/Growth Area					
Bath & North East Somerset					
Bath			7,500	7,500	6,000
Bristol (South East)			6,000	6,000	-
Keynesham			-	3,000	1,500
Somer Valley			-	-	2,700

17 Adopted Sedgemoor Core Strategy plans for the period 2006-2027

18 Published Taunton Deane Core Strategy plans for period 2008-2028

Administrative Area	Estimated population (2006)	Projected population growth 2006-2026	Draft RSS additional housing provision 2006-2026	Recommendations of the Panel Report	Emerging/adopted Core Strategy
SSCT/Growth Area					
Remainder of UA area			2,000	2,300	800
-	175,600	30,800	15,500	18,800	11,000
North Somerset					
Bristol (South West)			19,000	9,000	-
Weston Super Mare			3,000	12,000	8,800 ⁽¹⁹⁾
Clevedon, Nailsea and Portishead			-	-	3,400
Remainder of UA area			5,000	5,750	1,200
-	201,400	65,000	27,000	26,750	13,400
South Gloucestershire District					
Bristol (North & North East)			21,000	23,500	-
Yate			-	5,000	-
Remainder of UA area			2,000	2,300	-
-	254,400	53,700	23,000	30,800	21,500
Bristol City					
Bristol			28,000	30,000	-
Rest of City			-	-	-
-	410,500	109,300	28,000	30,000	30,600⁽²⁰⁾
TOTALS	1,041,900	258,800	93,500	106,350	76,500

19 Including Weston Villages.

20 Adopted Bristol Core Strategy also identifies a minimum figure of 26,400.

Table 4.9 Housing Allocations for Gloucestershire

Gloucestershire	Estimated population (2006)	Projected population growth 2006-2026	Draft RSS Additional housing provision 2006-2026	Recommendations of the Panel Report	Emerging/adopted Core Strategy
Cheltenham	111,500	12,600	8,500	8,100	Not available
Cotswold	83,200	13,800	6,000	6,900	Not available
Forest of Dean	81,700	9,300	5,400	6,200	5,162
Gloucester	113,200	18,300	11,500	11,500	Not available
Stroud	110,300	16,500	6,700	9,100	Not available
Tewkesbury	78,800	12,700	10,500	14,600	Not available
TOTALS	578,700	83,200	48,600	56,400	N/A

Table 4.10 Housing Allocations for Dorset

Dorset	Estimated population (2006)	Projected population growth 2006-2026	Draft RSS Additional housing provision 2006-2026	Recommendations of the Panel Report	Emerging/adopted Core Strategy
Christchurch	45,000	3,800	3,600	3,450	Not available
East Dorset	85,000	7,300	5,400	6,400	Not available
North Dorset	66,700	16,400	5,100	7,000	7,000
Purbeck	45,200	4,900	2,100	5,150	2,400
West Dorset	96,200	15,600	8,200	12,500	Not available
Weymouth and Portland	64,900	7,900	8,100	5,600	Not available
Bournemouth	161,200	5,800	15,600	16,100	Not available
Poole	136,900	5,800	10,000	10,000	10,000
TOTALS	701,100	67,500	55,600	66,200	N/A

4.20 The housing provisions for the surrounding counties in the South East region, are set out in table 4.11.

Table 4.11 Housing Allocations for the South East Region

County Level Area	District/Unitary Authority Area	Estimated population (2006)	Projected population growth 2006-2026	South East Plan: Additional housing provision 2006-2026	Emerging/adopted Core Strategy
Oxfordshire	Cherwell District	137,400	26,700	11,800	Not available
	Oxford District	149,100	30,500	7,000	8,000
	South Oxfordshire District	128,100	11,800	10,200	10,940
	Vale of White Horse District	117,100	13,900	11,500	11,560
	West Oxfordshire District	100,200	19,900	6,700	4,300 ⁽²¹⁾
TOTALS		631,900	102,800	47,200	N/A
Hampshire	Basingstoke and Deane District	158,700	30,200	16,500	Not available
	East Hampshire District	110,100	10,600	5,200	Not available
	Eastleigh District	119,000	19,400	7,083	9,400 ⁽²²⁾
	Fareham District	108,400	8,800	3,729	3,729
	Gosport District	78,200	12,800	2,500	2,500
	Hart District	88,800	21,100	4,000	4,000
	Havant District	116,800	10,200	6,301	6,300
	New Forest District	173,700	26,400	4,138	3,670
	Rushmoor District	88,700	3,700	6,200	6,350 ⁽²³⁾
	Test Valley District	113,600	20,000	10,020	12,550 ⁽²⁴⁾
	Winchester District	110,000	15,800	12,740	12,740

21 West Oxfordshire Core Strategy plans for the period 2011-2026.

22 Eastleigh Core Strategy plans for the period 2011-2029.

23 Rushmoor Core Strategy plans for the period 2010-2027.

24 For period 2006-31.

County Level Area	District/Unitary Authority Area	Estimated population (2006)	Projected population growth 2006-2026	South East Plan: Additional housing provision 2006-2026	Emerging/adopted Core Strategy
	City of Portsmouth	196,400	38,200	14,700	11,484-12,754 ⁽²⁵⁾
	City of Southampton	228,600	39,700	16,300	16,300
TOTALS		1,691,000	256,900	116,000	N/A
Berkshire JSPU	Bracknell Forest	112,200	18,300	10,780	11,139
	West Berkshire	148,800	21,100	10,500	10,500
	Reading	142,800	8,300	10,420	10,420
	Slough	118,500	7,300	4,700	6,250
	Windsor and Maidenhead	138,800	26,800	5,620	Not available
	Wokingham	153,800	21,600	10,460	13,230
TOTALS		814,900	103,400	52,480	N/A

Key Findings

- The composition of households nationally has shifted towards smaller numbers of people per household, leading to an increase in number of households in relation to population. With regard to the plan area, the shift has been greater due to the larger average household size during the early 1970s. Both the national and local figure for persons per household are now more closely matched at approximately 2.4 persons (2001 census).
- Data on recent housing completions reveals that Swindon followed by West Wiltshire are experiencing the highest construction output within the plan area. East Wiltshire shows relatively low levels of net dwellings gained. Externally, the West of England (particularly Bristol and South Gloucestershire) and parts of Somerset and Oxfordshire show the highest levels of construction.
- The Draft South West RSS and emerging Core Strategies intend to focus future development within key Strategically Significant Cities and Towns. For the plan area, these Principal Settlements are Swindon, Chippenham, Trowbridge and Salisbury⁽²⁶⁾.
- The Draft RSS allocated a significant proportion of housing for the plan area in Swindon (approximately 49%), with 1,000 additional dwellings located in North Wiltshire as an urban extension to the Borough. This has been revised through the developing Core

25 Portsmouth Core Strategy plans for the period 2006-2027

26 As defined by the Draft RSS.

Strategies, however approximately 40% of additional housing in the plan area is still attributed to Swindon.

- There is a need to provide minerals and waste management facilities to meet this growth, particularly in the areas of Swindon, North Wiltshire and West Wiltshire. The significant proportion of growth to the north of the plan area suggests that the greatest need for minerals and waste facilities should be in this area.
- The influence of housing development on minerals and waste planning is difficult to quantify but undoubtedly exists. It is therefore important to continue to monitor the scale and distribution of housing completions in and around the plan area to provide a context for the MWDF.



5 Chapter 5: Economy

Introduction

- 5.1** The Minerals and Waste Development Framework can contribute positively to maintaining economic growth in a number of ways, including ensuring that essential mineral resources for development are made available. Without an effective resource management framework in place, it is possible that associated costs would rise discouraging some development from going ahead. For this reason it is important to understand the economic context within which minerals and waste planning in Wiltshire and Swindon must operate. This is particularly relevant in relation to the severe economic downturn that has been experienced since Spring 2008, which has had an effect on economy of the plan area.
- 5.2** The following sections of this chapter firstly introduce the legal and policy context in relation to the economy and secondly provide some contextual data that can potentially be used to inform and develop minerals and waste policy.

Legal Framework

Planning and Compulsory Purchase Act 2004

- 5.3** Section 13 (1) (a) of the Act requires Local Planning Authorities to keep under review the principle economic characteristics of the area.
- 5.4** Section 39 of the Act also requires local authorities to have regard to the principles of sustainable development, which includes balancing the economic needs of the area with other social and environmental factors.

National Policy

Planning Policy Statement 4: Planning for Sustainable Economic Growth

- 5.5** PPS4 was published by the DCLG in December 2009, and supersedes a number of previous planning policy documents including PPG4, PPG5 and PPS6. PPS4 sets out the Government's national planning policies for economic development and includes policies for development within the B Use Classes, public and community use and main town centre uses. However, although the statement provides direction for developments that might accommodate a waste development use in particular, this document is unlikely to significantly influence the content of minerals and waste LDDs.

National Planning Policy Framework

- 5.6** In July 2011, the Government published the draft National Planning Policy Framework (NPPF) for consultation. The draft Framework outlines the Government's commitment to securing sustainable economic growth by planning pro-actively to meet the development needs of business, promote the vitality and viability of town centres, and raise the quality of life and the environment in rural areas. The document states '*Minerals are essential to support sustainable economic growth. It is therefore important that there is a sufficient supply of material to provide the infrastructure, buildings, energy and goods that the country needs*' (p. 26; para. 100).

Relevant Plans and Strategies

Regional Economic Strategy for South West England 2006 - 2015

5.7 Produced by the South West Regional Development Agency (RDA)⁽²⁷⁾, the Regional Economic Strategy (RES) is designed to provide a shared vision for the development of the region's economy. In the main the specific proposals in the strategy relate to the large urban locations in the region. The strategy recognises the importance of how the economy works in different parts of the region and identifies 'Functional Economic Zones' within the South West region. The South West RDA identifies that Wiltshire has a strong economy, relatively low business costs and good accessibility due to the "M4 corridor effect".

Regional Economic Strategy for South East England 2006 - 2016: A Framework for Sustainable Prosperity

5.8 The South East RDA has taken the Regional Hubs identified in the South East Regional Spatial Strategy as the basis for their allocated Diamonds for Investment and Growth. In relation to the plan area the most significant and possibly most influential of these are those associated with Oxford, Reading, Basingstoke and Southampton. They are likely to represent increasing sources of waste arisings and potentially represent a draw on mineral resources.

The Development Plan

Table 5.1 The relevant policies of the development plan⁽²⁸⁾

Plan/Strategy	Relevant Policy	Implications for MWDF
Draft Regional Spatial Strategy for the South West ⁽²⁹⁾	Policies E1 to E5 advise district authorities on location and supply of employment sites (Policies to be replaced by Policies ES1 to ES4 of the Panel Report)	No direct influence. However, the district level allocations in LDFs in accordance with these policies will be more relevant.
	Policies SR4 – SR6, SR8, SR12, SR13, SR21, SR22, SR23, SR29 & SR30	Provide an indication of the additional number of jobs that will need to be provided during the plan period to 2026, for Wiltshire and Swindon and surrounding areas. These figures (table 5.3) are transposed into specific employment land allocations in District Plans.
Wiltshire & Swindon Structure Plan ⁽³⁰⁾	Policy DP4	Sets out the provision of employment land in hectares by District/ Borough, including allocations for Swindon, Salisbury, Chippenham and Trowbridge.
	Policy DP5	Seeks to encourage developments that attract large numbers of people to be concentrated in the

27 All RDAs across England are due to close by March 2012.

28 The adopted development plan for the plan area comprises of the Wiltshire and Swindon Structure Plan 2016 (in conformity with RPG10). However, the emerging RSS and RES are material considerations despite the fact they did not reach adoption. Since then the LDFs for Wiltshire and for Swindon have been developed using the most up to date information available.

29 The Localism Bill has now been given Royal Assent and so the mechanism by which Regional Strategies will be revoked is now in place. However, orders by the Secretary of State are still required before revocation is enacted. For this reason, references to the Draft South West Regional Spatial Strategy are retained in this evidence base document.

30 Potential revocation of saved Structure Plan policies through the Localism Act.

Plan/Strategy	Relevant Policy	Implications for MWDF
		settlements and centres. The policy also requires sites that lead to the creation of significant freight movements be located outside of central areas with good access to the road and rail network.
Swindon Borough Local Plan	Policy E4	Lists Key Employment Areas suitable for B1, B2 & B8 Use Class developments. These sites could potentially accommodate certain waste developments.
	Policies E5, E7, E9 & E11	Identify areas suitable for B Use Class developments. These sites could potentially accommodate certain waste developments.
	Policy E6	Identifies land at Key Point, South Marston as a potential rail freight depot. This site could potentially accommodate strategic minerals and waste developments.
Kennet District Local Plan	Policies ED1, ED2, ED3, ED5, ED6, ED7, ED8, ED9, ED10, ED11, ED12 & ED13	Identify areas suitable for B Use Class developments. These sites could potentially accommodate certain waste developments.
North Wiltshire Local Plan	Policies BD1, BD5 & BD6	Identifies areas suitable for B Use Class developments. These sites could potentially accommodate certain waste developments.
Salisbury District Local Plan	Policies E2, E9, E10, E12 & E17	Identify areas suitable for B Use Class developments. These sites could potentially accommodate certain waste developments.
West Wiltshire Local Plan	Policy E1 and E2	Identify areas suitable for employment developments. These sites could potentially accommodate certain waste developments.
South Wiltshire Core Strategy	SO3, CP1, CP5	Core Strategy (adopted February 2012) states that land will have been identified in sustainable locations to provide for about 13,900 new jobs up to 2026.
Wiltshire Core Strategy	SO1, CP2, CP36	Emerging Core Strategy states that land will be identified in sustainable locations to provide for about 27,500 new jobs up to 2026.
Swindon Core Strategy	SO3, CT2, DMP6	Emerging Core Strategy states that by 2026 Swindon will have met forecast growth in economic activity and will have enhanced its position as the UK's best business location. 52.5 hectares of additional employment land will be provided between 2006 and 2026.

Wiltshire and Swindon Economic Partnership

- 5.9** The Wiltshire and Swindon Economic Partnership aims to provide a co-ordinated structure to promote the sustainable economic development of Wiltshire and Swindon. The **Swindon and Wiltshire Local Enterprise Partnership (LEP)** is a Business-led Private/Public Partnership, approved by Government that is tasked with creating wealth, jobs and new business opportunities in the area.

Sustainable Community Strategies

- 5.10** **A Sustainable Community Strategy for Wiltshire 2007-2016** was published in 2007. The strategy does not include any economic objective that can be directly or indirectly delivered through the Minerals and Waste Development Framework.
- 5.11** Swindon's Community Strategy, **A Shared Vision for Swindon 2008-2030**, states the economic objective that "*By 2030, Swindon will have become one of the best business locations in the UK, offering a high quality of life, not just to its 250,000 residents, but also to those from a much wider catchment area*". As this objective is broadly expressed, the minerals and waste development policy framework will need to be flexible and offer a range of sites to respond to the needs of a growing local economy.

Other Relevant Documents

The Barker Review

- 5.12** Economist Kate Barker was commissioned by the Chancellor and Deputy Prime Minister in 2005 to undertake a review of the planning system and to consider how the system could "*better deliver economic growth and prosperity alongside other sustainable development goals*" (Barker, 2006). The results and recommendations of this review, published in December 2006, are likely to have significant implications for future plan making and decision-making processes.

Economic Data

Past employment land development

- 5.13** As part of the Structure Plan Monitoring Programme, Wiltshire Council prepares data on employment land and floor space. This data provides an indication of where construction activity is likely to have occurred and the spatial distribution of sources of industrial and commercial waste arisings. Table 5.2 below shows employment land completions for the period 1998 – 2008.
- 5.14** Swindon Borough (8.22 hectares per annum) appears to have experienced the highest construction output in terms of employment land for the plan area, whilst there has also been relatively high levels of completions in West Wiltshire (5.26ha/annum). With regard to mineral resources, these areas can be viewed as exerting the greatest demand during the period 1998 – 2008. In terms of industrial and commercial waste generated as a result of total employment land for each area, Swindon Borough could potentially produce significantly more arisings than the former districts of Wiltshire.

Table 5.2 Employment Land Completions 1998 - 2008

Area	Employment land at 1998 (ha)	Completions 1998-2008 (ha)	Total employment land (existing plus completions)	Annual Mean 1998-2008 (ha/annum)
East Wiltshire	40.98	12.32	53.3	1.23
North Wiltshire	113.79	33.52	147.31	3.35
South Wiltshire	66.29	10.86	77.15	1.09
West Wiltshire	137.56	52.60	190.16	5.26
Swindon Borough	642.69	82.19	724.88	8.22
Wiltshire & Swindon	1001.31	191.49	1192.80	19.15

Future employment land allocated

5.15 The Draft RSS for the South West has outlined the expected additional employees for each SSCT travel to work area (TTWA) up to 2026, shown in table 5.3.

Table 5.3 South West Draft RSS provision for job growth

County (equivalent) Planning Area	TTWA	Additional jobs to be accommodated to 2026
Wiltshire and Swindon	Swindon	32,000
	Chippenham	6,200
	Trowbridge	11,700
	Salisbury	11,000-13,500
West of England	Bristol	92,000
	Bath	16,000-20,200
	Weston-super-Mare	10,000
Gloucestershire	Gloucester	12,750
	Cheltenham	10,750
Somerset	Taunton & Bridgewater	18,500
	Yeovil	9,100
Dorset	Bournemouth	23,000
	Poole	19,000
	Dorchester & Weymouth	9,500
TOTAL		278,900 - 288,300

- 5.16** In relation to the plan area the figures in the table conform to those suggested by the Regional Development Agency (within the Regional Economic Strategy) with one exception. The Draft RSS allocates an additional 5,400 jobs on top of the RDA suggested 6,300 jobs for the Trowbridge TTWA, totalling 11,700 to 2026. This table indicates that we should expect to see development associated with employment within the plan area will be concentrated in Swindon, Trowbridge and Salisbury.
- 5.17** The emerging Wiltshire Core Strategy outlines the number of additional jobs to be expected by 2026. These are consistent with projections by Cambridge Econometrics and identify that Wiltshire could deliver 27,690 jobs from 2006 to 2026.
- 5.18** The Wiltshire and Swindon Structure Plan 2016, provides allocations of employment land by district and main settlement for the period to 2016, as shown in table 5.4.

Table 5.4 Wiltshire & Swindon Structure Plan Employment Allocations by District

Area	Sub-area	Employment land (ha)
East Wiltshire	-	55
North Wiltshire	Chippenham	45
	Rest of area	115
South Wiltshire	Salisbury	35
	Rest of area	45
West Wiltshire	Trowbridge	35
	Rest of area	115
Swindon Borough	-	280
TOTAL		725

Gross Value Added (GVA) & Economic Output

- 5.19** Table 5.5 provides an indication of economic performance for Wiltshire, Swindon and surrounding areas in terms of GVA. The figures reveal that within the plan area, for the period 1998-2008 the GVA of both Wiltshire (4.7% increase) and Swindon (4.3%) has been below the rates of the South West Region (5.2%) and national average (5.1%). To the west of the plan area, authorities based in the West of England (particularly Bath and North East Somerset, North Somerset and South Gloucestershire) have experienced high economic growth in recent years. In the South East Region, Hampshire and the former area of Berkshire have both seen growth in GVA at higher than the national average (increases at 5.8%).

Table 5.5 Gross Value Added (GVA) at current basic prices, 1998-2008. Source: ONS.

Area	GVA 1998 (£million)	GVA 2008 (£million)	Growth of GVA (% per annum 1998-2008)	GVA per head 1998 (£)	GVA per head 2008 (£)
England	658,121	1,083,289	5.1%	13,297	21,049
South West	58,723	97,342	5.2%	11,981	18,682

Area	GVA 1998 (£million)	GVA 2008 (£million)	Growth of GVA (% per annum 1998-2008)	GVA per head 1998 (£)	GVA per head 2008 (£)
South East	109,613	181,435	5.2%	13,695	21,681
Berkshire (former areas of)	15,238	26,860	5.8%	19,043	31,908
Gloucestershire	7,545	11,771	4.5%	13,541	20,080
Bath and North East Somerset, North Somerset and South Gloucestershire	7,766	13,955	6.0%	12,995	21,642
Oxfordshire	9,579	15,389	4.9%	15,530	24,216
Bournemouth & Poole	3,621	6,329	5.7%	11,915	20,730
Cornwall & Isles of Scilly	3,755	7,045	6.5%	7,384	13,255
Swindon	3,892	5,927	4.3%	21,658	30,240
City of Bristol	7,299	11,583	4.7%	18,143	27,184
Hampshire	15,246	26,864	5.8%	12,317	20,929
Somerset	5,290	8,817	5.2%	10,809	16,820
Devon	6,797	11,809	5.7%	9,831	15,813
Wiltshire	5,118	8,128	4.7%	8,453	17,899
Dorset	3,658	6,080	5.2%	5,292	14,983
Plymouth	2,753	4,211	4.3%	10,881	16,475
Torbay	1,230	1,687	3.2%	10,000	12,590

5.20 The spatial distribution of economic growth in and around the plan area reveals a distinctive pattern of strong economic performance to the north and east and west and a lower performance for the south west counties of Somerset and Devon. Wiltshire and Swindon also reflect this north east / south west divide.

5.21 With regard to the economic output by sector for the plan area, both Wiltshire and Swindon show greatest contributions (in terms of output in GVA), from business services and finance, as illustrated in the table below.

Table 5.6 GVA by industry at current basic prices, Wiltshire and Swindon, 2008. Source: ONS.

Sector	Wiltshire (Estimated Output in £million)	Swindon (Estimated Output in £million)
Agriculture, forestry and fishing	170	8
Production	1,027	1,436
Construction	581	251
Distribution, transport and communication	1,836	1,357
Business services and finance	2,555	2,084
Public administration, education, health and other services	1,958	791
TOTAL GVA	8,128	5,927

Employment & Income

5.22 In terms of growth in employment in the South West for the period 1998 – 2008, the most notable increase occurred in South Gloucestershire with over 40,000 additional employee jobs (a percentage increase of over 40%). Over the same period, Wiltshire showed a more modest increase of 20,000 jobs (+12.6%). In contrast, Swindon demonstrated a decrease in the total number of employee jobs between 1998 and 2008, a reduction of 3,500 (-3.1%). It is worth noting that the policies for provision of additional jobs in the Draft RSS for the South West to 2026 (shown in table 5.3) intend to alter the local trend within the plan area with a greater proportion (approximately 50%) of additional jobs in the plan area being concentrated in Swindon. The majority of the surrounding counties in the South East Region have experienced a high employment growth rate compared to the areas in the South West, with Hampshire experiencing a significant increase in employment of 65,300 jobs (+13.1%).

Table 5.7 Employment Growth 1998-2008: Total employee jobs. Source: Annual Business Inquiry, Official Labour Market Statistics

Local Authority	1998	2008	Difference (1998-2008)	% Change
Bath and North East Somerset	70,500	78,400	7,900	+11.2%
Berkshire (former area of)	416,200	463,800	47,600	+11.4%
Bournemouth	67,500	76,100	8,600	+12.7%
Bristol	220,500	231,600	11,100	+5.0%
Cornwall and Isles of Scilly	154,800	193,700	38,900	+25.1%
Devon	240,600	293,700	53,100	+22.1%
Dorset	127,400	152,600	25,200	+19.8%
Gloucestershire	234,100	251,700	17,600	+7.5%

Local Authority	1998	2008	Difference (1998-2008)	% Change
Hampshire	497,400	562,700	65,300	+13.1%
North Somerset	63,300	74,700	11,400	+18.0%
Oxfordshire	298,900	319,300	20,400	+6.8%
Plymouth	93,200	106,900	13,700	+14.7%
Poole	61,000	71,800	10,800	+17.7%
Somerset	176,400	211,500	35,100	+19.9%
South Gloucestershire	97,500	137,700	40,200	+41.2%
Swindon	114,100	110,600	-3,500	-3.1%
Torbay	43,800	47,600	3,800	+8.7%
Wiltshire	159,000	179,000	20,000	+12.6%

5.23 This table above shows a noticeably different pattern of growth than for GVA, with Bristol and Bath showing a lower percentage increase in jobs than for other areas, and Swindon actually demonstrating a decrease in total employee jobs.

5.24 Data for the average full time earnings for the plan area show that the average workplace earnings in Swindon are significantly higher than in Wiltshire and the South West Region. Those that live within the Borough appear to earn a similar amount to what is available in the local employment market, whereas in Wiltshire resident earnings tends to be higher than that of the Wiltshire employment market. The Wiltshire and Swindon Economic Assessment 2005/2006 explains that this contrast in earnings between Wiltshire and Swindon is probably due to commuting patterns with a greater proportion of the workforce with skills associated with higher earnings out-commuting from the county to places like Swindon for employment and vice versa.

Table 5.8 Median Full Time Earnings. Source: Annual Survey of Hours and Earnings (ASHE), ONS.

Area	Workplace		Residence	
	Weekly Earnings (£)	Earnings PA (£)	Weekly Earnings (£)	Earnings PA (£)
Great Britain	502.6	26,244	503.1	26,357
England	507.2	26,601	507.6	26,615
South West	464.5	24,436	473.4	24,922
Swindon	521.4	26,779	520.9	26,900
Wiltshire	472.4	24,965	508.9	26,816
East Wiltshire	440.1	23,178	494.7	25,571
North Wiltshire	498.1	25,580	527.0	26,730

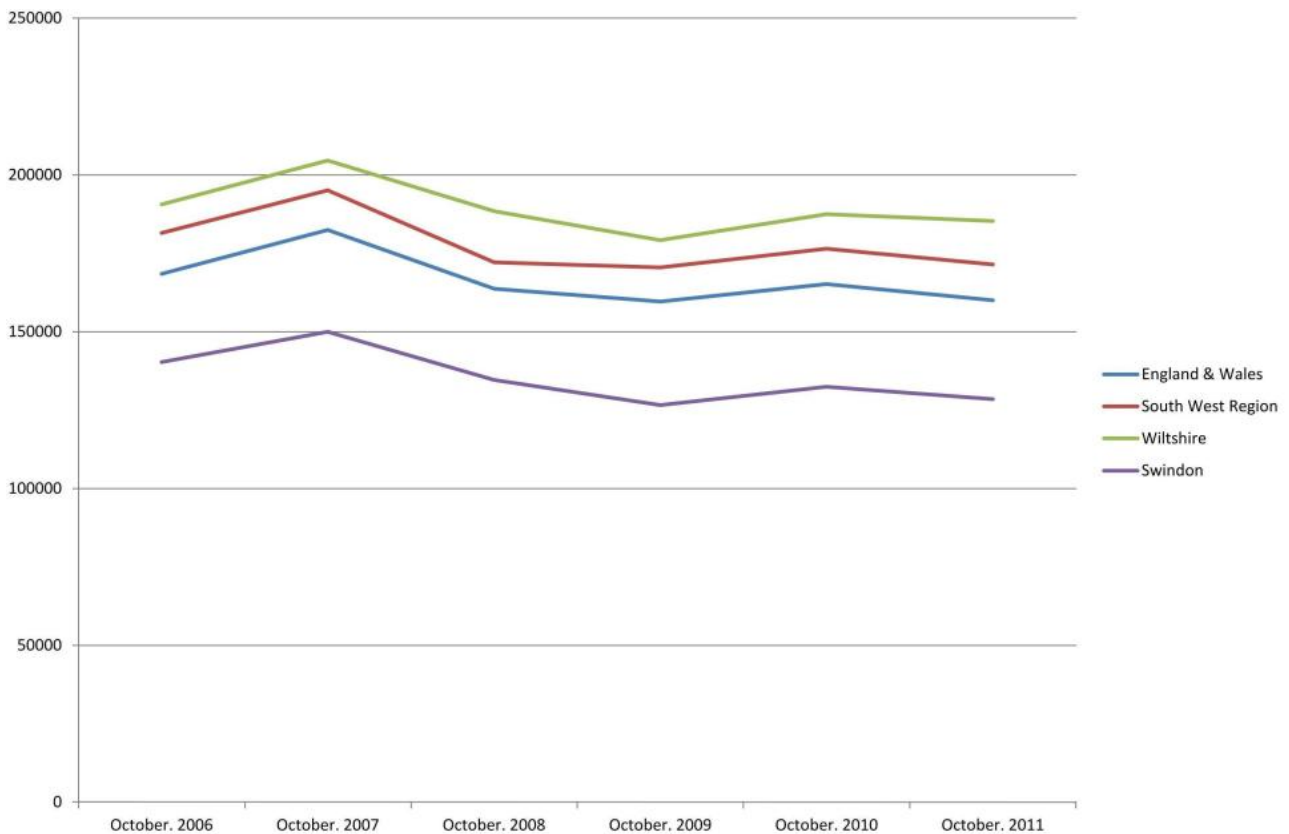
Area	Workplace		Residence	
	Weekly Earnings (£)	Earnings PA (£)	Weekly Earnings (£)	Earnings PA (£)
South Wiltshire	475.9	24,678	494.6	26,583
West Wiltshire	467.3	25,157	514.0	28,070

5.25 House prices show Wiltshire to be a relatively desirable place to live in relation to the national and regional average, and Swindon as less popular with average house prices below that of England & Wales and the South West region. This is perhaps also a reflection of workplace commuting patterns associated with Wiltshire and Swindon. From October 2010 to October 2011, house prices in England and Wales fell by an average of 3.2%. House prices in Wiltshire also reduced, but by a lesser figure of 1.1%.

Table 5.9 Average House Price, October 2011. Source: Land Registry House Price Index.

Area	Average Price (£)	Annual Change (%)
England and Wales	159,999	-3.2%
South West	171,384	-2.9%
Wiltshire	185,347	-1.1%
Swindon	128,440	-3.0%

Figure 5.1 Average House Prices, October 2006 - October 2011. Source: Land Registry



5.26 Table 5.10 gives an indication of housing affordability by comparing local house prices to local earnings. It is an obvious result of supply and demand that the fewer dwellings that are delivered the higher the cost per unit will be. However, whilst Wiltshire has acute affordability problems it must be viewed in its sub-regional context. The data presented below shows that actually both Wiltshire and Swindon are low value across the sub-region. Indeed, many of the neighbouring authorities have higher House Price to Earnings Ratios than Wiltshire (CLG live tables).

Table 5.10 House Price to Income Ratios of authorities surrounding the plan area

Local Authority	Median house price to median earnings	Rank	Lower quartile house price to lower quartile earnings	Rank
Wiltshire	7.29	8	8.09	9
Swindon	5.61	12	5.71	12
West Berkshire	7.08	10	8.25	8
Test Valley	7.88	7	8.70	5
New Forest	8.97	4	9.63	3
East Dorset	10.71	2	11.18	1
North Dorset	9.43	3	8.75	4
South Somerset	7.27	9	7.44	10
Mendip	8.09	5	8.53	7
Bath & North East Somerset	8.06	6	8.61	6
South Gloucestershire	5.90	11	6.87	11
Cotswold	11.65	1	10.88	2
England	6.27	-	6.28	-

5.27 Gross Disposable Household Income (GDHI) shows the balance of the cost of living in relation to income and is an alternative indicator to GVA in reflecting the state of the local economy. The figures in Table 5.11 show that the population of Wiltshire has the highest GDHI per head for the South West and that Swindon has a relatively high GDHI, above that of both England and the South West Region.

Table 5.11 Gross Disposable Household Income 1999-2009. Source: ONS.

Area	GDHI 1999 (£million)	GDHI 2009 (£million)	% Increase in GDHI (1999-2009)	GDHI per head 1999 (£)	GDHI per head 2009	% Increase in GDHI per person (1999-2009)
England	531,320	805,398	51.6%	10,836	15,545	43.5%
South West	51,689	79,200	53.2%	10,590	15,140	43.0%

Area	GDHI 1999 (£million)	GDHI 2009 (£million)	% Increase in GDHI (1999-2009)	GDHI per head 1999 (£)	GDHI per head 2009	% Increase in GDHI per person (1999-2009)
South East	97,423	145,873	49.7%	12,247	17,292	41.2%
Wiltshire	4,797	7,481	56.0%	11,282	16,400	45.4%
Bath and North East Somerset, North Somerset & South Gloucestershire	6,944	10,078	45.1%	11,663	15,257	30.8%
Dorset	4,234	6,625	56.5%	10,986	16,397	49.3%
Swindon	1,956	3,052	56.0%	10,907	15,351	40.7%
Gloucestershire	6,267	9,476	51.2%	11,170	16,084	44.0%
Bournemouth & Poole	3,247	4,972	53.1%	10,825	16,239	50.0%
Somerset	5,170	7,995	54.6%	10,542	15,272	44.9%
City of Bristol	3,944	5,882	49.1%	10,088	13,582	34.6%
Cornwall & Isles of Scilly	4,560	7,341	61.0%	9,257	13,767	48.7%
Devon	7,156	11,219	56.8%	10,337	15,010	45.2%
Torbay	1,185	1,803	52.2%	9,381	13,457	43.4%
Plymouth	2,228	3,278	47.1%	9,208	12,769	38.7%
Berkshire	10,344	15,270	47.6%	12,982	17,881	37.7%
Oxfordshire	7,634	11,200	46.7%	12,643	17,493	38.4%
Hampshire	14,771	22,221	50.4%	11,982	17,234	43.8%

Key Findings

- In terms of existing employment land within the plan area (and therefore likely distribution of sources of commercial and industrial waste), Swindon represents the largest share by far of approximately 61%, with the next largest share based in West Wiltshire (16%), followed by North Wiltshire (12%).
- Recent economic construction activity (1998–2008) shows that Swindon Borough has also seen the highest activity (82.19ha), followed by West Wiltshire (52.60). This gives some indication of recent areas of demand for mineral resources.
- Economic output measured as GVA shows the plan area as the centre of a contrasting north and east, and south and west divide, with Swindon representing relatively high output of the north and east, and Wiltshire the lower output of the south and west.

- Evidence from average earnings, GDHI and house prices suggest a likely trend of people commuting out of Wiltshire to places like Swindon, Bath and Bristol, and those living in Swindon out-commuting to places like Wiltshire.
- Future economic growth is still likely to be concentrated in the SSCTs identified in the Draft South West RSS, with Swindon expected to accommodate a significant proportion of overall growth for the plan area. Bristol is also expected to make provision for approximately 92,000 additional jobs according to the draft South West RSS. Policies for minerals and waste will need to take these factors into account when considering the suitable locations for development.



6 Chapter 6: Transport

Introduction

- 6.1** The UK freight logistics industry is one of the most important sectors of the economy. It is responsible for 6% of Gross Domestic Product (GDP) and employs some one million people (Department for Transport, 2006). Transportation is a significant consideration for the sustainable management of minerals and waste resources. Resources are rarely constrained by administrative boundaries and are often used or managed away from their point of origin. For this reason transport links and accessibility greatly influence the location of minerals and waste development.
- 6.2** The movement of minerals and waste can have significant adverse impacts upon the surrounding environment, particularly through the use of Heavy Goods Vehicles (HGVs). These impacts come in many forms such as noise, air pollution, intimidation of other road users and damage to road infrastructure through vibration. It is important that these impacts are suitably mitigated and/or minimised, and the Wiltshire and Swindon Minerals and Waste Development Framework will play a key role in achieving this.
- 6.3** This chapter explores the relationship between minerals and waste development and the existing road, rail and canal networks in Wiltshire and Swindon. It seeks to explain the reasons for the current modes of transportation used to handle minerals and waste within the plan area and aims to identify potential future alternatives.

Legal Framework

Planning and Compulsory Purchase Act 2004

- 6.4** Section 13 (2) of the Planning and Compulsory Purchase Act requires Local Planning Authorities to keep under review “*the communications, transport system and traffic of the area*”. This chapter intends to meet this requirement.

The Road Transport (Working Time) Regulations 2005

- 6.5** The Road Transport (Working Time) Regulations 2005, which implement European Directive 2002/15/EC, came into force on 4th April 2005. The Regulations apply to ‘mobile workers’ such as drivers, crew and other travelling staff. They place limits on weekly working time and a limit on the amount of work that can be done within a 24 hour period (for those who operate on night shifts). The Regulations, amongst other things, restricts mobile workers to an average 48-hour week and may have implications for lorry routing decisions as well as rest and parking facilities.

European Policy

A Sustainable Future for Transport (March 2011)

- 6.6** As the 2001 White Paper came to the end of the ten-year period it covered, the Commission prepared a new transport white paper, which defines its transport policy agenda for the next decade. Key objectives of the paper are to reduce transports environmental impacts and emissions, provide a well maintained, integrated, safe and secure transport for the needs of the community whilst keeping the EU at the forefront of modern technology. These objectives will be progressed through infrastructure development either by expansion or new programmes, development of ICT, new methods of funding schemes and greater involvement with the public in delivery of transport throughout the EU.

National Policy

Draft National Planning Policy Framework

- 6.7** In July 2011, the Government published the draft National Planning Policy Framework (NPPF) for consultation. According to the government 'Transport policies have an important role to play in facilitating development but also in contributing to wider sustainability and health objectives'. Where practical, encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. The planning system should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport. The Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas.
- 6.8** The Government's objectives for transport policy are to:
- facilitate economic growth by taking a positive approach to planning for development; and
 - support reductions in greenhouse gas emissions and congestion, and promote accessibility through planning for the location and mix of development.
- 6.9** Local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable economic growth. All developments that generate significant amounts of movement, as determined by local criteria, should be supported by a Transport Statement or Transport Assessment.
- 6.10** Planning policies and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised. Planning policies should also aim for a balance of land uses within their area so that people can be encouraged to minimise journey lengths. This is perhaps particularly relevant to the location of waste management sites throughout the plan area.

Planning Policy Statement 1: Delivering Sustainable Development (2005) & Planning Policy Statement: Planning and Climate Change (2007)

- 6.11** Planning Policy Statement 1: Delivering Sustainable Development (PPS 1) sets out the overarching planning policies on the delivery of sustainable development through the planning system. The supplement to PPS 1, 'Planning and Climate Change', sets out how planning should contribute to reducing emissions and take into account the unavoidable consequences of a changing climate. The subject of tackling climate change is undoubtedly a key Government priority for the planning system.
- 6.12** PPS 1 establishes the need for Local Planning Authorities (LPA) to ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change. In relation to transport, PPS 1 suggests that sustainable development can be achieved through policies which reduce energy use and emissions, for example, by encouraging patterns of development which "*reduce the impact of moving freight*" (para 13: ii).
- 6.13** Similarly, an objective of the supplement to PPS 1 is to deliver patterns of urban growth that help "*secure the fullest possible use of sustainable transport for moving freight*" (para 6).

Planning Policy Guidance 13: Transport (2001)

- 6.14** A main objective of Planning Policy Guidance 13 for Transport (PPG 13) is to “*promote more sustainable transport choices for both people and for moving freight*” (para 4:1) by integrating planning and transport at the national, strategic, regional and local level.
- 6.15** PPG 13 acknowledges that road transport is likely to remain the main mode for many freight movements but does encourage that where feasible, land use planning should help to promote sustainable distribution through the movement of freight by rail and water. The guidance highlights, that in preparing their development plans and in determining planning applications, LPAs should:
- Identify and, where appropriate, protect sites and routes, both existing and potential, which could be critical in developing infrastructure for the movement of freight, (such as major freight interchanges including facilities allowing road and rail transfer or for water transport), and ensure that any such disused transport sites and routes are not unnecessarily severed by new developments or transport infrastructure;
 - Where possible, locate developments generating substantial freight movements such as distribution and warehousing, particularly of bulk goods, away from congested central areas and residential areas, and ensure adequate access to trunk roads;
 - Promote opportunities for freight generating development to be served by rail or waterways by influencing the location of development and by identifying, and where appropriate, protecting realistic opportunities for rail or waterway connections to existing manufacturing, distribution and warehousing sites adjacent or close to the rail network, waterways or coastal / estuarial ports; and
 - On disused sites consider uses related to sustainable development first, before other uses.
- 6.16** PPG 13 highlights the need for policies to strike a balance between the interests of local residents and those of the wider community. The guidance also encourages the existence of Freight Quality Partnerships (FQP) to enable a more efficient and sustainable approach to deliveries in sensitive locations.

Guidance on Transport Assessments (Department for Transport, March 2007)

- 6.17** Planning Policy Guidance Note 13: Transport (PPG13) states that where a new development is likely to have significant transport implications a Transport Assessment (TA) should be prepared and submitted with a planning application in order to determine whether the impact of the development on transport is acceptable. The above document brings the previous guidance set out in the *Guidelines for Traffic Impact Assessment* (Institution of Highways and Transportation, 1994) up to date with the changes in Government policy.
- 6.18** The guidance includes; information on providing data, assessing impact and determining mitigation, suggested initial assessment form and guidelines on thresholds for categories of assessment. The movement of minerals and waste can pose significant impacts (such as noise, air pollution, vibration) through the use of heavy goods vehicles (HGVs). Consequently, it is likely that most, if not all, planning applications for minerals and waste development will need to include a TA.

Delivering a Sustainable Transport System (DaSTS) 2008

6.19 The document outlines five goals for transport, focusing on the challenge of delivering strong economic growth while at the same time reducing greenhouse gas emissions. It also outlines: key components of our national infrastructure; the difficulties of planning over the long term; the substantial investments being made to tackle congestion and crowding; the new National Networks Strategy Group; the domestic and international approach to tackling greenhouse gas emissions from transport and the first steps of future plans for investment to 2014 and beyond.

Minerals Planning Statement 1: Planning and Minerals & Planning and Minerals: Practice Guide (2006)

6.20 'Minerals Planning Policy Statement 1: Planning and Minerals' (MPS 1) sets out the Government's national planning policies for minerals planning in England. In relation to the bulk transportation of minerals, MPS 1 states that RPBs, LPAs and Mineral Planning Authorities (MPA) should:

- Seek to promote and enable the bulk movement of minerals by rail, sea or inland waterways to reduce the environmental impact of their transportation;
- Promote facilities at ports and rail links that have good communications inland, so that bulk minerals can be landed by sea and distributed from ports, as far as is practicable, by rail or water; and
- Safeguard and promote rail links to quarries where there is potential to move minerals by rail.

6.21 Whilst these policies clearly outline the Government's stance in favour of the transportation of minerals by rail or waterway, the accompanying 'Planning and Minerals: Practice Guide' recognises that minerals are heavy and that it can be costly to transport them for long distances using these means. The Government recognises that low priced minerals, such as sand and gravel, tend to be secured locally whereas higher priced commodities, such as high specification igneous rocks, can bear longer distances. Consequently, the lower priced materials, such as aggregates are often transported for short distances from the quarry by road.

6.22 The Practice Guide also points out that whilst there are economic and environmental advantages in transporting large amounts of heavy materials by rail or water, this can only be utilised if there is the network capacity and adequate loading and reception facilities. Hence the importance of identifying potential loading and unloading depots and wharves, and to safeguard these from potentially competing resources is highlighted.

6.23 There is currently one Rail Aggregate Depot (RAD) at Royal Wootton Bassett in Wiltshire which imports, handles and distributes crushed limestone from the Mendip quarries in Somerset to the South East of England. Whilst the depot is considered to be of vital importance to the local area and that potential exists for improvements at the site it must be noted that a Rail Aggregate Depot Study in 2003 revealed that it does not operate without disadvantage and has a limited capacity.

6.24 The Minerals Core Strategy recognises the importance of developing opportunities for increasing the use of rail for freight distribution. Draft Policy MSC 9 "Strategic Approach to Managing Minerals Transportation" seeks to direct proposals for new RADs to the Swindon market area. This reflects the fact that the Swindon area is destined to expand as a result

of major new development over the next 20 years. Clearly the Minerals Core Strategy has a role to play in this growth through making a sustainable commitment to supply aggregates (primary, secondary and recycled).

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

- 6.25** Planning Policy Statement 10: Planning for Sustainable Waste Management (PPS 10) sets out the Government's policy to be taken into account by waste planning authorities. The document forms part of the national waste management plan for the UK. PPS 10 states that waste management should not be planned for in isolation and should be considered alongside other spatial planning concerns, such as transport, housing, economic growth, natural resources and regeneration. With regards to transport, when considering which sites and areas to identify for waste management facilities, waste planning authorities (WPA) should assess their suitability for development against *'the capacity of existing and potential transport infrastructure to support the sustainable movement of waste, and products arising from resource recovery, seeking when practicable and beneficial to use modes other than road transport (para 21: i)'*.
- 6.26** Of equal importance is the need to consider *"the suitability of the road network and the extent to which access would require reliance on local roads"* (Annex E: f). When assessing suitable sites for waste development, the councils will need to fully consider and appraise the functional relationships between potential locations, proximity to the planned growth areas (principal settlements) and the current capacity of existing infrastructure.

White Paper: A New Deal for Transport: Better for Everyone (1998)

- 6.27** In July 1998 the Labour Government produced a White Paper entitled 'A New Deal for Transport: Better for Everyone' setting out the New Labour approach to transport problems in the UK. The White Paper introduces the concept of the local transport plan as a mechanism for integrating transport locally as well as nationally and commits to targets and monitoring, setting out the measures needed to provide the changes required. There is a framework for action at national, regional and local levels and for achieving the right balance between incentives, voluntary initiatives, best practice and economic instruments. The main focus of the document centres on an integrated transport policy in which integration exists between different types of transport, the environment, land use planning and policies for education, health and wealth creation so as to encourage a fairer, more inclusive society
- 6.28** The Paper specifically mentions improving the railway by meeting the needs of passengers and the freight customers it serves but understands that the growth in freight risks being met at the expense of the environment. In order to reduce the extent to which a healthier economy results in high levels of road traffic growth the government seek an increase in the use of rail freight, inland waterways and coastal shipping.

A New Deal for Trunk Roads in England (1998)

- 6.29** 'A New Deal for Trunk Roads in England' is one of a number of publications which spells out more fully the policies in the transport White Paper discussed previously. The document reports on the Government's strategic review of the roads programme against criteria of accessibility, safety, economy, environment and integration, with the overall objective of achieving a sustainable transport policy. According to the document, current projections without policy change see traffic levels growing by more than a third over the next 20 years and by more than a half on trunk roads, leading to an increase in air pollution. The document establishes a movement away from the 'new roads' programme towards one which places higher priority on better maintenance and making better use of existing roads.

6.30 The A303 alongside Stonehenge is included in the targeted programme of improvements. However, efforts to balance cost and environmental demands on road improvements were abandoned on 6th December 2007 when the scheme was officially shelved by the government after a substantial increase in the cost of the proposed 2.1 km bored tunnel scheme.

The Future of Transport: A Network for 2030 (2004)

6.31 The Future of Transport: A Network for 2030, released in July 2004, sets out the government’s vision for transport for 30 years. The paper places particular emphasis on the delivery of sustainable development and the promotion of alternative options, such as road pricing and improved public and freight transport systems. It recognises that simply building more capacity into the road network is unlikely to solve the problem of congestion. In relation to the movement of goods the government’s strategy is founded on sustainable freight transport that focuses on approaches which offer the best outcomes for the economy, society and the environment.

6.32 According to the document, a key change under the new structure will be a *“better deal for freight which will enable the industry and its customers to invest for the long term”* (para 4.22) The Government’s key aims for the freight industry are to facilitate the continuing development of a competitive and efficient freight sector, while reducing the impact that moving freight has on congestion and the environment (para 8.2).

6.33 The paper acknowledges that the Government’s policies should not be guided by attachment to particular forms of transport, but by the approach that offers the best value for money to deliver the best outcomes for the economy, society and the environment (para 8.8).

Creating Growth Cutting Carbon (2011)

6.34 The White Paper, Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen, outlines the coalition Government’s vision for a sustainable local transport system that supports local economic growth, whilst achieving a reduction in carbon emissions. The document sets out where transport fits in the Government’s localism agenda and changes to direct support and funding from Central Government, this also includes details of the new Local Sustainable Transport Fund.

6.35 The White Paper addresses the following themes:

- reduce the carbon emitted by transport;
- shift travel behaviour to walking, cycling and public transport;
- support the development of electric and other ultra-low emission vehicles
- reduce the carbon impact of longer journeys
- empower local authorities and communities to encourage sustainable travel.
- Simplification of government transport funding

Relevant Plans and Strategies

Table 6.1 The Development Plan Policies

Plan / Strategy	Relevant Policy	Implications for MWDF
RPG 10 – Regional Transport Strategy		The Regional Transport Strategy aims to guide the development of: <ul style="list-style-type: none"> • Improvements to the Trans-European route networks;

Plan / Strategy	Relevant Policy	Implications for MWDF
		<ul style="list-style-type: none"> • Effective multi-modal solutions to transport problems; • Efficient transport interchanges; • Attractive gateways and transport corridors; • Scope for the use of new technology; • High quality public transport; and • A pleasant, safe environment in keeping with the bid to improve the region's image and encourage more frequent use of slow methods of transport.
Regional Spatial Strategy for the South West ⁽³¹⁾	Policy TRANS11 Regional Freight Transport	Identifies the strategic network (national and regional) that will be promoted for use by HGV traffic in preference to county routes. This is likely to have implications for the location and / or direction of traffic in relation to future waste and minerals sites in the plan area.
	Policy TR13 – Rail Freight Interchange Facilities	Policy for identifying and safeguarding rail freight interchange facilities, within plan area, subject to viability.
	Policy RE10 – Supply of aggregates and other minerals	<p>Promotes transport of minerals by rail and water and safeguards existing wharves, railheads and other handling facilities.</p> <p>The supporting text to this policy encourages MPAs to minimise the distance that minerals and their derived products travel to their point of use when identifying sites. It also suggests that where road transport is the only option, minerals developers submit transport assessments to support proposals.</p>
	Policy W2 – Waste facilities and the waste hierarchy	Waste should be managed on site where it arises wherever possible. However, where waste does have to be transported the Waste Planning Authority should have full regard for the proximity principle. For Strategically Significant Cities and Towns (SSCTs) including Swindon, Chippenham, Salisbury and Trowbridge, the location of new waste management facilities should be in close proximity to the urban area (up

31 The Localism Bill has now been given Royal Assent and so the mechanism by which Regional Strategies will be revoked is now in place. However, orders by the Secretary of State are still required before revocation is enacted. For this reason, references to the Draft South West Regional Spatial Strategy are retained in this evidence base document.

Plan / Strategy	Relevant Policy	Implications for MWDF
		to 16km) thus reducing the movement of waste.
Wiltshire & Swindon Structure Plan	Policies T9 & T10 – Freight Transport	<p>Policy T9 Safeguards land at South Marston (near Swindon) as an intermodal freight interchange, and encourages the provision of additional freight interchange sites.</p> <p>Policy T10 requires freight traffic to use the primary road network or advisory lorry routes where the use of rail is not appropriate.</p>
Swindon Borough Local Plan	Policy T9 – Protection of Rail Freight Provision	Safeguards land adjacent to the Techno Trading Estate and the County Yard railway sidings for movement of freight by rail. County Yard is identified as being potentially suitable for a rail aggregates depot.
	Policy T10 – other Road Schemes	<p>Identifies a number of potential areas for road improvements as:</p> <ol style="list-style-type: none"> Croft Road to Hay Lane Link; Northern Orbital Road, Purton Road to Great Western Way; Cricklade Road Widening and Moonrakers Junction Improvement; Redposts Drive Link
Kennet District Local Plan	Policy AT13 – Heavy Goods Vehicle Movements	Supports the redirection of HGVs away from villages and rural areas to designated routes such as the A350 / M4 route.
	Policy AT4 – Canal Side Facilities	Promotes localised freight movement via canal within the district.
	Policy AT15 – Avebury World Heritage Site Traffic Management	Seeks to restrict HGV traffic along the A361 / A4361 through Avebury.
	Policy AT18 – Intermodal Freight Facilities	Promotes the provision of an intermodal freight facility at Ludgershall.
	Policy AT25 – A342 – A3026	Safeguards the line of a Western link road to the west of Ludgershall.
North Wiltshire Local Plan	Policy T5 – Safeguarding	Safeguards a number of areas associated with transport schemes including the Cotswold Water Park Eastern Spine Road; improvement south of the A350 north of Chippenham; Spring Quarry access road;

Plan / Strategy	Relevant Policy	Implications for MWDF
		and the Thames & Severn and Wilts & Berks Canals.
Salisbury District Local Plan	Policy TR4	Proposes former Eastern Goods Yard for use as a freight / passenger interchange, and proposes the Steam Engine Shed site as a freight interchange / terminal. The policy safeguards this land for those purposes.
	Policy TR10	Seeks the construction of a Brunel Link road as a matter of urgency.
	Policy TR17	Encourages the provision of new railway stations and freight terminals.
	Policies TR19 & TR 20	Seek an Amesbury Link Road and protects the possible route for a Shaftsbury Eastern Bypass.
West Wiltshire Local Plan	Policies CA4 – Wilts & Berks Canal	Safeguards the old line of the Wilts and Berks Canal and encourages in principle its restoration.
	Policy T1a – Westbury Bypass	Allocates and Safeguards land to the East of Westbury for a new bypass.
	T8a – Rail Freight Facility	Safeguards land at Northacre / Brook Lane Trading Estate, Westbury for a multi-user rail freight facility
Wiltshire Core Strategy Pre-submission February 2012	<p>Core Policy 60: Sustainable Transport</p> <p>Core Policy 61: Transport and Development</p> <p>Core Policy 62: Development Impacts on the Transport Network</p> <p>Core Policy 63: Transport Strategies</p> <p>Core Policy 64: Demand Management</p> <p>Core Policy 65: Movement of Goods</p> <p>Core Policy 66: Strategic Transport Network</p>	To develop a sustainable transport system, promoting alternative methods of transport, the need for Transport Assessments, encouraging use of the freight network, overnight freight parks and the provision of intermodal and other rail freight terminals.

Plan / Strategy	Relevant Policy	Implications for MWDF
Swindon Borough Core Strategy and Development Management Policies 2026 Revised Proposed Submission Document (March 2011)	SO7 and Policy CT1	Part G - Swindon's transport network will keep people and freight moving and contribute towards Swindon's sense of place by: Improving key gateways and corridors, providing good access to Swindon town centre and key destinations, promoting healthy lifestyles and travel choices, minimising emissions from transport Maintaining a safe and secure network
	Policy CT 7 – 'Keep Swindon Moving'	The aim of the policy is to support the economy and growth by delivering a reliable and efficient transport network, address climate change and reduce the need to travel, improve road safety and personal security, provide access to services and facilities for all and contribute towards improving Swindon's sense of place and quality of life.
Minerals Core Strategy / Development Control Policies	MCS1 MCS 9 MDC 8	Minimising distances travelled, encourage road alternatives, and when using the road network make good use of the Wiltshire HGV Route Network or Primary Route Network, drawing up Transport Assessments.
Waste Core Strategy / Development Control Policies	WCS1 WDC 11	Minimising distances travelled, encourage road alternatives, and when using the road network make good use of the Wiltshire HGV Route Network or Primary Route Network, drawing up Transport Assessments.

Wiltshire Local Transport Plan

- 6.36** The government's 1998 White Paper on Transport, 'A New Deal for Transport: Better for Everyone', introduced the concept of Local Transport Plans (LTP) to steer the development of national transport policies at the local level. The Transport Act 2000 then made it a statutory requirement for local transport studies to produce LTPs. The Wiltshire LTP sets out the council's objectives, implementation plans and targets for transport in Wiltshire. Furthermore, as a document developed through partnership working and extensive consultation, the LTP also provides the framework for all other organisations with a direct or in direct involvement in transport in Wiltshire.
- 6.37** The third Wiltshire Local Transport Plan (LTP3) covers the period from March 2011 to March 2026. As a strategic document, the LTP does not contain comprehensive details of individual transport schemes or measures. Rather, it sets out a long-term transport strategy, a shorter-term implementation plan based on a realistic assessment of available funding and

a number of supporting transport strategies. In addition, as a document developed through partnership working and extensive consultation, the LTP provides the framework for all other organisations with a direct or indirect involvement in transport in Wiltshire.

6.38 The first Wiltshire LTP (LTP1) was published in July 2000 and covered the five year period 2001/02-2005/06. The second Wiltshire LTP (LTP2), published in March 2006, then covered the five year period 2006/07-2010/11. This is the third Wiltshire LTP (LTP3) covering 2011/12-2025/26 which has been developed in line with government guidance. The Department for Transport's 'Guidance on Local Transport' (July 2009) sets of five overarching national transport goals:

- support economic growth
- reduce carbon emissions
- promote equality of opportunity
- contribute to better safety, security and health and
- improve quality of life and a healthy natural environment.

6.39 In addition, the most recent transport White Paper 'Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen (January 2011) has two main themes:

- offering people sustainable transport choices, particular for shorter journeys, that will stimulate behavioural change; and
- demonstrating how localism and the big society can work for transport.

6.40 While the LTP3 has a time line to 2026, a balance has to be struck between long term aspirations and acknowledging the short to medium term circumstances in which the plan was developed and is implemented. The coalition government's changes to the planning system, in particular the removal of regional spatial strategies, and its 2010 autumn comprehensive spending review, both contributed to a period of significant uncertainty at exactly the time when local transport authorities such as Wiltshire Council were developing their LTP3s.

6.41 Faced with this situation, the council took the pragmatic decision to reduce the scale and scope of the LTP3 by:

- only producing a one-year implementation plan for 2011/12
- not including the area transport strategies for Chippenham, Devizes, Salisbury and Trowbridge
- reducing the number of theme strategies to four: car parking, freight, public transport and road safety.

6.42 There is also a one year Implementation Plan which is based on realistic funding levels made up of:

- integrated transport block;
- capital maintenance funding;
- revenue funding;
- developer contributions; and
- parking charges.

6.43 Once clarity is restored to the planning and funding picture, the council will produce a three year implementation plan, area transport strategies for Chippenham, Devizes, Salisbury and Trowbridge in line with the development of the Wiltshire Local Development Framework (LDF) Core Strategy, and the remaining theme strategies (to include accessibility, cycling,

network management, powered two wheelers, rights of way improvement plan, smarter choices, transport asset management plan and walking). All of these documents are planned to be subject to public consultation in 2011/12.

Swindon Local Transport Plan

6.44 The third Local Transport Plan for Swindon was adopted in April 2011. It was a statutory requirement for all local transport authorities to have an LTP3 in place by this time and the preparation of the Plan was therefore undertaken against a changing and uncertain backdrop where significant reforms were announced, all of which will have a major impact on local transport policy. Reforms to the planning system and significant reductions in public finance are on-going and therefore it was decided to produce:

- A one year implementation plan to accompany the LTP (2011/12) and
- An implementation plan for the remainder of the local plan period.

6.45 There is a dynamic relationship between the Local Development Framework process and the Local Transport Plan process. It has been described as a mutually reinforcing relationship. Each document informs and is informed by the other. The LTP is required to enable delivery of key schemes that support growth and regeneration. Without these schemes, development on the scale of that proposed in the Core Strategy would not be acceptable.

6.46 The Borough Council has chosen to support its LTP3 with a number of supplementary documents covering areas such as parking, public transport, smarter choices and freight. This ensures that the core document is concise and will allow the supplementary documents to be reviewed and updated as appropriate during the term of the LTP. The supplementary documents are focussed on the delivery of the overarching strategy objectives of the core document. In addition there are a number of existing plans and duties that need to be reflected in the LTP including the Network Management Plan, Transport Asset Management Plan and Rights of Way Improvement Plan.

6.47 The relevant freight policies are:

- FP1 Work with the rail industry to promote the movement of freight by rail.
- FP2 Participate in the Wiltshire and Swindon Freight Quality Partnership along with similar partnerships in Oxfordshire, Gloucestershire and in the South West region.
- FP3 Seek improvements to delivery arrangements particularly at sensitive locations.
- FP4 Ensure that appropriate enforcement of regulations takes place in respect of loading and unloading restrictions and in respect of weight and height restrictions at bridges and other highway structures.
- FP5 Identify opportunities for enhanced lorry-parking provision.

Wiltshire's Sustainable Community Strategy

6.48 After reorganisation Wiltshire Council revised its community strategies and produced Wiltshire's Strategy, People, Places and Promises - The Wiltshire Community Plan 2011 - 2026. It was developed through close joint working with around 100 organisations through the Wiltshire Assembly. This has resulted in an up-to-date and relevant shared vision for Wiltshire.

6.49 The plan includes one vision – to build strong, resilient communities in Wiltshire, with three priorities including tackling the causes and effects of climate change, linked to seventeen broad objectives. The impacts of these objectives to significantly reduce transport CO₂ emissions across the county in line with national targets and providing a safer and more integrated transport system that achieves a major shift to sustainable transport, especially in the larger settlements of Trowbridge, Chippenham and Salisbury, and along the main commuting corridors by improving transport networks to attract new businesses and support the growth of existing ones.

6.50 These indirectly related to minerals and waste development. Alternative modes of transport to car and HGV use should be promoted through the MWDF, and it should ensure that access on and off of developments is clearly visible to other motorists and that distribution routes are the safest possible option.

Swindon's Sustainable Community Strategy

6.51 The Swindon Sustainable Community Strategy sets out a shared vision for Swindon based around 6 themes:

1. Swindon as a destination of choice
2. All people are benefiting from our growing economy
3. We have safeguarded our environment for future generations
4. A healthy, caring and supportive community
5. A place where high aspirations are supported by superb education provision for all ages
6. A place where local people can have real influence and where they feel safe.

6.52 These themes are continued through 'One Swindon' and the LDF.

Other Relevant Documents

Aggregates Market Study 2005 (Strategic Rail Authority, 2005)

6.53 In January 2005 the Strategic Rail Authority (SRA) (abolished in 2006) published the Aggregates Market Study to identify market forces which could be used in demand modelling to improve forecasts of likely future traffic. The purpose of the study centred on identifying marketing priorities which could be used to model and forecast the likely future traffic associated with road and rail.

6.54 Key findings of the study found that:

- Aggregates are generally used locally to where they are produced; 80% of aggregates are used within a 30 mile (48.3 km) radius of the source⁽³²⁾;
- Demand for aggregates from areas outside of the producing region as a result of uneven distribution of resources means that long distance transportation is an inevitable part of the industry;
- Rail only serves a small proportion of the total market and tends to cover movements over long distances with sufficiently high flow volumes;
- Forecasts estimate that the rail aggregate market (nationwide) may grow by 1.5% per annum, resulting in a growth of 20% by 2016;

32 The British Geological Survey have produced a Mineral Planning Factsheet: Construction Aggregate, 2005, that states that the average distance that minerals are transported from their point of origin by road is 40km.

- The 'contestable market' for rail transport is estimated to be 20-25% of the overall market, with road transport occupying the rest;
- Growth in the market share of secondary aggregates may offer a potential for some growth in the rail market share;
- A key future constraint for the carriage of aggregates by rail is not generally line capacity but the availability of suitable rail terminals close to the points of demand

6.55 According to the study, the financial viability of the transportation mode required for a particular distance and volume demand is a key factor in choosing the transport mode required for distribution of aggregates from the quarry or other facility to the customer. Generally, because of the industry accepted 30 mile transportation radius from the quarry and the cost of transporting the aggregates, using rail for shorter movements will not usually be financially viable unless the volumes demanded are high enough.

Wiltshire and Swindon Minerals Local Plan Review: Rail Aggregate Depot Study (2003)

6.56 A Rail Aggregate Depot (RAD) can be defined as a facility which aids the handling and transportation of mineral aggregate by rail, for onward distribution by road. There is currently one RAD in Wiltshire located at Royal Wootton Bassett which is responsible for the importation, handling and exportation of crushed rock (limestone) from the Mendip Quarries in Somerset to the South East of England.

6.57 The Public Local Inquiry into the then Deposit Draft Wiltshire and Swindon Minerals Local Plan (MLP) (2001) examined whether it was appropriate to afford the RAD at Royal Wootton Bassett specific safeguarded status or to seek its relocation to an alternative site. Work commenced on the Wiltshire and Swindon RAD Study in August 2002 with the primary aims of satisfying the Inspector's recommendation and to objectively assess potential and existing rail head or rail linked facilities across Wiltshire and Swindon. The study also objectively assessed a number of other sites with the potential to accommodate a RAD use but concluded that they could not be afforded safeguarded status as no specific proposals for a RAD use had been progressed through the planning process.

6.58 The findings of the study can be summarised as follows:

- The existing RAD at Royal Wootton Bassett does not operate without disadvantages and has a limited capacity. However, this depot is of vital importance to the local area and there exists potential for improvements at the site.
- With the level of future growth anticipated for the North Wiltshire and Swindon areas, it is considered appropriate to consider in more detail the potential for developing an additional or alternative site to Royal Wootton Bassett in the Swindon area. However, balanced against this objective is the need to consider in greater detail the potential disadvantages associated with the siting and operation of a RAD.
- The potential development of additional or alternative RAD sites appears to be governed by a range of external factors outside the direct control of the MPAs. These include a number of economic considerations associated in general terms with market forces and the apparent current lack of government incentives linked to grants and subsidies.

6.59 Selected recommendations and areas of future work can be summarised as follows:

- Unless market forces dictate and/or a suitable alternative site is proposed and secured, the existing RAD at Wootton Bassett should continue to be safeguarded within revisions to the adopted MLP.

- Subject to market forces and future development pressure, the focus for identifying any alternative or additional RAD site should be directed towards Swindon Borough and in particular the site at Ocotal Way (County Yard). In the medium term the site will be home to a High Output Operations Base for the electrification works of the Great Western mainline, however opportunities for rail freight use maybe possible in the future.

6.60 Since the Wiltshire and Swindon RAD Study, a rail freight depot has been built on 24 hectares of land at Keypoint in South Marston This may present an opportunity to transport minerals and waste in the future.

The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)

6.61 The ‘Air Quality Strategy for England, Scotland, Wales and Northern Ireland’, published by Defra in July 2007, sets out air quality objectives and policy options to further improve air quality in the UK from the present into the long term. As well as direct benefits to public health, the options are intended to provide important benefits to quality of life and help to protect the environment. The document discusses the impacts of transportation in terms of vehicle generated emissions and in particular, makes reference to the need for initiatives that encourage the technological progress of vehicles which are cleaner, quieter and less harmful to the environment. Issues of emission reductions are discussed in more detail in the Environmental Impacts chapter.

Climate Change: the UK Programme 2006

6.62 The UK Climate Change Programme sets out the government policies and priorities for action in the UK and internationally. In 2004, the transport sector, was responsible for around 27 per cent of total UK carbon dioxide emissions. The Government is committed to reducing the impact of travel on the environment and is promoting policies to reduce the fossil carbon content of transport fuels, increase the fuel efficiency of vehicles and encourage a move towards more environmentally friendly forms of transport.

6.63 The Programme also highlights the use of rail instead of road to transport freight as a means to cut carbon emissions. Statistic show that the amount of freight moved by rail in terms of tonne kilometres has increased by over 55 per cent since 1995/96. According to the Programme the government are currently spending around £20m each year on grants for rail freight, which take about 800,000 lorry movements off the road each year.

Sustainable Distribution: A Strategy

6.64 ‘Sustainable Distribution: A Strategy’ fulfils the Government’s commitment in the White Paper ‘A New Deal for Transport’ to set out a comprehensive, integrated strategy for the sustainable distribution of goods and services in the UK. The document sets out how, working with industry, local Government, businesses and the wider community, the Government intends to deliver a sustainable distribution strategy.

6.65 To achieve this requires an approach that is integrated:

- across all transport modes, so as to improve the overall efficiency and competitiveness of the UK;
- integrated with the environment, so that the industry plays its part in achieving the Government’s environmental objectives;

- integrated with land use planning, so as to improve the strategic development of the freight transport infrastructure and promote more sustainable patterns of goods distribution; and
- integrated with the Government's wider policies for health, education and wealth creation, so that freight transport contributes to a fairer, more inclusive society.

Other Relevant Information

Wiltshire and Swindon Freight Quality Partnership

- 6.66** An example of joint working to improve the transportation of freight can be shown in the development of Freight Quality Partnerships (FQP). These bodies, comprising hauliers, the local councils, police and local businesses, aim to encourage dialogue between stakeholders, address issues associated with HGV movements and promote solutions. FQPs are often responsible for the development and use of two tier (primary and strategic) lorry networks and/or the implementation of weight restrictions which seek to limit the impacts of HGV traffic along particular stretches of road.
- 6.67** In recognising the importance of engaging the freight industry in establishing lorry routing and controls. Wiltshire County Council established a Freight Quality Partnership (FQP) for Wiltshire with the support of the Freight Transport Association and Road Haulage Association in November 2000. The FQP comprises Wiltshire Council and Swindon Borough Council, Wiltshire Constabulary, local businesses and hauliers, and national road haulage organisations and covers a number of issues including the setting up of the FQP Working Groups and freight management studies. The FQP provides a forum for interested parties to discuss freight related matters and to promote solutions which reconcile the need for access with local environmental and social concerns.

Transport Data

The Transportation Network of the plan area

- 6.68** The plan area spans major east/west transport corridors including the M4 motorway, the A303 Trunk Road that links with the M3 motorway corridor, and three railway routes linking London with Bristol and the far South West of England. Wiltshire also has north/south links via the A419, A36, the A350, A338 and A346 Primary Route Networks.
- 6.69** Due to its rural nature, the plan area has a vast network of country lanes and other rural routes, many of which have evolved from historic tracks or droving routes. Consequently, many of these routes are unsuitable for coping with modern day traffic; particularly HGVs. Wiltshire County Council and Swindon Borough Council have opportunities for limiting the impact of road traffic in rural areas, including the use of speed limits in rural communities and working with freight operators as part of the FQP. Within Swindon there are also specific constraints with the urban area and the council have prepared a map identifying appropriate freight accesses for key locations.
- 6.70** Much of the mineral production in the plan area is used locally and for this reason there is a disparity in cost and convenience between rail and road transport. Consequently the minerals industry is expected to continue to rely mainly on road transport.
- 6.71** Within the vicinity of the Cotswold Water Park, in the north of the plan area, the 'Western Spine Road' has been improved specifically to cope with the exportation of quarried products. This road directs freight onto the main road (A419) reducing the need to travel through local villages. Development of an Eastern Spine Road to serve the new minerals sites east of the A419 has been discussed for many years and covered by policies in the North Wiltshire

District Local Plan and the Wiltshire and Swindon Minerals Local Plan. However, even with the commencement of operations at two new minerals sites (Eysey Manor Farm and Roundhouse Farm) only limited improvements have been made to the C116/C124, namely new accesses and limited carriageway re-alignment. Future infrastructure requirements in the Cotswold Water Park/Upper Thames Valley will require a consolidated approach between Wiltshire, Swindon and Gloucestershire in order to avoid piecemeal highway solutions being created on a site by site basis.

- 6.72** Issues concerning the transportation of waste are similar to those faced by the minerals industry. Consideration must be given to the potential for transporting waste to waste sites by rail and water; however this does not always present a feasible alternative to transportation via road.
- 6.73** Figures supplied by the Environment Agency show that between 552,200 - 611,600⁽³³⁾ tonnes of waste was *imported* into the plan area in 2009. Originating from the South East, Bristol and Somerset, the majority of this waste would have been imported via the M4 and the A303. In contrast, calculations for the *export* of waste reveal that a smaller total of between 49,200 – 100,500⁽³⁴⁾ tonnes of waste was transported out of the plan area to neighbouring authorities in 2009. It is thought that the vast majority of this waste would have reached its final destination by road and that it would have travelled along the strategic and local lorry routes.

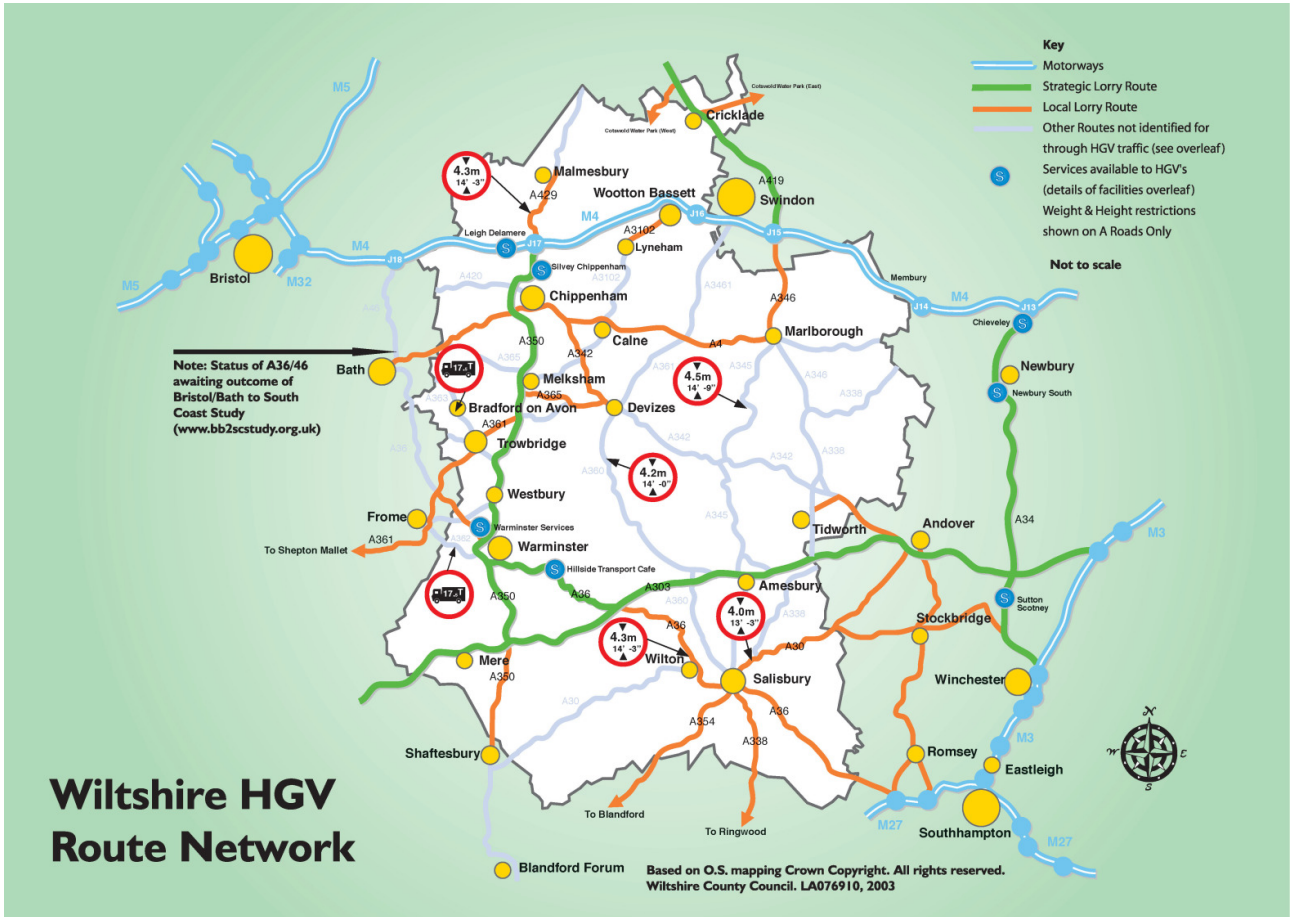
Wiltshire HGV Route Network

- 6.74** The Wiltshire LTP Freight Strategy was published in March 2011 as an aid to implement the lorry route networks, shown below. The freight map informs drivers of the most appropriate routes to use in Wiltshire and includes a HGV Code of Conduct that operators and drivers are encouraged to adopt. A third tier, a proposed 'Access' freight route, is currently in development, where it delivers essential freight from the local or strategic freight routes to the destination/origin of the required delivery. A dedicated web portal for freight issues compliments this.
- 6.75** The freight map is used to guide new minerals and waste development. The Development Control Policies documents for minerals and waste require sites to be in close proximity to the network, offering direct access or have good links to the HGV network/Primary Route Network.

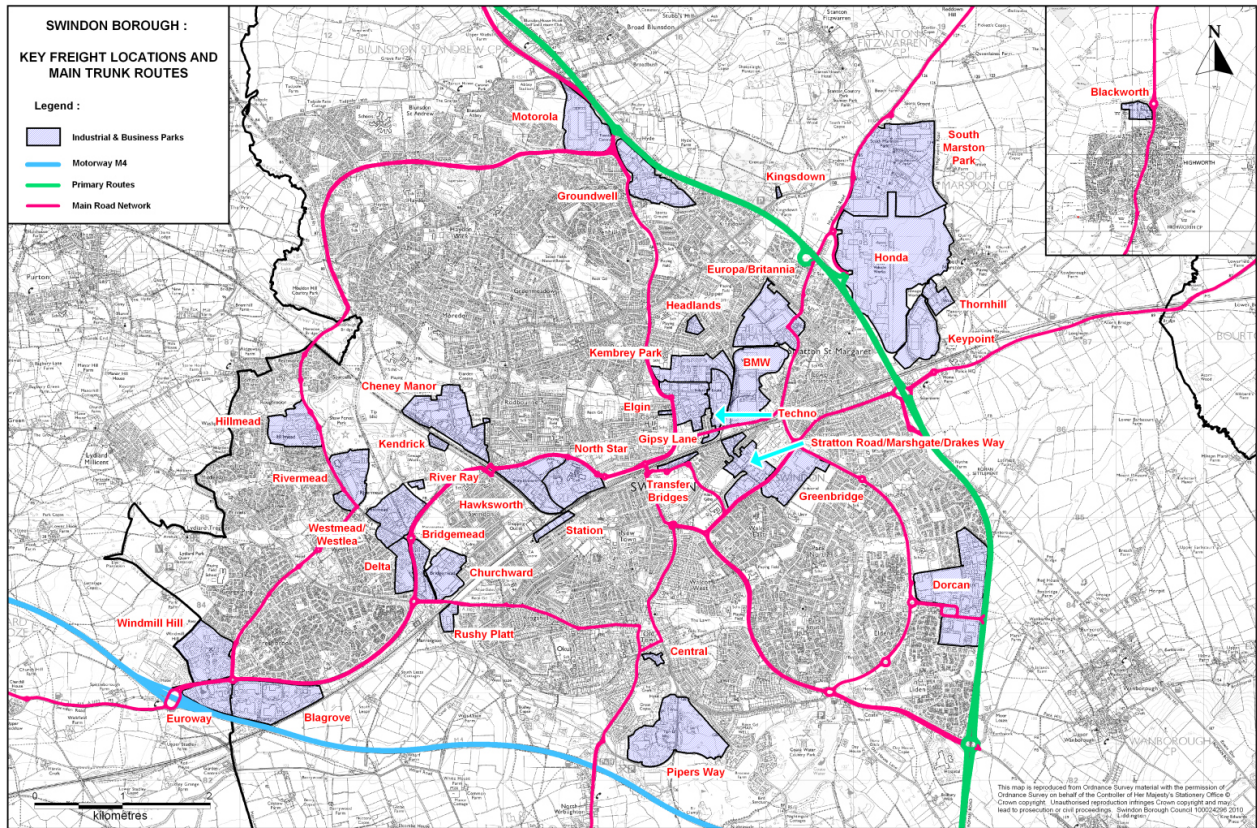
33 This range takes into account 59,500 tonnes of waste for which the origin was unknown – classified as 'not codable' by the Environment Agency

34 This range takes into account 51,300 tonnes of waste for which the destination was unknown – classified as 'not codable' by the Environment Agency

Figure 6.1 Wiltshire's Current advisory freight routes



Picture 6.1 Swindon Freight Map



Existing Freight Movement by Rail

- 6.76 Wiltshire can be defined as a through-train county on account that 86.3% of freight trains in Wiltshire travel through the county and that there are no rail freight movements which start and end in Wiltshire. There is an intermodal freight facility in South Marston which serves the Keypoint Distribution Facility.
- 6.77 The map below reflects freight train utilisation of key network sections across all commodities for the UK. The base year of 2004/05 is selected, as it is this year from which the industry forecasts have been built. Since 2004/05 a number of operators have actively sought to reduce the number of unused paths they have in the timetable ⁽³⁵⁾.

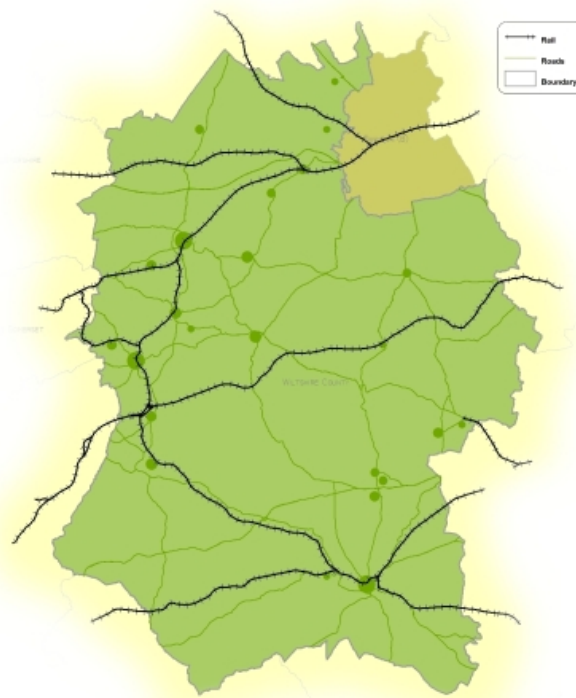
35 Ratio of average actual trains run on Thursdays throughout the 2004/05 against WTT booked paths (winter 2004/05 timetable). Duplicate paths have been excluded

Figure 6.2 Actual freight train utilisation of WTT paths on key freight sections. Source: Network Rail



6.78 There are approximately 156 route miles of track in Wiltshire and Swindon which are used by freight trains travelling through the plan area. 791 million tonne-miles of rail freight pass through Wiltshire each year making up 4.5% of the total UK rail freight. This is equivalent to 1.9 million lorry journeys per year, or over 5,000 lorry journeys per day.

Figure 6.3 Rail Network within Wiltshire (source Wiltshire Council)



Railway Network within Wiltshire

Annual Average Daily Traffic Flow

6.79 Annual Average Daily Traffic (AADT) calculations are particularly useful for illustrating the traffic use of the lorry route network. Tables 6.1 and 6.2 show the AADT figures for the strategic and local lorry route network within Wiltshire and Swindon in 2010.

6.80 The figures are for all two way traffic movements and are the average of all readings, as most roads had multiple readings in different locations⁽³⁶⁾.

Table 6.2 The Strategic Lorry Route Network

Road	AADT (2010 unless stated otherwise)
M4 (east of Junction 15 & west of Junction 17)	74,502 - 78,322
A419 (2005 data)	47,400
A303	19,618 - 22,068
A350	7,948 - 27,144

36 Some figures are based upon one reading in one location, due to the limitations of the available data. This may produce unbalanced AADT figures for an entire road. For example, the reading may have been taken at a busy junction and does not offer a realistic reading over the entire road.

Road	AADT (2010 unless stated otherwise)
A36	9,843 - 31,859

Table 6.3 The Local Lorry Route Network

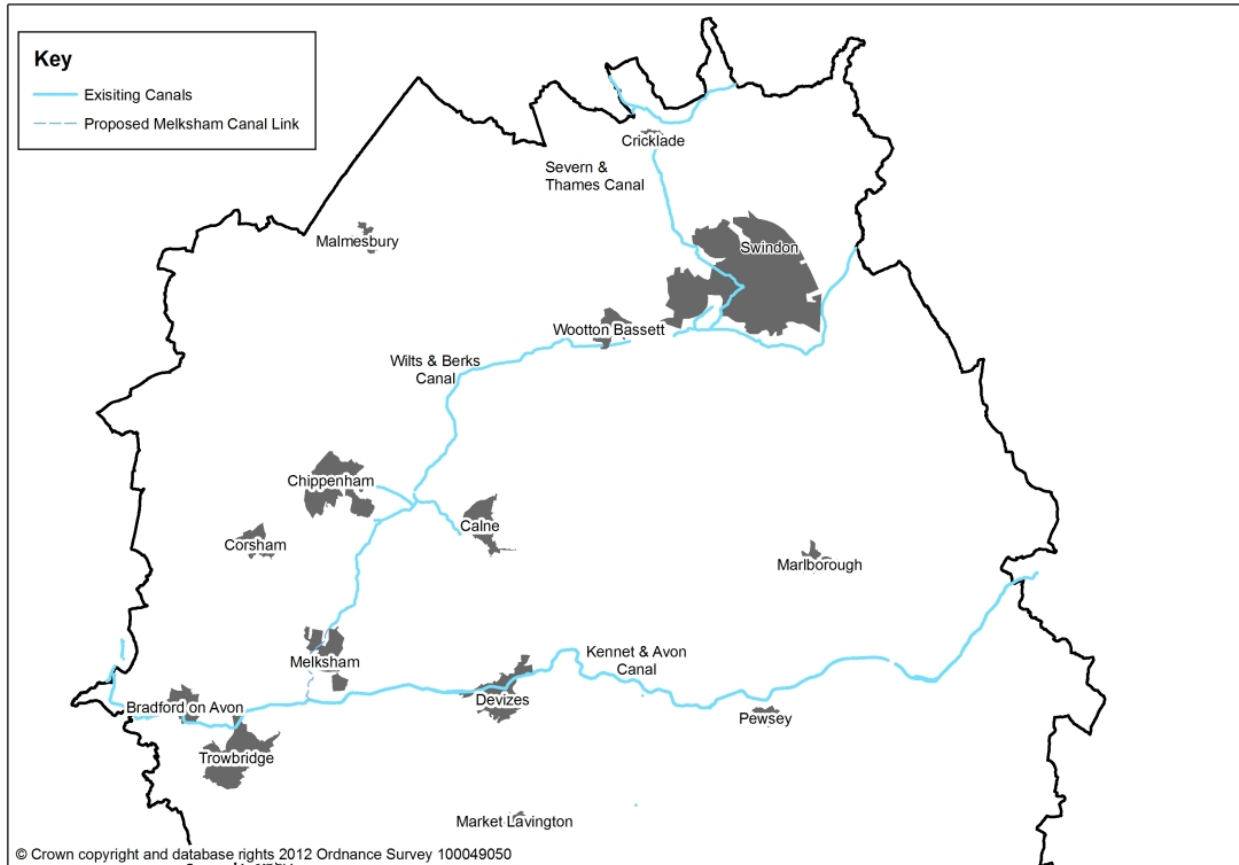
Road	AADT (2010 unless stated otherwise)
A30	4,013 - 16,563
A3102	5,022 - 19,142
A338	3,611 - 8,152
A342	6,757 - 7,138
A346	8,375 - 13,991
A354	7439
A361	7,988 - 24,132
A365	5,566 - 8,906
A4	6,845 - 20,612
A420	22,968
A4259 (2005 data)	31,737
A429	5,788 - 12,155
A4311 (2005 data)	23,542
A4312 (2005 data)	20,437
A4361	6,427

6.81 The figures indicate that there is a heavy reliance upon the strategic lorry route network and some parts of the local lorry route network. The AADT calculations also show high traffic levels on roads located in Swindon.

The Canal Network

6.82 There are a number of canals that run through the plan area of Wiltshire and Swindon; the Kennet and Avon, the Wilts and Berks Canal and the Thames and Severn. The Kennet and Avon Canal, runs from Bath through the Caen Hill Locks at Devizes and through Pewsey to meet the Kennet at Hungerford. The canal is now only used for pleasure craft and as a consequence the opportunity for any substantial use for commercial traffic is minimal.

Picture 6.2 Canals in Wiltshire and Swindon



6.83 The Wilts and Berks canal links the Kennet and Avon canal to the River Thames. The canal operated for more than a century but was abandoned by an Act of Parliament in 1914. In 1977 the Wilts and Berks Canal Trust began to preserve what remained, and is thought currently to be the longest restoration project in Britain. The Trust plans to restore the canal to its former state and construct new sections where urban development has made the original route unavailable. Restoration is happening due to the dedication and efforts of volunteers, and the works of the Wilts & Berks Canal Partnership. Several miles of the waterway have been returned to water with many structures, including bridges, locks and lengths of towpath, restored or in the process of restoration. The Partnership is aiming to complete restoration of this important recreational and wildlife resource by 2025. The main line of the canal runs for 52 miles between the Kennet & Avon Canal at Semington and the River Thames at Abingdon, with the 8 mile North Wilts branch connecting to the Thames & Severn Canal at Cricklade; there are a further four branches at Chippenham, Calne, Longcot, and Wantage.

6.84 The Thames and Severn was abandoned by an Act of Parliament in 1933. It forms what is known as The Cotswold Canals project which is in combination with the 7 mile stretch of the Stroudwater Navigation. When restored, the Cotswold Canals will form a continuous waterway from Saul Junction on the Gloucester & Sharpness Canal to the River Thames at Lechlade. Restoration has started on many parts of the waterway, with several miles having been returned to water and many structures, such as bridges and locks, restored by the dedication and enthusiasm of volunteers from the Canal Trust. The main focus in 2010/11 is the restoration of the western end of the canal near Stroud which is being carried out by a Partnership led by Stroud District Council with a Heritage Lottery grant in excess of £11m, together with other funding. Wiltshire Council assists with the restoration of this canal through the giving of financial contributions and technical assistance. About 4½ km of the canal is

located in the county to the north of Cricklade where it will link with the Wilts & Berks Canal when that is also restored. Restored sections of the canal already provide leisure opportunities, such as way-marked walking routes and trip boats, although not all parts of the route are currently accessible by the public.

- 6.85** The saved Swindon Local Plan safeguards the route of the Wilts and Berks Canal. Elements of this have now been delivered by new development at Wichelstowe and some of the route is safeguarded in the Core Strategy Proposed Submission Draft (Policy R10) so as to not prejudice the long-term ambition of linking the Wilts and Berks Canal to the River Thames at the proposed Eastern Villages development between Commonhead and Acorn Bridge (Policy NC4).
- 6.86** A stretch of canal linking the Wilts and Berks canal with the Cotswold Canals is known as the 'Cricklade Country Way Project'. Subject to funding the project aims to create a green recreational and wildlife corridor linking urban Swindon to Cricklade and the Cotswold Water Park. It will present visitors with a number of different ways to travel between Swindon, Cricklade and the Cotswold Water Park, none of which will involve travelling by road. Practical implementation of the project is being delivered by a partnership of organisations including Wiltshire Council and Swindon Borough Council.
- 6.87** It may be possible that developers could contribute to the project through sensitive working and restoration schemes. However due to the nature of the project it is unlikely that minerals will be transported along the system.
- 6.88** The perceived limitations of time and the volume of material that can be moved in one go poses a significant barrier to the argument in favour of moving freight via waterways as an alternative to road. Of equal significance is the location of the waterway in relation to the source and final destination of the freight in question. Most minerals and waste sites are governed by demand and this is often away from the canal side.

Key Findings

- 6.89** The chapter has focused on the main factors influencing the transportation of minerals and waste in Wiltshire and Swindon. The key findings can be summarised as follows:
- Within a predominantly rural planning areas such as Wiltshire, and a heavily constrained urban environment such as Swindon, the assessment of impacts relating to transport are considered to be extremely important.
 - The geography, rural nature and lack of viable alternative options means that the road network plays an important role in the transportation of minerals and waste throughout the plan area;
 - The 'Wiltshire Freight Map' and 'Swindon Freight Map' provides details of the local and strategic lorry routes and can be used to guide new minerals and waste development;
 - The highest AADT calculations are found along the strategic lorry route network;
 - Where new development is likely to have significant transport implications a Transport Assessment (TA) should be prepared and submitted with a planning application in order to determine whether the impact of the development on transport is acceptable. Policies WDC 11 and MDC 8 seek to provide clarity on this issue.
 - The advantages of transporting freight via rail or water can only be utilised if network capacity and facilities exist;
 - There is disparity in cost and convenience between rail and road transport – generally 30 miles represents a minimum threshold distance under which rail is not commercially attractive to transport aggregate;

- Wiltshire can be defined as a through-train county, due to the fact that 86.3% of freight trains travel through the county;
- Initiatives that seek the transference of goods from road to rail are found at the Royal Wootton Bassett RAD and Keypoint, near Swindon.
- The Wiltshire and Swindon Minerals Local Plan Review: Rail Aggregate Depot Study (2003) acknowledged limited capacity of the RAD at Royal Wootton Bassett and reported that any alternative or additional RAD sites should be directed towards the Swindon Borough, and in particular, to the site at Ocotal Way;
- It is generally unrealistic to expect minerals and waste to be transported by the canal network within the plan area given the current use of the only fully restored Kennet and Avon Canal.



7 Chapter 7: Landscape Character

Introduction and Background

- 7.1** The impact of minerals and waste development upon landscape character is an important consideration for the Minerals and Waste Development Framework (MWDF). This chapter will outline the significance of the landscape character within Wiltshire and Swindon, and assess how minerals and waste development can influence landscape character.
- 7.2** The landscape has important cultural, ecological, environmental and social dimensions, and is a key element in achieving sustainable development. Landscape can be defined simply as: *“an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”*⁽³⁷⁾.
- 7.3** The landscape has been given elevated status by the ratification of the European Landscape Convention (ELC) by the UK government in 2006. The ELC is the first international convention to focus specifically on landscape, and is an instrument devoted to the protection, management and planning of all landscapes in Europe. It is based on the premise that landscape, whatever quality, whether rural or urban, built or natural, should be recognised, understood and fully integrated into policy and decision-making. The ELC aims to promote landscape protection, management and planning, and to organise European cooperation on landscape issues⁽³⁸⁾.
- 7.4** The protection of landscapes from development is considered to be of great importance by the public. A poll⁽³⁹⁾ found that “land with significant landscape or scenic beauty” was the second most important type of land to protect from development.
- 7.5** Wiltshire and Swindon’s landscape is extremely varied – intimate river valleys contrast with open uplands and broad vales, along with the vast sweeps of the chalk downs for which the area is best known⁽⁴⁰⁾. As well as being extremely varied, Wiltshire and Swindon’s landscape is highly valued; and consequently heavily protected by designations.
- 7.6** The significance of the landscape is demonstrated by the fact that over two thirds of Wiltshire and Swindon is designated for its national or local landscape importance. The proportion of Area of Outstanding Natural Beauty (AONB) in Wiltshire and Swindon is far higher than the proportion for England as a whole, as shown in table 7.1.
- 7.7** A small part of Wiltshire, to the south east, lies within the New Forest National Park. Section 62 (2) of the Environment Act 1995 requires local authorities to *“...have regard to the purposes of the Parks as set out in ... section 61 [of the Act]”*, (English National Parks and the Broads, UK Government Vision and Circular 2010). The purposes of National Parks are:
- i. To conserve and enhance the natural beauty, wildlife and cultural heritage of the National Parks; and
 - ii. To promote opportunities for the understanding and enjoyment of the special qualities [of the Parks] by the public.
- 7.8** The purposes of the New Forest National Park must therefore be taken into account by Wiltshire Council and Swindon Borough Council when planning for minerals and waste development in proximity to the National Park.

37 European Landscape Convention 2000.

38 European Landscape Convention 2000.

39 Ipsos MORI poll for the ‘Barker Review of Land Use Planning’, HM Treasury, 2006.

40 Wiltshire Landscape Character Assessment, Wiltshire County Council and Land Use Consultants, December 2005.

Table 7.1 Area designated for its Landscape importance in Wiltshire and Swindon, and England

LPA	Total Area (ha)	AONB (% total area)	Green Belt (%total area) ⁽⁴¹⁾	National Park	SLA (% total area)
Wiltshire	325,540	44	2.1	0.9	26
Swindon	23,010	26	0	0	0
Wiltshire & Swindon	348,550	42.9	2.1	0	24.5
England	13,043,900	15.6	12.9	7.6	-

- 7.9** Minerals and waste developments have historically made use of both urban and, especially in the case of minerals extraction and waste landfill in Wiltshire, rural sites. Geological circumstances dictate that minerals extraction and waste landfill will only take place in certain locations. The County of Wiltshire is a largely rural authority and whilst minerals and waste development is encouraged to be located as close to urban areas as possible, it is inevitable that a proportion of future minerals and waste development within Wiltshire and Swindon will take place in rural locations. This can lead to adverse impacts in areas designated for their landscape importance, which are predominantly rural.
- 7.10** Some possible changes to the landscape as a result of minerals and waste development include: built structures (e.g. processing plant); removal of, or changes to, key landscape features such as hedgerows and field patterns; and blocking of existing views across the local area.
- 7.11** However, there are numerous measures that can prevent or mitigate significant landscape effects. These include designing and locating processing plant to reduce visibility; using screening embankments planted with vegetation to conceal the operation; and restricting the location of buildings, machinery, stockpiles etc to minimise visual impacts from intrusion or obstruction. The sensitive restoration of minerals and waste sites can, in some cases, actually enhance the local landscape character.
- 7.12** Mineral resources play an important role in shaping the landscape characteristics of Wiltshire and Swindon. The geological characteristics of the plan area contribute to the character of the landscape – from the chalk downlands of the Salisbury Plain to the picturesque limestone villages of the Cotswolds. Building materials have traditionally been quarried and used locally creating strong local built vernacular. There will be pressure to continue to supply materials from these traditional sources for quality new build and the maintenance of older buildings. This must be balanced with the need to consider the impact upon landscape character. The geological circumstances of Wiltshire and Swindon dictate that the vast majority of mineral workings will take place in rural areas.
- 7.13** The majority of waste management facilities will inevitably be concentrated around the main urban areas and some waste development will be required in rural areas to serve the needs of the local population. The location of waste sites may be dictated by other factors such as geology e.g. clay is required for cell construction and capping of existing landfill sites.

41 Local Planning Authority Green Belt Statistics: England 2007, DCLG

- 7.14** Government guidance⁽⁴²⁾ advocates the maintenance of local character and a high quality environment. Locally derived minerals extraction, and well-designed waste management facilities, can help to achieve these aims.
- 7.15** PPS7 states the government's overall aim is to protect the countryside for the sake of its intrinsic character and beauty, the diversity of its landscapes, heritage and wildlife, the wealth of its natural resources and so it may be enjoyed by all.
- 7.16** It is important to be aware that proposals for minerals and waste development may potentially present an unacceptable impact upon the landscape, especially in areas designated for their landscape importance.
- 7.17** Minerals development plan policies should take into account the impacts upon the landscape, including landscape severance; whilst also considering the scope for landscape improvements through mineral working and subsequent restoration⁽⁴³⁾. The long term quality of land and landscapes taken for minerals extraction should be maintained or, in some circumstances, enhanced⁽⁴⁴⁾.
- 7.18** Waste development considerations include the setting of the proposed location and the potential for design-led solutions to lead to acceptable development; and the need to protect landscapes of national importance⁽⁴⁵⁾.

Draft National Planning Policy Framework

- 7.19** In July 2011, the Government published the draft National Planning Policy Framework (NPPF) for consultation. The Government's objective for the natural environment is that planning should help to deliver a healthy natural environment for the benefit of everyone and safe places which promote wellbeing. As part of achieving this objective, the planning system should aim to conserve and enhance the natural and local environment by protecting valued landscapes.
- 7.20** In the draft NPPF, the Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence. The document states that mineral extraction is not necessarily inappropriate in Green Belt provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in Green Belt. Community Forests also offer valuable opportunities for improving the environment around towns, by upgrading the landscape and providing for recreation and wildlife.
- 7.21** The draft Framework also calls for authority's to "take into account the economic and other benefits of the best and most versatile agricultural land".

Landscape Designations in Wiltshire and Swindon

- 7.22** A significant proportion of the plan area benefits from protection because of its landscape value, with 70% of Wiltshire and Swindon being designated for its national or local landscape importance i.e. Area of Outstanding Natural Beauty, Special Landscape Area, and Green Belt. Figure 7.1 shows these designations.

42 PPS7: Sustainable Development in Rural Areas, ODPM, 2004.

43 Paragraph 11, MPS2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England, ODPM, 2005.

44 Paragraph 2, MPG7: The Reclamation of Mineral Workings, DoE, 1996.

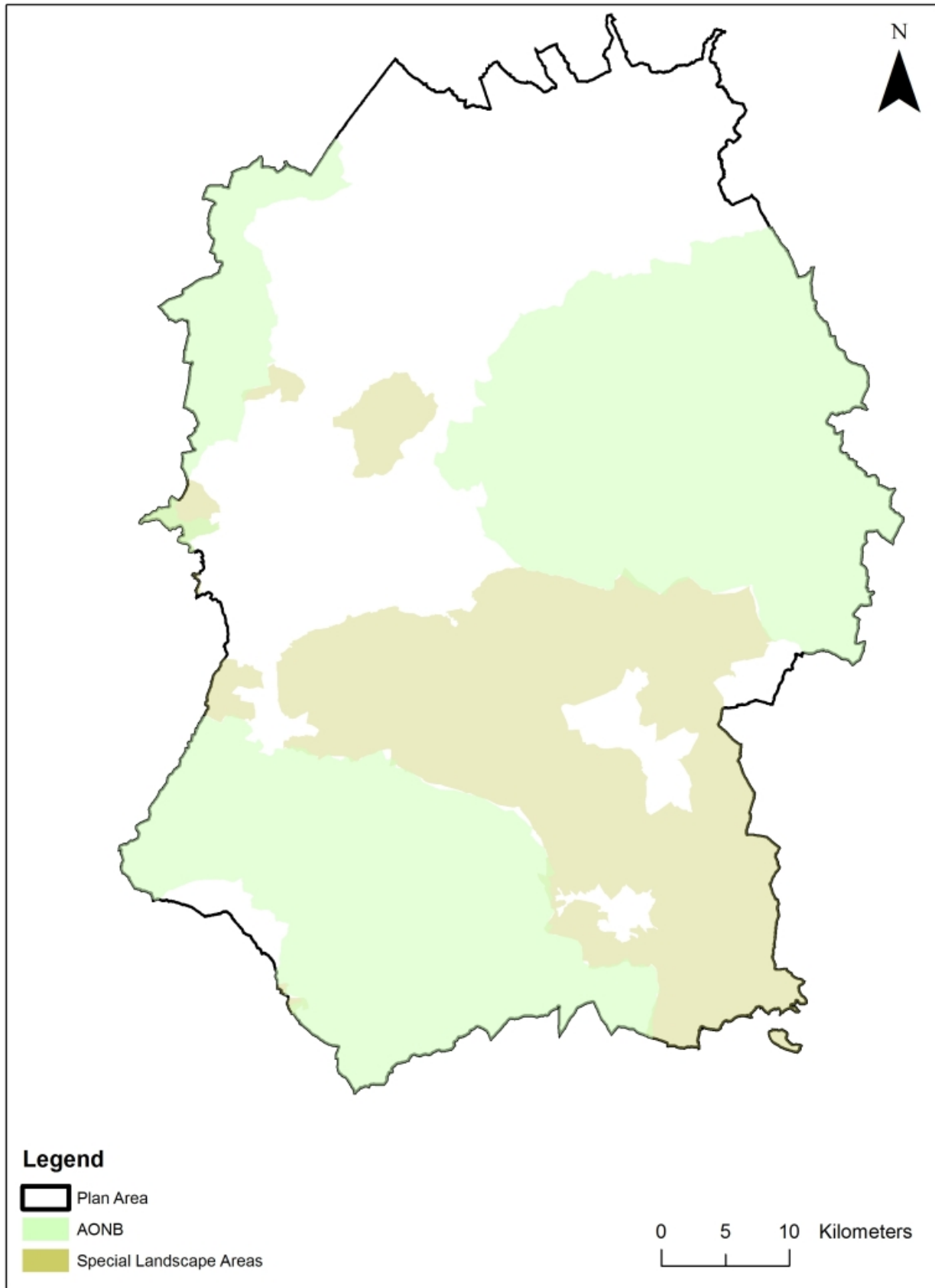
45 Annex E, PPS10: Planning for Sustainable Waste Management, ODPM, 2005.

Areas of Outstanding Natural Beauty (AONBs)

7.23 The AONB designation was first outlined in the Wildlife and Access to the Countryside Act 1949, and amended by the Countryside and Rights Of Way Act 2000. The purpose of AONBs is to conserve and enhance the natural beauty of the landform, geology, plants, animals, landscape features, and human culture. Government planning policy confirms that AONB have the highest status of protection in relation to landscape and scenic beauty, and great weight should be given to their conservation⁽⁴⁶⁾. This includes wildlife, physical characteristics, cultural heritage and landscape qualities.

46 Paragraph 21, PPS7: Sustainable Development in Rural Areas, ODPM, 2004.

Figure 7.1 AONB and SLA Landscape Designations in Wiltshire and Swindon



This map is indicative only and has no legal status. © Crown copyright and database rights 2012 Ordnance Survey 100049050

7.24 There are 35 AONBs in England, 3 of which cover parts of Wiltshire and Swindon (see map, Figure 7.1):

- **Cranborne Chase and West Wiltshire Downs AONB** – 61% of this AONB is located within the plan area, in the south west of Wiltshire. The section located within Wiltshire is typical of chalk landscapes with its smooth, rounded downs, steeply cut combes and dry valleys, with large rectangular fields emphasising the open character. It is a deeply rural agricultural area, with scattered villages and narrow roads⁽⁴⁷⁾.
- **North Wessex Downs AONB** – Wiltshire and Swindon contains 38% of this AONB. North Wessex Downs AONB is predominantly chalkland landscape with dramatic scarp slopes and moulded dip slopes; ranging between open downland, to wooded plateau and intimate secluded valleys⁽⁴⁸⁾.
- **Cotswolds AONB** – a relatively small section (6%) of this AONB straddles the western/northern Wiltshire boundary. The AONB is unified by its underlying limestone geology and the visible character of this stone in the buildings. Again, there is scenic diversity within the AONB, with a total of 19 different Landscape Types. The section within Wiltshire is predominantly dip-slope lowland forming a broad tract of gently sloping undulating landform, and a transition to the flatter Thames basin beyond the designated area⁽⁴⁹⁾.

7.25 These 3 AONBs cover a significant proportion (43%) of Wiltshire and Swindon, and therefore present a major constraint for minerals and waste development. Government guidance states that ‘major developments should not take place in these areas, except in exceptional circumstances’ – planning applications within such areas should be considered on the basis of the need for the development, the scope for developing elsewhere outside the designated area, and any detrimental effect on the environment, landscape and recreational opportunities⁽⁵⁰⁾.

New Forest National Park

7.26 An area of south-east Wiltshire now forms part of the New Forest National Park. This designation seeks to conserve the wildlife, physical characteristics, cultural heritage, landscape qualities and amenity interest of the New Forest.

7.27 The New Forest National Park Authority acquired its full statutory powers, functions and responsibilities in April 2006. Although, for the purposes of minerals and waste planning, this part of Wiltshire is no longer under the jurisdiction of the Wiltshire Council, the effects of development do not stop at the County border. Therefore, the potential for minerals and waste development in the vicinity of the New Forest National Park boundary to cause adverse landscape impacts upon the Park must be considered.

Green Belt

7.28 The five purposes of land designated as Green Belt are to:

- check the unrestricted sprawl of large built-up areas
- prevent neighbouring towns from merging into one another
- assist in safeguarding the countryside from encroachment

47 Cranborne Chase and West Wiltshire Downs AONB Management Plan, June 2004.

48 North Wessex Downs AONB Management Plan, 2004.

49 Cotswolds AONB Management Plan, 2004.

50 Paragraph 22, PPS7: Sustainable Development in Rural Areas, ODPM, 2004.

- preserve the setting and special character of historic towns
- assist in urban regeneration, by encouraging the recycling of derelict and other urban land⁽⁵¹⁾.

7.29 A small section of the Bath/Bristol Green Belt extends into Wiltshire, known as the Western Wiltshire Green Belt. Wiltshire contains around 6,980 hectares of designated Green Belt land, representing around 2% coverage of the total plan area⁽⁵²⁾.

7.30 Government policy states that minerals extraction within the Green Belt need not be an inappropriate development as it is a temporary land use, as long as high environmental standards are maintained and the site is well restored⁽⁵³⁾. PPS10 advocates the protection of green belts, but recognises that the particular locational needs of some types of waste management facilities should be given significant weight in determining proposals for planning permission⁽⁵⁴⁾.

Special Landscape Areas (SLAs)

7.31 Special Landscape Areas (SLAs) are local designations outlining areas of high quality landscape, and are concerned with conserving the natural beauty of the landscape⁽⁵⁵⁾. Although they are not considered to be of national importance, SLAs are highly valued locally, and the impact of minerals and waste development on SLAs should be considered very carefully. However, it is acknowledged that minerals extraction and other infrastructure development may need to be accommodated in SLAs⁽⁵⁶⁾.

7.32 SLAs are identified in the Wiltshire and Swindon Structure Plan 2016 and allocated within the former District Council Local Plans. There are currently seven SLAs in Wiltshire and Swindon, covering 24.5% of the plan area (see map - Figure 7.1):

- the majority of Salisbury Plain
- parts of Salisbury District to the north and east of Cranborne Chase and West Wiltshire Downs AONB
- the Blackmore Vale from Zeals to Sedgehill
- the Chapmanslade greensand ridge
- the higher land of the Spye and Bowood parklands
- the River Frome valley at Vaggs Hill
- the southern fringes of the Cotswolds, not covered by the AONB⁽⁵⁷⁾.

7.33 The adoption of the SW RSS would have brought about the removal of Structure Plan policy designating SLAs. As a result the ongoing status of SLAs is uncertain given the approach taken in recent Government policy on rural areas (PPS7), which outlines that rigid local designations may unduly restrict acceptable, sustainable development. Local landscape designations (such as SLAs) should only be maintained, or exceptionally extended, where criteria based policies cannot provide the necessary protection. Planning authorities should “rigorously consider” the justification for retaining existing local landscape designations⁽⁵⁸⁾.

7.34 The emerging Wiltshire Core Strategy has identified that there is not currently enough evidence available to include a ‘sound’ SLA policy, there is also evidence e.g. the Wellhead Valley study, that the unique characteristics of some areas of the county may not be fully

51 PPG2: Green Belts, DoE, 1995.

52 Area of Designated Green Belt Land, ODPM, 2004.

53 Paragraph 3.11, PPG2: Green Belts, DoE, 1995.

54 Paragraph 3, PPS10: Planning for Sustainable Waste Management, ODPM, 2005.

55 Wiltshire and Swindon Structure Plan 2016, adopted April 2006.

56 Paragraph 6.37, Wiltshire and Swindon Structure Plan 2016, adopted April 2006.

57 Policy C9, Wiltshire and Swindon Structure Plan 2016, adopted April 2006.

58 Paragraph 25, PPS7: Sustainable Development in Rural Areas, ODPM, 2004.

protected through the use of criteria based policies alone. An objective and robust study will be required to address this issue, which would be best undertaken as part of the forthcoming Wiltshire Landscape Strategy SPD, while SLA policies from the local plans could be saved in the interim.

- 7.35** Following the approach advocated in PPS7, Natural England are carrying out new work on landscape character and natural areas, which may lead to a review of the naming, number and extent of SLAs in the plan area.

Additional information

- 7.36** The broad structure of the landscape reflects the underlying geology, meaning there are some close links between this chapter on landscape, and the Biodiversity chapter. Following the approach taken in Government policy (PPS9), geological conservation is considered within the Biodiversity chapter.

- 7.37** There is also a close inter-relationship between landscape quality and value as wildlife habitats, providing further links between the Landscape chapter, and the Biodiversity chapter. Areas which are designated for their landscape importance can also support many habitats and species of biodiversity value. Indeed one of the objectives of AONBs is to conserve and enhance plants and animals – many concentrations of sites designated for their biodiversity value lie within AONBs, such as the North Wessex Downs AONB which contains Savernake Forest SSSI⁽⁵⁹⁾.

Locally Relevant Plans and Strategies

- 7.38** There have been several plans and strategies published relating to the landscape character within Wiltshire and Swindon. A brief synopsis of these, including relevant links to the Minerals and Waste Development Framework, is included here.

Wiltshire Landscape Character Assessment (Land Use Consultants) December 2005

- 7.39** The Wiltshire Landscape Character Assessment (LCA), incorporating Swindon Borough analyses, describes and classifies the landscape; identifying those features or combinations of elements that contribute to the special characteristics and qualities of Wiltshire's landscape. The diverse nature of Wiltshire's landscape is represented at the national level by the presence of 11 different Countryside Character Areas; within which sits the county-wide classification of 16 landscape types which are sub-divided into 38 landscape character areas⁽⁶⁰⁾.

- 7.40** The Wiltshire LCA documents the current status of Wiltshire and Swindon's landscape, enabling informed decisions to be made on the future management of the landscape. Each landscape character area contains a set of broad management objectives, which provides an objective basis for developing the policies within the Minerals and Waste Development Framework.

- 7.41** Of particular relevance to minerals development is landscape character area 12A: Thames Open Clay Vale, which covers the Upper Thames Valley/Cotswold Water Park, where the main concentration of mineral workings within the plan area is located. One of the broad management objectives is to "take opportunities to extend and enhance the varied wetland habitats (reedbeds, wet grassland and wet woodland) of the Cotswold Water Park through appropriate restoration of mineral workings"⁽⁶¹⁾.

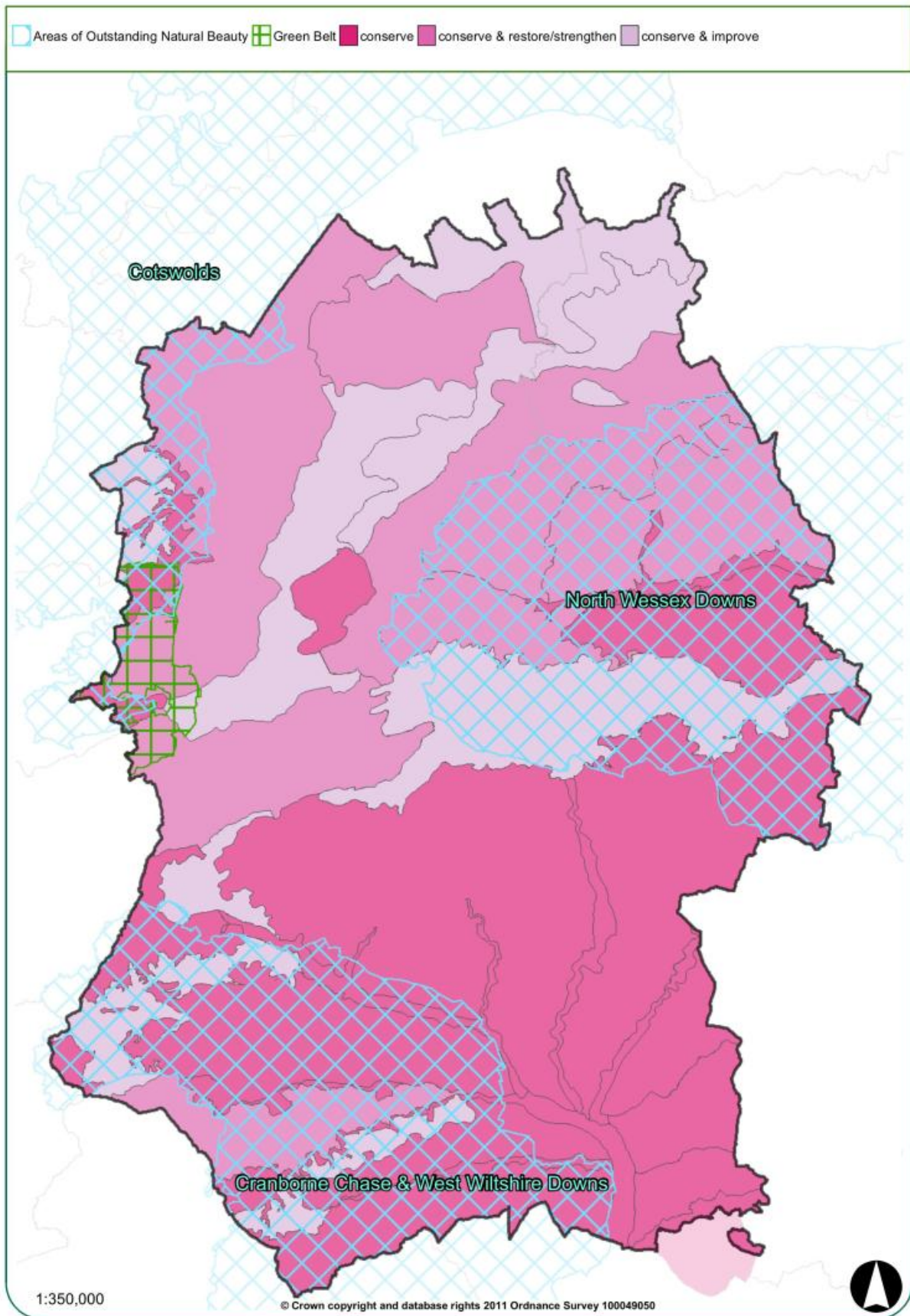
59 Wiltshire and Swindon Structure Plan 2016, Adopted April 2006.

60 Wiltshire Landscape Character Assessment, Wiltshire County Council and Land Use Consultants, December 2005.

61 Wiltshire Landscape Character Assessment, Wiltshire County Council and Land Use Consultants, December 2005.

7.42 The strategic outcomes of the Landscape Character Assessment are shown on the following map (figure 7.2) which also shows the extent of the AONBs and SLAs. Around the Upper Thames Valley the character of the landscape and its condition is considered to be moderate. The proliferation of minerals development in the Upper Thames Valley provides an opportunity to conserve, restore, strengthen and improve landscape elements that have been lost or are declining. This may include improvements to landscape management practices or the introduction of positive new elements or features such as waterbodies.

Figure 7.2 Wiltshire Landscape Character - Landscape Strategy



Wiltshire Landscape Character Assessment

- 7.43** The Wiltshire Landscape Character Assessment (LCA), incorporating Swindon Borough, was published in December 2005 and analyses, describes and classifies Wiltshire's landscape.

The Cotswold Water Park Landscape Character Assessment (2007)

- 7.44** There is recognition that with mineral reserves still available across the area, particularly centrally, the process of change in the park is set to continue for some decades. However, the potential location, extent and form of future extraction has to be balanced against other considerations including environmental issues, biodiversity and heritage resources, water quality, and recreation, whilst taking into account the quality of life and economic opportunities for local inhabitants.
- 7.45** The Cotswold Water Park Strategy 2000 – 2006 sets out an overarching vision for the park to be '*...a premier site for nature conservation, leisure and tourism. The Park should seek to become an exemplar in the field of landscape restoration. The guiding principle is that of sustainable development, where the needs of business, people and wildlife are successfully met without prejudicing the quality of life for future generations*' (para 3.2 p13). The presence of sand and gravel deposits in the area has given rise to a nationally important gravel extraction industry. With the reserves representing the most important source of these minerals in the South West of England.
- 7.46** The assessment describes the rock formation and geological strata of the Cotswold Water Park. The impermeable nature of the Oxford Clay has resulted in the water table being located within the gravels or soils above. The first quarries in the park were dug 'wet', however today they are 'de-watered' and on completion of extraction, are filled with the naturally occurring water. A total of 137 lakes have been created and due to the lime rich water, the Water Park is the most extensive marl lake (high bicarbonate alkalinity) system in Britain.
- 7.47** The Cotswold Water Park LCA indicates that there are currently, 7 mineral companies extracting around 2 million tonnes per year from 360 hectares with permission to extract from a further 370 hectares. Emerging mineral plans propose the allocation of a further 550 hectares for extraction. Furthermore there is approximately another 50 years supply of sand and gravel in the area. The exploitation of sand and gravel deposits within the Upper Thames Valley has been a potent force of change. The extensive areas of wetland landscape are a dominant influence on the landscape character. Areas of principle relevance to minerals and waste working include:
- Character Area 3D - Swill and Derry Brooks Clay Vale Farmland. Low lying, predominantly permanent pasture farmland underlain by Oxford Clay. The landscape has largely been untouched by gravel extraction operations. There are no villages in the character area; settlement is confined to a dispersed pattern of farms. The character area is home to the Clattinger Farm Nature reserve (located in the north-western section of the character area) which is managed by the Wiltshire Wildlife Trust. It has been designated as a SSSI and SAC and is considered to be the finest remaining example of enclosed lowland grassland in the country and an important remnant of a traditional hay meadow.
 - Character Area 3E - Castle Eaton and Inglesham Clay Vale Farmland. The Character Area extends across the south-eastern section from Cricklade in the west to Lechlade in the east. There is limited woodland cover across the area; however there are nevertheless some substantial areas of woodland. Settlement is generally small scale and dispersed. The area is characterised by a limited network of roads and many isolated areas that are inaccessible to traffic. To the west of the character area a disused railway line demarks the former Cheltenham to Andover line that was closed in 1961.

- Character Area 4A - Chelworth Rolling Clay Lowland. The landscape is characterised by gently rolling lowland underlain by Oxford Clay or alluvial deposits whilst wetland features exist on the lower ground. The landscape has limited woodland cover but some ancient woodland and wet woodland of high ecological value. The area has a small number of wetland and meadows of neutral and unimproved grassland and of nature conservation interest. Cricklade is the principal centre of population whilst a number of dispersed settlements of villages and farmsteads using local vernacular material characterises the landscape. To the South West of Cricklade, the former RAF Blakehill Airfield was acquired by the Wiltshire Wildlife Trust in 2000 to establish the Blakehill Nature Reserve, restoring the site to an extensive hay meadow and wildflower-rich status.
- Character Area 5A - Lus Hill. The area is characterised by gently sloping or level ridge summits that extend down to the surrounding clay lowland and is predominantly pastoral landscape with some arable fields. Ancient woodland and a number of villages and small towns exist in the area. An intricate network of rural roads connects the existing settlements and the area is further characterised by urban influences due to its proximity to Swindon. Lus Hill itself comprises a small, isolated outlier of the Settled Limestone Ridge and is underlain by the sandstones and limestones of the Stanford and Coral Rag Formations.

North Wessex Downs AONB Integrated Landscape Character Assessment Technical Report (March 2002)

- 7.48** The North Wessex Downs covers 1,730 square km making it one of England's largest designated AONBs. There are a total of 8 Landscape Types and 33 Character Areas within the AONB. Areas of principle relevance to minerals and waste working include the Character Area 5A - Avebury Plain. Minerals and Waste development in Compton Bassett (outside the AONB) adjoins the area. Avebury Plain is a flat level chalk area in the western part of the AONB. The flat level surface is intensively cultivated and the area is characterised by expanses of large open arable fields, long views and a bleak, exposed character. Central to the character of the whole area are the monuments associated with Avebury World Heritage Site (WHS). The prominent monuments provide a sense of antiquity and historical continuity. Settlements are confined to the Winterbourne valley with regularly spaced villages. Within the Plain, there are 11 woodland and 10 grassland sites with non-statutory designation, and Silbury Hill (SSSI), which is a nationally important area of chalk grassland.

Cranbourne Chase and West Wiltshire Downs AONB Integrated Landscape Character Assessment (2003)

- 7.49** Cranbourne Chase and the West Wiltshire Downs is a designated AONB. It covers an area of 983 sq km forming part of the extensive belt of chalkland which stretches across southern England. There are a total of 8 Landscape Types and 15 Character Areas within the AONB. Areas of principle relevance to minerals and waste working include:

- **Character Area 2A - West Wiltshire Open Chalk Downland.** Stone mining currently occurs in Character Area 2A. The area is characterised by a large-scale landscape of broad rolling hills and undulating land separated by dry river valleys. It is dominated by an Upper Chalk surface geology and drift clay with flints capping on higher ground. It is predominantly given over to arable farming; however, woodland also makes an important contribution to character. Although woodland interrupts some long distance views, there is a feeling of exposure and expanse across the entire landscape. With the exception of small hamlets and a village, settlement is largely absent. Remoteness

is disturbed however, by movement along the main transport corridors - the A303 and A350. In recreational terms, this is a landscape popular with walkers, ramblers and horse riders.

- **Character Area 6A - Fovant Terrace.** The area is a flat, open landscape providing impressive views to the adjacent Fovant and Chalk Escarpment which rises above the open terrace and offers a sense of containment. Arable farming is the dominant land use with large fields and the presence of many new farm buildings a key feature, although belts of woodland are also present. Much of the terrace is defined by an Upper Greensand geology that extends beyond the character boundary. Lower Chalk marks the terrace at the base of the adjacent chalk escarpment. The A30 is a busy transport corridor and runs along the character area. The flatness of the landform makes the road highly visible and it has a dominant influence, in an otherwise peaceful landscape. In terms of recreation, the landscape has a number of Public Rights of Way (PRoW).
- **Character Area 8A - Vale of Wardour.** The Vale of Wardour hosts a varied underlying geology with Clay, Gault, Portland and Purbeck Stone predominating. Although the area is dominated by a mix of arable agriculture and pastoral land uses, it has retained a reasonable woodland cover, including several sites which are considered to be of ancient origin.

The Vale has previously been the focus for mineral extraction and this continues today with stone quarrying occurring west of Chicksgrove. Previous quarrying activities represent sites of high scientific interest for geological reasons and include, Dinton Quarry (SSSI), Lady Down Quarry (SSSI), Teffont Evias Quarry/Lane Cutting (SSSI) and Upper Chickgrove Quarry (SSSI). Caves created during past quarrying activity support important numbers of roosting bats. Chilmark Quarries (SAC) for example, is home to the largest UK wintering roost of the rare Bechstein's bat as well as significant numbers of other bat species.

With the exception of the A350 marking the western boundary of the character area and the A30 marking the northern boundary to the east, there are no major roads within the character area. A number of Public Rights of Way cross the vale and visitor attractions in the area include National Trust land and properties.

Settlements within the Vale include Tisbury, the only town within the AONB, and a number of hamlets and villages such as Semley, Newtown and Upper and Lower Chicksgrove.

Cotswold AONB Landscape Character Assessment (2004)

- 7.50** The geological structure of the Cotswolds consists of bands of clay, sand and limestone. Whilst the area can be seen as a contiguous unit of broadly similar character, local variations have had a significant impact on the landscape and local landscape character.
- 7.51** The area is characterised by 'dramatic escarpment and expansive high wolds, the network of limestone walls, beech woods clothing the escarpment, and secluded valleys and valley bottom meadows. The built environment is also very evocative ranging from the charm of the many picturesque villages and historic small towns to the individual houses, churches and mansions, and historic landscaped parks.' (p36).
- 7.52** There are a total of 19 Landscape Types and 68 Character Areas with the Cotswold AONB. Compared to the number of quarries that once extended across the Cotswolds, the remaining working quarries are relatively small in number. They are large in scale and therefore likely

to affect, and be visible from, the surrounding area for a long period. Quarries are generally located in fairly remote areas though and are detached from settlements. As a consequence their 'area of influence' is confined, but the effects of heavy traffic generated through quarrying activities are a source of potential disturbance. Areas of principle relevance to minerals and waste working include:

- Character Area 4D - Lower By Brook Valley. Character Area 4D is located within the Enclosed Limestone Valley Landscape Type. Land use in the area is a combination of both arable and pastoral land, although the latter dominates. The settlements of Box Hill and Ashley have developed along the valley slopes south of the A4 and are connected by a network of minor roads along which scattered dwellings are also located. Underground quarries can be found in the area, most notably at Box.
- Character Area 11A - South and Mid Cotswold Lowlands. The Character Area forms an almost continuous area of Dip-Slope Lowland along the eastern and south-eastern limit of the outcrop of Oolitic Limestone within the Cotswolds. The area has a well managed, productive arable and pastoral landscape. Woodlands vary between extensive woodlands and plantations within the large estates (Historic Parks, Registered Gardens and private estates) and a pattern of intermittent smaller woodlands associated with the farmed landscape.

7.53 A number of prehistoric long barrows, and burial mounds are present. Remnants of Roman occupation are also notable, with Roman roads converging on the significant Roman settlement of Cirencester (which is outside the AONB).

7.54 Apart from the network of principal (A433) and local roads that cross the area, the southern sector is crossed by the M4 and the Swindon/Bristol main railway line. Villages and hamlets tend to be dispersed.

7.55 Local stone mines are of particular significance in the area and form part of the Bath and Bradford-on-Avon Bats SAC. This is notable for the presence of the Greater Horseshoe Bat, one of the largest and rarest bats in the UK, currently only found in south-west England and south and west Wales. In winter the bats depend on caves, abandoned mines and underground sites for undisturbed hibernation.

Kennet Landscape Character Assessment (1998)

7.56 Each landscape type in the district was assessed using the attributes of scenic quality, sense of place, unspoilt character, landscape as a resource and conservation interests. Landscapes of particular importance in Kennet District include those of extensive unimproved chalk upland landscapes, chalk and greensand scarps under pasture or semi-natural vegetation cover, the wooded landscapes of Savernake Forest and areas of parkland and wooded farmland, and the unspoilt, pastoral and tranquil areas of riparian pasture along main river valleys and vales. The document identifies four regional character areas and eleven local character areas within the district.

Kennet Landscape Conservation Strategy (2005)

7.57 The Kennet Landscape Conservation Strategy provides detailed information of the landscape enhancement priorities for each of the different character areas in Kennet as identified through the Landscape Character Assessment of the district. The document aims to provide guidance on how the Council will assess the impact of development proposals in the

countryside, with the emphasis on landscape conservation and enhancement. The Strategy outlines a number of general principles that should be carried forward into any enhancement strategy including:

- Management or enhancement should reinforce/restore the local landscape vernacular;
- Intervention should aim to restore diversity and structure to the landscape;
- Habitat creation and planting should reflect the ecological character of the area;
- The historic landscape should be a material consideration;
- Mitigation of intrusive features or influences that could detract from the rural character of the landscape; and
- A programme of tree planting is to be encouraged throughout the district, but must also respect long views and wide open spaces.

West Wiltshire Landscape Character Assessment (2007)

7.58 The assessment confirms that the historical settlement, development and use of the West Wiltshire landscape and its ecological character reflects a wide diversity of landscape types. The assessment has identified 40 areas of distinctive landscape character. West Wiltshire is predominantly dominated by chalk formations and there are a wide range of habitats within the District many of which are of particular value for nature conservation and are protected by European, national and local designations. A total of ten landscape character types were defined within the District. Areas of principle relevance to minerals and waste working include:

- Landscape Character D1 - Limpley Stoke and Westwood Limestone River Valley. A number of small scale quarries and mines exist in the area. The area is characterised by distinctive river valleys, steep limestone sides, some significant areas of woodland (ancient and semi-natural), predominance of open pastoral farmland whilst a number of major transport routes run through the valley (notably the A36 and B3108 and the Trowbridge/Bath/Bristol railway line).
- Landscape Character E8 - Heywood Rolling Clay Lowland. The rural character of this landscape has been disturbed by noise and visual intrusion associated with railway corridors, roads and the West Wiltshire Trading Estate. The tall chimney associated with the Westbury cement works is referred to as a 'dominant visually detracting landmark'.
- Landscape Character A3 - Broughton Gifford Limestone Lowland. This area has experienced mineral working and is characterised by gently undulating limestone lowland. A few small woodland blocks are scattered in the area, including the more expansive ancient Great Bradford Wood.
- Landscape Character F2 - Sandridge Park Greensand Hills. Rounded hill/ridge and steep slopes facilitate dramatic views across adjacent open clay vales to the north and south. Small scale mineral extraction has occurred in this area.

North Wiltshire Landscape Character Assessment (2004)

7.59 The district has a total of 14 Landscape Character Types with a total of 17 Landscape Character Areas. Areas of principle relevance to minerals and waste working include:

- Landscape Character Area 1 - ThamesValley Floor. A predominantly flat landscape with agricultural use of the land creating both arable and wet pasture. It is a varied landscape which includes large areas of open water and marl lakes from former gravel pits. Terrace areas around Ashton Keynes have been exploited for sand and gravel extraction which have left open water habitats, forming part of the CotswoldWaterPark. Many of the fields are valued for their high levels of biodiversity, with some being given SSSI status. Due to the wet nature of the landscape there is little settlement in the area with Ashton Keynes, Latton and Marston Meysey the notable exceptions. Drier ground to the north east edge of the area has been used for the Fairford airfield and local mineral and waste workings need to pay particular attention to the potential for birdstrike.
- Landscape Character Area 2 - Thames Valley Lowland. The area lies on Oxford Clay and forms a transition between the flatter, wetter landscapes with open water ditches and waterside willows, through to a more pastoral landscape of mixed pasture and arable, hedgerows and oak trees. As the flatter land rises to meet the villages of Witham and Purton, service land uses such as the waste disposal site at Purton become evident.
- Landscape Character Area 3 - Swindon Fringe. Rolling hills, limestone and clay are key characteristics of this landscape. The influence of Swindon is significant in the area, with ribbon development (and development pressures) along roads adjoining Wootton Bassett. Two main railway lines and the M4 motorway are also prominent features.
- Landscape Character Area 7 - Sherston Dipslope Lowland. The area lies on gently undulating land underlain by marble limestone. Agriculture is a mix of permanent pasture and arable whilst woodland cover varies. Settlement within the areas is confined to dispersed small villages, hamlets and farmsteads. Kemble Airfield lies to the north of the area whilst the M4 motorway also crosses the area. Much of the area is characterised AONB.
- Landscape Character Area 9 - By Brook Valley. This landscape is heavily valleyed and lies completely within the Cotswold AONB. The underlying geology is dominated by limestone and marble whilst clay, fullers earth and alluvial deposits are present. The area also has heavily wooded areas many of which are designated SSSI's. The area is relatively sparsely populated and Box's development is based around the mining of Bath stone. The area is mostly serviced and connected by minor roads, often single tracked (the A420 and A4 being the exceptions).
- Landscape Character Area 10 - Corsham Rolling Lowland. The area is defined by marble and cornbrash extending to well drained agricultural land. Historically the area gained in prosperity from quarrying and mining. The area has a rural character in the southern part of the area with traditional rural settlements. The intact rural character, sparse settlement pattern and prominent and slightly exposed elevation make the south of the area sensitive to development.
- Landscape Character Area 14 - Hilmarton Rolling Lowland. This landscape sits on geology of predominantly clay, Lower Greensand and Coral Rag. The landcover is mostly pasture and meadow with pockets of arable farming located on the lighter Greensand. Except for the settlement of Calne, the area is sparsely populated with much of the area characterised by scattered and isolated farmsteads. Sand extraction has been carried out east of Calne, leaving water bodies and pits used for waste disposal. The main roads in the area are the A4 and the A3102 but much of the area is accessed only by minor roads.

Salisbury Landscape Character Assessment (2008)

7.60 Almost 50% of the district's landscape falls within the Cranborne Chase and West Wiltshire Downs AONB. The district has a total of 9 Landscape Character Types and 25 Landscape Character Areas. The area is dominated by upper chalk which forms the upland landscape of the downs, the district also has significant areas of clay deposits and upper greensand terraces can be found within the Cranborne Chase AONB. Areas of principle relevance to minerals and waste working include:

- Landscape Character Area D1 - West Wiltshire Downs Chalk Downland. Situated entirely within the Cranborne Chase and West Wiltshire AONB with a surface geology of Upper Chalk. The area can be characterised by its large scale landscape of broad rolling hills and undulating land separated by dry river valleys with contrasting substantial areas of woodland. The moving corridor of the A303 running across and through the area partially reduces the sense of isolation.
- Landscape Character Area D3 - Larkhill Chalk Downland. Encompasses extensive areas of unenclosed and uninhabited grassland and scrub. The area is characterised by numerous archaeological landscape features, notably the landmark of Stonehenge. The urban edges of Amesbury and the A303 road corridor are seen as visual intrusions. The area has a number of designated SSSI's.
- Landscape Character Area D8 - Netherhampton Chalk Downland. The area is strongly influenced by the settlement edges of Salisbury and Wilton that create a human influence over the landscape and introduce a source of noise and visual intrusion. The area is characterised by intensive and widespread arable cultivation but it also supports a number of sites of nature conservation importance – notably woodland. Chalk working is also operational within the area.
- Landscape Character Area F2 - Landford Forest Heath Mosaic. The area has a predominantly rural character throughout with an associated strong sense of tranquillity. It has a variety of habitats including areas of ancient broad leaved and coniferous woodland, wood-pasture, heath, grassland and several ponds. This abundance is reflected in parts of the area being designated as SSSI and SAC. Part of the New Forest SAC also lies within the area.
- Landscape Character Area I1 - Vale of Wardour Rolling Clay Vale. Situated within the Cranborne Chase and West Wiltshire Downs AONB. The geology of the area is varied with clay, gault, portland and purbeck stone predominating. A strong wooded character with broad leaf and mixed woodland is also evident throughout. Tisbury is contained within the area whilst the Vale is also home to nationally important geological (fossil beds) and biological SSSIs. Previous quarrying activities have disturbed the landform but have created areas of biological and geological interest.

Swindon Borough Council – Landscape Character Areas (2004)

7.61 The borough has a total of 6 Landscape Character Types and 8 Landscape Character Areas. Areas of principle relevance to minerals and waste working include:

- Thames Vale. The area is characterised by clay and substantial alluvial and gravel deposits and is a generally flat, low lying large scale valley with occasional areas of higher ground. Water plays an important role in forming this landscape, which includes

a number of ditches. The area currently benefits from extensive views across to the Midvale Ridge and Highworth. The area has a few scattered villages whilst the A361 and A419 run through it.

- Midvale Ridge. The area is characterised by limestone and isolated areas of clays with rolling landform of valleys, ridge, hill and plateau tops. The area has open views across the Vale of the White Horse towards the High Downs and open views across the Thames Vale towards the Cotswolds. Numerous substantial woodlands are common whilst a number of A-roads are found in the locale.

AONB Management Plans

7.62 The Countryside and Rights Of Way Act 2000 created a statutory duty for AONB authorities to prepare and publish AONB Management Plans. These management plans should formulate policies for AONB management, including key actions for carrying out their functions in relation to their area. Management Plans have been produced for each of the 3 AONBs that cover parts of Wiltshire and Swindon – the approach taken to minerals and waste development is outlined below:

Cranborne Chase and West Wiltshire Downs AONB Management Plan 2009 – 2014

7.63 The AONB Partnership and other stakeholders seek to work together to secure the sustainable future of natural resources within and around the AONB. The Management Plan recognises the need to safeguard local identity and distinctiveness through the use of local materials. Policy F1 supports mineral extraction provided it is managed so as to conserve and enhance the natural beauty of the AONB. Policy F4 supports the ‘waste hierarchy’ advocated by the Government to help achieve the sustainable management of natural resources and waste reduction within the area where there is no harm to the distinctive characteristic of the AONB.

North Wessex Downs AONB Management Plan 2009 - 2014

7.64 Minerals and waste management issues are not dealt with specifically within this AONB Management Plan. Objective 13 of the plan seeks to ensure that the formulation and implementation of planning policy across the AONB takes full account of the purposes of designation and the character and quality of the setting.

Cotswolds AONB Management Plan 2008 - 2013

7.65 Minerals policy **NRP1 is included in the Management Plan to encourage and support**, through policies in Minerals Local DPDs, the safeguarding of supplies of natural building and roofing stone from sources of appropriate location and scale for historic repair and preservation purposes. Further, to maintain local distinctiveness where no harm is caused to the landscape and traffic is minimised, whilst discouraging the extension of quarrying for crushed rock and aggregates, except where required in the national interest.

7.66 Waste policy NR3 supports waste minimisation, recycling of waste and disposal of residual waste locally where there is no harm to the distinctive characteristics of the AONB.

Cotswold Water Park LCA

7.67 The series of lakes throughout the CWP are visible evidence of the high water table of the Upper Thames Valley which has facilitated the natural infilling with water of the gravel pits following the completion of the mineral extraction. Indeed the creation of lakes continues to be the preferred type of post extraction restoration, and has made a significant contribution to the character of the area, its recreational potential and value to wildlife. Mineral extraction

can have a direct impact on flood risk if extraction and restoration are not appropriately planned and managed. For example the risk of flooding can increase through the backfilling of sites with impermeable material, and restoration can also affect topography and the path water takes through the floodplain. However, if used appropriately, mineral extraction can be used as a mechanism for alleviating flood risk. The dynamic nature of the CWP with its changing pattern of active extraction is therefore an asset to certain species that rely on periodic disturbance and the creation of bare ground and open habitats. The timing of operations associated with the quarrying process is critical to the species dependent on these temporary habitats.

The New Forest National Park Management Plan 2010 - 2015

7.68 As stated earlier, the presence of the New Forest National Park adjacent to Wiltshire’s southern boundary means there is a potential for minerals and waste development to adversely affect the National Park. The New Forest National Park Management Plan contains strategic and aspirational objectives and actions that sit beside other plans and policies to achieve the overall Vision for the National Park. Although there are no specific references to minerals and waste development the following objectives are considered relevant:

- Objective 1 - Conserve and enhance the wealth of individual characteristics that contribute to the local distinctiveness of the villages and landscapes of the New Forest; and
- Objective 4 - Supporting local or community-based initiatives for improving energy efficiency, reducing waste, recycling, composting, food production, water conservation or producing renewable energy.

The Development Plan

Table 7.2 Policies from the Development Plan

Policy	Implications for MWDF
The Draft Regional Spatial Strategy for the South West 2006 - 2026 ⁽⁶²⁾	<p>Policy ENV2 seeks to sustain and enhance the distinctive qualities and features of the South West. Landscape character assessments are encouraged as a basis for considering development impacts and promoting quality development which enhances local character and distinctiveness. Assessments of landscape character can identify priority areas for the maintenance, enhancement and/or restoration of that character.</p> <p>The approach to nationally protected landscapes – National Parks and AONBs – is outlined in Policy ENV3. The conservation and enhancement of their natural beauty, wildlife and cultural heritage will be given priority. Additionally, this policy recognises that development outside of National Parks/AONBs can adversely impinge upon these nationally protected areas, and should not damage their natural beauty, character and special qualities or otherwise prejudice the achievement of National Park/AONB purposes.</p>

62 The Localism Bill has now been given Royal Assent and so the mechanism by which Regional Strategies will be revoked is now in place. However, orders by the Secretary of State are still required before revocation is enacted. For this reason, references to the Draft South West Regional Spatial Strategy are retained in this evidence base document.

Policy	Implications for MWDF
Wiltshire Core Strategy Pre-submission February 2012	Core Policy 51 seeks to protect, conserve and enhance Wiltshire's distinctive landscape character.
Swindon Borough Core Strategy and Development Management Policies 2026 Revised Proposed Submission Document (March 2011)	CT3 - Swindon, set within its strategic landscape context, will be at the heart of a connected and multi-functional network of green spaces.
Wiltshire Structure Plan	There are various policies having regard for the landscape and the need to protect, conserve and where possible enhance the natural beauty of the landscape including C8, C9, and MSP2. The Western Wiltshire Green Belt is outlined, the objectives of this Green Belt are to maintain the open character of undeveloped land adjacent to Bath, Trowbridge and Bradford on Avon; and to protect the setting and historic character of Bradford on Avon. Policy HE6 consider the need to protect historic towns and their settings.
Swindon Borough Local Plan (Adopted July 2006)	Development should be sympathetic to the local context and character. The importance of landscape character is outlined in Policy ENV10 which seeks to protect and enhance the character and quality of the environment. The area of North Wessex Downs AONB within the Borough is protected by Policy ENV11. The landscape setting of Highworth is identified as being of particular importance (Policy ENV12).
West Wiltshire District Local Plan (Adopted June 2004)	The landscape of the AONBs within the District should be protected and enhanced (Policy C2). Special Landscape Areas' landscape character will be conserved and enhanced in accordance with Policy C3. The District's characteristic landscape features are protected (Policy C6a), including hedges, stone walls, chalk grasslands and semi-natural and ancient woodland.
North Wiltshire District Local Plan (Adopted June 2006)	New development should have respect for the local character and distinctiveness of the area, in the consideration of materials in new development (Policy C3). Policy NE15 promotes the conservation and enhancement of the landscape character. Policy NE4: Areas of Outstanding Natural Beauty, requires development to use appropriate building materials.
Salisbury District Local Plan (Adopted June 2003)	Several policies outline the importance of using complementary, traditional materials in building design (Policy D1, D2, D3, D6) to ensure the townscape character is maintained. In rural areas, building materials should be used which are appropriate to the locality and reflect the character of the area (Policy C5, C6, C7). Salisbury and Wilton are singled out as having particularly fine landscape settings (Policy C7) where development should not impair the landscape.
Kennet District Local Plan (Adopted April 2004)	Policy NR7 takes into account that the length of time over which landscape effects remain significant should be considered. A

Policy	Implications for MWDF
	development with temporary highly adverse impacts may be more acceptable than one with permanent moderate adverse impacts. This would include minerals development (and waste development in certain instances, such as landfill) as it is a temporary use of land. The landscape character and local distinctiveness of the District should be respected: the local building character is dominated by local materials such as stone, brick, flint and tiles (Policy PD1 and para 1.23, 1.24)
Minerals Core Strategy / Development Control Policies document	The challenge for developers will be to limit the impact of quarrying activity as much as possible. The councils are confident that this can be achieved through appropriate design and implementation of a mitigation strategy which incorporates minerals restoration and aftercare, as set out within the Minerals Core Strategy and required by MDC1, 2, 5, 7 and 9.
Waste Core Strategy / Development Control Policies document	Having due regard for the landscape is set out through the Core Strategy and Policies WDC1, 2, 9 and 10. Policy WDC7: Conserving Landscape Character aims to protect and where possible enhance the quality and character of the countryside and landscape.

Sustainable Community Strategies

- 7.69** After reorganisation Wiltshire Council revised its community strategies and produced **Wiltshire's Strategy, People, Places and Promises - The Wiltshire Community Plan 2011 - 2026**. It was developed through close joint working with around 100 organisations through the Wiltshire Assembly. This has resulted in an up-to-date and relevant shared vision for Wiltshire.
- 7.70** The plan includes one vision – to build strong, resilient communities in Wiltshire, with three priorities including tackling the causes and effects of climate change, linked to seventeen broad objectives. It notes Wiltshire's environment is arguably its strongest asset and consequently to maintain these natural systems in a healthy state requires us to manage these processes actively, and to live in ways which allow such systems to stay within critical limits so that they can continue to support the county in being more resilient to future challenges. The landscape is of national and global significance and includes a wealth of archaeological and architectural treasures, including the Stonehenge and Avebury World Heritage Site, Salisbury Cathedral, and more recent industrial transport features such as the Box railway tunnel and the Kennet and Avon Canal.
- 7.71** The **Swindon Community Strategy 2008-2030** contains an objective for landscaping and open spaces in new developments to be designed to look attractive and be havens for wildlife. This will be achieved through the use of ecologically sound planting and by retaining existing features like hedges or ponds.
- 7.72** Sensitive restoration of mineral workings can help to deliver this objective.

Key Findings and Conclusions

- 7.73** The high proportion of Wiltshire and Swindon designated for its landscape value means that the impacts of minerals and waste development upon landscape character represent an important consideration for the Minerals and Waste Development Framework.

- The impact of minerals and waste development on landscape character is an important consideration for the Minerals and Waste Development Framework. The circumstances within Wiltshire and Swindon are not uniquely different from other areas of the country but nonetheless have intrinsic value worthy of conservation and enhancement. The councils have set out a number of key facts and figures relating to the landscape context of the area and has demonstrated a finer degree of detail in terms of local landscape importance and this has led to the adoption of the council's Minerals and Waste DPDs (WDC 1, 2, 7, 9 and 10; MDC 1, 2, 5, 7 and 9).
- Wiltshire and Swindon are located within an extremely varied landscape where intimate river valleys contrast with open uplands and broad vales, along with the vast sweeps of chalk downs. This is demonstrated by the presence of 38 different landscape character areas.
- The high proportion of Wiltshire and Swindon's landscape designated for its national importance is a major constraint for minerals and waste development, with 3 AONBs covering 43% of the plan area. It should be recognised that development outside AONBs can adversely impinge upon these areas, and should not damage the natural beauty, character and special qualities of AONBs. An additional 25% of Wiltshire and Swindon benefits from the protection of a local landscape designation.
- The potential for cross-boundary landscape impacts of minerals and waste development upon the New Forest National Park (NFNP), particularly with regard to the purposes of the NFNP, needs to be considered.
- Impacts on local landscapes associated with existing and future minerals and waste development will need careful and robust consideration. The policies of the adopted Minerals and Waste Core Strategies and the Development Control Documents will be used in conjunction with Landscape Character Assessments when determining proposals for future development.
- In gathering the evidence to support the emerging wider policy framework the councils recognise that the components of Wiltshire's landscape are varied and highly valued.
- In terms of future waste planning, a range of potential factors will need to be considered in the context of landscape impact. Such factors may include; the visual impact of built development (including hard standings, fencing, lighting, stacks etc). The Development Control Documents contain a range of policies designed to address such factors. However, and as detailed within our wider Evidence Base, the impacts of future waste development in Wiltshire and Swindon will also need to be considered in the light of European, National and Regional policy.
- Within the context of minerals development, it is clear from the evidence gathered that previous quarrying activity within the plan area has resulted in significant scientific interest – i.e. habitat creation for bats (around Corsham, Gastard, Box and Chilmark) and the exposure of geological and geomorphological features. In recognition of National Policy Statements (e.g. PPS7 and PPS9), the councils' adopted and emerging policy framework seeks to enhance such important features.
- Future proposals for minerals extraction, must consider impact upon landscape as the scale of such development can often lead to large scars in the rural environment. As much of Wiltshire and Swindon's quarrying activity is associated with the production of sand and gravel, the impact upon local landscapes can be considered as being relatively short term (10-25 years). Clearly, the challenge for developers will be to limit the impact of quarrying activity as much as possible. The councils are confident that this can be achieved through appropriate design and implementation of a mitigation strategy which incorporates minerals restoration and aftercare (as set out within the Minerals Core Strategy and required by MDC1, 2, 5, 7 and 9).
- It is clear from examples such as the CotswoldWaterPark that an holistic view of mineral extraction, restoration and aftercare management can be a success if appropriately planned at a landscape scale.

- Mineral resources play an important role in the physical characteristics of Wiltshire and Swindon; contributing to the formation of the landscape and the local building vernacular.
- The prevalence of minerals and waste sites in rural locations in Wiltshire and Swindon exacerbate the potential for impact upon the rural landscape; especially in river valleys where the visual impact of sand and gravel workings can be quite pronounced, in contrast with the flat landscape and lack of concealing factors.
- Minerals and waste sites should be restored to an appropriate landform and landscape character, taking on board the aims and objectives of the Wiltshire Landscape Character Assessment. This may be of particular relevance to the declining landscape condition within the Upper Thames Valley – considerate restoration of mineral workings in this area presents an opportunity to reverse this decline. After-uses which enhance landscape features will be encouraged.



8 Chapter 8: Culture, Heritage & Tourism

Introduction

- 8.1** With a wealth of archaeological and architectural treasures and many of the local landscape characteristics considered to be of national importance, the plan area attracts a large number of tourists each year making a significant contribution to the local economy.
- 8.2** Wiltshire and Swindon is home to a rich and diverse historic environment, including 20,000 known and the Stonehenge and Avebury World Heritage Site. The plan area also home to one of England's 43 battlefields, (the civil war battlefield at Roundway Down, near Devizes); approximately 1,500 Scheduled Monuments; approximately 16,000 listed buildings; 43 historic parks and gardens; and 275 conservation areas. Other tourist and recreation attractions include the three Areas of Outstanding Natural Beauty (AONB's) covering 43% of the plan area, and the part of the southern tip of the Wiltshire which has been incorporated as part of the designated New Forest National Park.
- 8.3** Collectively these are defined as heritage assets, the valued components of the historic environment, for example a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. The historic environment includes all designated and non designated areas. It also includes their settings, the wider urban and rural landscape, and the potential for unrecorded archaeology.
- 8.4** If not suitably located, minerals and waste developments can have undesirable impacts upon many of these highly valued and sensitive features within Wiltshire and Swindon. This chapter provides a contextual evidence base for the development of minerals and waste policies, covering the following areas:
- Heritage assets and historic environment;
 - Leisure and Recreation (including parks, playgrounds and sport fields Rights of Way); and
 - Tourism.

Legal Framework

National Parks and Access to the Countryside Act 1949

- 8.5** This Act makes provision for National Parks and the establishment of a National Parks Commission; to give the Nature Conservancy and local authorities' powers for:
- the establishment and maintenance of nature reserves;
 - making further provision for the recording, creation, maintenance and improvement of public paths; and
 - securing access to open country, and to amend the law relating to rights of way; to confer further powers for preserving and enhancing natural beauty; and for matters connected with the purposes aforesaid.

The Countryside and Rights of Way Act 2000

- 8.6** In 1999 the government proposed a new right of access for those on foot to certain types of land. This is often known as 'The Right to Roam' although this title is not official and can be somewhat misleading. The Act covers four main areas of interest:

- access to the countryside;
- public rights of way;
- nature conservation;
- Areas of Outstanding Natural Beauty.

8.7 The purpose of the Act is to modernise the public rights of way system, to strengthen nature conservation legislation, and to facilitate better management of AONBs. There are provisions for local authorities to establish byelaws and give greater powers of enforcement to a variety of relevant bodies. It seeks to balance the new rights with responsibilities on all parties, and codes of practice have been produced to explain these to landowners and users.

Ancient Monuments and Archaeological Areas Act 1979

8.8 The Ancient Monuments and Archaeological Areas Act schedules and protects monuments considered to be of international or national importance from disturbance. The Act requires the application for consent from English Heritage to proceed with surface or underground activity which may result in the disturbance of a Scheduled Monument.

National Policy

Planning Policy Statement 5: Planning for the Historic Environment (PPS5) 2010

8.9 This guidance replaced PPG15 and PPG16. It sets out the Government's planning policies on the conservation of the historic environment and heritage assets. The government's overarching aim is that these should be conserved and enjoyed for the quality of life they bring to this and future generations. To achieve this, the Government's objectives for planning for the historic environment are:

- to deliver sustainable development by ensuring that policies and decisions concerning the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term
- to conserve England's heritage assets in a manner appropriate to their significance by ensuring that – decisions are based on the nature, extent and level of that significance, investigated to a degree proportionate to the importance of the heritage asset, wherever possible, heritage assets are put to an appropriate and viable use that is consistent with their conservation, the positive contribution of such heritage assets to local character and sense of place is recognised and valued and consideration of the historic environment is integrated into planning policies, promoting place-shaping
- to contribute to our knowledge and understanding of our past by ensuring that opportunities are taken to capture evidence from the historic environment and to make this publicly available, particularly where a heritage asset is to be lost.

8.10 The historic environment and its heritage assets should be conserved and enjoyed for the quality of life they bring to this and future generations. There should be a presumption in favour of the conservation of designated heritage assets. Assets that have not been designated are still to be acknowledged. Identification of any previously unidentified heritage assets should take place during the pre application stage or at the earliest opportunity otherwise. Some unidentified assets are offered the same protection as designated assets. The re use and, where appropriate, modification of heritage assets should be sought in order to reduce carbon emissions and secure sustainable development. Substantial harm to or loss of designated heritage assets of the highest significance will be wholly exceptional.

Planning Policy Statement 7: Sustainable Development in Rural Areas (PPS7, 2004)

- 8.11** PPS7 sets out to give continued protection of the open countryside for the benefit of all, enhancing local distinctiveness and the intrinsic qualities of the countryside through focusing most development in, or next to, existing towns and villages and to promote sustainable, diverse and adaptable agriculture.

Planning Policy Guidance Note 17: Sport, Open Space and Recreation (PPG17)

- 8.12** PPG 17 provides a clear statement of the Government's intention to protect existing sport, open space and recreation facilities and create new ones. Its concern is to meet diverse recreational needs, from formal, organised sport through to enjoyment of local open spaces and the countryside.

- 8.13** The Government's main planning objectives for sport and recreation are to:

- promote more sustainable patterns of development by creating and maintaining networks of recreational facilities and open spaces, particularly within our urban areas;
- promote social inclusion, health and well-being by ensuring that everyone has easy access to good quality sport and recreation facilities and open space including rights of way; and
- support an urban renaissance, by making our towns and cities more attractive places in which people will choose to live.

- 8.14** The Government also remains firmly committed to protecting playing fields which are used by schools or by the wider community.

The Government's Statement on the Historic Environment for England 2010

- 8.15** This has been published to complement and underpin Planning Policy Statement 5 and the PPS5 Planning Practice Guide. The document is intended to help the government realise its vision for the historic environment through working jointly with others to achieve its aims. It states its understanding of the historic environment and the roles that government can play. There are six broad aims: Strategic Leadership, Protective Framework, Local capacity, Public involvement, Direct ownership and Sustainable ownership.

Draft National Planning Policy Framework

- 8.16** In July 2011, the Government published the draft National Planning Policy Framework (NPPF) for consultation. The Government's objective is that the historic environment and its heritage assets should be conserved and enjoyed for the quality of life they bring to this and future generations. To achieve this, the Government's objectives for planning and the historic environment are to:

- Conserve heritage assets in a manner appropriate to their significance; and
- Contribute to our knowledge and understanding of our past by capturing evidence from the historic environment and making this publicly available, particularly where a heritage asset is to be lost.

Relevant Plans and Strategies – The Development Plan

Table 8.1 Draft Regional Spatial Strategy for the South West 2006–2026 (RSS)⁽⁶³⁾

Policy	Implications for MWDF
ENV1 Protecting and Enhancing the Regions Natural and Historic Environment	Promotes a hierarchical approach to protecting the natural and historic environment with preference to avoiding, then mitigating and finally compensating any impacts of development. Minerals and Waste DPDs could adopt this impacts hierarchy.
ENV5 Historic Environment	Minerals and Waste DPDs should ensure that associated development preserves and enhances the historic environment.
LCF1 Local Cultural Facilities	Seeks to protect and enhance cultural facilities such as libraries, museums, village halls, places of worship, playing fields and community sports centres. Minerals and Waste DPDs will have to take this policy into consideration when formulating policies and considering suitable locations for development.
GI1 Green Infrastructure	Seeks to encourage protection and development of green infrastructure including parks, woodland, informal open spaces, nature reserves and historic sites.
TO1 Sustainable Tourism	It may be possible for restoration and after-use of some minerals developments to contribute to delivery of this policy

Wiltshire and Swindon Structure Plan

Table 8.2

Policy	Implications for MWDF
HE1 World Heritage Site – Stonehenge / Avebury	This policy seeks to protect the World Heritage Site from inappropriate development. A possible impact of minerals and waste development may be the result of transport.
HE2 Other sites of archaeological or historic interest.	This policy promotes a presumption in favour of the physical preservation of archaeological or historic remains in situ.
HE3 Parks and Gardens & HE4 Historic Battlefields	Seeks to protect these sites from inappropriate development.
RLT3 The recreational Use of Water & RLT4 Other Canals	Seeks to protect and enhance existing and historic alignments of canals. Minerals development in the north of the plan area may potentially occur near to historic canal alignments such as the Wilts and Berks or Trent Severn Canal.
RLT5 The Cotswold Water Park – Sport Recreation and Tourism	Encourages water based sport, recreation and tourism in the Cotswold Water Park. Should influence restoration schemes for minerals and waste development in this area.

63 The Localism Bill has now been given Royal Assent and so the mechanism by which Regional Strategies will be revoked is now in place. However, orders by the Secretary of State are still required before revocation is enacted.

Policy	Implications for MWDF
HE6 Landscape Settings	This policy protects the landscape settings of the historic towns of Bradford on Avon, Devizes, Highworth, Malmesbury, Marlborough, Salisbury, Warminster, Wilton and Wootton Bassett.
HE7 Conservation Areas and Listed Buildings	Protects Conservation Areas and Listed Buildings from adverse development.

Development Plan Policies

Table 8.3 Development Plan Policies

Policy	Implications for MWDF
Wiltshire Core Strategy Pre-submission February 2012	
Core Policy 58 - Ensuring the conservation of the historic environment	Development should protect, conserve and where possible enhance the historic environment, and should not have an unacceptable impact on the historic environment, particularly where this could be avoided or mitigated.
Core Policy 59 – The Stonehenge, Avebury and associated sites World Heritage Site and its setting	The Outstanding Universal Value (OUV) of the World Heritage Site and its setting will be protected and enhanced.
Swindon Borough Core Strategy and Development Management Policies 2026 Revised Proposed Submission Document (March 2011)	
CT3 Safeguarding our environment for future generations	Swindon's heritage assets will be protected and enhanced including; historic buildings, conservation areas, historic parks and gardens and archaeology
SO8 Culture	By 2026 Swindon's cultural and leisure facilities will have been enhanced to be commensurate with Swindon's size. Culture will enrich the communities of the Borough. Growth at Swindon will respect and enhance its historic environment.
Minerals Core Strategy / Development Control Policies documents	
MDC 1, 2, 5, 7	Effective heritage protection needs to strike a balance between protecting and enabling appropriate change.
Waste Core Strategy / Development Control Policies documents	
WDC 1, 2, 9	Effective heritage protection needs to strike a balance between protecting and enabling appropriate change.

Sustainable Community Strategies

- 8.17** After reorganisation Wiltshire Council revised its community strategies and produced **Wiltshire's Strategy, People, Places and Promises - The Wiltshire Community Plan 2011 - 2026**. It was developed through close joint working with around 100 organisations through the Wiltshire Assembly. This has resulted in an up-to-date and relevant shared vision for Wiltshire.
- 8.18** The plan includes one vision – to build strong, resilient communities in Wiltshire, identifying Wiltshire's environment as one of its strongest assets, linked to seventeen broad objectives. It states that the landscape is of national and global significance and includes a wealth of archaeological and architectural treasures, including the combined World Heritage sites of Stonehenge and Avebury, Salisbury Cathedral, and more recent industrial features such as the Box railway tunnel and the Kennet and Avon Canal.
- 8.19** The **Swindon Community Strategy A Shared Vision for Swindon 2008-2030** contains the following relevant priority:
- *To invest in its leisure and cultural offering.*
- 8.20** The community strategy objectives are non-specific in terms of particular schemes or locations and are indirectly related to minerals and waste development. They therefore can only in part be delivered through minerals and waste developments where appropriate.

Other Relevant Plans and Strategies

The Wiltshire Local Transport Plan (LTP)

- 8.21** The LTP states that a high proportion of visitors to Wiltshire and Swindon arrive by car, which has an impact on the local highway network, especially in rural areas. This increase in traffic results in increases in noise and air pollution, safety concerns, and discourages people from more sustainable activities such as walking, cycling, and horse riding. Hotspots in the County include Avebury, Stonehenge, Salisbury, Bradford on Avon, Castle Coombe, and Lacock, as well as in the three AONBs.

Swindon Culture and Leisure Strategy 2003 - 2013

- 8.22** The purpose of the Local Cultural Strategy (LCS) is to promote the cultural well-being of the Swindon. The aim of this strategy is to recognise and acknowledge the diversity of the borough and to balance the needs and interests of all who live in it. The development of the LCS will be able to directly contribute to and influence this long-term development of the town.
- 8.23** The LCS sets in place a number of principles for cultural planning and cultural development over the next ten years - principles which are shared and agreed by all Swindon Borough Council departments and partner organisations, and which complement SBC service-based strategies and plans and those of their partners.
- 8.24** This is to be achieved through the promotion of existing facilities, and to plan and develop for future facilities, including parks, museums and meeting halls.

Kennet and Avon Canal Conservation Plan

- 8.25** This plan seeks to ensure a sustainable future for the canal through four objectives: to conserve the canal; for the enjoyment of all and as a unique example of a working canal; to provide a habitat for wildlife and conserve and enhance the character and setting of the canal.

Other Relevant Documents

Rights of Way Improvement Plan for Wiltshire County Council 2008-2012

- 8.26** The Countryside and Rights of Way Act 2000 introduced a duty for all local highway authorities to prepare a Rights of Way Improvement Plan (ROWIP). Wiltshire's ROWIP was published in 2008. It sets out the council's aspirations and action plan for providing a well-maintained, easy to use and fit for purpose range of public rights of way and access routes that are appropriately promoted to both locals and visitors, in order to enhance their enjoyment of the countryside. The ROWIP will be updated in 2012 to become the strategic plan for the council's Rights of Way and Countryside Service.

White Paper: Heritage Protection for the 21st Century. English Heritage (2007)

- 8.27** The White Paper sets out English Heritage's vision for a new heritage protection system and argues that heritage protection needs to be an integral part of a planning system that can deliver sustainable communities.
- 8.28** The White Paper recognises the importance of the heritage protection system in preserving our heritage for people to enjoy now and in the future and improvements are set out around three core principles:
- Developing a unified approach to the historic environment;
 - Maximising opportunities for inclusion and involvement; and
 - Supporting sustainable communities by putting the historic environment at the heart of an effective planning system.
- 8.29** The vision is for an understandable and accessible heritage protection system that engages the public in decisions on protection, and provides wide opportunities for public involvement.
- 8.30** It is seen as essential that the importance of the historic environment is promoted within the planning system, whilst bringing heritage protection in line with ongoing planning reforms. Effective heritage protection needs to strike a balance between protecting and enabling appropriate change.
- 8.31** The paper suggests that management plans could be created for each World Heritage Site and, where needed, the delineation of a buffer zone around it.

Mineral Extraction and Archaeology: A Practice Guide

- 8.32** The guide is prepared by the Minerals and Historic Environment Forum . It provides guidance specifically for dealing with archaeological remains as part of mineral development through the planning process. The principal purpose of this Practice Guide is to provide clear and practical guidance on the archaeological evaluation of mineral development sites, particularly for the determination of individual planning applications for minerals development.

- 8.33** *“Archaeological remains’ encompasses those elements of the historic environment that include buried and above-ground remains, including anything which provides evidence of the impact of past human activity upon landscapes” (para 2 p.3).*
- 8.34** The Minerals and Historic Environment Forum agrees that:
- Archaeological resources are not equal in value; those of international or national importance require the highest level of protection from competing development; and
 - It is the role of the planning system to reconcile the needs of the historic environment and minerals development in the context of sustainable development.
- 8.35** Early identification of the potential impacts of a proposed development is a key element in achieving sustainable minerals development and appropriate treatment of archaeological remains.
- 8.36** There is a direct link between certain types of landform and kinds of archaeological and environmental remains (Waddington and Passmore, 2006⁽⁶⁴⁾).
- 8.37** The historic environment is an important consideration in any EIA. A website created by the Planarch 2 partnership⁽⁶⁵⁾ has identified good archaeological practice based on experience of EIA implementation. The operational principles are intended to provide a rigorous, robust and reasonable framework for ensuring that the historic environment is appropriately treated in the EIA process.
- 8.38** English Heritage has additional criteria above that of the former national planning policy document PPG16: Archaeology and Planning (since replaced by PPS5), identified as ‘amenity value’. The amenity value is assessed in terms of its visibility and its physical and intellectual accessibility.

Mineral Extraction & the Historic Environment 2008

- 8.39** This statement sets out English Heritage’s stance on mineral extraction and the historic environment. Its primary concerns are:
- the historic significance of mining and quarrying sites and landscapes
 - the impacts on the historic environment that can be caused by mineral extraction together with advice on appropriate mitigation measures and realising benefits to understanding of the historic environment that may be gained through mineral working
 - the need for and supply of natural stone and other materials required to conserve the historic environment and maintain local distinctiveness.
- 8.40** The position statement identifies the following principal impacts of minerals development as being:
- the mineral extraction area
 - waste heaps
 - ancillary works such as haul roads, bunds, processing plants etc.
 - vibration damage and noise
 - impacts on buried remains caused by mitigation planting of trees
 - reduction in landscape legibility

64 Waddington, C and Passmore, DG. (2006) ‘Planning for the Future: Historic Environment Planning Guidance for the Till-Tweed Valleys, Northumberland, UK’. Morpeth: Northumberland County Council.

65 See: <http://www.planarch.org/>

- dewatering of surrounding landscape, with potential impacts on archaeological remains (including palaeoenvironmental deposits) and historic buildings
- subsidence
- dust and airborne pollution
- movements of heavy traffic
- long-term effects on setting, landscape character and, where present, the industrial archaeological remains of earlier workings
- compound effects e.g. dewatering in conjunction with farming and irrigation

8.41 The document goes on to state that ‘English Heritage will not normally oppose mineral-related development proposals that are consistent with national, regional and local planning policies on the historic environment’⁽⁶⁶⁾. However, some approaches to identifying appropriate mitigation measure for developments are suggested.

Boundless Horizons: Historic Landscape Characterisation (English Heritage, 2001)

8.42 ‘Boundless Horizons’ provides a summary account of the aims and ambitions of English Heritage’s Historic Landscape Characterisation (HLC) programme which focuses on aspects of the landscape that have not always been regarded as archaeological. HLC considers components of the landscape that are ‘natural’ but nonetheless the product of centuries of human action, such as hedgerows, woodland, ponds and modified watercourses. It also takes into account more intangible matters reflected in its physical structure; time-depth, and patterns such as settlement, land-use and the mixture of enclosed and non-enclosed land, arable and grazing, woodland and parking. HLC can be considered a useful tool for broadening understandings of landscape as a whole and contributing to the decision-making process.

8.43 HLC works using computerised Geographic Information Systems (GIS) that attribute blocks of land to landscape types. Historic Landscape Types are based on historic processes, land-uses and appearance. It can, for example be used to identify areas mainly characterised by mineral extraction and industry. HLC can provide strategic information for development plans, detailed data for development control, help to assess the environmental impact of major developments, influence the character and location of landscape change and development, and contribute to rural and urban planning and development policies. In this way, HLC can be used to inform development proposals and in particular enhance the restoration and after-use of minerals development. HLC also ensures that, in addition to archaeological assessment, the potential adverse impacts from development on the historic landscape and cultural heritage assets are taken into account in development proposals.

8.44 It is worth noting that at the time of writing, the HLC project does not cover the whole of Wiltshire and Swindon. It is anticipated that coverage will be extended in the future.

Good Practice Guide on Planning for Tourism

8.45 Travel and tourism is a huge industry of enormous economic importance. Most communities in the UK feel its effects in some way. Tourism is one of the largest industries in the UK worth approximately £74 billion a year which is approximately 6.4% of GDP. It is worth noting that tourism supports around 2.2 million jobs - around 7.7% of all people in employment in Great Britain, and is the sixth biggest employer type in the UK, and one of the largest employers in the south west region.

- 8.46** This guidance seeks to ensure planners understand the importance of tourism and, together with the tourism industry work together to develop tourism in a sustainable manner. The planning system should take a proactive role in encouraging and developing tourism therefore having economical, social and environmental benefits to the area.
- 8.47** It notes that tourism can achieve sustainability in the environment by achieving small scale improvements including recycling and sourcing materials locally⁽⁶⁷⁾.
- 8.48** It is worth noting that the recently cancelled PPG21⁽⁶⁸⁾ (replaced by this Good Practice Guidance), showed that tourism brought in 23 million overseas visitors to Britain in 2001 and is our largest invisible export earner.

Tomorrow's Tourism

- 8.49** The Government's policy is to encourage tourism to be world-class in every respect. It wishes to see tourism grow rapidly and to be used as a driving force in bringing about development that contributes to the nation's economic, social and cultural well-being. This will be facilitated by modernising infrastructure such as hotels, restaurants and transport links and linking it with new infrastructure located to support the long-term sustainable development of the industry.
- 8.50** However, in the interests of sustainable development, it notes that care must be taken to ensure the broader fabric on which tourism in the UK depends, (our environment, heritage, culture, and the diversity of our landscape and local communities), is upheld. So tourism growth should be handled carefully to be a part of regeneration projects, to stimulate growth, develop and attract new businesses and revitalise run down areas; and provide much needed training and employment opportunities for large numbers of people. Tomorrow's Tourism seeks to:
- contribute to revitalising rural economies and communities;
 - enable the conservation of many historic buildings and landscapes that might otherwise be lost;
 - contribute to nature conservation and biodiversity; and
 - foster social inclusion and widen access to culture, heritage and the countryside.
- 8.51** Minerals development in particular through restoration of sites, will be able to make a contribution to tourism.

The Historic Environment

- 8.52** The historic environment includes both archaeological and built heritage assets and their settings. The plan area is rich in historical treasures including the World Heritage Site (WHS) of Stonehenge and Avebury, over 1500 Scheduled Monuments (SMs), over 20,000 sites of archaeological or historic remains (recorded on the councils' Sites and Monuments Record) and 1 Historic Battlefield. There are market towns and villages set in large expanses of countryside, with steep hillsides and river valleys. This historic environment makes a major contribution to the economic development of the plan area acting as a magnet for tourism, creating an attractive environment for people to live and work.
- 8.53** The Council's Archaeology Service protects and records archaeological remains. The service advises the planning services in Wiltshire and Swindon, negotiates with landowners and developers in order to minimise the impact of development on known sites and those with

67 Paragraph 5.11, Good Practice Guide for Tourism, DCLG, 2006

68 Planning Policy Guidance Note 21 on tourism, 1992

archaeological potential. A key tool in the delivery of this advice is the Historic Environment Record (HER), a computerised database and mapping system recording all known sites and find spots.

- 8.54** The Monuments at Risk Survey of England 1995⁽⁶⁹⁾ stated that mineral extraction has had a large impact on archaeological monuments, with 12% of observed cases of complete destruction and 3% of piecemeal loss of sites attributable to the extraction of minerals.

Stonehenge, Avebury and Associated Sites (WHS)

- 8.55** The Stonehenge and Avebury World Heritage Site (WHS), the only prehistoric World Heritage Site in England, was inscribed on the World Heritage List in 1986. Under the Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO, 1972) the United Kingdom is obliged to protect, conserve and present the outstanding universal value of the World Heritage Site and ensure that it is transmitted to future generations. The site covers a landscape of c.2,600 hectares (ha) around Stonehenge and 2,550 ha at Avebury.
- 8.56** The protection of a World Heritage Site is the responsibility of the government, working with the local authorities, statutory bodies, landowners and other stakeholders. In the UK, World Heritage status does not imply any additional statutory controls. To ensure that all World Heritage Sites are managed in a sustainable way, Management Plans are recommended by UNESCO. It is UK government policy that the requirements of the Convention are met in part by the preparation of World Heritage Site Management Plans. The implementation of the WHS Management Plan relies on the effective co-operation of the stakeholders. The World Heritage Planning Circular (07/09) provides information on responsibilities. At Stonehenge, the WHS Management Plan (2009) was endorsed by Wiltshire Council as supplementary guidance and a material consideration, and there are WHS related policies in the South Wiltshire Core Strategy. For Avebury half of the WHS, Kennet District has specific saved policies in its Local Plan and there is a WHS Management Plan (2005) in place endorsed by the council.

Draft Statement of Outstanding Universal Value for Stonehenge, Avebury and Associated Sites World Heritage Site (2010)

- 8.57** The Statement of Outstanding Universal Value (SOUV) summarises exactly what it is that makes Stonehenge and Avebury internationally important. It was submitted to UNESCO's World Heritage Centre in Paris in February, 2011. The process of evaluation by UNESCO will take at least 18 months but the draft SOUV already carries weight in the planning process and should assist in better protecting, conserving and managing the World Heritage Site.

Historic Environment Record (HER)

- 8.58** This is a database of all recorded archaeological finds within the County and Borough. The HER database is compiled by the Wiltshire and Swindon History Centre and holds over 20,000 records.
- 8.59** Archaeological sites on the HER that are considered to be of national importance are classed as Scheduled Monuments. Any development that may affect a HER requires a Scheduled Monument Consent from English Heritage. There are approximately 1,570 SMs within the plan area, many of which are located within or near to areas with potential for mineral extraction.

69 The Monuments at Risk Survey of England 1995 (Darvill and Fulton, 1998).

Other Heritage Sites

8.60 The plan area is home to many other cultural and heritage sites including the Ridgeway National Trail, Salisbury Cathedral and Roundway Battlefield. Wiltshire Art Collections are housed at the Salisbury Art Gallery, and Swindon is home to the Steam Museum in the centre of the town. All these attractions draw tourists and sightseers from a wide area and provide education to the community.

8.61 In addition the museum service provides advice and support to 16 museums across Wiltshire, working closely with the Conservation Service in the management of their collections. Museum Service staff also provide advice and information for groups contemplating new museum projects.

Listed Buildings, Parks & Gardens and Conversation Areas

8.62 Listed Buildings are those registered on a statutory list of buildings of 'special architectural or historical interest'. They are graded to indicate their relative level of importance and fall into one of the three grades below:

- Grade I buildings are those of exceptional interest
- Grade II* are particularly important buildings of more than special interest
- Grade II are of special interest, warranting every effort to preserve them

8.63 Information regarding Listed Buildings in Wiltshire and Swindon is included in the table below.

Table 8.4 Listed Buildings, Parks and Gardens and Conservation Areas within Wiltshire & Swindon ⁽⁷⁰⁾

	Wiltshire	Swindon	Plan area
Listed Buildings			
Grade I	281	14	295
Grade II*	697	27	724
Grade II	11,228	613	11,841
Total	12,206	654	12,860
Parks and Gardens			
Grade I	7	-	7
Grade II*	11	-	11
Grade II	22	3	25
Total	40	3	43
Conservation Areas			
	244	28	272

70 National Heritage List, English Heritage 2011

Tourism and Recreation

Great Western Community Forest

8.64 The Great Western Community Forest is one of 12 community forests in England where local people and organisations are working together to create a better environment. The Great Western Community Forest project aims to provide a high quality environment for homes, employment, education and recreation. It covers 140 square miles (the borough as a whole), stretching from Royal Wootton Bassett to Faringdon in Oxfordshire and from the Marlborough Downs to the River Thames. The Great Western Community Forest was founded in 1994 in part as a result of priorities for environmental protection and sustainable living, established in the Rio Earth Summit Agreement of 1992. The restoration of mineral workings can contribute local initiatives including Community Forests⁽⁷¹⁾.

The Cotswold Water Park

8.65 A significant area of sand and gravel extraction on the Wiltshire and Gloucestershire border has been established as a recreational area - the Cotswold Water Park. It comprises a large area of lakes that have been (and still are being) developed and supported by private owners and Local Authorities. There are water-based sports, recreation and tourism, alongside nature conservation.

The New Forest National Park

8.66 The New Forest National Park was created in March 2005 and the New Forest National Park Authority gained full planning powers in April 2006. Its purpose is to conserve and enhance the natural beauty, wildlife and cultural heritage of the Park, and to promote opportunities for understanding and enjoyment of its special qualities. It is the eighth national park in England, and the first to be created for nearly 50 years. The National Park lies mainly in north west Hampshire however a small area of south east Wiltshire lies within its boundary.

8.67 It is a popular area for residents and visitors alike to enjoy. It draws over 13 million visitors every year, attracted by its natural beauty, wildlife, cultural heritage and by the recreational opportunities it offers.

Cranborne Chase and West Wiltshire Downs AONB Historic Landscape Characterisation

8.68 A HLC Project for the Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty (AONB) is currently being undertaken. The AONB covers 380 square miles of Dorset, Hampshire, Somerset and Wiltshire. The HLC project splits the 380 square miles of AONB into 4,438 separate areas of Historic Landscape Type.

8.69 At the most general level the broad land use in today's landscape is recorded. Figure 4 shows the areas of landscape that are enclosed, unenclosed, wooded, parkland (designated and ornamental), water or used for modern purposes such as recreation.

8.70 In comparison, Figure 5 provides details of the current historic landscape character of the AONB. For example, of the 77,916 hectares of enclosed land within the AONB, 15% retains characteristics which are pre-18th century in origin, 37% retains 18th and 19th century characteristics, 43% is predominantly 20th century in character, while 5% reflects enclosed types such as assarts and orchards which date from a range of periods.

Public Rights of Way

8.71 There are 6562 km of public footpath in Wiltshire and Swindon.

Table 8.5 Rights of Way in Wiltshire and Swindon

	Public Footpath	Public Bridleway	Byways open to all traffic	Restricted Byways ⁽⁷²⁾	Total
Wiltshire	3957 km	1522 km	819 km	224 km	6162 km
Swindon	204 km	124 km	10 km	2 km	340 km

- 8.72** The Rights of Way network in Wiltshire is managed through a pro-active parish maintenance programme which operates on rotation within each of the northern, eastern, southern and western areas of the county. In addition, particular attention is paid to nationally promoted routes such as The Ridgeway and the Thames Path National Trails, to locally promoted long-distance and strategic paths, and to those paths which provide important links within and between communities. Circular routes are recognised as being of particular value. The maintenance and improvement work carried out by the Rights of Way Wardens is increasingly supplemented by the work of volunteers within local communities and by rights of way user groups such as The Ramblers and Tread Lightly. The Council is keen to encourage more local people to become involved in caring for the paths in their area, where possible through their parish and town councils.
- 8.73** The work carried out on the paths themselves is facilitated by the Definitive Map and Highway Records Officers, who keep the legal record of public rights of way and other access in the county up-to-date by progressing a variety of applications for route changes to enable development to take place once planning consent has been obtained, to facilitate better management of land and to improve access. They also deal with applications to register unrecorded public rights of way where evidence of their existence has been found, and to register new Town and Village Greens.
- 8.74** The Rights of Way and Countryside services within Wiltshire Council were brought together in January 2011. The Council owns and manages a number of countryside sites where there is extensive public access, including Barton Farm Country Park at Bradford on Avon, Biss Meadows Country Park in Trowbridge, Southwick Country Park and Oakfrith Wood at Urchfont.
- 8.75** Swindon Borough Council recognises the importance and strategic effect of both the Ridgeway and Thames Path National Trails running through the Borough and actively participates in their management, both at local and national level. The Council promotes the use of its network through, for example, its support for the Great Western Community Forest Strategy.
- 8.76** The councils work in partnership with Town and Parish councils, Rights of Way user groups, landowners and occupiers, conservation and heritage organisations, individual members of the public and the Wiltshire and Swindon Local Access Forum.

⁷² Restricted Byways may not be used by mechanically propelled vehicles but can be used by horse-drawn vehicles

Tourism

8.77 There are many facilities in Wiltshire and Swindon that attract large numbers of visitors each year. These are of a diverse nature ranging from the large estates / manor houses, holiday villages and race circuits to name but a few. Swindon's railway heritage is attracting an increasing number of visitors, and the attraction at Lydiard Park, through its restoration of its gardens will become a heritage site of national importance, will draw more visitors. The table below shows local tourist attractions, and the number of visitors they attract.

Table 8.6 Wiltshire and Swindon Tourist Attraction Visitor Numbers 2008⁽⁷³⁾

Attraction	Visitor numbers
Stonehenge	883,603
Longleat	875,000 ⁽⁷⁴⁾
Stourhead	329,169
Brokerswood Country Park	66,236
Courts Garden	37,861
Avebury Manor & Garden	44,285
Great Chalfield manor	12,000
Lacock Abbey	104,392
Mompesson House	41,628
Old Sarum Castle	51,233
Old Wardour Castle	26,038
Swindon & Cricklade Railway	12,040

8.78 In 2008 tourism related employment for Wiltshire was 19,595 people, 6% of the total employment for the area, with a total spend of £779,335⁽⁷⁵⁾.

8.79 The councils provide and manage 16 sites for public access. Many other sites have been opened to the public by the Forestry Commission, the National Trust, nature conservation bodies and other organisations and landowners.

Key Findings

- Minerals and waste development can potentially impact on historic environment, heritage, leisure and tourism within the plan area. However, this development can be mitigated to respect the local character and distinctiveness of an area through carefully thought out conditions attached to allocated sites in the MWDF and in the planning permission of permitted sites.
- Heritage protection is an integral part of the planning system and hence must be fully considered within the context of future minerals and waste development.

73 Wiltshire Intelligence Network

74 Lord Bath interview, Wiltshire Times 2010

75 South West Tourism

- Effective heritage protection needs to strike a balance between protecting and enabling appropriate change. The policies of the Development Control documents (WDC 1, 2, 9 and MDC 1, 2, 5, 7) seek to address this aim.
- Early identification of the potential impacts of a proposed development is a key element in achieving sustainable minerals development and appropriate treatment of archaeological remains.
- Development can uncover previously unknown archaeological remains and when excavated can preserve them in record. In cases where remains considered of national importance are uncovered, there is a presumption in favour of preservation in situ.
- There are known significant archaeological remains in some of the site allocations for both minerals and waste sites and that these will be dealt with appropriately in accordance with both national legislation and policy guidance and local planning policies.
- Waste policies can influence new developments through waste audits and provision of recycling facilities. When developing attractions, waste management must be considered and site allocations are made due to the demand in the relevant areas.
- In conjunction with Landscape Character Assessment, a number of additional tools are being developed to provide greater understanding of local areas. One such tool is Historic Landscape Characterisation (HLC) which is being developed as a methodology for broadening the understanding of landscape as a whole and hence will contribute to the decision-making process. The councils would recommend developers consider HLC when designing proposals for new development.
- HLC can be used to inform development proposals and enhance the restoration and after-care use of minerals development.
- Minerals and waste sites form part of the infrastructure of the plan area. They provide essential production of materials and the management of waste not only in the plan area but have regional and national significance. Through heeding government policy and guidance we can balance the protection and enhancement of the plan area, whilst maintaining the needs of our community.

9 Chapter 9: Biodiversity and Geodiversity

Introduction and background

- 9.1** Minerals and waste development can have significant impacts upon biodiversity, both positive and negative, and therefore it is an important issue for the Minerals and Waste Development Framework (MWDF) to consider. This chapter outlines the importance of biodiversity and geodiversity within Wiltshire and Swindon and seeks to assess how minerals and waste development can affect these.
- 9.2** **Biodiversity** is a term used to describe “the variety of living things”⁽⁷⁶⁾. It includes all species of plants and animals, the genetic variation amongst them and the complex ecosystems of which they are part. Recognition of the importance of biodiversity came to prominence at the Rio Earth Summit (1992) when more than 150 heads of Government signed a convention aimed at preserving the global diversity of habitats and species.
- 9.3** PPS9⁽⁷⁷⁾ takes this a stage further by incorporating geological conservation into biodiversity guidance, acknowledging sites that are also designated for their geology and/or geomorphological importance. **Geodiversity** describes the “variety of rocks, fossils, minerals, landforms and soils, along with the natural processes that shape the landscape”⁽⁷⁸⁾. PPS 9 states that where significant harm to biodiversity and geological interests cannot be adequately avoided, mitigated against, or compensated for, planning permission should be refused⁽⁷⁹⁾.
- 9.4** Minerals and waste developments have historically made use of both urban and, especially in the case of minerals extraction and waste landfill in Wiltshire, rural sites. Geological circumstances dictate that minerals extraction and waste landfill will only take place in certain locations. Wiltshire is a largely rural authority and whilst minerals and waste development is encouraged to occur as close to urban areas as possible, it is inevitable that a proportion of future minerals and waste development within Wiltshire and Swindon will take place in rural locations. This gives rise to the possibility that sites of biodiversity importance, which are mostly located in rural areas, will be affected by minerals and waste development.
- 9.5** Government policy⁽⁸⁰⁾ dictates that minerals and waste Local Development Documents (LDDs) should consider impacts upon habitat loss and sites of nature conservation. The public place great weight on the protection of valuable biodiversity. A public survey undertaken in 2006⁽⁸¹⁾ found that “land with important or endangered wildlife” is the most important type of land to protect from development; as stated by over 70% of respondents.

Legal framework

Convention on wetlands of international importance especially water fowl (the 'Ramsar Convention' or 'Wetlands Convention')

- 9.6** The Ramsar Convention was adopted in Ramsar, Iran in February 1971 and entered into force in December 1975. The Convention covers all aspects of wetland conservation and wise-use. It include three main 'pillars' of activity:
1. Designation of wetlands of international importance as Ramsar sites

76 Wiltshire Biodiversity Action Plan, 2008

77 PPS9: Biodiversity and Geological Conservation, ODPM, 2005

78 Local Geodiversity Action Plans – Sharing Good Practice, English Nature, 2004

79 PPS9: Biodiversity and Geological Conservation, ODPM, 2005

80 MPS2: Controlling and Mitigating the Effects of Minerals Extraction in England, ODPM, 2005; and PPS10: Planning for Sustainable Waste Management, ODPM, 2005; Annex E

81 Ipsos MORI poll for the 'Barker Review of Land Use Planning', HM Treasury, 2006

2. Promotion of wise-use of all wetlands in the territory of each country
3. International co-operation with other countries to further the wise-use of wetland and their resources.

9.7 The UK ratified the Convention in 1976 and has generally chosen to underpin the designation of its Ramsar sites through prior notification of these areas as Special Sites of Scientific Interest (SSSIs) which receive protection under the Wildlife and Countryside Act 1981 (as amended) and further protection by the Countryside and Rights of Way (CRoW) Act 2000.

Convention on the conservation of European wildlife and natural habitats (the 'Bern Convention')

9.8 The Bern Convention was adopted on September 1979 in Bern (Switzerland) and came into force on 1 June 1982. It has 40 Contracting Parties including 35 Member States of the Council of Europe as well as the European Union. The aims of the Convention are 'to conserve wild flora and fauna and their natural habitats, especially those species and habitats whose conservation requires the co-operation of several States, and to promote such co-operation. Particular emphasis is given to endangered and vulnerable species, including endangered and vulnerable migratory species'.

European Union Directive on the conservation of wild birds (2009/147/EC)

9.9 Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (this is the codified version of Directive 79/409/EEC as amended) is the EU's oldest piece of nature legislation and one of the most important, creating a comprehensive scheme of protection for all wild bird species naturally occurring in the Union. The directive recognises that habitat loss and degradation are the most serious threats to the conservation of wild birds.

EC Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) (The Habitats Directive)

9.10 The EU Habitats Directive aims to protect the wild plants, animals and habitats that make up our diverse natural environment. The directive created a network of protected areas around the European Union of national and international importance; called Natura 2000 sites. These sites include:

- Special Areas of Conservation (SACs) - these support rare, endangered or vulnerable natural habitats, plants and animals (other than birds).
- Special Protection Areas (SPAs) - support significant numbers of wild birds and their habitats.

9.11 In the UK, the Habitats Directive is implemented by the Conservation of Habitats and Species Regulations 2010, more commonly known as the Habitats Regulations.

National legislation

The Wildlife and Countryside Act 1981 (as amended)

9.12 This Act is the principle mechanism for the legislative protection of wildlife in Great Britain (it does not extend to Northern Ireland, the Channel Islands or the Isle of Man) and is the means by which the the Bern Convention, the Birds Directive (79/409/EEC) and Habitats Directive (92/43/EEC) are implemented in Great Britain. The Wildlife and Countryside Act is divided into four parts.

- Part I is concerned with the protection of wildlife
- Part II relates to the countryside and national parks (and the designation of protected areas; SSSIs)
- Part III covers public rights of way
- Part IV deals with miscellaneous provisions of the Act.

9.13 This act is supplemented by the Habitat Regulations (1994 as amended) and the Countryside and Rights of Way (CRoW) Act 2000 (see below).

Conservation of Habitats and Species Regulations 2010

9.14 This Act Implements Council Directive 92/43/EEC (set out above) on the conservation of natural habitats and of wild fauna and flora and makes it an offence to deliberately capture, kill or disturb or trade in protected animals; and to remove or trade in protected plants.

Countryside and Rights of Way (CRoW) Act 2000

9.15 This Act is widely known as introducing the public's "right to roam" over open country in England and Wales where previously there was no public right of way. It provides for public access on foot to certain types of land, amends the law relating to public rights of way, increases 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).

9.16 A paper, prepared by DEFRA under Section 74(2) of the Countryside and Rights of Way Act 2000⁽⁸²⁾, identifies the habitats and living organisms (species) which the Secretary of State considers are of principal importance for the conservation of biological diversity in England, in accordance with the 1992 UN Convention on Biological Diversity.

9.17 The Biodiversity Strategy for England sets out the means by which the Government will comply with its duty under Section 74 to further the conservation of the listed habitats and species, through the continued implementation of the Action Plans.

9.18 **Government Circular: Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system, ODPM (2005)**

9.19 The circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. A planning authority is required to notify English Nature (Natural England) before granting planning permission for development likely to damage a SSSI, even if the development is not located in the SSSI. Importance is placed on the Waddenzee judgement where an authority must make certain that a plan or project will not adversely affect the integrity of a site, where no reasonable scientific doubt remains.

9.20 If a site hosts a priority habitat or species, permission to disturb it will only be granted in the interests of overriding public interest (those relating to human health, public safety or beneficial to the environment). However, local authorities should take steps to conserve habitats and species of principle importance.

9.21 Under the Ramsar Convention, compensatory measures should be provided for the loss of conservation interests. These should provide, as a minimum, no net loss to the overall value of the site either through quality or area. Planning authorities should recognise that development may affect a SSSI some distance away. Features of the landscape that are of

82 Countryside and Rights of Way Act 2000, Section 74: List of habitats and species of principal importance for the conservation of biological diversity in England

major importance such as wild flora and fauna, veteran and substantial trees (such as ancient semi natural woodland) should be managed biodiversity contributions. Consideration should be given to their nature conservation value.

9.22 The circular details the regulation requirements for European protected species of animals, protection of birds, protection of plants and the protection of badgers. The potential effects on natural features and processes should always be carefully considered in the scoping of environmental impact statements to ensure compliance with the EIA Directive.

9.23 **Countryside and Rights of Way Act 2000, Defra**

9.24 **Section 74: List of Habitats and Species of Principle Importance for the Conservation of Biological Diversity in England**

9.25 This paper identifies the habitats and living organisms (species) which the Secretary of State considers are of principle importance for the conservation of biological diversity in England, in accordance with the 1992 UN Convention on Biological Diversity. The Biodiversity Strategy for England sets out the means by which the Government will comply with its duty under Section 74 to take or promote the taking by others of steps to further the conservation of the listed habitats and species, including through the continued implementation of the Action Plans.

9.26 **Planning Policy Statement 9 – Planning for Biodiversity and Geological Conservation: A Guide to Good Practice (2006)**

9.27 The guide expands on the key points raised through PPS9 and provides good practice guidance on delivering the requirements of the ODPM Government Circular ‘Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system’ (2005). Of note in this guidance is the approach to be taken regarding species of principle importance. The guide also calls for the use of Local Authority Ecologists and highlights the importance of accessing in-house and shared expertise in ecology (and geology) to ‘improve the capacity of planning authorities to evaluate environmental information and make informed planning judgements’ (PPS9, para 2.33, p20).

9.28 The guide sets out some of the principle benefits of using in-house expertise to fulfil the objectives of PPS9 and help planning authorities to:

- Interpret the environmental information requirements for LDF production and select appropriate targets and indicators;
- Provide specialist input into consultation exercises and workshops;
- Help to ensure that the SA of development plans complies with the SEA Directive;
- Provide specific expertise in the strategic and spatial approach to conservation, enhancement and restoration of biodiversity through the LDF process;
- Appraise the quality of submitted information and of environmental statements;
- Find optimal ways to incorporate nature conservation benefits and avoid, mitigate or compensate for any harm; and
- Advise on the selection of sites for allocation to identify sites that may minimise impacts on biodiversity and which could have the greatest potential for enhancement.

National policy

Government Circular: Biodiversity and Geological Conservation - Statutory obligations and their impact within the planning system

- 9.29** This circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It details the regulation requirements for European protected species of animals, protection of birds, protection of plants and the protection of badgers.
- 9.30** A planning authority is required to notify Natural England before granting planning permission for development likely to damage a SSSI, even if the development is not located in the SSSI. Importance is placed on the Waddenzee judgement where an authority must make certain that a plan or project will not adversely affect the integrity of a site, where no reasonable scientific doubt remains.
- 9.31** If a site hosts a priority habitat or species, permission to disturb it will only be granted in the interests of overriding public interest (those relating to human health, public safety or beneficial to the environment). However, local authorities should take steps to conserve habitats and species of principle importance.
- 9.32** Under the Ramsar Convention, compensatory measures should be provided for the loss of conservation interests. These should provide, as a minimum, no net loss to the overall value of the site either through quality or area.
- 9.33** Planning authorities should recognise that development may affect a SSSI some distance away. Features of the landscape that are of major importance to wild flora and fauna, veteran and substantial trees (such as ancient semi natural woodland) should be managed via biodiversity contributions and consideration should be given to their nature conservation value.
- 9.34** The potential effects on natural features and processes should always be carefully considered in the scoping of environmental impact statements to ensure compliance with the EIA Directive.

Draft National Planning Policy Framework

- 9.35** In July 2011, the Government published the draft National Planning Policy Framework (NPPF) for consultation. The Government's objective for the natural environment is that planning should help to deliver a healthy natural environment for the benefit of everyone and safe places which promote wellbeing. As part of achieving this objective, the planning system should aim to conserve and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity, where possible.
- 9.36** The draft Framework states that planning policies should:
- take account of the need to plan for biodiversity at a landscape-scale across local authority boundaries
 - identify and map components of the local ecological networks, including: international, national and local sites of importance for biodiversity, and areas identified by local partnerships for habitat restoration or creation
 - promote the preservation, restoration and re-creation of priority habitats, ecological networks and the recovery of priority species populations, linked to national and local targets; and identify suitable indicators for monitoring biodiversity in the plan; and
 - aim to prevent harm to geological conservation interests.

Planning Policy Statement 1: Delivering Sustainable Development

- 9.37** PPS 1 highlights the Government's commitment to protecting and enhancing the quality of the natural and historic environment, in both rural and urban areas. It emphasises that planning policies should seek to protect and enhance the quality, character and amenity value of the countryside and urban areas by ensuring a high level of protection is given to the most valued townscapes and landscapes, wildlife habitats and natural resources. In particular, PPS1 is keen to highlight that planning authorities should seek to enhance the environment as part of development proposals.

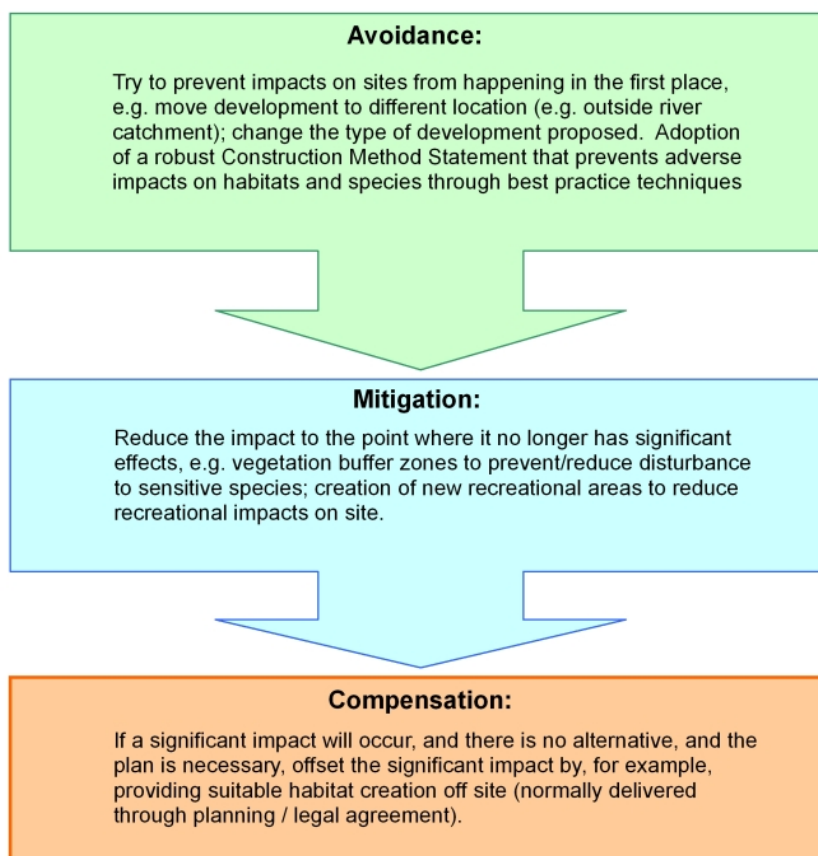
Planning Policy Statement: Planning and Climate Change - Supplement to PPS1

- 9.38** The PPS on climate change was published in Dec 2007 and makes clear that tackling climate change is central to what is expected of good planning. One of the key objectives in the Government's pursuit of delivering sustainable development is to conserve and enhance biodiversity, recognising that the distribution of habitats and species will be affected by climate change (para 9). Planning authorities are required to take into account the effect of development on biodiversity and its capacity to adapt to likely changes in the climate whilst considering the contributions which can be made from conserving and enhancing biodiversity (para 24).

Planning Policy Statement 9: Biodiversity and Geological Conservation

- 9.39** PPS9 sets out the planning policies on protection of biodiversity and geological conservation through the planning system. The policy statement aims to ensure that local planning authorities maintain, and enhance, restore or add to biodiversity and geological conservation interests (para 1; ii).
- 9.40** PPS9 outlines that the aim of planning decisions is to prevent harm to biodiversity and geological interests. Significant harm to protected species and features should first be avoided, including ensuring the development cannot be reasonably located on any alternative sites that would result in less or no harm. In the absence of alternatives, adequate mitigation measures should be put in place. Where significant harm to biodiversity or geological interests cannot be prevented or adequately mitigated against, compensation for any loss of habitat or wider biodiversity feature should be sought. If significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused (para 1; vi). This process is outlined in figure 9.1.

Figure 9.1 Preventing harm to biodiversity and geological conservation interests (Appropriate Assessment of Plans: Discussion Paper, Scott Wilson et al, 2006)



9.41 Clear distinctions should be made between the biodiversity and geological conservation hierarchy of international, national, regional and locally designated sites (para 5; i). Most importance is attached to sites identified through international conventions and European Directives, namely Special Protection Areas (SPAs); Special Areas of Conservation (SACs); and Ramsar sites (para 6). Since these benefit from statutory protection, specific policies for these sites should not be included in Local Development Documents (LDDs). The following table outlines the hierarchy of designated sites.

Table 9.1 The Hierarchy of designated sites (Planning for Biodiversity and Geological Conservation: A Guide to Good Practice, ODPM, 2006)

Designation	
International	Special Protection Areas (SPA), Special Areas for Conservation (SAC), Ramsar sites
National	Sites of Special Scientific Interest (SSSI), including National Nature Reserves (NNRs)
Local	Local Sites, including Local Nature Reserves (LNRs), County Wildlife Sites and Regionally Important Geological and geomorphological Sites (RIGS)

9.42 Other species of principal importance have also been identified as requiring biodiversity conservation action in England⁽⁸³⁾. PPS9 states that local authorities should take measures to protect the habitats of these species from further decline through policies in local development documents. The minerals and waste adopted Core Strategies and Development Control Policies DPDs contain several policies (see 'relevant plans and strategies' section of this chapter) that specifically seek to protect and enhance the natural environment of Wiltshire and Swindon.

Planning for Biodiversity and Geological Conservation: A Guide to Good Practice

9.43 The guide expands on the key points raised through PPS9 and provides good practice guidance on delivering the requirements of the Government Circular 'Biodiversity and Geological Conservation' (2005). Of note in this guidance is the approach to be taken regarding species of principle importance.

9.44 According to the guide, Core Strategies should contain a limited suite of overarching policies, incorporating objectives in respect of biodiversity and geological conservation, which provide the strategic hooks for more detailed policies in further DPDs (para 4.34). To link with this, Site Specific Allocations DPDs may need to indicate areas of land designated for their biodiversity or geodiversity value and the nature of that designation, in order to clarify relationships with development allocations. In addition to allocating land for development, a Site Specific Allocation DPD could be used to meet PPS9 requirements by identifying specific areas for the restoration and enhancement of biodiversity or geological conservation identified in the Core Strategy.

9.45 The guide also calls for the use of local authority ecologists and highlights the importance of accessing in-house and shared expertise in ecology (and geology) to "improve the capacity of planning authorities to evaluate environmental information and make informed planning judgements" (PPS9, para 2.33, p20).

9.46 Using in-house expertise to fulfil the objectives of PPS9 will help planning authorities:

- Interpret the environmental information requirements for LDF production and select appropriate targets and indicators
- Provide specialist input into consultation exercises and workshops
- Help to ensure that the SA of development plans complies with the SEA Directive
- Provide specific expertise in the strategic and spatial approach to conservation, enhancement and restoration of biodiversity through the LDF process
- Appraise the quality of submitted information and of environmental statements
- Find optimal ways to incorporate nature conservation benefits and avoid, mitigate or compensate for any harm
- Advise on the selection of sites for allocation to identify sites that may minimise impacts on biodiversity and which could have the greatest potential for enhancement.

Minerals Planning Guidance 7: Reclamation of minerals workings

9.47 Restoration and aftercare should provide the means to maintain or, in some circumstances, enhance the long-term quality of land and landscapes taken for mineral extraction. MPG7 explains that reclamation can provide opportunities for creating, or enhancing, sites for nature conservation. This can make a contribution, for example, towards achieving specific targets

83 Lists of habitats and species which are of principal importance for the conservation of biodiversity in England published by the Secretary of State in response to Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006) are available at: <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx>

set in the UK Biodiversity Action Plan and/or contributing to maintaining and expanding the South West Nature Map. Examples include creating new semi natural habitats and providing appropriate locations for the reestablishment of threatened species.

Biodiversity and geological conservation designations in Wiltshire and Swindon

9.48 A significant proportion of Wiltshire and Swindon is designated for biodiversity and/or geological conservation, ranging from international, to national, regional and local importance. This means that minerals and waste development will often need to consider the impact it will have on biodiversity and geodiversity. The table below compares the proportion of international/national biodiversity and geological designations in Wiltshire and Swindon, with those of England.

Table 9.2 Areas of Wiltshire, Swindon and England, covered by biodiversity and geological conservation designations

LPA	Total Area (ha)	SPA (% total area)	SAC (% total area)	SSSI (% total area)	AW (% total area)	CWS (% total area)	RIGS (% total area)	LNR (% total area)
East Wiltshire	96,670	9.3	9.6	11.3	3.6	6.1	0.1	<0.01
North Wiltshire	76,770	None	0.2	1.0	2.6	5.9	0.03	<0.01
South Wiltshire	100,410	5.5	6.8	9.2	5.4	7.4	0.02	0.03
West Wiltshire	51,690	11.2	11.3	13.2	3.5	3.8	0.15	0.1
Swindon Borough	23,010	None	None	0.6	0.7	3.1	<0.01	0.76
Wilts & Swindon	348,600	5.8	6.3	8.0	3.7	5.9	0.05	0.08
England	2,490,979	4.7	6.2	8.2	2.6	-	-	-

Abbreviations in the table: SPA: Special Protection Area; SAC: Special Areas of Conservation; SSSI: Site of Special Scientific Interest; AW: Ancient Woodland; CWS: County Wildlife Site; RIGS: Regionally Important Geological or Geomorphological Sites; LNR: Local Nature Reserves. (NB. some of these designations overlap).

9.49 As the table demonstrates, west, east and south Wiltshire all contain a higher proportion of international/national biodiversity designations in the form of Special Protection Areas (SPAs), Special Areas of Conservation (SACs), and Sites of Special Scientific Interest (SSSIs), than England. The proportion of Ancient Woodland within Wiltshire and Swindon is also higher, with south Wiltshire being home to more than twice the England average of Ancient Woodland.

9.50 For locally designated sites south, east and north Wiltshire contain the highest proportion of County Wildlife Sites, with west Wiltshire home to more Regionally Important Geological or Geomorphological Sites (RIGS). Although there is a far higher proportion of Local Nature Reserves (LNRs) in Swindon Borough, there is a dearth of international, national and other local biodiversity designations in the Borough, which can be explained by the urban nature of Swindon Borough compared to Wiltshire.

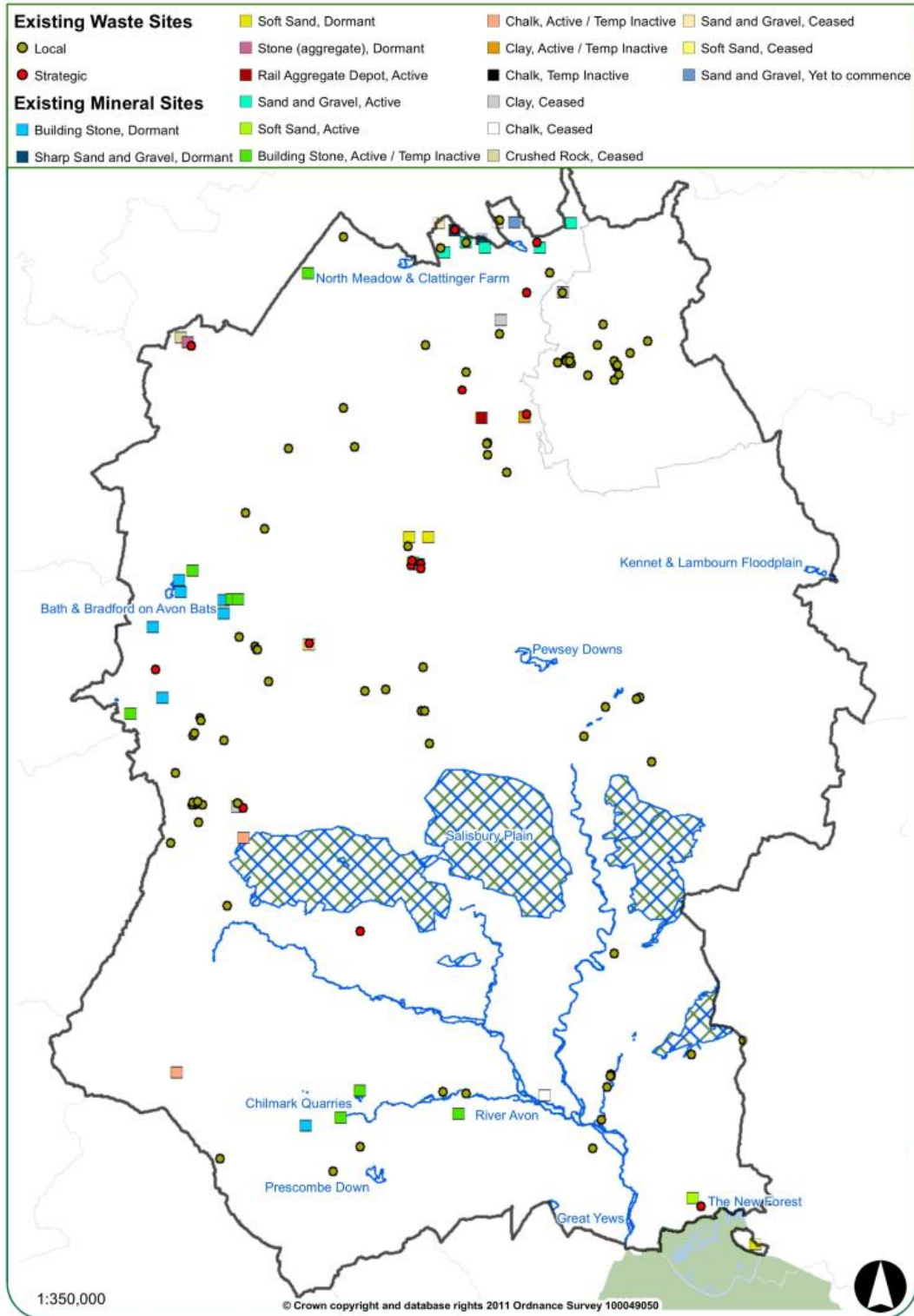
- 9.51** Notable, high profile biodiversity sites within Wiltshire and Swindon include North Meadow SAC, a traditional hay meadow home to a variety of wildflowers; Bath and Bradford on Avon Bats SAC and Chilmark Quarries SAC, a suite of hibernation sites used by some of Britain's rarest bat species; The River Avon SAC, the chalk streams and rivers of the River Avon system; Salisbury Plain SAC and SPA, containing more than 40% of all the unimproved chalk grassland in Britain; Parsonage Down National Nature Reserve, situated on the Salisbury Plain plateau; and the ancient forests of Savernake, Cranborne Chase and Braydon Forest (this list is not exhaustive).

Habitats Regulations Assessment

- 9.52** In October 2005 a European Court of Justice ruling found that the UK had failed to correctly transpose the Habitats Directive in national law. The implications of this ruling are that Planning Authorities must conduct Habitats Regulations Assessment (HRA) of all plans and projects for their potential significant effect on one or more Natura 2000 sites (which comprise SACs and SPAs) either individually, or in combination with other plans and projects, in line with Regulation 61 of the Conservation of Habitats and Species Regulations 2010. Government guidance also requires that Ramsar sites are included within HRA.
- 9.53** The purpose of HRA is to ensure the protection of the integrity of European sites, through assessing likely significant effects on the aforementioned sites; ascertaining the effect of a proposed development on site integrity; and outlining any mitigation and alternative solutions that may be required⁽⁸⁴⁾. HRA should be carried out in conjunction with the Sustainability Appraisal and the process requires information to be gathered in relation to:
- European sites within and outside the plan area potentially affected
 - the characteristics of these European sites and the features for which they are designated
 - their conservation objectives
 - and other relevant plans or projects.
- 9.54** Only in exceptional circumstances will a plan be allowed to proceed despite the absence of mitigation measures and alternative solutions, where it can be shown that there is no alternative or there are 'imperative reasons of overriding public interest' (Regulation 62, Conservation of Habitats and Species Regulations 2010). This includes reasons relating to human health, public safety or beneficial consequences of primary importance to the environment .
- 9.55** HRA of the Minerals and Waste Core Strategies and Development Control Policies DPDs have been undertaken (and has been updated for the Sites DPDs). The assessment of potential impacts upon North Meadow & Clattinger Farm SAC is particularly important given the location of the North Meadow part of the SAC in close proximity to an area of concentrated minerals development.

84 Planning for the Protection of European Sites: Appropriate Assessment Guidance for Regional Spatial Strategies and Local Development Documents, DCLG, 2006

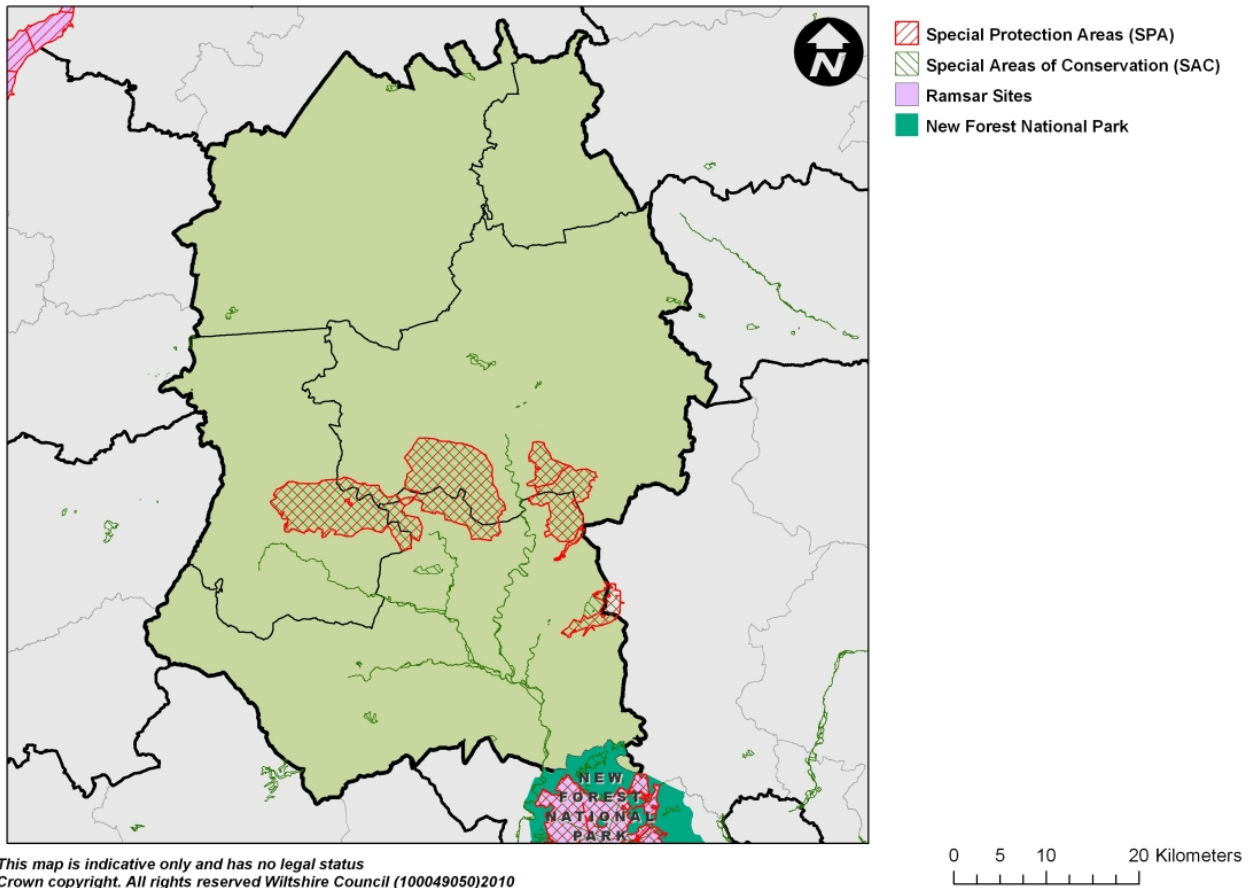
Figure 9.2 Existing minerals and waste sites



International designations

9.56 There are several internationally designated sites within Wiltshire, but none are located in Swindon (see map below).

Figure 9.3 Biodiversity sites of international importance in Wiltshire and Swindon



Special Protection Areas

9.57 The Birds Directive (79/409/EEC) requires measures to preserve, maintain or re-establish sufficient diversity and areas of habitats for all species of birds naturally occurring in a wild state and applies special measures for the protection of listed, vulnerable and migratory bird species. In part, these objectives are achieved through a network of protected areas for birds, known as Special Protection Areas (SPAs). Member states have a duty to protect SPAs from deterioration and significant disturbance. Two SPAs cover parts of Wiltshire⁽⁸⁵⁾:

1. Porton Down
2. Salisbury Plain

9.58 Additionally, the New Forest SPA is in close proximity to the south eastern boundary of Wiltshire which raises the prospect of cross boundary issues in the form of potential impacts from minerals and waste development within the vicinity of the New Forest SPA border.

Special Areas of Conservation

9.59 The Birds Directive (79/409/EEC) has been partially amended by The Habitats Directive (94/43/EEC) which extends the principle of protection to habitats, plus plant and animal species. This is achieved by the establishment of a network of protected areas for these habitats and/or species, known as Special Areas for Conservation (SACs). Together, SPAs

85 www.jncc.gov.uk - accessed February 2010

and SACs form a European network of protected areas known as Natura 2000 sites. Member states are required to submit appropriate areas to the EC for approval. Ten SACs have been approved within (or partially within) Wiltshire⁽⁸⁶⁾:

1. Salisbury Plain
2. River Avon System
3. New Forest
4. Kennet and Lambourne Flood Plain
5. North Meadow and Clattinger Farm
6. Chilmark Quarries
7. Bath and Bradford on Avon Bats
8. Great Yews
9. Prescombe Down
10. Pewsey Downs.

9.60 The North Meadow element of North Meadow and Clattinger Farm SAC is of particular relevance to minerals development as it is located within the vicinity of several sand and gravel quarries. It is home to a great variety of wildflowers, including Britain's largest population of Snake's Head Fritillary, and is one of the finest examples of lowland hay meadow in Europe. Proposals for minerals extraction must be carefully considered to ensure there are no adverse impacts upon North Meadow, especially upon the ground and surface water flows in the area. Flooding is vital during the winter months to the growth of many plants and helps to maintain the great variety of species at North Meadow.⁽⁸⁷⁾

Ramsar sites

9.61 A Ramsar site (as listed under the Ramsar Convention) receives the same protection as designated SPAs and SACs⁽⁸⁸⁾. There are currently no Ramsar sites designated within Wiltshire and Swindon. However, large parts of the New Forest National Park (NFNP), which borders south east Wiltshire, are protected by the Ramsar status (as well as being a SPA and SAC). This raises the possibility of minerals and waste development within the vicinity of the NFNP border adversely affecting the Ramsar (and SPA/SAC) site, if not carefully planned.

National designations

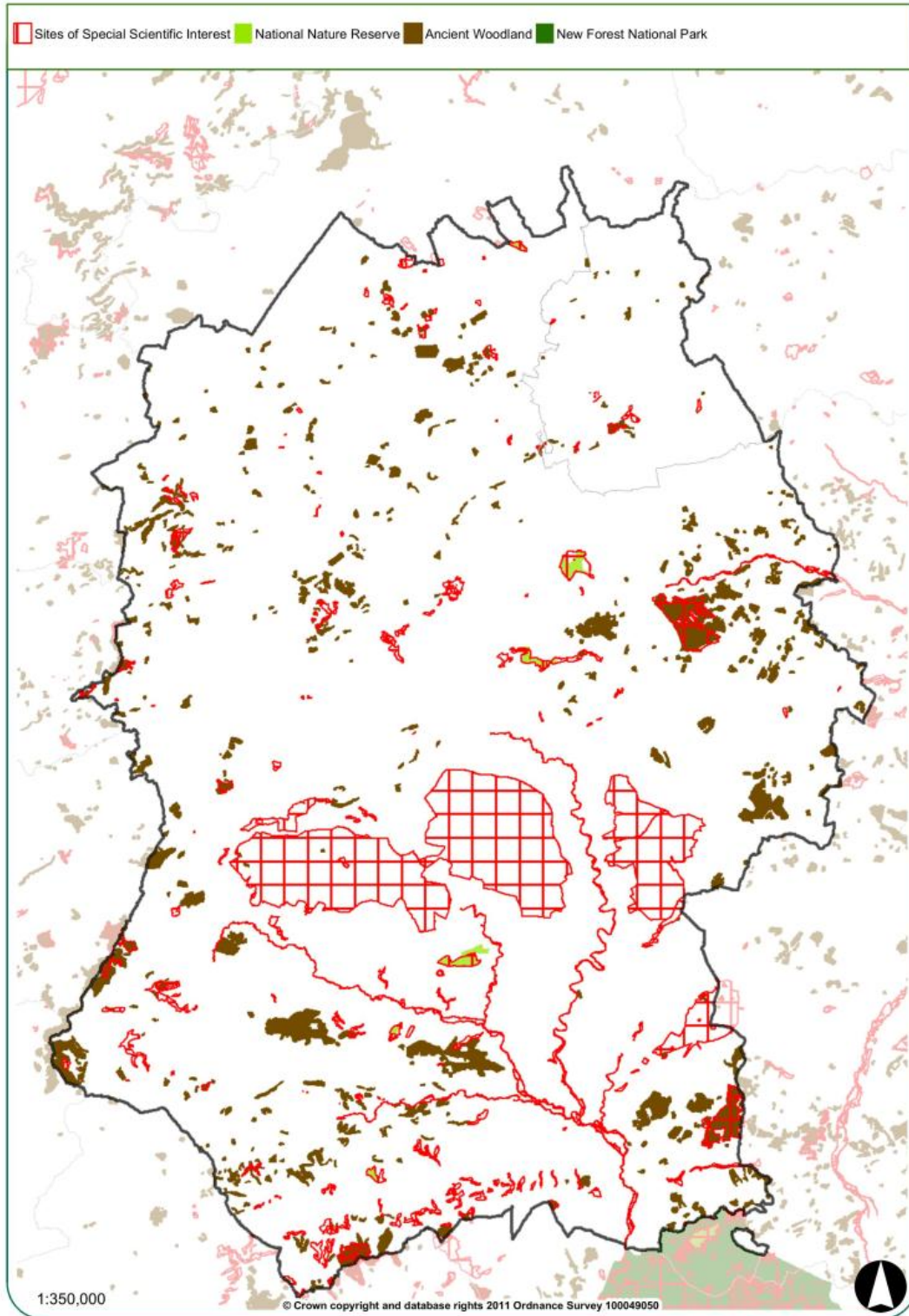
9.62 There are many sites within Wiltshire and Swindon designated for their national biodiversity importance, ranging between SSSIs, National Nature Reserves and Ancient Woodland, as depicted on the following map.

86 www.jncc.gov.uk - accessed February 2010

87 www.naturalengland.org.uk - accessed February 2010

88 PPS9, DCLG, 2005; para 6

Figure 9.4 National designations



Sites of Special Scientific Interest

9.63 Sites of Special Scientific Interest (SSSIs) are designated under the Wildlife and Countryside Act 1981 and the Countryside and Rights Of Way Act 2000. The purpose of SSSIs is to protect the most notable examples of flora and fauna, geological and physiographical features in the UK. They are often used as the basis for other conservation designations such as Regionally Important Geological and Geomorphological Sites (RIGS).

9.64 There are currently 135 SSSIs in Wiltshire and Swindon ⁽⁸⁹⁾, including major sites at Savernake Forest, Salisbury Plain, and the River Avon System. The restoration of quarries has created a series of lakes which make up the Cotswold Water Park and many of these lakes are designated SSSI with nationally scarce marl waters as a result of the lime rich geology; this has created a wide range of flora and fauna ⁽⁹⁰⁾.

9.65 Natural England reports on the condition of SSSIs and strives to achieve targets for good condition set by the Government. Restoration of Mineral and Waste sites can contribute to the favourable conservation status of SSSIs by buffering the edges of important sites and providing additional accessible habitat for wildlife species associated with SSSIs.

Table 9.3 Condition of Sites of Special Scientific Interest within Wiltshire and Swindon (January 2010)

Date	% Area meeting PSA target	% Area favourable	% Area unfavourable recovering	% Area unfavourable no change	% Area unfavourable declining	% Area destroyed / part destroyed
Jan 2010	95.52	20.68	74.84	5.06	1.32	0.00

National Nature Reserves

9.66 SSSIs owned by Natural England are known as National Nature Reserves (NNRs). These are established to protect the most important areas of wildlife habitat and geological formations in Britain, and as places for scientific research. They are designated under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981. There are six NNRs in Wiltshire and Swindon:

1. Fyfield Down
2. North Meadow
3. Parsonage Down
4. Pewsey Downs
5. Prescombe Down
6. Wylde Down.

9.67 Langley Wood SSSI is located approximately 12km south east of Salisbury within the NFNP boundary.

Ancient Woodland

9.68 Land that has been continually wooded since AD1600 or earlier is classed as ancient woodland. Although not protected by legislation, ancient woodland is recognised and awarded protection in national planning policy (PPS9) and afforded weight in the Government policy

89 Natural England 2010

90 Wiltshire Landscape Character Assessment, Wiltshire County Council and Land Use Consultants, December 2005

statement; Keepers of time: A Statement of policy for England's ancient and native woodland⁽⁹¹⁾. According to the statement ancient woodland and trees are exemplars of sustainability:

- **socially** through enhancing social inclusion, health and exercise, education, cultural associations and recreation;
- **economically** by providing jobs, renewable energy, rural development and sustainable production; and
- **environmentally** ancient woodland is important for biodiversity, flood alleviation, air and water quality, and historic landscapes.

9.69 Approximately 3.7% of the plan area is covered by ancient woodland. It is particularly valuable for biodiversity as a rich habitat for wildlife, and is home to more species of conservation concern than any other habitat - ancient woodland supports some 232 species (outlined in the UK Biodiversity Action Plan, 1994). These ecosystems cannot be recreated, therefore the loss of ancient woodland (and aged or veteran trees found outside of ancient woodlands) should be avoided. Possible mitigation measures to avoid adverse impacts upon ancient woodland include:

- exclusion zones
- the creation of buffer strips of new native woodland or other semi-natural habitats
- working with local communities⁽⁹²⁾.

9.70 The Wiltshire Biodiversity Action Plan (2008) makes reference to the importance of Ancient Woodland as a priority habitat and several landscape scale delivery projects within the BAP target protection, buffering and appropriate enhancement of ancient woodland sites..

9.71 In some instances replanting of conifer woodland for commercial purposes has taken place on sites previously occupied by ancient woodland (such as the Planted Ancient Woodland Scheme - PAWS). Where these plantations reach maturity and are felled, there is an opportunity to extract minerals before replanting. However, PAWS sites often retain the ancient woodland seedbank within the soils of the site and are a source of regeneration not only of native deciduous trees but also of the ground flora and shrub layer. In such cases the integrity of the seed bank may be protected and conserved by strict soil handling strategies as part of the extraction process, to ensure that ancient woodland soil profiles are not mixed.

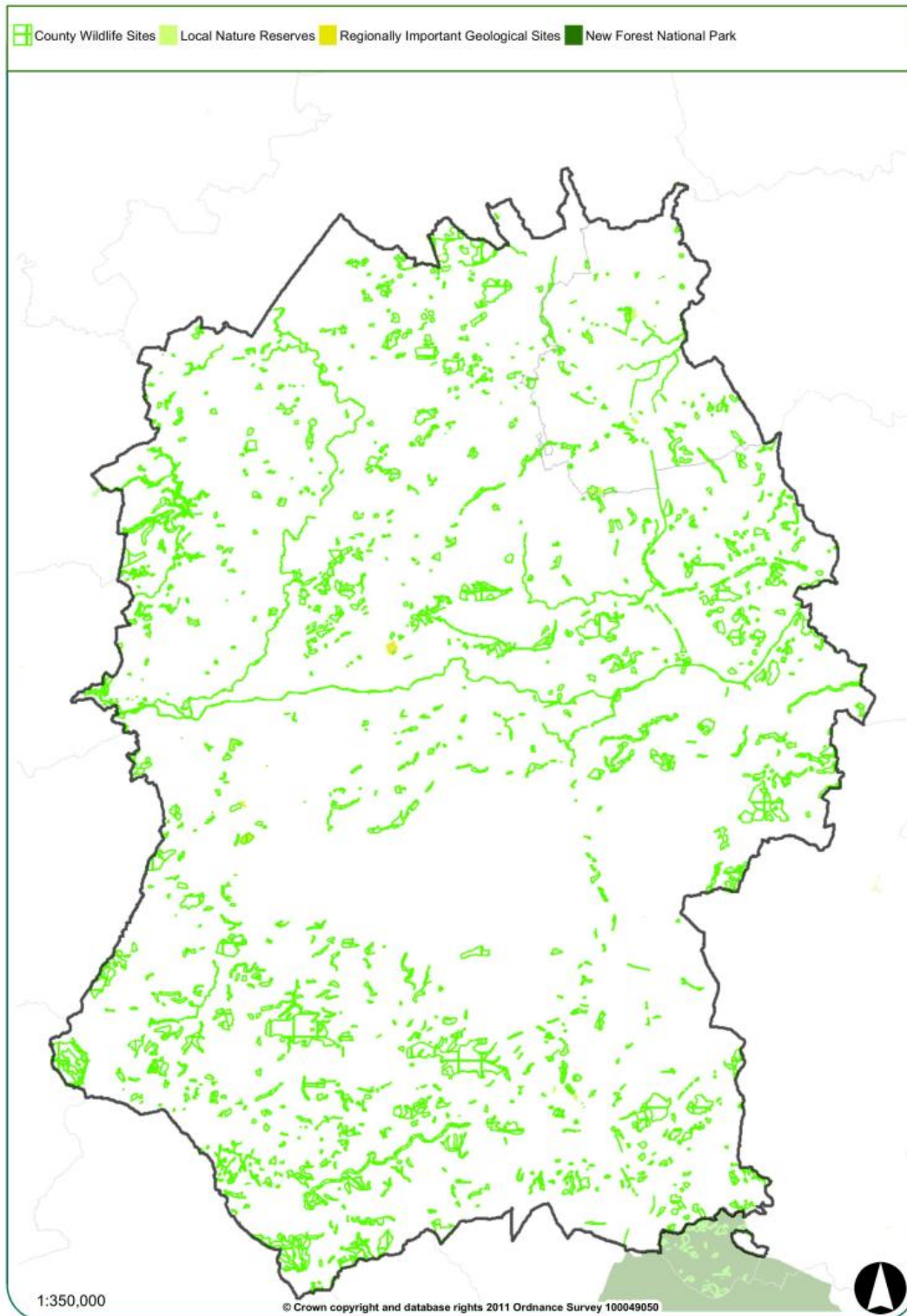
Regional and local designations

9.72 There are numerous sites within Wiltshire and Swindon which have regional and local biodiversity and geological conservation importance. The map below shows the extent of Regionally Important Geological and geomorphological Sites (RIGS), County Wildlife Sites and Local Nature Reserves within Wiltshire and Swindon.

91 Keepers of time: A Statement of policy for England's ancient and native woodland, DEFRA and Forestry Commission, 2005

92 Keepers of Time: A Statement of Policy for England's Ancient and Native Woodland Action Plan 2005-2007, DEFRA and Forestry Commission, 2005

Figure 9.5 Regional and local designations



9.73 Regionally and locally designated sites, although not of the same status as international or national sites, have an important role to play in contributing to overall national biodiversity targets, the quality of life and well-being of the community, and in supporting research and education ⁽⁹³⁾. These are protected through policy.

Sites of Nature Conservation Importance (RIGS and County Wildlife Sites)

- 9.74** The term Sites of Nature Conservation Importance (SNCI) incorporates Regionally Important Geological and Geomorphological Sites (RIGS) and County Wildlife Sites⁽⁹⁴⁾.
- 9.75** Although they have no statutory status, **RIGS** are considered to represent the most important examples of geology and geomorphology outside of SSSIs. Established in 1990 by the Nature Conservancy Council, RIGS are designated by locally developed criteria, and are of local importance that should be considered as a material consideration in planning matters. RIGS are designated according to their value for education, scientific study, historical value, and aesthetics⁽⁹⁵⁾. There are 60 RIGS in Wiltshire and Swindon, covering an area of 141 hectares⁽⁹⁶⁾.
- 9.76** The restoration of mineral workings can potentially lead to the creation of a RIGS, often through leaving exposed, rocky faces. Several former and current quarries in Wiltshire and Swindon have been designated as RIGS, for example Westbury Chalk Pit, Chicks Grove Quarry and Sahara Sandpit.
- 9.77** Wiltshire and Swindon contain around 1,500 County Wildlife Sites, covering 20,509 hectares which, together with SSSIs, comprise the critical core of Wiltshire and Swindon's biodiversity. Although County Wildlife Sites do not receive statutory protection, they do receive protection through Development Plan policies; for example Minerals Development Control policy MDC6, Waste Development Control policy WDC8 and Structure Plan policy C2. The councils are committed to protecting and enhancing these sites through the local Biodiversity Action Plans (discussed later). The restoration of some of the former mineral extraction pits within the Cotswold Water Park has created County Wildlife Sites which are rich in bird and dragonfly diversity⁽⁹⁷⁾.

Local Nature Reserves

- 9.78** Designated under the National Parks and Access to the Countryside Act 1949, Local Nature Reserves (LNRs) are places with wildlife or geological features that are of special interest locally; 18 LNRs are located in the plan area⁽⁹⁸⁾:
1. Avon Valley
 2. Barbury Castle
 3. Bemerton Heath and Barnards Folly
 4. Coate Water
 5. Conygre Mead
 6. Corston Quarry and Pond
 7. Drews Pond Wood
 8. Green Lane Wood
 9. Jubilee Lake
 10. Mortimore's Wood
 11. Oakfrith Wood
 12. Radnor Street Cemetery
 13. River Wylde
 14. Rushy Platt Canalside Park
 15. Seven Fields

94 Wiltshire and Swindon Structure Plan 2016, Adopted April 2006

95 www.ukrigs.org.uk - accessed February 2010

96 Wiltshire and Swindon Structure Plan 2016, Adopted April 2006

97 Wiltshire Landscape Character Assessment, WCC and Land Use Consultants, 2006

98 English Nature, January 2007

16. Smallbrook Meadows
17. Stanton Park
18. The Quarry Wildlife Garden.

Nature Reserves

9.79 Additionally, there are numerous Nature Reserves throughout Wiltshire and Swindon which, although non statutory, represent an important local resource and benefit from protection in accordance with Government guidance⁽⁹⁹⁾. The Wiltshire Wildlife Trust owns approximately 34 Nature Reserves throughout Wiltshire⁽¹⁰⁰⁾ (n.b. Landford Bog is outside of the plan area within the NFP remit).

Relationship with landscape designations

9.80 There are some commonalities between land designated for its biodiversity, geological value, and landscape designations. It is often the case that land which is valued for its biodiversity and geodiversity, such as ancient woodland and RIGS also makes an important contribution to the landscape character of an area. These types of designations often overlap one another; for example, Savernake Forest SSSI covers an extensive area within the North Wessex Downs AONB.

9.81 Information on landscape designations covering Wiltshire and Swindon is provided in Chapter 7 (Landscape Character) of this document.

Relevant plans and strategies

9.82 Several plans and strategies relevant to planning for biodiversity have been produced which are of regional and local importance.

Table 9.4 Relevant part of the development plan

Plan/strategy	Relevant policy	Implications for the development framework
Draft Regional Spatial Strategy for the South West 2006-2026 ⁽¹⁰¹⁾	ENV4	States that the distinctive habitats and species in the South West should be maintained and enhanced in line with South West Regional Biodiversity Action Plan (SW BAP) and the South West Nature Map targets.
	RE8	Seeks to ensure that the region's woods and forests are protected and enhanced in a sustainable way.
Wiltshire and Swindon Structure Plan	C1	Recognises the need to link nature conservation with the use and development of land.
	C2	Places equal importance on international, national and county biodiversity sites, which is not in accordance with PPS9.
	C3	Seeks to protect habitats and species in the Wiltshire and Swindon BAPs.

99 Paragraph 9, PPS9: Biodiversity and Geological Conservation, ODPM, 2005

100 www.wiltshirewildlife.org - accessed February 2010

101 The Localism Bill has now been given Royal Assent and so the mechanism by which Regional Strategies will be revoked is now in place. However, orders by the Secretary of State are still required before revocation is enacted. For this reason, references to the Draft South West Regional Spatial Strategy are retained in this evidence base document.

Plan/strategy	Relevant policy	Implications for the development framework
	C4	Recognises the importance of, and provides protection for, nature conservation within the Salisbury Plain Training Area.
	C6	The wildlife value of the Cotswold Water Park is seen as being of special significance and the wildlife and the features upon which it is based should be maintained and where possible enhanced.
	C11	Gives a high priority to the planting of new woodlands and effective woodland management within The Great Western Community Forest.
Wiltshire Core Strategy Pre-submission February 2012	Core Policy 50	The policy seeks to protect, and where possible enhance, features of nature conservation and geological value as part of the design rational and seek opportunities to enhance biodiversity. All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development and avoid Damage or disturbance to local sites.
Swindon Borough Core Strategy and Development Management Policies 2026 Revised Proposed Submission Document (March 2011)	CT1	Development at Swindon will be underpinned by a series of underpinning principles including the protection and enhancement of biodiversity.
Wiltshire and Swindon Minerals Core Strategy	Spatial Vision	Encourages a restoration-led approach to minerals development alongside collaborative working arrangements with stakeholders and local planning authorities to ensure minerals development makes a positive contribution to biodiversity through the creation of high quality habitats.
	SO 4	Seeks to protect and enhance the natural and historical environment of Wiltshire and Swindon and reduce and buffer the impacts of climate change through a restoration-led approach to minerals workings.
	MCS1(B)	The process of identifying, appraising, designing and implementing proposals for new or extended sites for minerals extraction will need to take into account the likely effects on designated sites and other environmentally valuable features; the likely effects on designated habitats and priority species; and the ability of sites to deliver a significant contribution to BAP targets for habitat creation and priority species as well as geodiversity gains where applicable.
	MCS10	Seeks to ensure that restoration schemes are designed to prevent increased risks associated with flooding and/or bird strike and should include long-term environmental enhancement, in

Plan/strategy	Relevant policy	Implications for the development framework
		accordance with the Wiltshire, Swindon and Cotswold Water Park BAPs and the South West Nature Map where appropriate.
Wiltshire and Swindon Minerals Development Control Policies	MDC1	All proposals for minerals development will need to ensure protection and enhancement of biodiversity and geodiversity and consider the contributions that can be made to the UK, South West and/or Wiltshire, Swindon and Cotswold Water Park BAP targets, the South West Nature Map and Great Western Community Forest.
	MDC6	Specifically deals with minerals development on features of biodiversity and/or geological interest and highlights the need to take into account cumulative impacts of other development and potential impacts on climate change.
	MDC9	Deals with the restoration, after-care and after-use management of minerals development to enable the long term maintenance and enhancement of the environment after the minerals development has ceased.
Wiltshire and Swindon Waste Core Strategy	Spatial Vision	By 2026, the development of a sustainable waste management framework to serve the needs of Wiltshire and Swindon must ensure that the naturally and historically rich and sensitive environment of the plan area is protected and enhanced for future generations to enjoy.
	SO 3	Seeks to protect and enhance the diverse and highly valued natural and historical environment of Wiltshire and Swindon, incorporating biodiversity and geological interests.
Wiltshire and Swindon Waste Development Control Policies	WDC1	All proposals for waste management will need to consider the extent to which the development ensures protection and enhancement of local biodiversity and geodiversity and the contributions that can be made (via restoration, aftercare and after-use proposals) to BAP targets.
	WDC8	Demands objective assessment of the potential effects of development on areas of biodiversity and/or geological interest, taking into account cumulative impacts with other development and the potential impacts of climate change.
	WDC10	Proposals for temporary waste management development will be permitted where they achieve an after-use that helps to enhance biodiversity interest and other environmental assets. Restoration should also help to achieve the objectives of the South West Nature Map and contributes to BAP targets.
West Wiltshire District Local Plan	C6	Protects Areas of High Ecological Value, RIGS, and SNCIs from detrimental development.
	C10	Protects Local Nature Reserves.

Plan/strategy	Relevant policy	Implications for the development framework
North Wiltshire District Local Plan	NE5, NE6, NE7	Details a hierarchical approach to nature conservation, in accordance with PPS9.
	NE8	Sets out the importance of the Cotswold Water Park as a nature conservation area.
	NE11	Seeks to protect, and where possible, enhance BAP species and habitats.
	NE12	Protects areas of ancient and semi-natural woodland.
	NE13	States that development will only be permitted when it does not prejudice the implementation of the Great Western Community Forest Plan.
Salisbury District Local Plan	C9, C11-C16	Details the approach to wildlife and natural features (woodland, nature conservation, protected species, wildlife habitat sites, geological or geomorphological importance, nature conservation, local nature reserves).
Kennet District Local Plan	NR3	Restricts development which is likely to have an adverse impact on sites of local importance.
	NR4	Restricts development which would adversely affect a feature of local ecological importance as a wildlife habitat, or one which acts as a linear route or network of habitats.
Swindon Borough Local Plan	ENV15	Deals with development within, adjoining or directly affecting LNRs, SINC's or species and habitats noted in local BAPs.
	ENV18	Seeks to ensure features of intrinsic nature conservation value including species specially protected by law are either protected, enhanced or if this cannot be achieved replaced by conditions or planning obligations.
	ENV19	Seeks to ensure that development which prejudices the implementation of the Great Western Community Forest (that covers the whole of Swindon Borough) will not be permitted.

Sustainable Community Strategies

9.83 After reorganisation Wiltshire Council revised its community strategies and produced Wiltshire's Strategy, People, Places and Promises - The Wiltshire Community Plan 2011 - 2026. It was developed through close joint working with around 100 organisations through the Wiltshire Assembly. This has resulted in an up-to-date and relevant shared vision for Wiltshire. The plan includes one vision – to build strong, resilient communities in Wiltshire, with three priorities including tackling the causes and effects of climate change, linked to seventeen broad objectives. It states that Wiltshire's environment is arguably its strongest asset and consequently to maintain these natural systems in a healthy state requires us to

manage these processes actively, and to live in ways which allow such systems to stay within critical limits so that they can continue to support the county in being more resilient to future challenges.

9.84 Similarly, the Swindon Community Strategy⁽¹⁰²⁾ contains the following priority:

- The landscaping and open spaces in new developments will be designed to look attractive and be havens for wildlife. This will be achieved through the use of ecologically sound planting and by retaining existing features like hedges or ponds.

9.85 The community strategy objectives are non-specific in terms of particular schemes or locations, are indirectly related to minerals and waste development and can therefore only in part be delivered through sensitive landscaping and restoration schemes for minerals and waste developments.

South West Nature Map: Wiltshire and Swindon

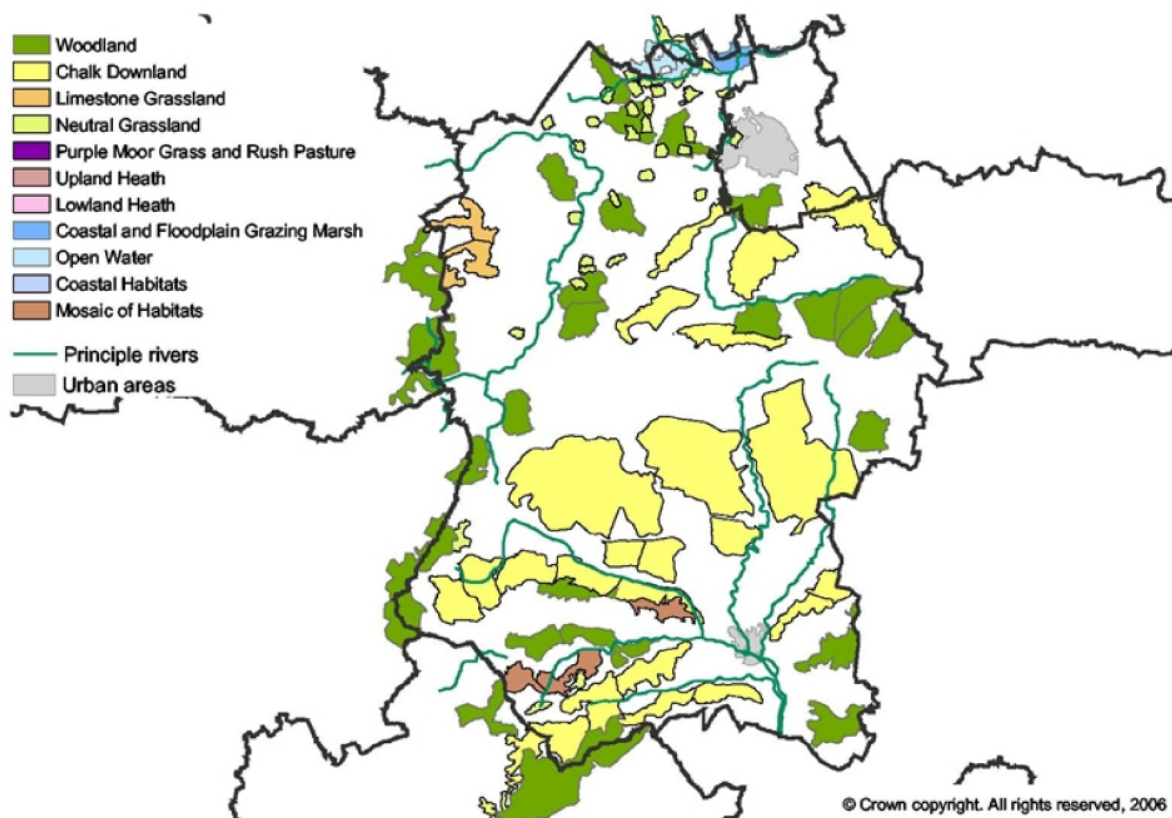
9.86 The South West supports some 25 species that are globally important, 700 species that are of national conservation concern, 34 species that are endemic to the UK, 11 of which are only found in the South West⁽¹⁰³⁾.

9.87 The UK Biodiversity Action Plan (BAP) and South West Regional BAP include ambitious targets to conserve, restore and create new wildlife habitats and re-establish species' populations. The South West Regional Biodiversity Partnership has produced a South West Nature Map, which identifies areas of priority habitat and opportunities in the region to conserve, create and connect these wildlife habitats at a landscape scale (known as Strategic Nature Areas; SNAs). According to the Draft Revised RSS for the South West these areas should provide increased opportunities for people to see and enjoy wildlife. The map illustrates where most of the major biodiversity concentrations are found, and where BAP targets to maintain, restore and recreate wildlife might best be met.

102 A Shared Vision for Swindon 2008-2030

103 The Draft Revised RSS for the South West incorporating the Secretary of State's proposed changes - for public consultation July 2008 (GOSW; para 7.2.9)

Figure 9.6 South West Nature Map: Wiltshire and Swindon



9.88 Paragraph 7.2.11 of the Draft Revised RSS for the South West points out that local authorities should use the Nature Map and work with interested local stakeholders including biodiversity partnerships and local record centres to map local opportunities for biodiversity enhancement in development plan documents. This is particularly relevant to the development of the Wiltshire and Swindon minerals and waste Site Allocation DPDs which influences the location of future minerals and waste development.

Biodiversity Action Plans

9.89 The targets and actions within Biodiversity Action Plans (BAPs) are a 'material consideration' within the planning process, and provide a framework for the conservation and enhancement of priority habitats and species.

UK Biodiversity Action Plan and England's Biodiversity Strategy

The UK Biodiversity Action Plan, published in 1994, was the UK Government's response to signing the Convention on Biological Diversity at the 1992 Rio Earth Summit. The plan set out a programme for conserving the UK's biodiversity. It also led to the production of 436 action plans between 1995 and 1999 to help many of the UK's most threatened species and habitats to recover⁽¹⁰⁴⁾. A review of the UK BAP priority list in 2007 led to the identification of 1,150 species and 65 habitats that meet the BAP criteria at UK level.

104 Details of these plans can be found at the UK Biodiversity Partnership website: <http://www.ukbap.org.uk>

9.90 After the UK BAP was published in 1994 many new drivers for conservation action have been recognised. For example, the need to tackle the impact of climate change, the 2010 target to halt the loss of biodiversity and the findings of the Millennium Ecosystem Assessment (2005) which helped us to understand how ecosystems and human well being affect each other⁽¹⁰⁵⁾.

9.91 The UK BAP continues to be taken forward under the UK Biodiversity Partnership. Devolution means a strategy specifically for England is required, to look more closely at how biodiversity considerations will be integrated across the range of policies and programmes. England's Biodiversity Strategy⁽¹⁰⁶⁾ sets out a series of actions that will be taken by Government and its partners to make biodiversity a fundamental consideration across all main sectors or public policy.

9.92 The Strategy includes proposals for:

- Agriculture
- Water and wetlands
- Woodland and forestry
- Urban areas (town, cities and development)
- Marine and coastal management (the coasts and seas)
- Climate change adaptation
- Local and regional action
- The economic and funding of biodiversity
- The engagement of business
- Education and public understanding

9.93 The England Biodiversity Group oversees the Strategy's implementation.

Local Biodiversity Actions Plans

9.94 Local BAPs (Wiltshire, Swindon, and Cotswold Water Park BAPs) give greater priority to Habitat Action Plans (HAPs) rather than Species Actions Plans (SAPs). This is because in the majority of cases the main threats to wildlife are associated with the loss, degradation or fragmentation of the place in which it lives, and no species can exist in the wild independently of its habitat. The HAPs and SAPs describe the habitat or species under consideration, provide information on national and local status and on current factors affecting this status, and identifies objectives and targets alongside the actions required.

9.95 Specific references to local BAPs in the Wiltshire and Swindon Minerals and Waste Development Plan Documents reinforce the role that minerals and waste developments can play in contributing to BAP targets (see policies; MCS1(B), MCS10, MDC1, MDC6, MDC9, WDC1, WDC8 and WDC10).

Wiltshire Biodiversity Action Plan

9.96 Published in 2002 and revised in 2008, the Wiltshire Biodiversity Action Plan (incorporating Swindon) incorporates 10 Habitat Action Plans (HAP), 1 Species Action Plan (SAP) and 1 Habitat Information Note (heathland):

- Woodland HAP
- Wood-pasture, Parkland and Ancient Trees HAP

105 <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/ukactionplan.aspx> - accessed February 2010

106 Working with the Grain of Nature - taking it forward: volume 1: full report of progress under the England Biodiversity Strategy 2002-2006

- Ancient and/or Species-rich Hedgerows HAP
- Traditional Orchards HAP
- Farmland Habitats HAP
- Calcareous Grassland HAP
- Neutral Grassland HAP
- Rivers, Streams and Associated Habitats HAP
- Standing Open Water HAP
- Built Environment HAP
- Bats SAP
- Habitat Information Note for Heathland

9.97 Priority is given to conserving and enhancing habitats and species identified in the Wiltshire BAP. Potential exists for minerals and waste development to make an important contribution to habitats and species targets especially where they contribute to landscape scale projects or strategies⁽¹⁰⁷⁾.

9.98 The Wiltshire BAP is a “live” document where individual actions within target frameworks may change as they are achieved however, some main themes remain constant throughout the document which relate to:

- delivery of biodiversity gain through landscape scale projects
- contribution to biodiversity gain within new developments via planning gain
- improvement of County Wildlife Sites condition
- maintainance of existing extent and integrity of ancient woodland.

9.99 Of particular relevance to minerals planning is the target that in addition to Cotswold Water Park, suitable former mineral sites on floodplains are restored to wetland habitat (including reedbed, fen and marsh habitat as appropriate).

Swindon Biodiversity Action Plan

9.100 A total of 17 HAPs and one SAP (bats) are included within the Swindon BAP (revised draft version, 2009):

- Farmland HAP
- Standing Open Water HAP
- Rivers and Streams HAP
- Wetlands HAP
- Urban HAP
- Orchards HAP
- Woodland HAP
- Bats SAP

9.101 Some possible examples of how minerals and waste development could impact upon the targets set within the Swindon BAP include:

- work to achieve the restoration and enhancement of standing open water habitat
- take measures to restore and create wetland habitat
- secure protection, extension and expansion of woodland and trees associated with new developments

107 NB: This list is not exhaustive; for details of all the Wiltshire BAP targets and objectives see: <http://biodiversitywiltshire.org.uk>

Cotswold Water Park Biodiversity Action Plan

- 9.102** The Cotswold Water Park (CWP) covers more than 40 square miles or 10,000 hectares in the Upper Thames catchment. For over 50 years the area has been subjected to sand & gravel extraction. The CWP BAP encourages a more considered approach to restoration through the creation of lakes and demonstrates that significant biodiversity gains can be made through restoration of mineral sites.
- 9.103** Until recently little thought was given to the after-use of quarries until they had been flooded as lakes, due to a lack of planning and forethought prior to mineral extraction which in some cases led to incompatible uses of neighbouring lakes with considerable conflicts and problems.
- 9.104** Low intensity farming on a few key sites has maintained flower rich meadows while mineral extraction has led to the formation of lime rich marl lakes important for aquatic plants. The large number of lakes and sheer size of the area of open water has attracted large number of wetland birds.
- 9.105** More recently pro-active restoration of quarries and management for nature conservation has enhanced the conservation value of a number of sites through the area.
- 9.106** The potential of the CWP as a site of national importance for wildlife was recognised by its inclusion in the Nature Conservation Review in 1977. The area contains eight grassland SSSIs two of which are now a SAC (North Meadow and Clattinger Farm). Ten marl lakes have also received SSSI designation and there are a large number of associated wetland and grassland, as well as open water sites carrying the non-statutory County Wildlife Site designation. The area is nationally important for wintering and breeding birds as well regionally significant for birds, dragonflies, damselflies, bats and water voles. The original CWP BAP (1997-2007) vision has been carried forward into the new BAP (2007-2016) and can be summarised as follows: 'The Cotswold Water Park should be a premier site for nature conservation where the requirements of industry, leisure, people and wildlife are successfully integrated'. Emphasis is on delivering benefit for biodiversity at a landscape scale across the whole of the CWP area, with particular emphasis on maintaining green corridors and a consideration of ecosystem services such as flood alleviation.
- 9.107** The plan selects those priority species and habitats typical of the area for which focused conservation effort can make a significant difference at local, regional and potentially national level.
- 9.108** The South West Nature Map Strategic Nature Areas (SNAs) provide an additional, site specific framework of potential habitat creation and enhancement where most appropriate, based on existing areas of UK BAP Priority Habitats and this has been recently incorporated into an overarching Vision document for the CWP.
- 9.109** The CWP BAP is successful in that many targets are achieved or exceeded within each reporting round so to achieve continued effectiveness, the document is refreshed and updated on a regular basis. The most up-to-date version of the CWP BAP may be viewed on the Biodiversity Action Reporting System website: <https://ukbars.defra.gov.uk/default.asp> .
- 9.110** Additions to the CWP BAP in recent years include the revision of the Canals HAP and drafting and publication of the Pond HAP (with Pond Conservation).
- 9.111** The CWP BAP 2007-2016 contains 10 HAPs for:
- 9.112** Habitats found before, during and after mineral extraction:
- Boundary Features

- Built Structures
- Canals
- Rivers and Streams
- Lowland Neutral Grassland
- Farmed Land
- Woodland
- Ponds.

9.113 Habitats created as a result of the mineral extraction process:

- Sand and Gravel Quarries

9.114 Habitats created during the mineral restoration process:

- Fen, Marsh and Reedswamp
- Standing Open Water

9.115 Habitat Statements are provided for:

- Bare ground and early-successional habitats

9.116 A key point is to emphasise that habitat conservation and enhancement should be seen as an integral part of the whole mineral extraction process, before, during and following extraction.

9.117 The CWP BAP (2007-2016) includes a HAP for Built Development (structures and associated landscaping schemes) as development of the area is closely linked to the existing and local tourism and leisure industry. New developments will need to rely on a high quality environment to attract custom and in doing so, should provide opportunities for roosting bats and nesting birds on buildings, or for creating green corridors and linking habitats in landscaping schemes.

9.118 Additionally, nine species were chosen to compliment the HAPS: barberry carpet moth; bats; black poplar; breeding waterbirds; dragonflies and damselflies; great crested newt; stoneworts; water vole; and wintering birds.

9.119 Several species statements have been included for those species considered sufficiently important to warrant inclusion within the CWP BAP 2007-2016, but where halting population decline and assisting recovery will be achieved by measures already outlined within a HAP, for example, Otter and Bittern.

9.120 Generic minerals planning and development control targets in the CWP BAP include:

- GAPT4: All major developments to achieve an overall biodiversity gain
- GAPT5: All major developments to contribute to biodiversity enhancement throughout the CWP.

9.121 A major project is included to transform the head of the Thames wetland corridor. Significant opportunities exist to integrate high quality nature conservation into new recreation and leisure developments in the area. The project in this area seeks to restore and create ten UK BAP habitats and will also make significant contribution to 15 UK BAP Species Action Plans.

Other relevant documents

Local Geodiversity Action Plans

9.122 A Local Geodiversity Action Plan (LGAP) is a framework for the conservation, management and promotion of geodiversity in a particular area, setting out clear objectives for looking after geodiversity as a resource, with an aim to influence planning policy.

9.123 There are currently no LGAPs in Wiltshire and Swindon, although work continues on the production of the North Wessex Downs AONB Local Geodiversity Action Plan. The Gloucestershire Cotswolds LGAP (published 2005) covers an area to the north of Wiltshire and Swindon.

The New Forest National Park Management Plan: Strategy for the New Forest (2009)

9.124 The significant biodiversity value of the New Forest National Park (NFNP), and its location adjacent to south Wiltshire, means that the possible impacts of minerals and waste development within south Wiltshire on the NFNP need to be considered.

9.125 The NFNP Management Plan contains the following objectives which relate to biodiversity:

- Protect and enhance the large-scale cultural landscapes and semi-natural habitats of the New Forest, by:
 - improving and sustaining the quality of internationally and nationally designated habitats through appropriate management where these are not currently in favourable condition and by monitoring and managing recreational pressure to avoid any adverse impacts
 - encouraging integrated land management on the enclosed lands which enhances the landscape character, habitats and archaeological features of the area
 - ensuring development proposals, both within and close to the National Park, take the important landscapes, habitats and the visual setting of the Park fully into account
- Plan for the likely impacts of climate change on the special qualities of the New Forest and reduce the overall environmental footprint of the National Park, by:
 - conserving and where necessary restoring an extensive network of natural habitats both within and across the National Park boundary, to improve resilience and reduce fragmentation.

9.126 A BAP is currently being produced by the National Park Authority and partner organisations and will set out more detailed objectives and actions for the future.

Conserving Biodiversity - the UK approach

9.127 In 2007, the UK government adopted a new shared vision for biodiversity conservation, 'Conserving Biodiversity – the UK Approach'. Its purpose is to set out the vision and approach to conserving biodiversity within the UK's devolved framework. This strategic document sets out the future priorities for the UK and provides for a more holistic ecosystem approach to conservation and sustainable use of biodiversity.

9.128 Work to embed consideration of biodiversity and ecosystem services includes:

- the biodiversity and environment strategies of each of the four countries of the UK and
- the statutory conservation bodies as the main delivery agents

9.129 This will be in addition to work on the conservation of priority habitats and species, and protected areas. The framework complements 'One future – different paths, the UK's framework for sustainable development', which recognises the importance of living within environmental limits in order to conserve biodiversity.

Natural Environment White Paper

9.130 Published in June 2011 The Natural Environment White Paper entitled The Natural Choice: securing the value of nature, is a bold and ambitious statement outlining the Government's vision for the natural environment over the next 50 years, backed up with practical action to deliver that ambition.

9.131 It states that nature is sometimes taken for granted and undervalued and that people cannot flourish without the benefits and services our natural environment provides. A healthy, properly functioning natural environment is the foundation of sustained economic growth, prospering communities and personal wellbeing.

9.132 Alongside the White Paper, the Government has published its response to the Lawton Review. The Review, Making Space for Nature, found that nature in England is highly fragmented and unable to respond effectively to new pressures, such as climate and population change. The Government's response reflects evidence in the National Ecosystem Assessment, and builds on outcomes of the Convention on Biological Diversity in Nagoya in October 2010.

- protecting and improving our natural environment
- growing a green economy
- reconnecting people and nature
- international and EU leadership

9.133 Some new initiatives within the White Paper include:

- Local Nature Partnerships – strategic partnerships of organisations that work to create a shared vision for their area and deliver better, more integrated, environmental outcomes.
- testing a new voluntary approach to biodiversity offsetting in a number of pilot areas
- Nature Improvement Areas

9.134 The Natural Environment White Paper advocates a more landscape scale approach to delivery of benefits to biodiversity and work has started to adjust the framework of partnerships to address this.

The reclamation of minerals sites

9.135 The reclamation of minerals and waste development can often make an important contribution to the biodiversity and geological value of an area; although this is mostly associated with restoring mineral workings. For example, Government guidance (MPG7) states that sites for nature conservation should be created or enhanced after minerals extraction has ceased and can contribute towards achieving UK BAP targets and the maintenance and enhancement of the South West Nature Map.

9.136 Operational considerations such as sensitive working practices should be considered in development plan policies for minerals documents. This includes impacts upon habitat loss, sites of nature conservation, and the benefits to biodiversity which can be achieved through mineral working and subsequent site restoration ⁽¹⁰⁸⁾.

9.137 A report⁽¹⁰⁹⁾ on the first four years of implementation of the England Biodiversity Strategy contains refreshed work programmes for each of the ten workstreams of the strategy, including the summaries of the relevant UK BAP targets proposed for England. In general it is envisaged that the two processes should work together with strategy workstreams providing the policy input, freeing up action plan steering groups to focus on management, research and survey and, for habitat groups in particular, the delivery of specific habitat restoration and re-creation projects.

9.138 The table below shows the proposed UK BAP Targets for England.

Table 9.5 Proposed UK BAP Targets for England - overview of quantitative targets for 2015

Habitat (target unit)	Maintenance	Achieve condition by 2015	Condition (%) *	Restoration by 2015	Restoration (%) *	Expansion by 2015	Expansion (%)
Agriculture							
Arable margins (ha)	N/A	tbc	-	-	-	69,378	-
Blanket bog (ha)	240,000	tbc	-	-	-	-	-
Hedgerows (km)	558,150	279,075	50	-	-	6,400	1
Limestone pavement (ha)	2,340	tbc	-	4 sites	-	-	-
Lowland calcareous grassland (ha)	38,687	32,036	83	726	2	8,426	22
Lowland dry acid grassland (ha)	20,142	17,295	86	285	1.4	276	1.4
Lowland heathland (ha)	58,000	47,000	81	-	-	7,600	13
Lowland meadows (ha)	7,282	6,078	83.5	481	7	256	3.5

108 MPS2: Controlling and Mitigating the Effects of Minerals Extraction in England, ODPM, 2005; para 11

109 Working with the grain of nature – taking it forward: Volume I, Full report on progress under the England Biodiversity Strategy 2002 – 2006

Habitat (target unit)	Maintenance	Achieve condition by 2015	Condition (%) *	Restoration by 2015	Restoration (%) *	Expansion by 2015	Expansion (%)
Purple moor-grass and rush pastures (ha)	21,544	19,195	89	128	1	151	1
Upland calcareous grassland (ha)	16,000	tbc	-	-	-	-	-
Upland hay meadows (ha)	870	830	95.4	48	5.5	72	8
Upland heathland (ha)	220,000	tbc	-	-	-	-	-
Water and wetlands							
Coastal and floodplain grazing marsh (ha)	170,000	76,500	45	7,500	4.4	1,250	1
Fens (ha)	8,000	7,200	90	1,500	19	-	-
Lowland raised bogs (ha)	11,200	7,466	67	1,000	9	-	-
Wet reedbeds (ha)	5,200	4,680	90	-	-	1,900	36.5
Chalk rivers (km)	3,915	2,534	65	-	-	-	-
Aquifer-fed fluctuating water bodies (sites)	5	5	100	-	-	-	-
Eutrophic standing waters (sites)	3,917	24 (tier 2)	-	3	-	-	-
Mesotrophic lakes (sites)	644	7 (tier 2)	-	5	-	-	-

* Percentage values are the proportion that each target represents of the total current habitat area (i.e. The maintenance target)

- 9.139** The RSPB published a report in 2006 ⁽¹¹⁰⁾ outlining how mineral sites can provide an opportunity for the restoration of large areas of land, and can make a substantial contribution to UK BAP habitat creation targets. The report states that targets for nine of the priority habitat types listed in the table above can be met through minerals site restoration alone, and significant progress can be made towards the UK BAP targets for native woodland and lowland calcareous grassland.
- 9.140** Examples of the biodiversity benefits of minerals site restoration in Wiltshire and Swindon include the creation of numerous lakes in the Upper Thames Valley, many of which are of national biodiversity significance such as the Cotswold Water Park SSSI; and the complex of abandoned underground stone mines at Chilmark which have been internationally designated as a Special Area of Conservation (SAC), due to the presence of a range of bat species.
- 9.141** One of the major issues when considering the restoration of minerals and waste sites is bird strike hazard. Where mineral workings are restored to a landfill or wetland habitat, the owner or operator of civil and military aerodromes within 13km must be consulted in order to assess the risk of bird strike ⁽¹¹¹⁾. If planned well, predominantly dry, or wet habitats such as reedbeds, of high biodiversity value can be created that do not increase the bird strike risk to aircraft ⁽¹¹²⁾.
- 9.142** As explained previously, the Draft RSS for the South West supports biodiversity enhancement, especially through linking habitats. The concentration of mineral workings in the Upper Thames Valley provides an opportunity to do this through considering their restoration as part of a wider perspective, rather than the current site-by-site approach ⁽¹¹³⁾. The Cotswold Water Park Strategy 2000-2006 provides a broad approach to this, dividing the Cotswold Water Park into three sections.
- 9.143** As part of the spatial planning approach, the objectives of wider environmental strategies should be integrated into Local Development Frameworks ⁽¹¹⁴⁾. This is reinforced in Government minerals policy ⁽¹¹⁵⁾ which states that mineral workings should make a contribution to UK BAP targets, local Geodiversity Action Plans, and initiatives such as Community Forests. Additionally, objectives within River Basin Management Plans, which are statutory plans introduced in December 2009 that summarise the actions required to meet the objectives of the Water Framework Directive, can also be incorporated ⁽¹¹⁶⁾.

Key findings and conclusions

- From our assessment of European, National and Regional Policy, the councils must take steps to conserve habitats and species of principle importance.
- The biodiversity value of Wiltshire and Swindon can be a constraint to minerals and waste development. However, the restoration of minerals and waste development offers the opportunity to make positive contributions to biodiversity and geological conservation.
- The public place great weight on the protection of biodiversity, naming “land with important or endangered wildlife” as the most important type of land to protect from development.

110 Nature After Minerals: How minerals site restoration can benefit people and wildlife, RSPB, 2006

111 MPS1: Planning and Minerals, DCLG, 2006; para 19

112 Nature After Minerals: How minerals site restoration can benefit people and wildlife, RSPB, 2006

113 Cotswold Water Park Strategy 2000-2006, Cotswold Water Park Joint Committee

114 Planning for Biodiversity and Geological Conservation: A Guide to Good Practice, ODPM, 2006

115 Planning and Minerals: Practice Guide, DCLG, 2006

116 The Implications of the EU Water Framework Directive for plans, plan making and development control: A scoping study, DCLG, 2006

- From our assessment of European, National and Regional Policy, the councils must take steps to conserve habitats and species of principle importance.
- The Minerals and Waste Development Plan Documents should aim to maintain, and enhance, restore or add to biodiversity and geological conservation interests.
- Clear distinctions should be made between the conservation hierarchy of international, national, regional and locally designated sites. Policies do not need to be drafted on internationally designated sites, but they should be shown on the Proposals Map.
- When considering proposals for new minerals and waste development applicants seek to access robust ecological advice when preparing planning applications. In accordance with the councils' Statement of Community Involvement, this could involve detailed pre-application discussion with in-house and shared ecological expertise. This is the favoured approach of PPS9 (and the associated Guide to Good Practice), hence the inclusion of Appendices within the submission draft Development Control Policies Documents relating to the requirements of ecological survey.
- Significant harm to biodiversity and geological interests should first be avoided; then adequately mitigated against; and finally compensated for. If this process is not possible, planning permission should be refused.
- Policies should be included to protect 'species of principal importance for the conservation of biodiversity in England' from further decline.
- Wiltshire and Swindon contain a rich source of biodiversity, some of national and international importance, meaning that minerals and waste development will need to consider the impact it will have on biodiversity. North Meadow SAC is of particular relevance to minerals development as it is located within the vicinity of a concentration of mineral workings in the Upper Thames Valley.
- West, east and south Wiltshire are particularly constrained by international/national biodiversity designations.
- The potential for cross boundary biodiversity impacts of minerals and waste development, for example upon the New Forest SAC/SPA/Ramsar must be considered.
- The reclamation of minerals and waste development can make an important contribution to the biodiversity and geological value of Wiltshire and Swindon. The targets set within local BAPs and the SW BAP and South West Nature Map provide a basis for considering the contribution minerals and waste development can make to the biodiversity and geological value of Wiltshire and Swindon.
- In the light of the need to protect existing biodiversity as well as creating opportunities for enhancement, the councils will look to deliver biodiversity action plan targets. This will need to be achieved both at the site assessment level and through development control. The policies of the Core Strategies and Development Control documents will be instrumental in these processes.
- Pro-active restoration of quarries and management for nature conservation, as in the case of the Cotswold Water Park, can enhance the conservation value of mineral sites.
- Habitat conservation and enhancement should be seen as an integral part of the whole mineral extraction process – i.e. before, during and following extraction. These considerations are set out in adopted policies WDC 1, 10; MDC1, 9, 10.

10 Chapter 10: Environmental Impacts

Introduction and Background

- 10.1** Minerals and waste developments have long been associated with damaging and sometimes long-term effects upon the environment. This however does not have to be the case and many sites used for minerals extraction and waste management can be operated and restored to a high standard, sometimes resulting in significant improvements for an area.
- 10.2** For this reason it is important that the councils have an understanding of both the state of the local environment and an awareness of where changes are likely to occur both during the plan period and beyond. This chapter aims to set out what we know about the environment of Wiltshire and Swindon within the context of relevant legislation, guidance, plans and strategies.
- 10.3** This chapter begins with an outline of the legislation, guidance and plans relevant to environmental impacts in general, before more specific plans and strategies are detailed for the following environmental policy areas:
- Land and soil resources
 - Water resources and flood risk
 - Air quality and environmental pollution.

Legal Framework

- 10.4** The legislative framework for the protection of the environment in the UK is continually evolving and therefore is the subject of numerous acts and regulations. Because of this, procedures for implementation are complex, involving a number of actors and a certain degree of overlapping responsibilities.

The Environmental Protection Act 1990

- 10.5** This Act provides a legislative framework for the treatment of waste; and for dealing with statutory nuisance (dust, smell, smoke, or other effluvia, including noise and vibration). Part IIA of the Environmental Protection Act (EPA) 1990 on contaminated land was introduced through the **Environment Act 1995** and brought into force through the **Contaminated Land (England) Regulations 2000 as amended**.

The Environment Act 1995

- 10.6** This piece of legislation established and gave powers to the Environment Agency (EA) to permit and enforce waste management activities and regulate emissions to air and water; requires the periodic review of minerals planning permissions to be undertaken by MPAs; and introduced Part IIA of the EPA1990 on contaminated land as the responsibility of the Local Environmental Health Authority (in the case of the plan area, this function is carried out by Wiltshire Council and Swindon Borough Council).

EC Directive on the Assessment of Environmental Effects (85/337/EEC as amended by 97/11/EC)

- 10.7** This EC Directive, implemented through the **Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended)**, requires the assessment of certain projects for their likely significant effects upon the environment. A significant amount of new minerals and waste developments meet the criteria for the requirement of Environmental Impact Assessment (EIA) to accompany an application as set

out in Schedule 1 or Schedule 2 of the regulations. A developer can request a local planning authority to provide a screening opinion as to whether a development proposal should be subject to an EIA.

EC Directive 2001/42/EC on the effects of certain plans and programmes on the environment (The SEA Directive)

10.8 This EC Directive was implemented through the **Environmental Assessment of Plans and Programmes Regulations 2004**, which requires plans and programmes to be examined for likely significant effects on the environment. This legislation places greater importance on the need to consider alternatives as part of the plan preparation process. Strategic Environmental Assessment is now a key component of the requirements to carry out Sustainability Appraisal of development plan documents and supplementary planning documents.

EC Directive 2008/1/EC concerning integrated pollution prevention and control (The IPPC Directive)

10.9 The IPPC Directive, which in 2008 replaced EC Directive 96/61/EC, requires industrial and agricultural activities with a high pollution potential (as defined in Annex I to the Directive to include mineral industry and waste management) to obtain a permit. In order to receive a permit an installation must comply with certain basic obligations and pollution-prevention measures, namely using the best available techniques.

10.10 In England and Wales the IPPC Directive requirements are implemented through the Environmental Permitting regime, and installations defined under Part A(1) are regulated by the EA while Part A2 and B are regulated by local authorities.

10.11 The IPPC Directive has been implemented in England and Wales through the **Environmental Permitting (England and Wales) Regulations 2010**. These regulations revoke the Environmental Permitting (England and Wales) Regulations 2007, which in 2008 combined and replaced the Pollution Prevention and Control (PPC) and Waste Management Licensing (WML) regulations. The scope of the regulations has since been widened to include water discharge and groundwater activities, radioactive substances and provision for a number of Directives, including the Mining Waste Directive (Directive 2006/21/EC on the management of waste from the extractive industries).

10.12 Prior to environmental permitting, different activities that were harmful to the environment and human health required different types of permission to continue. These permissions came under various names and had differing forms, procedures and processes, though they all served broadly the same purpose. The Environmental Permitting (England and Wales) Regulations 2007 brought into force the first phases of environmental permitting and established a common permitting programme for Waste and PPC regimes. This new system replaced 41 separate sets of regulations. The Environmental Permitting (England and Wales) Regulations 2010 brought into force the majority of the second phases of environmental permitting and extended this common permitting system to seven other permitting regimes, covering over one million permits and exemptions.

EC Council Directive 99/31/EC Landfill Directive

10.13 This directive is intended to prevent or reduce the adverse effects of the landfill of waste on the environment, in particular on surface water, groundwater, soil, air and human health. The directive requires member states to establish both a network of disposal facilities and competent authorities with responsibility for issuing waste management authorisations and licenses. Member states may also introduce regulations that specify which waste recovery

operations and businesses are exempt from licensing regimes. In England and Wales the ongoing requirements of the Directive are applied under the Environmental Permitting (England and Wales) Regulations 2010.

European Nitrates Directive 91/676/EC

10.14 One of the earliest pieces of EU legislation aimed at controlling pollution and improving water quality, this directive deals with the reduction of water pollution by nitrates from agricultural sources and the prevention of such pollution occurring in the future. The directive requires Defra (Department for Environment, Food and Rural Affairs) to identify surface or groundwaters that are, or could be high in nitrate from agricultural sources. Once a water has been identified, all land draining to that water is designated as a Nitrate Vulnerable Zone.

EC Directive 2008/98/EC on waste and repealing certain Directives (The Waste Framework Directive)

10.15 The Waste Framework Directive (WFD) sets the basic concepts, principles and definitions related to waste management. Directive 2008/98/EC is a revision of codified Directive 2006/12/EC, which was produced to bring together the elements of all relevant EU legislation as a consolidated version of EC Directive 75/442/EC (revised 1991). Directive 2006/12/EC was revised in order to clarify key concepts such as the distinction between recovery and disposal, and "...to focus on reducing the environmental impacts of waste generation and waste management". The EC Directive 2008/98/EC defines 'recovery' as "...any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy". The WFD also repealed the Hazardous Waste Directive (91/689/EEC) and the Waste Oils Directive (75/439/EEC).

10.16 The revised Waste Framework Directive is implemented through the **Waste (England and Wales) Regulations 2011**. These regulations amend the Hazardous Waste Regulations 2005 and revoke the Waste Management Licensing Regulations 1994, Environmental Protection (Duty of Care) Regulations 1991 (as amended) and Environmental Protection Act 1990 (Amendment of Section 57) (England and Wales) Regulations 2005.

10.17 Generally the planning authority should assume that "*the relevant pollution control regime will be properly applied and enforced*" (para 27, PPS10). However, these considerations can be taken into account with regard to planning and decisions on the appropriate use of land, as PPS10 states "*...health can be material to these decisions*". This overlap of legislation and responsibilities has also been recognised at National Government level and a joint DCLG and Defra paper on *Planning and Pollution Control* was published in 2007. The current situation (in its simplest form) is outlined in the table below.

Table 10.1 Environmental impacts Legislation and Responsible Authorities

Legislation		Areas covered by Responsible Authority		
Title	Key elements	Local Planning Authority	Environment Agency	Environmental Health
Contaminated Land (England) Regulations 2000 as amended	Identification, designation and remediation of contaminated land.	Remediation of contaminated land can be delivered through the planning process through	Works closely with Environmental Health Authority on the designation and requirements for remediation of site.	Responsible for the identification and designation of contaminated land. Works closely with EA

Legislation		Areas covered by Responsible Authority		
		development and reuse of brown field land. The EA and Environmental Health should be consulted as part of this process.		on issues such as remediation of contaminated site.
The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended)	Requires the assessment by competent persons of the likely impacts a project may have on the environment.	EIA may be required to support a planning application and results must be submitted in the form of an Environmental Statement. The EA acts as Consultee.	Where waste management licence or pollution control permit is required, similar evidence to that required for an Environmental Statement must be included as part of the application to the EA.	May provide advice as a Consultee.
Environmental Assessment of Plans and Programmes Regulations 2004	Requires assessment of the likely significant effects of a plan on the environment and a consideration of suitable alternatives	Forms part of the Sustainability Appraisal of DPDs.	EA provides advice and information in the form of baseline data and highlighting potential issues that may arise as a result of the implementation of the plan. Natural England and English Heritage are also statutory consultees.	May provide advice as a Consultee.
Environmental Permitting (England and Wales) Regulations 2010	The Environmental Permitting system simplifies permit applications, amendments and variations for both industry and regulator and thereby is designed to cut unnecessary red tape. There is some overlap of policy, although it is Schedule 9 of the Regulations that sets out the requirements for	Functions in relation to a regulated facility (Part A(2) installation or mobile plant, and Part B installation or mobile plant) are exercisable by the local authority in whose area the facility is or will be operated. Provision 33 of the Regulations prescribes that an appropriate authority may direct the EA to exercise	Functions in relation to a regulated facility (other than those mentioned in paragraph 2 of regulation 32) are excisable by the Agency. The EA regulates for waste operations, mining waste operations, water discharge activity, groundwater activity and radioactive substances activity. The EA has developed standard rules for facilities	Together with the EA, Environmental Health is responsible for regulating commercial and industrial installations that are subject to controls by the regulations. Wiltshire Council regulate industries which only pollute to air known as Part B processes and

Legislation	Areas covered by Responsible Authority			
	waste operations, as dictated by the EC Waste Framework Directive. The IPPC Directive is covered in Schedule 7 of the 2010 Regulations.	such local authority functions, and vice versa.	that have similar environmental hazards (e.g. waste transfer stations). The EA regulates industries with the greatest potential of causing pollution to land, air or water; these are known as Part A processes.	also regulate 'A2' processes, these have the same criteria as the larger Part A processes but are usually smaller. Permits are issued containing conditions on emission limits and controls.
The Waste (England and Wales) Regulations 2011	The Waste Regulations require businesses to confirm that they have applied the waste management hierarchy when transferring waste, and include a declaration on their waste transfer note or consignment note. The Regulations also make amendments to hazardous waste controls and exclude some categories of waste from waste controls.	The regulations state that a planning authority must have regard to Articles 13 and 16 of the Waste Framework Directive when exercising its planning functions. Article 13 of the MWD states the need to take the necessary measures to ensure that waste management is carried out without endangering human health and harming the environment. Article 16 prioritises the need to establish an integrated and adequate network of waste disposal and recovery installations.	The EA regulates waste activities such as permitted waste transfer, storage and treatment sites, moving hazardous waste, and also register carriers and brokers of waste. Some of the revisions to the Waste Framework Directive will affect these customers. There will be a transition period for many of the changes that are required.	May provide advice as a Consultee.

International Policy

- 10.18** The objectives of the **Kyoto Protocol** came into force in 2005, requiring all nations that signed the agreement, including the UK, to cut greenhouse gas emissions from 1990 levels by 5.2% over the period 2008 - 2012. The EU have adopted an even tougher target of 8%

reduction which, taking into account the factor of some member states being in a stronger position to meet this target than others, means that the UK has a legally binding target of 12.5% reduction.

- 10.19** The **2011 United Nations Climate Change Conference** was held in Durban, South Africa from 28 November to 11 December 2011 to establish a new treaty to limit carbon emissions. The outcomes of the conference included a decision by Parties to adopt a universal legal agreement on climate change no later than 2015, and to take effect in 2020.

National Policy

- 10.20** Planning Policy Guidance notes (PPGs), and their replacements Planning Policy Statements (PPSs), have been prepared by the Government after public consultation to explain statutory provisions and provide guidance to local authorities and others on planning policy and the operation of the planning system. On 25 July 2011, the Department of Communities and Local Government (CLG) unveiled the draft National Planning Policy Framework (NPPF) for consultation. This draft framework will replace existing PPGs and PPSs. The current situation in national policy related to environmental impacts is outlined below. Planning policy guidance more specifically relevant to soil, water and air quality are identified in the particular sections of this chapter.

Planning and Climate Change: Supplement to Planning Policy Statement 1

- 10.21** Planning and Climate Change has been introduced as a supplement to **Planning Policy Statement 1**. This Statement requires planning authorities to tackle both the causes of climate change (reduction of green house gas emissions) and the impacts of a changing climate (flooding, habitat migration). Minerals and waste developments potentially have a lot to offer in this respect, particularly regarding site restoration where connecting habitats, or woodland management (carbon sink) may be a realistic option.

Planning Policy Statement 7: Sustainable Development in Rural Areas

- 10.22** This document urges planning authorities to encourage use of lower grade agricultural land in preference to grades 1, 2 and 3a of the Agricultural Land Classification (see soil section of this chapter). For many types of minerals development, this is unavoidable, although high quality restoration of quarries can ensure that impacts to agricultural land are kept to a minimum. The Statement also requires local planning authorities to “*provide for the sensitive exploitation of renewable energy sources*” (PPS7, para 16, (iv)). There may be scope for minerals and waste developments, particularly remote developments, to consider micro-renewable energy sources as an alternative option to national grid supply or portable generators for electricity and heat.

Planning Policy Statement 10: Planning for Sustainable Waste Management

- 10.23** This document advises waste planning authorities to consider the likely impact of applications for waste management facilities on the environment and amenity. Annex E lists the locational criteria that waste planning authorities should consider. These factors include the protection of water resources (i.e. proximity to vulnerable surface and groundwater); land instability; nature conservation; air emissions including dust; odours; noise and vibration. Where possible, data relating to these criteria for the plan area that can be used to inform the waste site allocation process will be included in this chapter.

10.24 The Waste Planning Policy Statement will not be replaced by the National Planning Policy Framework, and will remain in place until the National Waste Management Plan is published⁽¹¹⁷⁾.

Consultation paper on a new Planning Policy Statement: Planning for a Natural and Healthy Environment

10.25 Policy NE3 of the draft PPS sets out the local planning approach for the natural environment. LPAs should include criteria-based policies in their LDFs against which to judge proposals for development on or affecting sites of regional and local biodiversity and geodiversity interest and landscapes outside nationally designated landscape areas that are particularly highly valued locally.

Natural Environment White Paper - The Natural Choice: securing the value of nature

10.26 Presented to Parliament by Defra in June 2011, the Natural Environment White Paper is a statement outlining the Government's vision for the natural environment over the next 50 years. The White Paper states, "Nature is sometimes taken for granted and undervalued... This is why we must properly value the economic and social benefits of a healthy natural environment while continuing to recognise nature's intrinsic value".

10.27 The Government sets out four key steps in maintaining the value of nature across our society by:

- 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.

National Planning Policy Framework

10.28 In July 2011, the Government published the draft National Planning Policy Framework (NPPF) for consultation. This document represents a key part of the Government's reforms to make the planning system less complex and more accessible, and to promote sustainable growth. The draft Framework sets out the Government's economic, environmental and social planning policies for England. Taken together, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations. In order to assist in the delivery of sustainable development, the planning system should be used to protect and enhance our natural, built and historic environment, to use natural resources prudently and to mitigate and adapt to climate change, including moving to a low-carbon economy.

10.29 With regard to environmental assessment, the draft NPPF states that "planning policies and decisions should be based on up-to-date information about the natural environment and other characteristics of the area. A sustainability appraisal should be an integrated part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors".

117 Draft National Planning Policy Framework, CLG, 2011

Minerals Policy Statement 2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England

10.30 Considers the impacts of minerals development on the environment stating “...the need to keep these impacts to an acceptable minimum in the planning and operation of extraction sites is a high priority”. The document provides additional guidance in the form of annexes which to date cover dust and noise.

Minerals Planning Guidance 7: The Reclamation of Mineral Workings

10.31 Recognises that the impacts of minerals development can continue beyond the life of the mine or quarry and therefore encourages the restoration of minerals development at the earliest opportunity. Of particular relevance to this chapter is the subject of soil stripping, removal and storage during the life of the operation. Consideration will have to be given as to whether a general development control policy will be required to cover soils, bearing in mind advice to not repeat national guidance, in light of available information for the plan area. This will also apply to infilling of void.

Good Practice Guidance on Restoration of Mineral Workings (MAFF)

10.32 Minerals Planning Authorities (MPAs) are encouraged to use this good practice guidance when determining planning applications. Of particular relevance to this chapter are the considerations that should be given to the protection of soils regarding the stripping and storage of topsoil, subsoil and overburden.

Waste Strategy for England

10.33 The National Waste Strategy, produced by Defra in 2007, demonstrates that England has made significant progress in recent years. Recycling and composting nearly quadrupled between 1996/97 to 2005/06 and has continued to increase. Less waste is also being sent to landfill. This progress has been driven by significant changes in policy. However, England's performance still lags behind many European countries. The government's key objectives in the waste strategy are to:

- Decouple waste growth from economic growth and emphasise prevention and re-use;
- Meet and exceed the landfill directive diversion targets for biodegradable municipal waste in 2010, 2013 and 2020;
- Increase diversion from landfill of non-municipal waste and secure better integration;
- Secure the investment in infrastructure needed to divert waste from landfill;
- Get the most environmental benefit for that investment through increased recycling of resources and recovery of energy from residual waste using a mix of technologies.

10.34 Positive planning has an important role in delivering sustainable waste management through the development of appropriate strategies for growth, regeneration and prudent use of resources and by providing sufficient opportunities for new waste management facilities of the right type, in the right place and at the right time.

10.35 The Waste Strategy for England is covered in further detail in the Waste Evidence Base, in addition to the **Government Review of Waste Policy in England 2011**.

Environmental Quality in Spatial Planning / Supplementary Files (The Countryside Agency, English Heritage, English Nature and the Environment Agency, 2005)

- 10.36** The above guidance was produced by the Countryside Agency, English Heritage, English Nature (now Natural England) and the EA (the agencies) to help planning authorities and regional planning bodies in preparing plans and strategies under the new planning system. In particular, the document seeks to set out how planning authorities might achieve high standards of environmental quality in spatial planning.
- 10.37** In particular, the agencies commend measures such as using recycled building materials, avoiding or reducing pollution, reducing waste, remedying the effects of derelict and contaminated land, reducing water and energy consumption, using renewable energy, reducing the need to travel, increasing density and using less land. The agencies look to planning authorities to promote these measures in plans and strategies as an important contribution to sustainable development and seek to ensure that planning authorities have plans and strategies which are consistent with and promote the government's waste hierarchy.
- 10.38** The agencies aim to ensure that the planning system promotes and adopts:
- The precautionary principle;
 - The principle that the developer should avoid, or where not possible, mitigate and compensate for the adverse effects of development, minimise and then deal with its waste in the most sustainable way (including where possible, the polluter pays principle);
 - The protection of environmental resources necessary for life;
 - The provision of essential infrastructure including water resources, waste facilities, flood defences and 'green' infrastructure;
 - The re-use of buildings before considering demolition;
 - Design of development that minimises its impact on the environment both during and after construction, taking account of climate change;
 - Development that generates and utilises renewable energy in appropriate ways; and
 - Working with, not against, nature and natural processes.
- 10.39** In the Environmental Quality in Spatial Planning Supplementary Files (2005) the agencies call for firm but flexible plans and strategies which allocate and facilitate development and other changes needed but also recognise the difficult decisions faced by planning authorities. The guidance recognises that some developments that are necessary but unpopular, such as waste management facilities and mineral working, and in this case policy frameworks need to be particularly robust to enable these developments to proceed in accordance with the principles of sustainable development.

Effectiveness of aftercare provisions for minerals workings (DCLG, 2000)

- 10.40** The above report presents the findings of a two year research project that has assessed the effectiveness of the provisions for the aftercare of mineral workings in England (and Scotland). The research examines the statutory requirements, the existing procedural arrangements and the standards of reclamation being achieved in practice, and makes recommendations for improvements to the procedures.
- 10.41** The key findings can be summarised as follows:
- There was a general preference for aftercare schemes rather than detailed conditions;
 - There was a view that a mechanism to allow the aftercare period to be temporarily suspended or extended would be helpful in some circumstances;

- Considering the importance of restoration to the success of aftercare, many respondents thought that standards for restoration should be set and maintained, with remedial works if necessary;
- The importance of involving the landowner was seen to be important in ensuring that the objectives of the aftercare were not lost if the land reverted to the landowner part way through the aftercare period.

Defra Guidance for Successful Reclamation of Mineral and Waste Sites (Defra, 2004)

- 10.42** In 1999 the Ministry of Agriculture, Fisheries and Food (MAFF) adopted a more strategic role in relation to mineral and waste land use planning. After discussions with the key stakeholders, MAFF commissioned the Farming and Rural Conservation Agency (FRCA) to produce the “Guidance for successful reclamation of mineral and waste sites”. The guidance aims to help both mineral planning authorities and mineral operators achieve the desired outcomes in the context of the more strategic input from Defra’s Rural Development Service (RDS). The guidance, intended to be used as a ‘tool kit’ with the user selecting the relevant issues and tailoring them to site specific circumstances, promotes better understanding of the agricultural issues affecting the restoration of mineral and waste sites where the long-term agricultural potential of the land is to be preserved. It provides a working tool for the industry to assess and balance the agricultural issues relating to mineral and waste proposals, by focusing on the agricultural considerations and the key issue of sustainability.
- 10.43** The document highlights that an important basis of schemes of working and restoration are Agricultural Land Classification Surveys and Statement of Physical Characteristics Reports.

Regional and Local Policy

The Community Strategies

- 10.44** In order to produce a ‘sound’ document, LPAs must demonstrate that the plan has had regard to the authority’s Community Strategy (soundness test five)⁽¹¹⁸⁾. The **Wiltshire Community Strategy 2007-2016** includes the following key targets and objectives relating to environment:
- Use of integrated renewables in new buildings
 - Reduced growth in total household waste arisings
 - Increased recycling and composting of household waste arisings.
- 10.45** The community strategy objectives are non-specific in terms of particular schemes or locations and are indirectly related to minerals and waste development. They therefore can only in part be delivered through minerals and waste developments where appropriate.
- 10.46** The District Community Strategies also contain non-specific objectives that have an indirect connection with minerals and waste development in relation to leisure. Restoration of minerals sites may be able to in part deliver leisure opportunities.
- 10.47** The Swindon Community Strategy *A Shared Vision for Swindon 2008-2030* contains no relevant priorities.

118 PPS12: Local Development Frameworks, ODPM, 2004

The Development Plan

Table 10.2 Relevant parts of the Development Plan

Plan/Strategy	Relevant Policy	Implications for MWDF
Draft Regional Spatial Strategy for the South West ⁽¹¹⁹⁾	Policy F1 – Flood Risk	This policy echoes the principles of PPG25/PPS 25. The minerals DPDs could offer a potential solution to areas at risk of flooding through realignment of water courses and creation areas with a capacity to divert and store floodwater. A feasibility study will need to be undertaken.
	Policy RE1 – Renewable Energy	Waste DPDs could contribute to the target for Wiltshire by encouraging development of energy from waste, anaerobic digestion facilities and harnessing of landfill gas within the plan area. A feasibility study may need to be undertaken.
	Policy RE3 – Renewable Heat	Waste DPDs could encourage harnessing the heat produced from waste facilities listed for policy RE1. A feasibility study may need to be undertaken.
	Policy RE6 – Water Resources	Preparation of the minerals and Waste DPDs will take into consideration information provided by the EA relating to water resources.
	Policy RE9 – Air Quality	Minerals and waste DPDs could include policies that aim to reduce the impact of development on air quality, in particular through suppression of dust from minerals development and encouraging more efficient modes of transport.
Wiltshire & Swindon Structure Plan ⁽¹²⁰⁾	Policy C5 – The Water Environment	Minerals and Waste DPDs should discourage development that increases risk of flooding. To a certain extent reflects principles of PPS25.
	Policy C12 - Agriculture	Preparation of minerals and waste DPDs will need to take in to account Agricultural Land Classification. To a certain extent this policy reflects principles of PPS7.
	Policy C13 – Land Restoration	Minerals and waste DPDs could encourage high quality restoration of brownfield/derelict land.

119 The Localism Bill has now been given Royal Assent and so the mechanism by which Regional Strategies will be revoked is now in place. However, orders by the Secretary of State are still required before revocation is enacted.

120 Potential revocation of saved Structure Plan Policies through Localism Act.

Plan/Strategy	Relevant Policy	Implications for MWDF
	Policy W2 – Provision of Recycling and Recovery Facilities	Waste DPDs could encourage recovery of energy from waste.
	Policy W4 - Environmental Criteria	Waste DPDs may take into account the environmental impacts of waste developments.
Swindon Borough Local Plan	Policy ENV14 – Protection of Agricultural Land	Where possible, high quality agricultural land will be protected. This policy reflects principles of PPS7.
Kennet District Local Plan	Policy NR12 – Protection of High Quality Agricultural Land; Policy NR13 – Development of Contaminated Land; Policy NR14 - NR18; and Policy NR19 – Renewable Energy Proposals	This policy framework will need to be taken into consideration when considering sites in the former Kennet District.
North Wiltshire Local Plan	Policy NE16 – Renewable Energy; Policy NE17 – Contaminated Land; Policy NE18 – Noise and Pollution; Policy NE21 – Development in Flood Risk Areas; Policy NE22 – Surface Water Runoff; and Policy NE23 Water Courses	This policy framework will need to be taken into consideration when considering sites in the former North Wiltshire District.
West Wiltshire Local Plan	Policy C1- Countryside Protection; Policy C9 – Rivers	This policy framework will need to be taken into consideration when considering sites in the former West Wiltshire District.
Salisbury District Local Plan	Policy C18 – Water Resources; Policy C19 – Best and Most Versatile Agricultural Land; and Policy PS8 – Renewable Energy	This policy framework will need to be taken into consideration when considering sites in the former Salisbury District. For the time being, these three policies will continue to be in force (saved) after adoption of the South Wiltshire Core Strategy (below).
Emerging South Wiltshire Core Strategy	Core Policy 19 - Water Efficiency and the River Avon Special Area of Conservation; Core Policy 20 - Pollution and phosphate Levels in the Water Environment; Core Policy 21 - Flood Risk; Core Policy 25 - Air Quality	The South Wiltshire Core Strategy sets out the Council's spatial vision, key objectives and overall principles for development in the area of the former Salisbury District Council. The document has not yet been adopted. The South Wiltshire Core Strategy, essentially a transitional document, will in effect be replaced by the Wiltshire wide Core Strategy when the latter document is adopted.
Emerging Wiltshire Core Strategy	SO2 - Addressing climate change; SO5 - Protecting and enhancing the natural, historic and built environment; CP41 - Sustainable construction and	The Wiltshire Core Strategy is the most important part of the Local Development Framework (LDF), a suite of planning policy documents that will eventually replace the four local plans covering Wiltshire.

Plan/Strategy	Relevant Policy	Implications for MWDF
	low-carbon energy; CP55 - Air Quality; CP56 - Contaminated land; CP67 - Flood risk; CP68 - Water resources; CP69 - Protection of the River Avon SA	<p>The Wiltshire Core Strategy Development Plan Document (DPD) will cover the whole of Wiltshire (excluding Swindon) and sets out the council's spatial vision, key objectives, and overall principles for development in the County.</p> <p>This emerging policy framework will need to be taken into consideration when considering sites in the Wiltshire area.</p>
Emerging Swindon Core Strategy	CT3 - Safeguarding out environment for future generations; DMP2 - Energy and sustainable construction; DMP3 - Flood risk	When adopted this policy framework will need to be taken into consideration when considering sites in the Swindon Borough area.

Land and Soil Resources

- 10.48** Land and soils are a finite resource. This section of the chapter addresses issues relating to the appropriate use of land and soils and their management to retain long term availability of high quality resources. Waste management and mineral working are therefore fundamental elements to consider.
- 10.49** At the international level, a number of waste directives are relevant here including the Waste Framework Directive (2008/98/EC), Landfill Directive (99/31/EC), and European Nitrates Directive (91/676/EC) which have been summarised earlier in this chapter.
- 10.50** At the national level the following guidance, plans and programmes are relevant to the impacts of waste management and mineral working on land and soil resources.

Planning Policy Guidance 14: Development on Unstable Land

- 10.51** This PPG, published in 1990, sets out the broad planning and technical issues to be addressed in respect of development on unstable land. The responsibilities of the various parties to development are considered and the need for instability to be taken into account in the planning process is emphasised.
- 10.52** The key objectives of PPG14 are:
- To minimise the risks and effects of land instability on property, infrastructure and the public;
 - To help to ensure that various types of development should not be placed in unstable locations without appropriate precautions;
 - To bring unstable land, wherever possible, back into productive use;
 - To assist in safeguarding public and private investment by a proper appreciation of site conditions and necessary precautionary measures.
- 10.53** The document shows that mining and landfill activities have been responsible for instable land in the past so it particularly pertinent that unstable land is identified at an early stage in the planning process.

Rural Development Programme for England (RDPE)

- 10.54** Defra are responsible for the RDPE, which aims to encourage better management of rural areas through the implementation of schemes such as the Countryside Stewardship Scheme (see landscape chapter).
- 10.55** A number of these schemes apply to Wiltshire and Swindon and therefore minerals and waste development involving displacement of soils and overburden during operations can have an impact upon these areas. Soils that are not properly managed on site can compromise the future use of a minerals or waste development site.

The state of soils in England and Wales

- 10.56** Produced by the EA in 2004, this report summarises current knowledge about the condition of soils. It highlights some of the major concerns that the EA wants to tackle in partnership with those who have a stake in protecting this vital resource. The principal conclusion of this report is that there is not enough good quality information on the soils of England and Wales. Without this, it is not possible to develop effective policies.
- 10.57** The report does not identify detailed responsibilities and actions but has helped inform the EA's own priorities for action. The policy challenges are identified as:

- Improving the knowledge base;
- Tackling the impacts of intensive agriculture;
- Understanding soil biodiversity;
- Soils in the built environment;
- Integrated management of soil, water and air.

10.58 The document states that "Soils are damaged by the extraction of minerals and fossil fuels. There is a legacy of affected sites that need careful restoration." This statement highlights the importance of giving options for quarry restoration careful consideration from an early stage in the planning process.

Safeguarding our Soils: A Strategy for England

10.59 Published by Defra in September 2009, this strategy builds upon and replaces the **First Soil Action Plan for England 2004 - 2006**. As identified in the strategic document, the government's vision is that "by 2030, all England's soils will be managed sustainably and degradation threats tackled successfully. This will improve the quality of England's soils and safeguard their ability to provide essential services for future generations". The planning system is identified as being one of the key elements in achieving this aim, particularly through preventing unnecessary degradation of soils from diffuse pollutions caused during and sometimes after construction of developments. Defra recognises the need to review the effectiveness of existing planning policy, and makes reference to comments related to soil within existing national planning guidance. Of particular relevance is paragraph 20 of PPS1, which states "Development Plan policies should take account of environmental issues such as: ...the conservation of soil quality". Defra is also working with the DCLG to develop a Soils Toolkit for Planners, which will provide easily digestible information to ensure that soils receive the necessary consideration at the appropriate stages in the planning process, and can be delivered by planning authorities working at the local level.

10.60 Good management of soils in relation to minerals extraction is considered an important factor in conservation of soil quality. MPAs are urged to use Good Practice Guidance published by MAFF on handling soils during minerals operations when considering proposals. The plan expresses concern about soils lost due to minerals restoration schemes involving flooding of areas for amenity and recreational use. To compliment this plan, the EA have produced a *State of Soils in England and Wales* report, in which they state "*In England and Wales, the main causes of structural damage and erosion in soils are:*

- *intensive cultivation, particularly when soils are compacted by heavy machinery or left exposed to heavy rain (as with winter cereals and maize);*
- *heavy trampling of soil by sheep and cattle, and rooting by free-range pigs;*
- *poor forestry practice, for example during road construction and harvesting;*
- *runoff from urban land, especially building sites."*

10.61 In this report the EA see planning as a potential mechanism to better protect soils and to encourage the remediation of land through development of brownfield sites. The report specifically mentions the potential impact of minerals extraction through the removal of overburden and soils on the local environment, particularly in relation to drainage patterns.

Soil: A precious resource - our strategy for protecting, managing and restoring soil

10.62 The EA has also produced a strategy highlighting its priorities for soil and the actions the Agency will take to fulfil its objectives. The document states the importance of working with DCLG and local authorities in implementing the SEA Directive by encouraging people to consider soils when they are developing relevant policies, strategies and plans.

Data Relating to Soil

- 10.63** There is very little data available on the quality of soils at the national or local level. However there are some sources of relevance to this topic that provide useful information for this chapter. Soils share an interdependent relationship with the air and water environments, which can sometimes lead to contamination of water courses from soil through surface runoff or conversely soils can be damaged by deposition from the air or water. It is hoped that over time this part of the evidence base will grow as research into this area continues and more data becomes available.
- 10.64** During the period 1990-2005, the presence of nitrates found in water samples has seen a significant increase, partly due to use of agricultural fertilisers. However, levels of phosphates show a reduction over the same period.

Contaminated Land

- 10.65** Up to date records of registered land contaminated by previous development or human activity are held by Wiltshire Council. Having access to this information will ensure that areas and sites proposed in DPDs are more realistic with respect to the likelihood of being developed within the life of the plan. Development proposals which are likely to be on or adjacent to land which may have been subject to contamination will need to demonstrate that measures can be taken to effectively mitigate the impacts of land contamination on public health, environmental quality, the built environment and amenity.
- 10.66** The EA are responsible for monitoring and controlling potential contamination to air, water and if a contaminated land site is considered to qualify as a special site under Part IIA of the EPA 1990 they are also the responsible authority for contaminated land. In 2009, the EA published a report to present current information on the progress made under Part IIA (the Contaminated Land Regime) in managing contaminated sites in England and Wales 2000-2007. The waste management and energy industries were adjudged as being the biggest sources of pollution associated with contaminated land sites in England.

Agricultural Land Classification

- 10.67** The system of classifying agricultural land began in 1966 with the aim of protecting the best and most versatile agricultural land. This classification has been updated and revised many times and the most recent data is held by Defra and is presented in the map below. This information is indicative only and the area of land subject to a development proposal may require further assessment.
- 10.68** The Agricultural Land Classification (ALC) provides a framework for classifying land (Grade 1 – 5, with 1 being 'excellent' and 5 being 'very poor' quality agricultural land) according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural land use. The limitations can operate in one or more of four principal ways: they may affect the range of crops that can be grown, the level of yield, the consistency of yield and the cost of obtaining it.
- 10.69** In terms of Minerals and Waste, it is chemical limitations which have the largest implications. Where landfill containing organic material has been used in restoration of land to agriculture, gases such as methane can be generated when the waste decomposes. If methods for sealing the landfill surface and venting gas emissions are not used or are not fully effective, such gas can create anaerobic conditions in the overlying soil affecting plant roots and reducing crop yield. Similarly, high concentrations of toxic elements associated with spoil heaps from metalliferous mining, industrial waste and sewage disposal can adversely affect

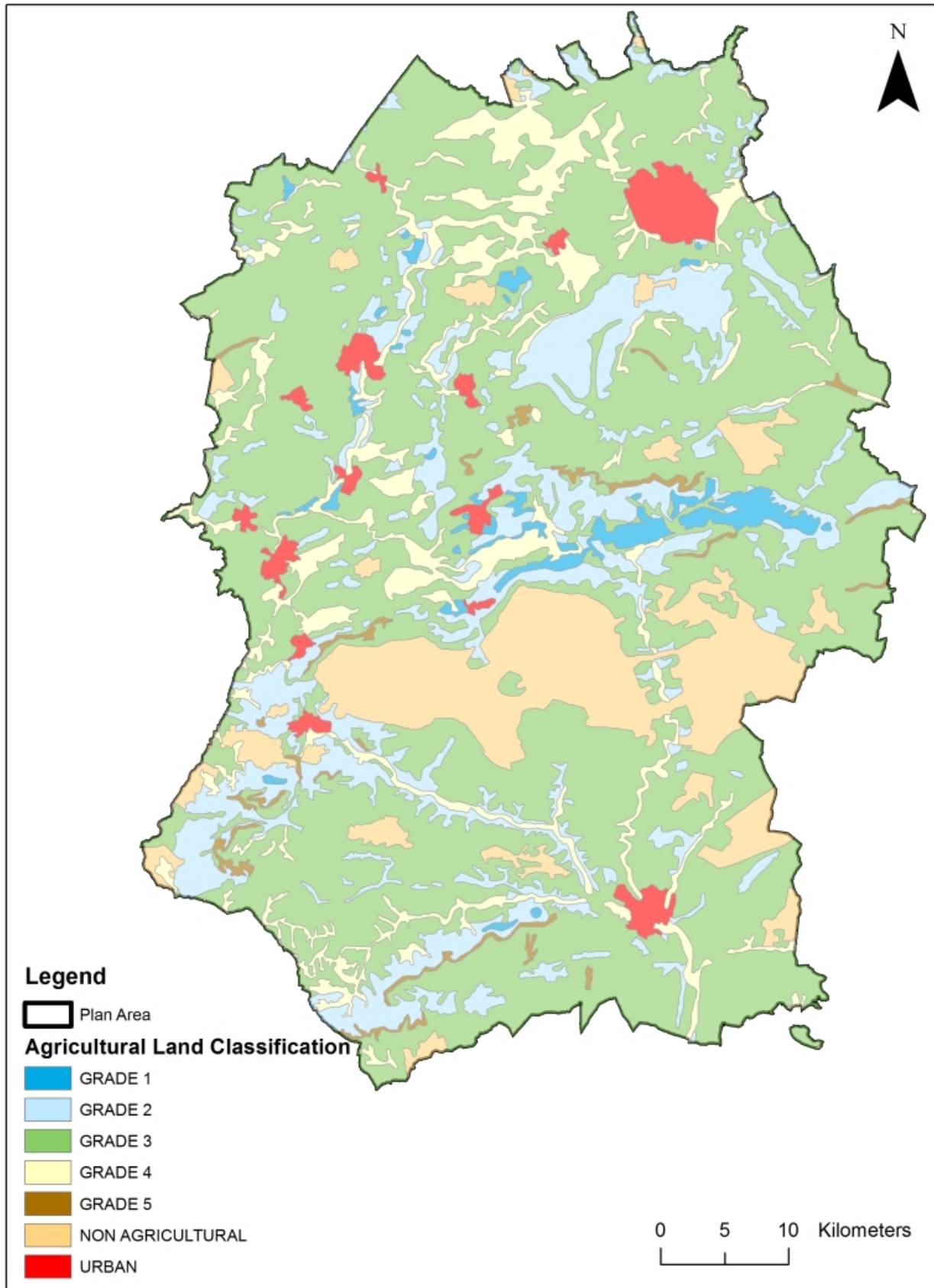
plant growth or pose potential harm to animals or humans. It is important that these environmental impacts associated with minerals and waste developments are kept to an acceptable minimum through the use of appropriate mitigation measures.

10.70 A significant amount of agricultural land in Wiltshire (over 75%) is at grade 3 or higher (i.e. grades 1 and 2), which compares favourably to figures for the south west and nationally (see table below).

Table 10.3 Agricultural Land Classification in Wiltshire (Source: Defra, 2008)

Indicator (%)	East Wiltshire	North Wiltshire	South Wiltshire	West Wiltshire	Wiltshire	South West	England
Area of grade 1 agricultural land	5.18	1.13	0.17	0.65	1.96	1.50	2.70
Area of grade 2 agricultural land	18.45	9.48	12.50	17.11	14.29	7.60	14.20
Area of grade 3 agricultural land	52.66	68.32	62.56	49.60	58.92	58.90	48.20

Figure 10.1 Agricultural Land Classification (Source: Defra)



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Water Resources and Flood Risk

Legal Framework

EC Directive 2000/60/EC establishing a framework for Community action in the field of water policy (The Water Framework Directive)

- 10.71** Implemented in England and Wales through the **Water Environment (Water Framework Directive) (England and Wales) Regulations 2003**, the Water Framework Directive provides a holistic approach to the management of Europe's water bodies, committing member states to achieve good qualitative and quantitative status of all water bodies by 2015. The EC Directive requires the production of a number of key documents over six year planning cycles. Among these documents is the River Basin Management Plans, to be published in 2009, 2015 and 2021. Through the Regulations, the EA is established as the 'competent authority' for carrying out the Directive in England and Wales. There are also a number of "Daughter Directives" and subordinate instruments/regulations including the **EC Directive 2006/118/EC on the protection of groundwater against pollution and deterioration**.
- 10.72** Protected areas designated under other EU directives must also meet the objectives of the Water Framework Directive. The protected areas include:
- Special Areas of Conservation
 - Special Protection Areas
 - Protected Bathing Waters
 - Significant species
 - Nitrate Vulnerable Zones
- 10.73** Minerals and waste development could lead to potential for point source pollution; diffuse source pollution; water abstraction and flow regulation; and physical or morphological alteration to water bodies. The reference to European Designated Sites suggests a possible link between meeting the objectives of the WFD and the requirements of Appropriate Assessment. Consultation with the EA will be essential in the development of minerals and waste DPDs where they relate to the objectives of the WFD.

Council Directive 91/271/EEC concerning urban waste-water treatment (1991)

- 10.74** This directive concerns the collection, treatment and discharge of urban wastewater and the treatment and discharge of wastewater from certain industrial sectors. The objective of the directive is to protect the environment from the adverse effects of wastewater discharges. Planning is recognised as one of the four main principles laid down in Directive, and the importance of recognising sensitive water bodies is emphasised. Policies and objectives contained within Minerals and Waste DPDs should seek to promote the objective contained within the wastewater directive.
- 10.75** The urban waste-water treatment directive is transposed through the **Urban Waste Water Treatment (England and Wales) (Amendment) Regulations (2003)**. These Regulations amend the Urban Waste Water Treatment (England and Wales) Regulations 1994, ("the principal Regulations"). Amongst other matters, the principal Regulations require the Secretary of State to keep under review the identification of "sensitive areas" and "high natural dispersion areas", which are areas of water defined in accordance with specified criteria. The amended Regulations concern the publicity to be given to decisions taken on the review of sensitive areas and high natural dispersion areas under the principal regulations.

National Policy

Flood and Water Management Act 2010

10.76 The Flood and Water Management Act (FWMA) is designed to provide for better, more comprehensive management of flood risk for people, homes and businesses, helps safeguard community groups from unaffordable rises in surface water drainage charges and protects water supplies to the consumer. The Act implements Sir Michael Pitt's recommendations requiring urgent legislation, following his review of the 2007 floods. Serious flooding can happen any time. Climate projections suggest extreme weather will happen more frequently in the future. This Act is central to reducing the flood risk associated with extreme weather. The Act will need to be commenced by ministerial order before it comes into effect.

Planning Policy Statement 25: Development and Flood Risk

10.77 First published in December 2006 (and updated in March 2010), this PPS introduces the requirement for local Planning Authorities to undertake a Strategic Flood Risk Assessment (SFRA), based on flood zones as defined by the EA. SFRA considers the implications for development in terms of both contribution to, and impacts from flooding. This includes consideration of the future impacts associated with climate change. An interesting issue regarding flood risk assessment may be the potential impact of a reduction in minerals extraction in the Cotswold Water Park as the available resources become increasingly depleted. The current mineral extraction activity may be maintaining an artificial ground water level.

10.78 The statement also states that SFRA should inform SA and therefore should be undertaken at the early stages of DPD preparation⁽¹²¹⁾. LPAs are also encouraged to consider including a general policy on legal agreements, setting out what mitigating measures the authority will expect developers to contribute to regarding flooding issues. PPS25 defines sand and gravel extraction as a "water-capable development" (in table D.2).

10.79 The accompanying **Planning Policy Statement 25 - Practice Guide** (December 2009) states that "waste and mineral planning authorities (including county councils) need to take account of flood risk when allocating land for development". Plans and policies should be developed with due regard to Regional Spatial Strategies (RSSs), Regional Flood Risk Appraisals (RFRAAs), and any available SFRAs. Waste and Minerals Planning Authorities should apply the sequential approach to the allocation of sites for waste management and mineral extraction. Given that mineral workings can be large, the sequential approach may also be applied at site level.

Making Space for Water

10.80 Published by Defra in March 2005, this document is the cross Government programme taking forward the developing strategy for flood and coastal erosion risk management in England. The document outlines a holistic approach to managing these risks over the 20-year lifetime of the strategy. The approach involves taking account of all sources of flooding, embedding flood risk management across a range of government policies, and reflecting other relevant government policies in the policies and operations of flood risk management.

121 In the case of the Wiltshire and Swindon MWDF, this requirement came into effect after the early stages of consultation had already passed.

- 10.81** Flood risk assessments should be included at all levels of the planning process. A balance between the three pillars of sustainable development should be achieved in flood risk management activities; the environmental pillar of sustainable development should be promoted by making greater use of rural land use solutions such as the creation of wetlands and washlands, and managed realignment of coasts and rivers.

Future Water: The Government's water strategy for England

- 10.82** Published in 2008, this water strategy for England sets out the government's plans for water in the future and the practical steps needed to ensure that good clean water is available for people, businesses and nature. It sets out how the government wants the water sector to look by 2030. The strategic vision is for sustainable delivery of secure water supplies and an improved and protected water environment. This will be achieved through taking action in areas of water demand, water supply, water quality in the natural environment, surface water drainage, river and coastal flooding, greenhouse gas emissions, charging for water and regulatory framework, competition and innovation. Policies should reflect the long term aims of the water strategy, incorporating strategies to promote the protection and enhancement of the plan area's water resources and manage them in more sustainable ways.

Water for people and the environment: Water Resources Strategy (WRS) for England and Wales

- 10.83** Published by the EA in 2009, this document outlines the strategy for how water resources should be managed in England and Wales over the coming decades. The EA's vision is for the "management and use of water that is environmentally, socially and economically sustainable, providing the right amount of water for people, agriculture, commerce and industry, and an improved water-related environment". The document identifies four key aims related to this vision: to manage water resources and protect the water environment in the face of climate change; to protect species and habitats that depend on water; to support people and the economy through good water management; and work to ensure and understand the value of water and its contribution to people's quality of life. In support of this strategic document, a "**Water Resources Action Plan for England and Wales**" was also produced by the EA, which identified national strategic actions and methods of implementing these actions. One of the main messages from these EA documents is the need for LPAs to work closely with the Agency to ensure the adequate protection of water resources.
- 10.84** In addition to the National action plan, the EA has published seven Regional action plans. These documents provide regional actions on key priorities in the given area, with regard to other plans and strategies including the WRS and WFD. The December 2009 **Water Resources Strategy for the South West Region** recognised that 25 per cent (38) of the 153 surface water "Water Resource Management Units" in the region are over-abstracted or over-licensed, and that seven Habitats Directive sites and seven SSSIs are at risk from, or are being damaged by, too much abstraction.

Water White Paper - Water for Life

- 10.85** Published by Defra in December 2011, this government white paper describes a vision for future water management in which the water is valued as a precious and finite resource. Over the long term the government will introduce a reformed water abstraction regime, as signalled in the Natural Environment White Paper (The Natural Choice, June 2011). The Water White Paper outlines the following key challenges related to water and the natural environment:

- Tackling water pollution;
- Tackling over-abstraction.

10.86 In an effort to deliver this White Paper the Government will publish a draft Water Bill for pre-legislative scrutiny in early 2012 and introduce a Water Bill as soon as Parliamentary time allows.

Groundwater Protection: Policy and Practice (GP3)

10.87 Groundwater is important, supplying approximately one third of mains drinking water in England (in the South West Region 43% of public water supply comes from groundwater sources⁽¹²²⁾) and supporting numerous private supplies. All rivers are also partly fed on groundwater and some rivers and wetlands are completely dependent on it. However the EA's **Underground, under threat - the state of groundwater report** (2006) identifies the two major threats that put the resource under pressure:

- **Pollution** - groundwater is vulnerable to contamination and is difficult to clean. Nitrate, pesticides, solvents and other chemicals can get into groundwater from surface water and soils.
- **Demand** - over-use of groundwater depletes the public water supply, so we might not be able to rely on it in the future. Many rivers and wildlife also depend heavily on groundwater and may be harmed, or lost, if groundwater levels become too low. Thirty-five per cent of groundwater bodies are classified as at 'poor quantitative status' under the EU Water Framework Directive because of abstraction pressures.

10.88 GP3 comprises a series of documents and sources produced by the EA to offer advice and tools for planning professionals and developers on how best to protect groundwater resources. The GP3 documents outline information related to Catchment Abstraction Management Strategies (CAMS), groundwater vulnerability, and Source Protection Zones (SPZs), all of which are investigated in more detail within this chapter.

10.89 The EA also outlines the new aquifer designations that have been used in its Groundwater Protection Policy since 1 April 2010. Consistent with the Water Framework Directive, the new aquifer designations are as follows:

- **Principal Aquifers** - These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.
- **Secondary Aquifers** - These include a wide range of rock layers or drift deposits with an equally wide range of water permeability and storage. Secondary aquifers are subdivided into two types:
 - **Secondary A** - permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers;
 - **Secondary B** - predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin

122 South West Observatory 'Water resources'

permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers.

- **Secondary Undifferentiated** - has been assigned in cases where it has not been possible to attribute either category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.

10.90 On older groundwater vulnerability maps, aquifers previously designated as major and minor have now become principal and secondary respectively.

10.91 Local planning authorities should refer to the EA's own model planning policies when drawing up their LDDs, particularly in regard to minerals and waste. The disposal of waste into landfill is a major potential hazard to groundwater quality and to reduce this risk it is EA policy to divert landfill to areas where risk of groundwater pollution is minimised. Current and historic mining activities can also cause pollution and groundwater degradation.

Catchment Abstraction Management Strategies (CAMS)

10.92 The EA is responsible for safeguarding water resources and managing abstraction through Catchment Abstraction Management Strategies (CAMS). Surface and groundwater sources are used for a number of uses which can place significant stress on these systems. The EA use CAMS to assess whether a licence for water abstraction should be permitted. The first cycle of CAMS have now been complete, and the 6 CAMS that may influence or be influenced by policies for the MWDF are listed below.

Table 10.4 Catchment Area Management Strategies relevant to plan area

CAMS	Area	River/groundwater unit	Status (2007)
Bristol Avon	A significant part of North Wiltshire and part of West Wiltshire	Bristol Avon	No Water Available
		Sherston Avon	No Water Available
		By Brook	No Water Available
		Semington Brook	No Water Available
Dorset Stour	South Wiltshire (Mere area)	Mere (River Shreen)	Over Licensed
Cotswold	North Wiltshire (northern part of)	River Churn	No Water Available
		River Colne	
		River Leach	
		River Thames	
Hampshire Avon	East Wiltshire, Southern Wiltshire, West Wiltshire (southern parts of)	Upper Avon	Over Licensed
		River Bourne	Over Licensed
		River Wyle	Over Abstracted

CAMS	Area	River/groundwater unit	Status (2007)
Kennet & Pang	East Wiltshire (eastern part of)	Upper Kennet	Over Abstracted
Vale of White Horse	Swindon Borough	River Ray	No Water Available
		River Cole	No Water Available

- Water Available = Water available for new licence abstractions during the whole year.
- No Water Available = Water available for new abstractions during higher flows but conditions on the licence issued will stop or limit the abstraction during low flows.
- Over Licensed = If all abstraction licence holders abstract their full legal limit during low flows, the current amount of abstraction licences may cause an environmental impact.
- Over Abstracted = At recent actual abstraction levels there may be an impact on the environment during low flows.

10.93 Given the pressure on river catchments in the area from abstraction, the MWDF will have to consider the implications of water availability when assessing locations for minerals and waste development. Consultation with the EA will be essential in determining the right development in the right location.

River Basin Management Plans

10.94 As required by the EU Water Framework Directive (2000) and the Water Environment (WFD) (England and Wales) Regulations 2003, River Basin Management Plans (RBMPs) were published by the EA in December 2009. These plans represent the first of a series of six-year planning cycles. The plan area is covered by 3 RBMPs:

- the South West River Basin District;
- the Severn River Basin District; and
- the Thames River Basin District.

10.95 These reports recognise that there are active mining operations in these river basin districts, which are likely to have an impact on groundwater. The Severn RBMP notes that local authorities should “assess mineral restoration schemes for potential for delivering Water Framework Directive benefits”.

Data relating to Water

Groundwater vulnerability

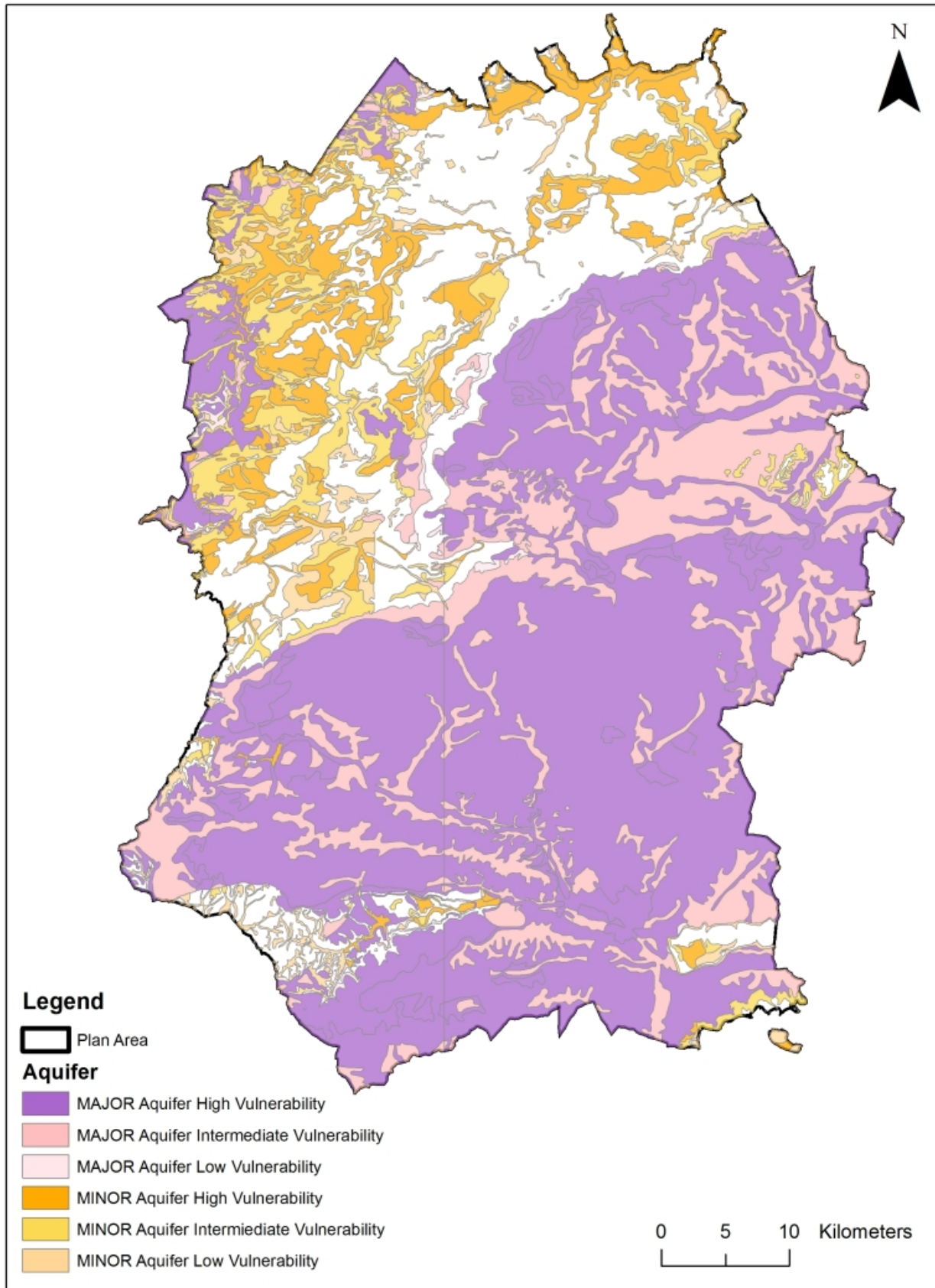
10.96 Groundwater is an essential resource for both domestic and industrial use, and although stocks are replenished over time through precipitation, due to the complex and seasonal nature of hydrogeology, the recovery of an aquifer does not necessarily match the rate of abstraction and local rainfall does not necessarily recharge a local aquifer.

10.97 Where ground water occurs close to the ground surface there is a greater chance of effects on flows resulting from development. This is particularly relevant where development is likely to lead to changes in the water table, potentially causing flooding and/or lowering of the water table which may have an impact upon local communities, agriculture or designated sites.

10.98 The map below shows the location of aquifers within the plan area and an indication of the vulnerability to infiltration from sources on the surface⁽¹²³⁾. This shows, for example, that a significant part of the south and east of the plan area lies on a major aquifer of high vulnerability, which is particularly sensitive to impacts from certain types of development.

123 This map of groundwater vulnerability only provides an indication representation of the likelihood of impacts from development. More detailed assessment of the local geological/hydrological conditions will have to be undertaken to assess the impacts of individual developments.

Figure 10.2 Groundwater Vulnerability. Source: Environment Agency



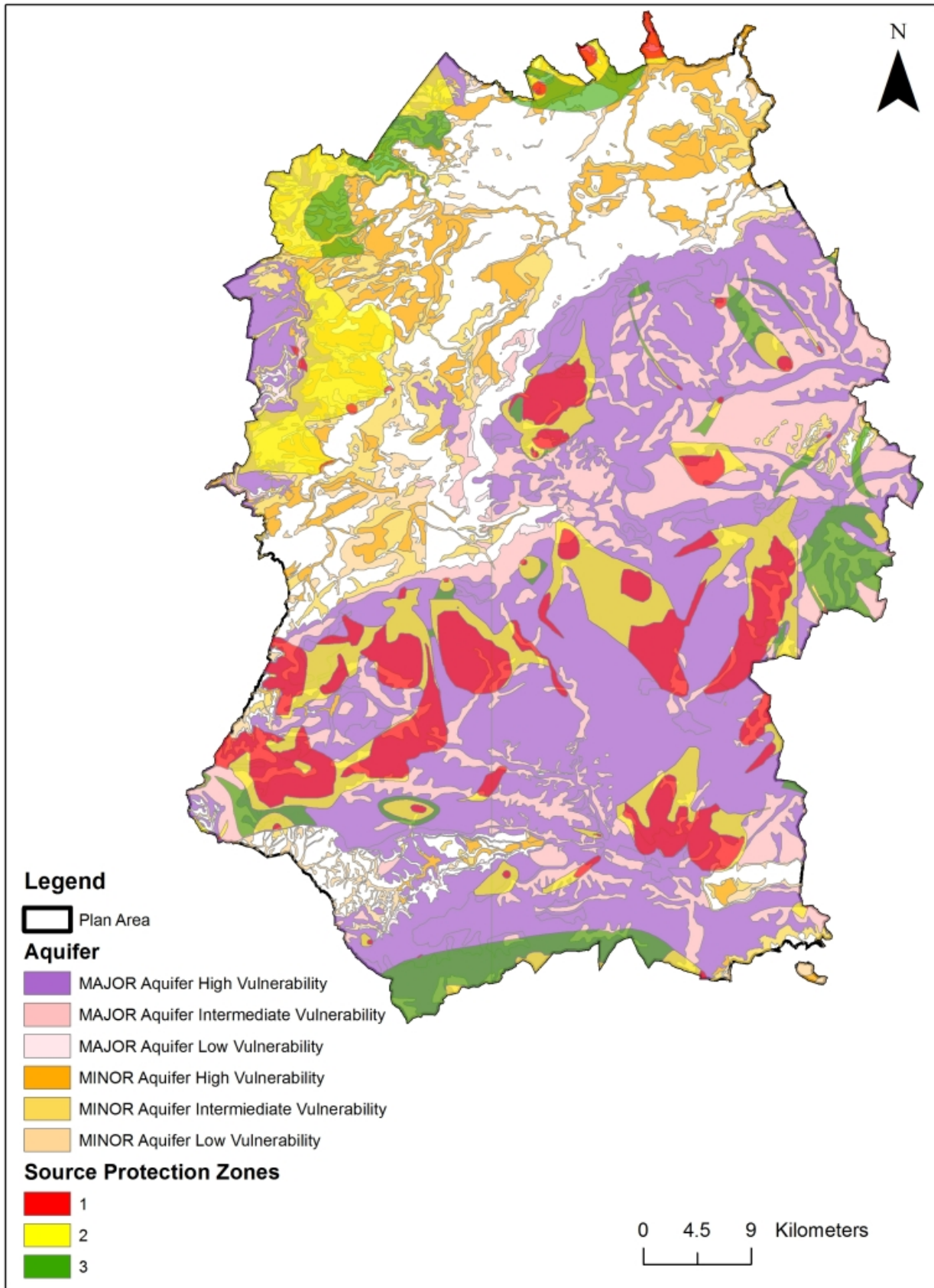
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Groundwater Source Protection Zones (SPZs)

10.99 To assist with the assessment of suitable locations for development the EA have identified Source Protection Zones (SPZs) which are concerned with protecting the catchment area for public and private water supply from potential polluting sources. Minerals resources of interest in the plan area often coincide with SPZs including sand and gravel deposits found in the Cotswold Water Park. Where this is the case, and where minerals extraction occurs, great care will need to be taken to ensure that groundwater sources are protected. Certain types of waste development can also pose a potential risk of contamination to groundwater and therefore it is essential to use the information provided by the EA below to advise the suitable location for specific waste developments⁽¹²⁴⁾.

124 This map showing SPZs is indicative and more detailed assessment will have to be undertaken for individual proposals.

Figure 10.3 Environment Agency Source Protection Zones



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10.100 The shape and size of a zone depends on the condition of the ground, how the groundwater is removed, and other environmental factors. The EA divides groundwater source catchments into three zones, defined as follows:

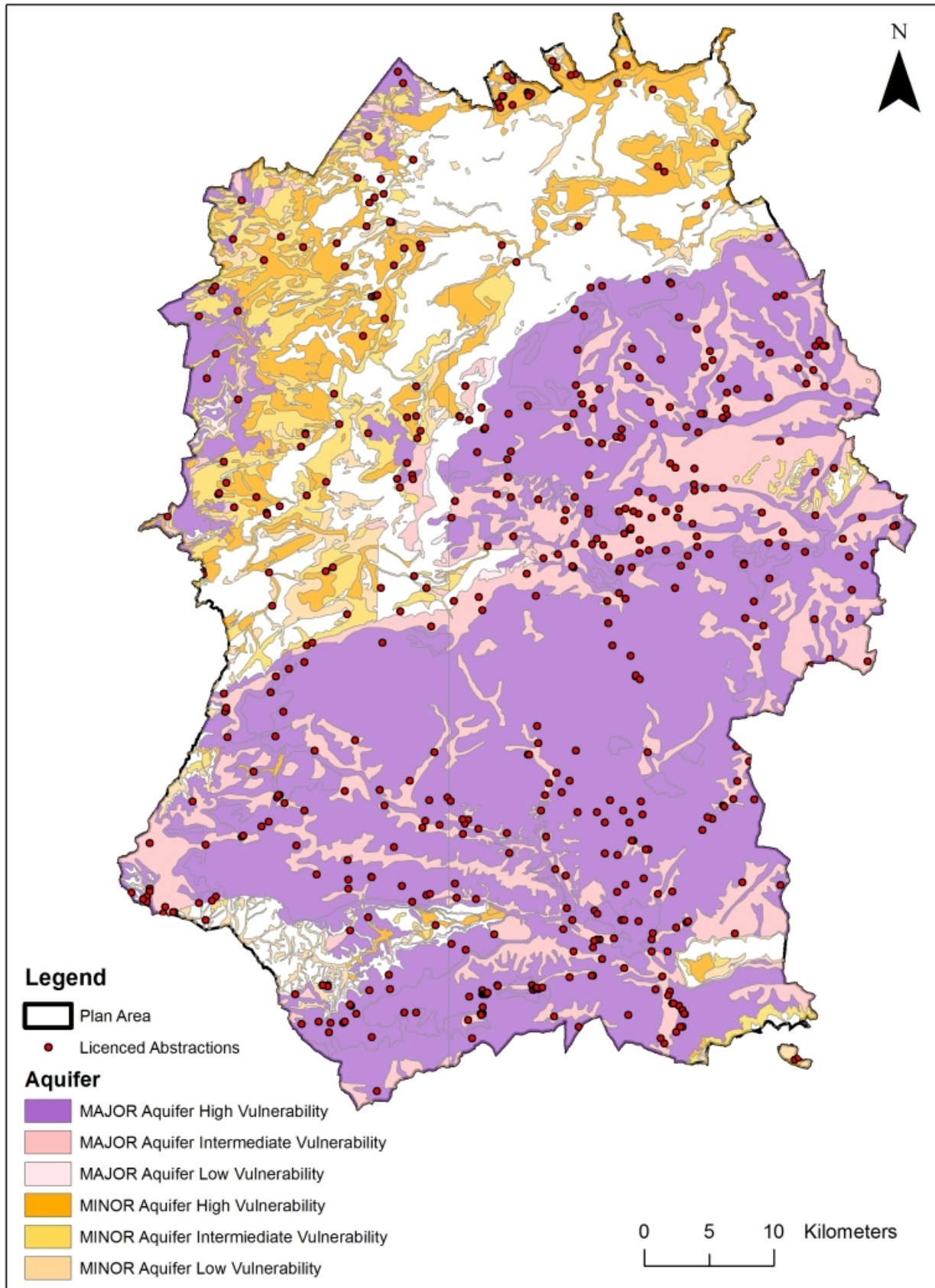
- **SPZ1 (Inner protection zone)** - Defined as the 50 day travel time from any point below the water table to the source. This zone has a minimum radius of 50 metres.
- **SPZ2 (Outer protection zone)** - Defined by a 400 day travel time from a point below the water table. The previous methodology gave an option to define SPZ2 as the minimum recharge area required to support 25 per cent of the protected yield. This option is no longer available in defining new SPZs and instead this zone has a minimum radius of 250 or 500 metres around the source, depending on the size of the abstraction.
- **SPZ3 (Source catchment protection zone)** - Defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source. In confined aquifers, the source catchment may be displaced some distance from the source. For heavily exploited aquifers, the final Source Catchment Protection Zone can be defined as the whole aquifer recharge area where the ratio of groundwater abstraction to aquifer recharge (average recharge multiplied by outcrop area) is >0.75 . There is still the need to define individual source protection areas to assist operators in catchment management.
- A fourth zone SPZ4 or 'Zone of Special Interest' was previously defined for some sources. SPZ4 usually represented a surface water catchment which drains into the aquifer feeding the groundwater supply (i.e. catchment draining to a disappearing stream). In the future this zone will be incorporated into one of the other zones, SPZ 1, 2 or 3, whichever is appropriate in the particular case, or become a safeguard zone.

Licensed Abstraction Points

10.101 In areas where water is reliably replenished it can, to a certain extent, be considered as a renewable resource. However, there are limits to the volume of water that can be abstracted within a particular time period. For this reason licenses for abstraction of ground and surface water are permitted and monitored by the EA to ensure that water resources are not over exploited.

10.102 The map on the following page shows licensed abstraction points within the plan area. Some processes associated with minerals development may involve the abstraction of local water resources.

Figure 10.4 Environment Agency Licensed Groundwater/Surface Water Abstraction Points

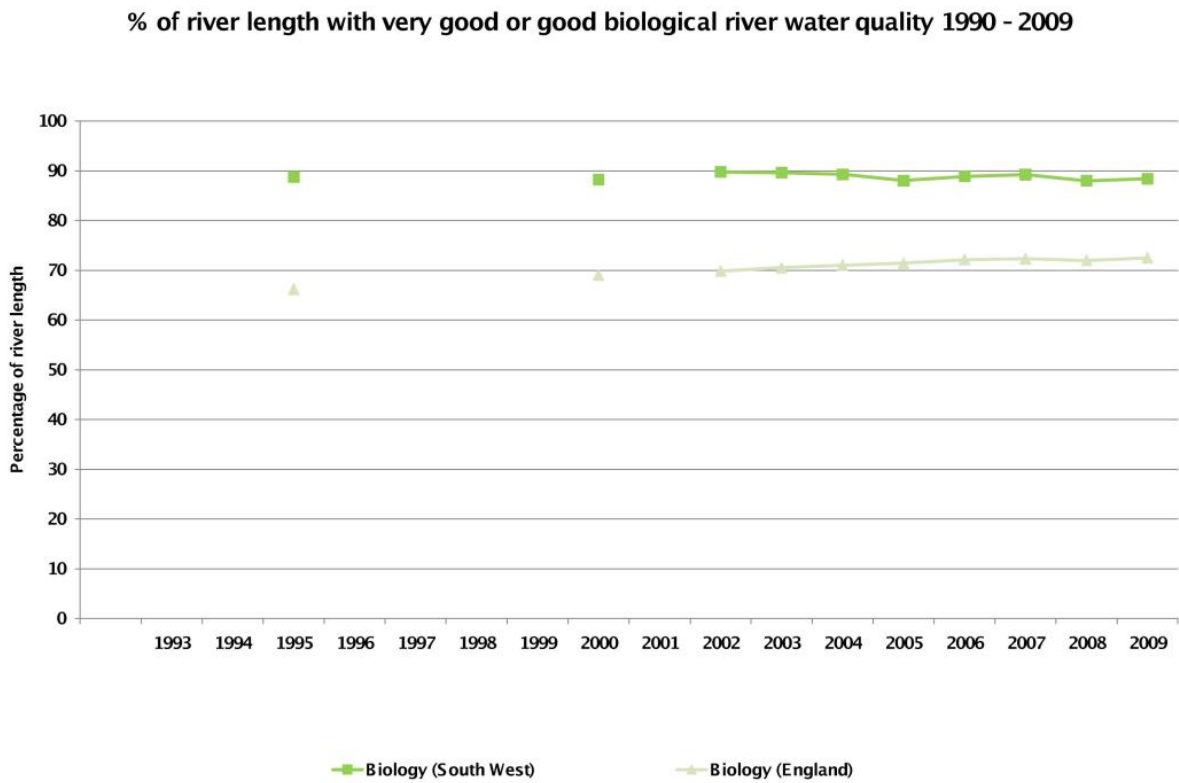


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Surface water quality

- 10.103** Surface water consists of water bodies such as rivers and lakes which are also susceptible to impacts from minerals and waste development. The quality of water in our rivers is monitored by the EA in order to assess the overall health of the inland water ecosystem. It is one of the 68 indicators of the Government's Sustainable Development Strategy. For the past twenty years, a general quality assessment (GQA) scheme has been used to assess river quality in terms of biology, chemistry and nutrients. GQA has helped drive environmental improvements by dealing with many of the major point sources of pollutions, but from 2011 the EA will be using a new methodology, designed to give a more sophisticated analysis of the health of our waters, in line with the European Water Framework Directive. Currently, statistics for the GQA indicators of river biology, chemistry and nutrients are available from the EA for the plan area. However, detailed statistics relating to specific rivers are not available and therefore more information will need to be gathered for relating when considering specific locations for development. This site specific data may then need to be subject to regular monitoring.
- 10.104** The biological quality of a river is a measurement based on the number, type and size of population of species of flora and fauna whose habitats are wholly dependant on the water body. Certain species are particularly sensitive to changes in the water climate and therefore the absence or presence of these species act as indicators of the health of the local water environment. According to the South West Observatory (SWO), biological river water quality has been consistently good in the South West region, with over 80% of rivers classed as good or better since 1990. As illustrated by figure 10.5, the biological quality of rivers in the South West is significantly higher than the national average. In 2009, 88% of river length in the region was adjudged as being good or very good in terms of biological water quality, in comparison to a 73% average for rivers in England.

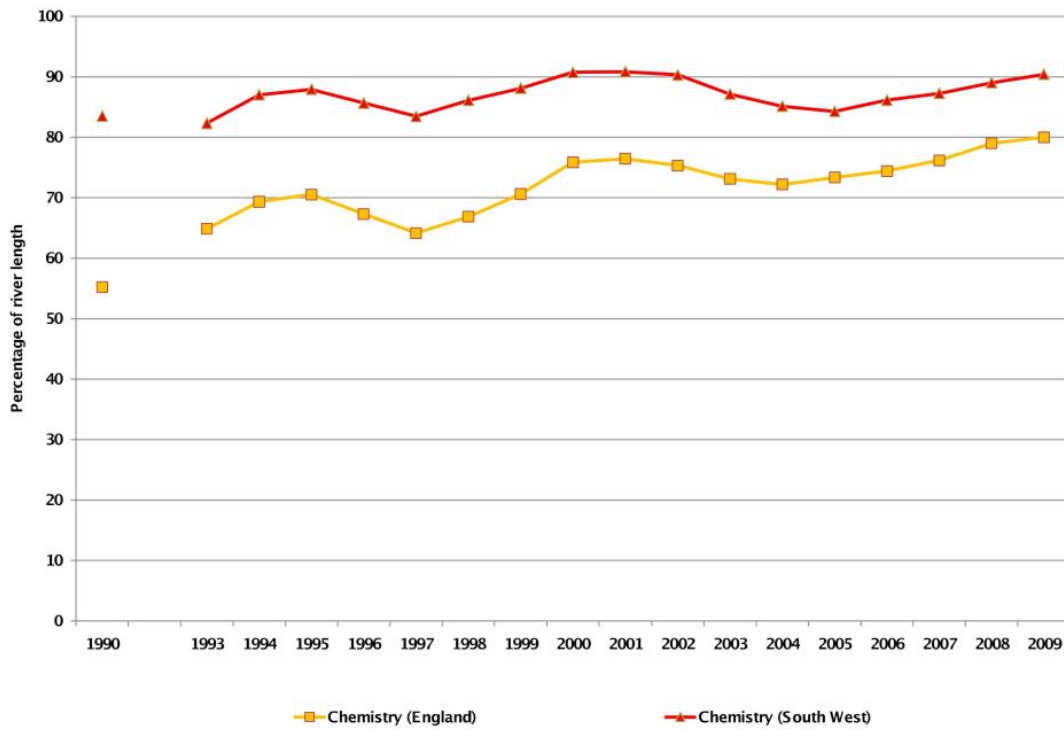
Figure 10.5 Biological River Water Quality. Source: South West Observatory



10.105 The chemical quality of a river is a measure of oxygen (present as dissolved oxygen) and the presence of chemical and biological material that consumes oxygen as it undergoes decomposition and dilution within the water environment. As oxygen levels fall, the health of the water body deteriorates, although oxygen levels also depend on other natural conditions like the rate of flow and type of terrain. In the South West, the chemical quality of rivers has improved over the past two decades, with 90.4% of rivers in the top two quality chemistry bands (2009). Since 1990, the level of rivers achieving good or better status has increased by 16.4 percentage points.

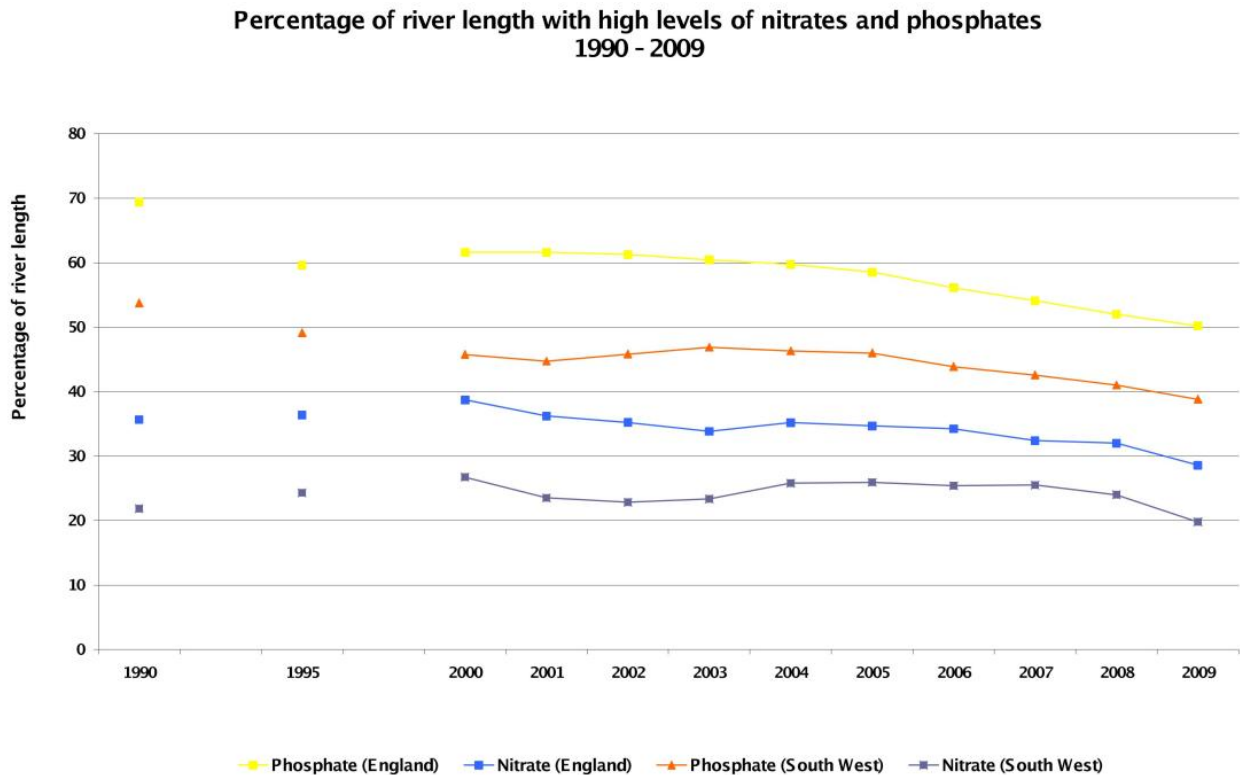
Figure 10.6 Chemical River Water Quality. Source: South West Observatory

% of river length with very good or good chemical river water quality 1990 - 2009



10.106 In terms of nutrients, the graph below demonstrates that levels are falling. Stretches of rivers in the South West recording high phosphate concentrations have reduced from 54% in 1990 to 38.8% in 2009. Stretches with high nitrate concentrations have remained around 25-26% for the last few years, however for the second year in a row this has fallen; now 19.8% and below the 22% recorded in 1990.

Figure 10.7 Levels of Nitrates and Phosphates. Source: South West Observatory



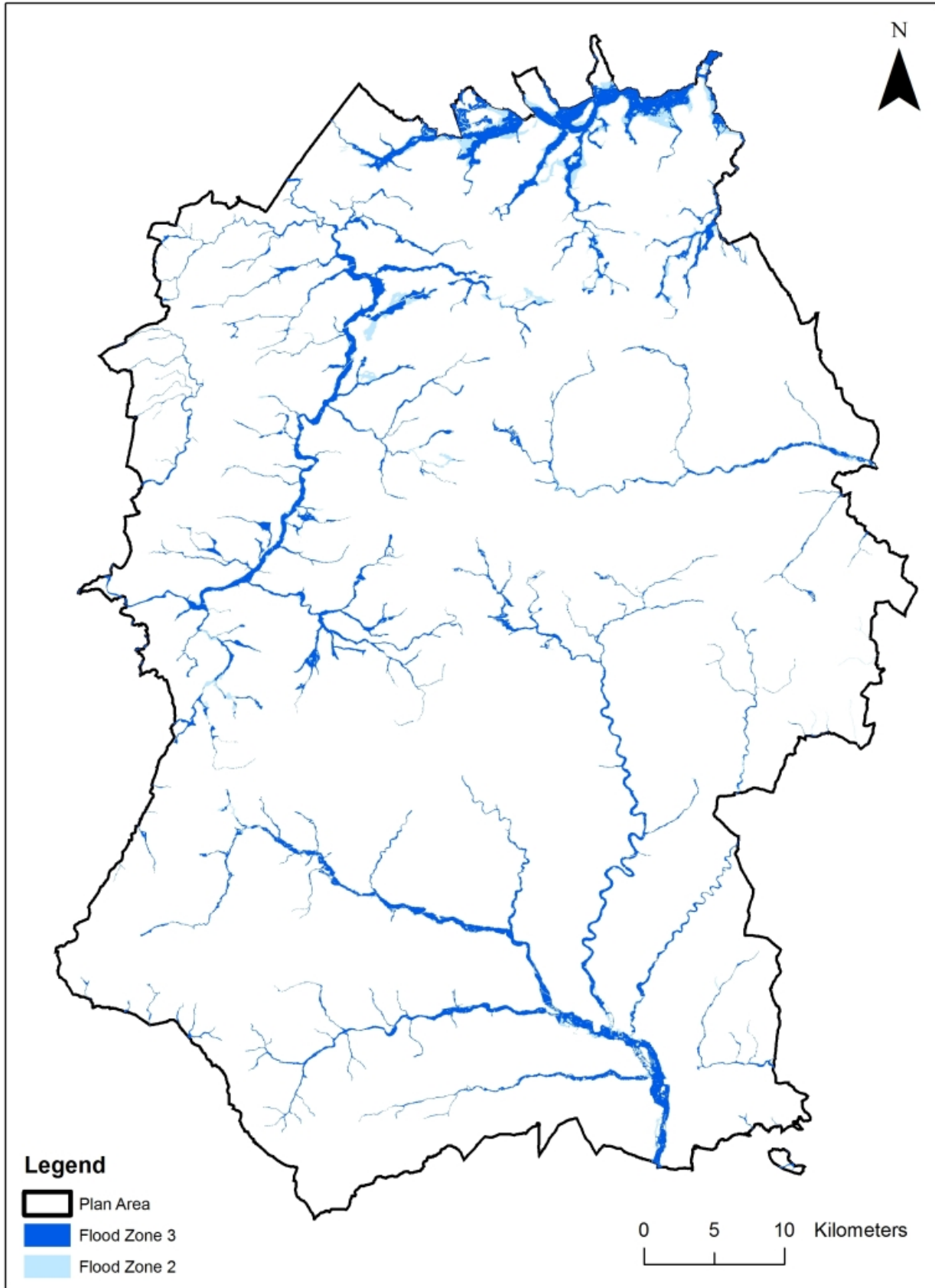
Flooding

10.107 The EA publishes data on areas likely to be affected by flooding which is sub-divided into three categories of risk based upon historic flooding events. The categories of risk are as set out below:

- Zone 1 – All areas that lie outside of Zones 2 & 3.
- Zone 2 – low to medium risk with an annual probability of flooding of 0.1-1.0% from rivers and 0.1-0.5% from the sea.
- Zone 3 – high risk with an annual probability of flooding of 1.0% or greater from rivers, and 0.5% or greater from the sea.

10.108 Within the plan area there are three main areas that are likely to experience flooding. These areas often overlie deposits of sand and gravel occurring in the north in the Upper Thames Valley, in the north and west around the Bristol Avon, and in the south around the Salisbury/Hampshire Avon. PPS25 encourages MPAs to consider how minerals development can help to reduce the impacts of flooding events. A potential solution is to create additional storage for storm water through minerals extraction in these areas. A Level 1 Strategic Flood Risk Assessment for the MWDF was undertaken to inform and support the Minerals and Waste Core Strategies.

Figure 10.8 Environment Agency Flood Zones



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Climate Change in relation to flooding

10.109 The UK Climate Impacts Programme collates baseline data and models scenario based future climate change. The UKCIP02 model provides detail at a scale of 5km x 5 km squares across the UK. The outcomes of the UKCIP model for the plan area up to 2020 are as follows:

- 0-15% decrease in precipitation during summer months
- 0-15% increase in precipitation during winter months.

10.110 An increase in precipitation in winter months may lead to an increased likelihood of flooding to occur within the plan area. The councils will need to ensure that minerals and waste development does not exacerbate the problem of flooding in these areas, and where possible helps to alleviate the risk of future flood events.

Air Quality and Environmental Pollution

10.111 Air pollution can have a serious effect on human health. Exposure to air pollution can have long-term effects, associated in particular with premature mortality due to cardiopulmonary (heart and lung) effects. Air pollution also has negative impacts on our environment, both in terms of direct effects of pollutants on vegetation, and indirectly through effects on the acid and nutrient status of soils and waters. Further to air pollution, minerals and waste development may induce other forms of pollution including noise, light, vibration and dust. This section explores legislation, plans and data directly related to the effects of minerals and waste on air quality and environmental pollution.

Legal Framework

Directive 2002/49/EC relating to the assessment and management of environmental noise (The Environmental Noise Directive)

10.112 This directive requires competent authorities in member states to produce strategic noise maps on the basis of harmonised indicators, to inform the public about noise exposure and its effects, and to draw up action plans to address noise issues. This directive is implemented through the **Environmental Noise (England) Regulations 2006 (as amended)**.

Directive 2008/50/EC on ambient air quality and cleaner air for Europe (The Ambient Air Quality Directive)

10.113 This piece of legislation merged most of the existing legislation related to air quality into a single directive with no change to existing air quality objectives. The directive sets legally binding limits for concentrations in outdoor air of major air pollutants that impact on public health such as particulate matter (PM₁₀ and PM_{2.5}) and nitrogen dioxide (NO₂). 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.

National Policy

Draft National Planning Policy Framework

10.114 In July 2011, the Government published the draft National Planning Policy Framework (NPPF) for consultation. The Government has outlined preventing unacceptable risks from pollution as a key policy objective for the natural environment. As part of this, the draft Framework states that 'Planning policies should sustain compliance with and contribute towards EU limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and the cumulative impacts on air quality from individual sites in local areas'. Air Quality Management Areas (AQMA) in the plan area are outlined later in this section.

Planning Policy Statement 22: Renewable Energy

10.115 Sets out how the planning system can contribute to the implementation of the government's energy policies through enabling the use of renewable energy. Waste development in particular can contribute to this aim. The accompanying good practice guidance to PPS22 recognises the following types of waste related sources of renewable energy:

- Energy from Waste (Biological processes) – including Anaerobic Digestion, landfill & sewage gas; and
- Energy from Waste (Thermal processes) – including pyrolysis and gasification.

- 10.116** Through embracing renewable energy systems in new minerals and waste development, the Minerals and Waste DPDs will make a positive contribution towards reducing production of greenhouses gases and the therefore the effects of human activity on climate change.

Planning Policy Statement 23: Planning and Pollution Control

- 10.117** Sets out national policy on the protection of the environment stating that “*any consideration of the quality of land, air or water and potential impacts arising from development, possibly leading to impacts on health, is capable of being a material planning consideration*” and goes on to state that “...*LDDs, which set the policy framework for the development of an area, can prevent harmful development and mitigate the impact of potentially polluting developments over the medium to the long term*”.

- 10.118** Minerals and waste development can be associated with negative impacts on the environment. Therefore development control policies will be required to ensure that the impacts of development in Wiltshire and Swindon are avoided and/or mitigated.

Planning Policy Guidance 24: Planning and Noise

- 10.119** PPG24 requires planning authorities to ensure that noise sensitive developments, such as housing, hospitals and schools, should be located away from existing sources of significant noise. It follows that for plan making purposes proposed developments that may result in the generation of significant noise should be located a suitable distance from existing sensitive receptors, and where necessary adequate mitigation measures should be set out.
- 10.120** PPG24 also advises planning authorities on the considerations to be taken into account in determining planning applications both for noise-sensitive developments and for those activities which will generate noise.

Noise Policy Statement for England

- 10.121** Published in March 2010, this National Policy Statement sets out Policy Vision for Noise as being to "Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development". The policy is intended to help ensure that noise issues are considered at the right time during the development of policy and decision making, and not in isolation. The statement covers "neighbourhood noise" which includes noise arising from within the community such as industrial and business premises - and as such is relevant to both minerals and waste developments.

The Air Quality Strategy

- 10.122** In July 2007, Defra published an updated Air Quality Strategy with the aim of setting out air quality objectives and policy options to reduce pollutants and further improve air quality in the UK. The document stated that “as well as direct benefits to public health, these options are intended to provide important benefits to quality of life and help to protect our environment”.
- 10.123** The table below lists each pollutant identified in the Air Quality Strategy and provides an indication of how the MWDF can work towards helping to meet the government's air quality targets. Airborne particulates (PM10), Ozone and Nitrogen Oxides are of particular concern, as they are likely to exceed objective levels by 2020.

Table 10.5 Air Quality Strategy Air Pollutants

Air pollutant	Potential effects	Main sources	Relevance to MWDF
Sulphur Dioxide	The presence of sulphur dioxide in high concentrations can lead to respiratory problems.	Generation of electricity from fuels containing sulphur such as coal.	No significant relationship identified.
Nitrogen Oxides	Can lead to the production of Ozone.	Road transport and electricity generation.	Vehicles used for the transportation and processing of minerals and waste materials.
Particulates	High levels can lead to respiratory related illness. Air Quality Strategy 2007 is concerned primarily with PM ₁₀ and PM _{2.5} .	Road transport, quarrying, domestic heating (coal and wood) and other industrial sources.	Vehicles used for the transportation and processing of minerals and waste materials. Dust from mineral working (and from landfilling/processing of waste materials).
Benzene	A recognised human carcinogen.	Road vehicles and coal and wood for domestic heating.	Vehicles used for the transportation and processing of minerals and waste materials.
1,3 Butadiene	A recognised human carcinogen.	Road transport.	Vehicles used for the transportation and processing of minerals and waste materials.
Ozone	Can lead to respiratory related illness.	Ozone is produced through reaction of nitrogen oxides in atmosphere with volatile organic compounds in the presence of sunlight. This process can take some time and therefore ozone is often found many kilometres from the original source.	Indirect result of vehicles used for the transportation and processing of minerals and waste materials.
Carbon Monoxide	Reduces the capacity of blood to carry oxygen.	Road transport.	Vehicles used for the transportation and processing of minerals and waste materials.
Lead	Damages the developing nervous system and is thought to be related to high blood pressure.	Road transport (although this has been reduced over recent years through the removal of lead supplements in fuels).	Vehicles used for the transportation and processing of minerals and waste materials.

10.124 Both minerals and waste DPDs can help to reduce concentrations of these pollutants at a strategic level through promoting use of more sustainable modes of transport; avoiding routes where congestion is likely to occur; and considering the benefits of locating sites closer to markets/ sources to reduce vehicle mileage. Although emissions are controlled by a separate regulatory function (EA and Environmental Health), development control policies could ensure that impacts of the activities associated with mineral and waste development are a primary consideration.

10.125 In March 2010, Defra and the devolved administrations published the document “**Air Pollution: Action in a Changing Climate**”. This document does not replace the current Air Quality Strategy but instead highlights additional benefits that can be achieved through closer integration of air quality and climate change policies in the future.

Other Relevant Plans and Strategies

Air Quality Strategy for Wiltshire 2011-2015

10.126 Adopted by Wiltshire Council in December 2011, this document provides annual data for air quality measurements across Wiltshire and sets out an air quality strategy for the county. The main aim of the strategy is that "Wiltshire Council working collaboratively will seek to maintain the good air quality in the county and strive to deliver improvements in areas where air quality fails national objectives in order to protect public health and the environment".

10.127 The document states that "Air quality in Wiltshire is very good. This is perhaps unsurprising given the rural nature of much of the land within its boundaries. The areas of concern are generally very specific and localised." Of the potential pollutants listed in table 5.5, the document identifies that Nitrogen dioxide and particulates (PM₁₀) are relevant in Wiltshire. It is noted that there is always a delay of a year or more from when monitoring commences to the availability of the results. As such even “new” data will be a year old.

Climate Change Action Plan for Swindon Borough 2006 – 2010

10.128 The Swindon Climate Change Action Plan was developed in response to the need to deliver the objectives of the Swindon Community Strategy. The document includes the following targets:

- Reduce Swindon Borough's Carbon Dioxide emissions by 20% from 1990 levels by 2010
- Reduce Swindon Borough's Carbon Dioxide emissions by 60% from 1990 levels by 2050

10.129 The document includes a commitment to provide more recycling opportunities for residents and waste disposal options for businesses within the borough.

Wiltshire & Swindon Renewable Energy Action Plan, 2005

10.130 The key aims of the Wiltshire Renewable Energy Action Plan are:

- Identify the barriers to deployment of renewable energy projects in Wiltshire and Swindon and address them.
- Identify how we can meet the REvision 2010 renewable electricity target and develop a sustainable renewable energy industry for the future with targets beyond 2010.
- Promote renewable energy for heat and electricity as a sustainable future industry for Swindon and Wiltshire.

- 10.131** The document includes an overall target for renewable energy generation in Wiltshire and Swindon of 65-85 Mega Watts (MW) of electricity by 2010. 5 MW of this target is to come from Energy from Waste sources and 5 MW is to be supplied from landfill gas. Regen SW's Annual Survey of renewable energy projects (June 2009) identified a total of 470 renewable electricity projects in South West England connected to the grid (154.84 MW). The survey shows that the plan area generates a total capacity of 13.83 MW of renewable electricity (26 projects) and 1.76 MW of renewable heat (75 projects).

Wiltshire ECO Strategy 2011 - 2020

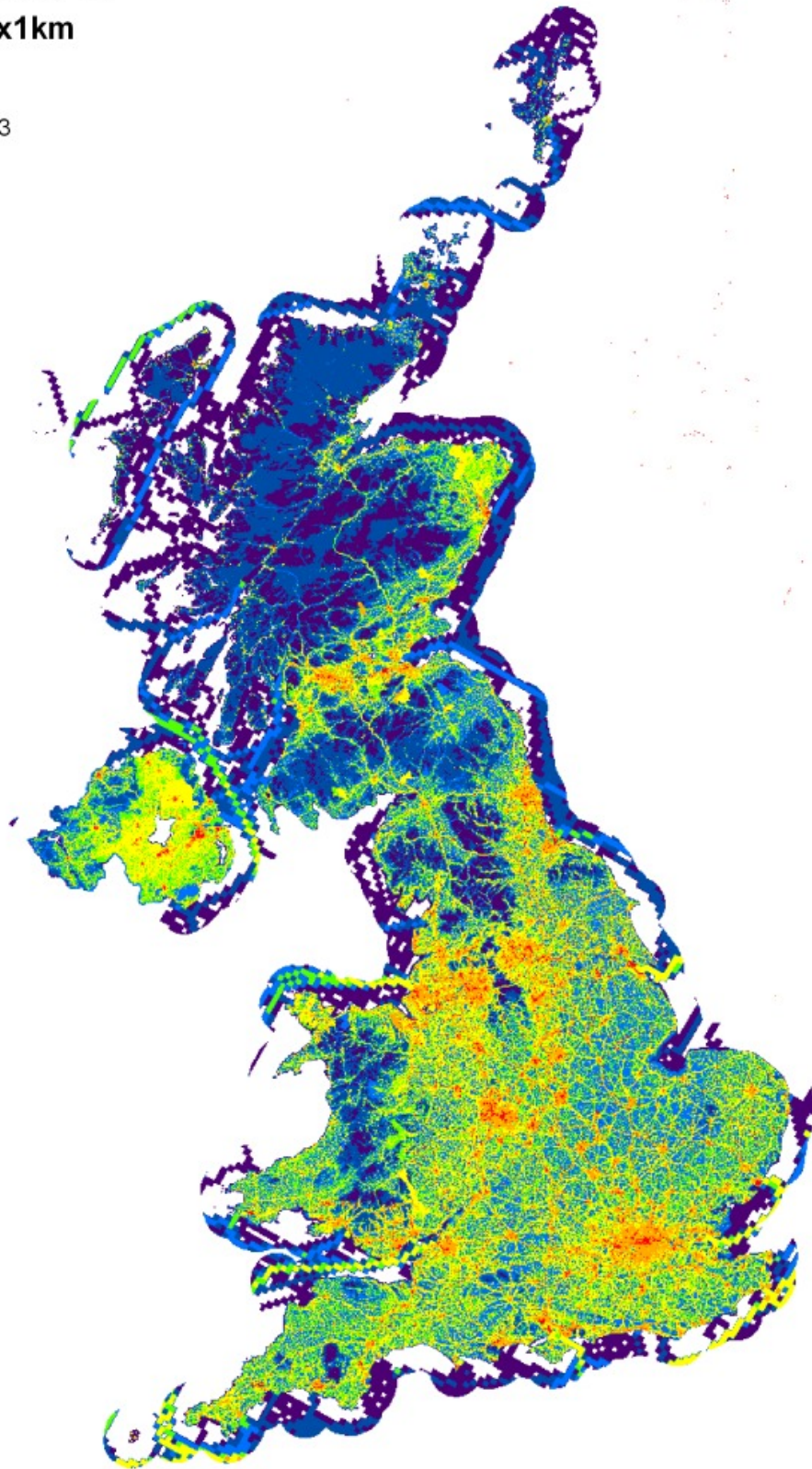
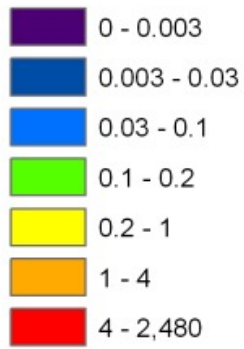
- 10.132** The Wiltshire Energy, Change and Opportunity (ECO) Strategy sets out how Wiltshire as a council and a community can take action on climate change, in light of the targets set by the **UK Climate Change Act 2008** for the reducing the level of carbon dioxide by 2020. The overarching strategy covers a number of themes including waste and planning. With regard to waste the council collects, the council wants to recycle or compost at least 45% and landfill less than 25% by 2014.
- 10.133** Considering climate change adaptation and risk assessment should be a continuous process and the council's progress on this process of 'planning to adapt' is detailed in the **Wiltshire Climate Change Adaptation Plan (2010)**.

Data Relating to Air Quality

- 10.134** Air pollution has been improving year on year in Wiltshire across all of the indicators. This data is only available at local levels and comparisons are difficult. With year on year improvements and the rural nature of Wiltshire it can be assumed that performance in these indicators is good. The National Atmospheric Emissions Inventory provides estimates of emissions of air pollutants at local authority level. This data can be used to provide information on the most affected areas within the plan area.
- 10.135** Minerals developments in particular are associated with the release of dust particles into the air although the highest levels of airborne particulates (PM₁₀) within the plan area are found around the larger urban areas and major roads (most noticeably the M4 and A350 corridors). Other main roads that converge around Swindon, the A419, A361 and A420, and the A30 near Salisbury also appear to influence levels of particulate matter present in the air. The estimates for 2010 show an overall improvement in air quality for the plan area but this may depend upon the reduction in traffic for the affected areas. Levels of nitrogen dioxide again tend to be highest around major roads and urban areas, and so it is clear that road traffic plays a significant role in the air quality of the plan area. The transport chapter of this report considers the impacts of minerals and waste transport in more detail.

Figure 10.9 UK Emissions Map of airborne particulates (PM10). Source: NAEI/Defra

UK Emissions Map of PM₁₀ 2009 t/1x1km



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Air Quality Management Areas

10.136 Where levels of particular air pollutants are deemed to be significantly high, councils can designate Air Quality Management Areas (AQMA). The table below identifies the five AQMAs that have been declared within the plan area. There are no AQMAs designated in Swindon.

Table 10.6 Air Quality Management Areas in Wiltshire

District	AQMA	Area description	Pollutants declared
West Wiltshire District	Westbury	Haynes Road from No.23 up to the junction with Warminster Road and Warminster Road from the junction with Haynes Road to the junction with Leigh Road.	Nitrogen Dioxide
	Bradford-on-Avon	Masons Lane, Market Street, Silver Street, St Margaret's Street.	Nitrogen Dioxide PM10
Salisbury District	Salisbury City Centre	An area encompassing the whole of Salisbury City Centre within the Churchill Way ring road (amalgamating the previous 5 smaller AQMAs in the City Centre).	Nitrogen Dioxide
	Wilton Road	An area encompassing properties on Wilton Road (A36) between Hawthorn Close and the junction with St Pauls roundabout.	Nitrogen Dioxide
	London Road	An area encompassing properties on London Road (A30) between the railway bridge and St Marks Avenue and Bourne Avenue.	Nitrogen Dioxide

Emissions Associated with Climate Change

10.137 There are six main gases produced through natural and human induced processes that are thought to contribute to our global climate. Current levels of all of these gases present in the Earth's atmosphere are influenced by human activity.

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂O)
- Hydrofluorocarbons (HFC)
- Perfluorocarbons (PFC)
- Sulphur hexafluoride (SF₆)

- 10.138** In 2009, UK emissions of the basket of six greenhouse gases (above) covered by the Kyoto Protocol were estimated to be 566.3 million tonnes carbon dioxide equivalent (MtCO₂e). This was 8.7 per cent lower than the 2008 figure of 620.5 million tonnes⁽¹²⁵⁾. Between 2008 and 2009 there were decreases in emissions in all sectors (energy supply, business, industrial processes, transport and residential).
- 10.139** According to the Department of Energy and Climate Change (DECC), the overall decrease in emissions has primarily resulted from two factors: a significant fall in energy consumption across all sectors, and an increase in the use of nuclear power rather than coal and natural gas for electricity generation. As the UK economy contracted during 2009, this resulted in an overall reduction in demand for electricity, together with lower fossil fuel consumption by businesses and households.
- 10.140** Carbon dioxide (CO₂) is the main greenhouse gas, accounting for about 84 per cent of total UK greenhouse gas emissions in 2009. The DECC provides estimates of emissions of carbon dioxide for Local Authority and Regional areas, as shown below. Table 10.7 demonstrates that the level of CO₂ emissions has reduced over the period 2005 to 2009 at the national, regional and plan area level. Per capita emissions of carbon dioxide remain higher for Wiltshire than for England, the South West Region, and Swindon. For Wiltshire in 2009, approximately 36% (1,331kt) of carbon dioxide emissions were from industrial and commercial sources, compared to 37% (627kt) of carbon dioxide emissions in Swindon. The proportion of emissions from road transport were also similar between the two areas, with 32% (1,206kt) of Wiltshire's CO₂ emissions, and 29% (424kt) of Swindon's emissions, coming from road transport in 2009. The remaining carbon dioxide emissions came from domestic sources.

Table 10.7 Local Carbon Dioxide Emission Estimates, 2005 - 2009. Source: Department of Energy and Climate Change (2011)

Area	2005		2009	
	Total (kt CO ₂)	Per Capita Emissions (t)	Total (kt CO ₂)	Per Capita Emissions (t)
England	432,629	8.6	371,951	7.2
South West	41,937	8.3	36,029	6.9
Swindon	1,688	9.0	1,460	7.3
Wiltshire	4,583	10.3	3,729	8.2

- 10.141** Weighted by global warming potential, methane (CH₄) accounted for about 8 per cent of the UK's greenhouse gas emissions in 2009. Methane emissions, excluding those from natural sources, were 61 per cent below 1990 levels. In 2009, the main sources of methane were agriculture (41 per cent of the total) and landfill sites (37 per cent). Emissions from landfill have reduced by 72 per cent since 1990.
- 10.142** Weighted by global warming potential, nitrous oxide (N₂O) emissions accounted for about 6 per cent of the UK's man-made greenhouse gas emissions in 2009. Nitrous oxide emissions fell by 49 per cent between 1990 and 2009. The largest reductions were in emissions from adipic acid production between 1998 and 1999 (down 95 per cent) which is reflected in the reduction in emissions from industrial processes between these years. There was a further reduction in industrial process emissions in 2009, primarily due to decreases in the production of adipic acid and nitric acid. Measures such as diverting waste from landfill site management

125 Department of Energy and Climate Change (DECC) Statistical release - UK Climate Change Sustainable Development Indicator: 2009 Greenhouse Gas Emissions, Final Figures (2011)

should enable the continuation of this national trend at the local level. Agriculture is now the main source of nitrous oxide, accounting for approximately 79 per cent of all nitrous oxide emissions in 2009, mainly from agricultural soils. However, there is still potential for further reduction in terms of minerals and waste. Indeed, there has been an increase in emissions from road traffic, which now represents a greater share of total emissions than industrial processes. The transport chapter of this report examines the potential for reduction of minerals and waste traffic.

- 10.143** The importance of climate change as an environmental issue of global significance has increased enormously in the past few years. The **Stern Report** and the **Energy White Paper** highlighted the importance of the need to reduce global carbon emissions. Local planning policies need to be developed with a consideration of their impact on climate change and greenhouse gas emissions, and this is particularly true of air quality.

Data Relating to Noise

- 10.144** Noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities. It is inevitable that activities associated with minerals and waste development will result in a certain level of noise being produced. This can be particularly noticeable in rural locations where background noise levels are generally significantly lower than in more urbanised areas. Unfortunately in the case of minerals development, mineral resources can only be worked where they exist and this can lead to mineral development being proposed on land in relatively tranquil rural locations.
- 10.145** As mentioned earlier in this chapter Defra are currently mapping areas of background noise levels and tranquillity to meet the requirements of the Environmental Noise (England) Regulations 2006. The Noise Mapping England site currently only supports a small number of urban areas outside of the plan area. There are currently no other resources available that provide comprehensive coverage of background noise levels for the plan area. Therefore, until the results of the Defra project are published, there is no environmental data available for this section of the chapter.

Key Findings

- Due to the complexity, overlap and evolving nature of current environmental legislation there may be a need to consider preparing a Development Control policy or SPD that aims to maintain a strong working relationship between the various authorities and therefore the efficiency of the planning application/licensing process. As a minimum the councils will have to ensure that policies do not replicate or contradict factors that are the responsibility of other agencies.
- Environmental impacts associated with minerals and waste development should be kept to an acceptable minimum through the use of appropriate mitigation measures – such measures must be integrated into the design of minerals and waste proposals (MDC1, WDC1).
- Wiltshire and Swindon should promote measures in plans and strategies that contribute to sustainable development (Section 39(2) and 19(5) of the Planning Compulsory Purchase Act 2004; Evidence Base Part A: Spatial Context chapter 2, p.1). In addition the policies of the Wiltshire and Swindon Minerals and Waste Development Framework must also be consistent with and promote the Government's waste hierarchy.
- Some developments are necessary but unpopular (e.g. waste management facilities and mineral working). The councils are seeking to address concerns regarding minerals and waste development through policy. The Development Control documents must be considered alongside the submitted Core Strategies, European, National, Regional and Local policies to ensure that new development follows sustainable principles.
- Restoration of minerals and waste development will be key to achieving many of the objectives of other plans and strategies, like the Soil Action Plan and the objectives of the Water Framework Directive, including some of the aspirations of local communities expressed through community strategies. A restoration-led approach is recommended. Guidance on these matters is available from government departments such as Defra and the DCLG.

Land and soil resources

- The importance of restoration to the success of the aftercare of minerals working is an important environmental consideration. Aftercare schemes must seek to address circumstances associated with the design and implementation of restoration schemes. This work should be considered at the very outset of the planning process. The impact of restoration to lakes, etc will have to take into consideration the potential for soil degradation.
- Agricultural Land Classification Surveys and Statement of Physical Characteristics Reports are an important basis of schemes of mineral working and restoration. These tools will need to be used to inform pre-application discussions and the scope of any subsequent proposals to accord with PPS7. A significant amount of agricultural land in the plan area is at grade 3 or higher which compares favourably with regional and national figures. Soil is a finite resource and as such there is a need for careful management to retain long term availability and high quality resources.

Water resources and flood risk

- It is recognised that active mining operations are likely to have an impact on groundwater. In the south west region, a high proportion of public water supply comes from groundwater sources.
- A significant part of the south and west of the plan area lies on a primary (major) aquifer, which is particularly sensitive to impacts from certain types of development.
- Given the pressure on river catchments in the area from abstraction, the MWDF will have to consider the implications of water availability when assessing locations for

minerals and waste development. Consultation with the Environment Agency will be essential in determining the right development in the right location. There are six Catchment Abstraction Management Strategies related to the plan area that may influence/be influenced by policies for the MWDF.

- To assist with the assessment of suitable locations for development the EA have identified Source Protection Zones (SPZs) which are concerned with protecting the catchment area for public and private water supply from potential polluting sources. Minerals resources of interest in the plan area often coincide with SPZs including sand and gravel deposits found in the Cotswold Water Park. Where this is the case, and where minerals extraction occurs, great care will need to be taken to ensure that groundwater sources are protected. Certain types of waste development can also pose a potential risk of contamination to groundwater and therefore it is essential to use the information provided by the Environment Agency to advise the suitable location for specific waste developments.
- Data from the South West Observatory shows that the biological and chemical quality of rivers in the south west is improving and is better than the national average.
- Within the plan area there are three main areas that are likely to experience flooding. These areas often overlie deposits of sand and gravel occurring in the north in the Upper Thames Valley, in the north and west around the Bristol Avon, and in the south around the Salisbury/Hampshire Avon. There may be an opportunity for minerals development to contribute to reducing the likelihood of flooding events in certain areas.

Air quality and environmental pollution

- Air pollution can have a significant effect on human health and the environment. There has been an increased level of legislation and policy guidance in this area in recent years.
- Both minerals and waste DPDs can help to reduce concentrations of air pollutants at a strategic level through promoting use of more sustainable modes of transport; avoiding routes where congestion is likely to occur; and considering the benefits of locating sites closer to markets/ sources to reduce vehicle mileage.
- Local authorities have an important role to play in helping deliver the national strategy's air quality objectives. Air quality in the plan area is good and improving and it is anticipated that continuing improvements can be made through improved traffic management. Data in relation to other forms of environmental pollution is poor but there is a duty on the planning authority to recognise the impact of noise, light pollution and contamination existing or likely to occur as a consequence of new development.
- Emissions of greenhouse gases (including carbon dioxide, methane and nitrous oxide) are in decline at the national, regional and plan area level. Landfill is still a major source of methane although emissions from landfill have reduced by 72 per cent between 1990 and 2009. Policies such as diverting waste from landfill should enable the continuation of this national trend at the local level.
- Minerals and waste developments can make a number of positive contributions to reducing the impacts of human activity on climate change. This is achievable through harnessing energy from waste (Anaerobic digestion, landfill and sewage gas, pyrolysis and gasification); encouraging use of renewable energy on site; locating minerals sites close to markets and waste sites near to waste sources; promoting sustainable transport options such as use of rail; and through restoration.
- Noise can have a significant effect on the environment and on the quality of life enjoyed by individuals and communities. It is inevitable that activities associated with minerals and waste development will result in a certain level of noise being produced. This can be particularly noticeable in rural locations where background noise levels are generally significantly lower than in more urbanised areas. Unfortunately in the case of minerals

development, mineral resources can only be worked where they exist and this can lead to mineral development being proposed on land in relatively tranquil rural locations. Due to lack of noise data relating to the plan area, this issue will need to be considered on a site by site basis.

11 Appendix 1: Documents Cited in Evidence Base Report.

Table 11.1 European Directives and Policy

Document	Year
A Sustainable Future for Transport - Towards an integrated, technology-led and user-friendly system	2009
Council Directive 91/271/EEC concerning urban waste-water treatment	1991
EC Directive 2008/1/EC concerning integrated pollution prevention and control (The IPPC Directive)	2008
EC Directive 2000/60/EC establishing a framework for Community action in the field of water policy (The Water Framework Directive)	2000
EC Directive on the assessment of environmental effects (85/337/EEC as amended by 97/11/EC)	1997
EC Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (The Habitats Directive)	1992
EC Directive 2009/147/EC on the conservation of wild birds	2009
EC Directive 2001/42/EC on the effects of certain plans and programmes on the environment (The SEA Directive)	2001
EC Directive 2006/118/EC on the protection of groundwater against pollution and deterioration	2006
EC Directive 2008/50/EC on ambient air quality and cleaner air for Europe (The Ambient Air Quality Directive)	2008
EC Council Directive 99/31/EC Landfill Directive	1999
EC Directive 2006/21/EC on the management of waste from the extractive industries (The Mining Waste Directive)	2006
EC Directive 2002/15/EC on the organisation of the working time of persons performing mobile road transport activities	2002
EC Directive 2008/98/EC on waste and repealing certain Directives (The Waste Framework Directive)	2008
EC Directive 2002/49/EC relating to the assessment and management of environmental noise (The Environmental Noise Directive)	2002
European Nitrates Directive 91/676/EC	1991

Table 11.2 Acts and Regulations

Document	Year
Ancient Monuments and Archaeological Areas Act	1979

Document	Year
Contaminated Land (England) Regulations	2000 (as amended)
Countryside and Rights Of Way Act	2000
Environment Act	1995
Environmental Assessment of Plans and Programmes Regulations	2004
Environmental Noise (England) Regulations	2006 (as amended)
Environmental Permitting (England and Wales) Regulations	2010
Environmental Protection Act	1990
Flood and Water Management Act	2010
Hazardous Waste Regulations	2005 (as amended)
Localism Act	2011
National Parks and Access to the Countryside Act	1949
Natural Environment and Rural Communities Act	2006
Planning and Compulsory Purchase Act	2004
Road Transport (Working Time) Regulations	2005
The Wildlife and Countryside Act	1981 (as amended)
Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations	1999
UK Climate Change Act	2008
Urban Waste Water Treatment (England and Wales) (Amendment) Regulations	2003
Waste (England and Wales) Regulations	2011
Water Environment (Water Framework Directive) (England and Wales) Regulations	2003

Table 11.3 National Planning Policy Guidance

Document	Year
Barker Review of Land Use Planning	2006
Circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System	2005
Defra Guidance for Successful Reclamation of Mineral and Waste Sites	2004

Document	Year
Draft National Planning Policy Framework (NPPF)	2011
Draft Planning Policy Statement: Planning for a Natural and Healthy Environment	2010
English National Parks and the Broads: UK Government Vision and Circular	2010
Effectiveness of aftercare provisions for minerals workings	2000
Environmental Quality in Spatial Planning / Supplementary Files	2005
Good Practice Guidance on Restoration of Mineral Workings, MAFF	
Guidance on Transport Assessments	2007
Mineral Extraction and Archaeology: A Practice Guide	2008
Mineral Extraction and the Historic Environment	2008
Minerals Policy Statement 1: Planning and Minerals	2006
Minerals Policy Statement 2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England	2005
Minerals Planning Guidance 7: The Reclamation of Mineral Workings	1996
Planning and Minerals: Practice Guide	2006
Planning Policy Statement 1: Delivering Sustainable Development	2005
Planing and Climate Change - Supplement to Planning Policy Statement 1	2007
Planning for Biodiversity and Geological Conservation: A Guide to Good Practice	2006
Planning Policy Guidance 2: Green Belts	1995
Planning Policy Statement 3: Housing	2011
Planning Policy Statement 4: Planning for Sustainable Economic Growth	2009
Planning Policy Statement 5: Planning for the Historic Environment	2010
Planning Policy Statement 7: Sustainable Development in Rural Areas	2004
Planning Policy Statement 9: Biodiversity and Geological Conservation	2005
Planning Policy Statement 10: Planning for Sustainable Waste Management	2011
Planning Policy Statement 12: Local Spatial Planning	2008
Planning Policy Guidance 13: Transport	2001
Planning Policy Guidance 14: Development on Unstable Land	1990
Planning Policy Guidance 17: Planning for Open Space, Sport and Recreation	1991
Planning Policy Statement 22: Renewable Energy	2004

Document	Year
Planning Policy Statement 23: Planning and Pollution Control	2004
Planning Policy Guidance 24: Planning and Noise	1994
Planning Policy Statement 25: Development and Flood Risk	Updated 2010
Planning Policy Statement 25 - Practice Guide	2009
The Government's Statement On The Historic Environment For England	2010

Table 11.4 National Plans and Strategies

Document	Year
Air Pollution: Action in a Changing Climate	2010
A New Deal for Transport: Better for Everyone (White Paper)	1998
A New Deal for Trunk Roads in England	1998
Changing Patterns: UK Government Framework for Sustainable Consumption and Production	2003
Climate Change: the UK Programme	2006
Conserving Biodiversity – the UK Approach	2007
Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen (White Paper)	2011
Delivering a Sustainable Transport System	2008
Future Water: The Government's water strategy for England	2008
Good Practice Guide on Planning for Tourism	2006
Government Review of Waste Policy in England	2011
Heritage Protection for the 21st Century (White Paper)	2007
Keepers of time: A Statement of policy for England's ancient and native woodland, DEFRA and Forestry Commission	2005
Making Space for Water	2005
Natural Environment White Paper - The Natural Choice: securing the value of nature	2011
Noise Policy Statement for England	2010
Rural Development Programme for England	
Safeguarding our Soils: A Strategy for England	2009
Securing the Future: Delivering UK Sustainable Development Strategy	2005

Document	Year
Soil: a precious resource	2007
Sustainable Communities Plan	2003
Sustainable Distribution: A Strategy	1999
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland	2007
The Future of Transport: A Network for 2030	2004
The state of soils in England and Wales	2004
Underground, under threat - the state of groundwater report	2006
Waste Strategy for England	2007
Water for people and the environment: Water Resources Strategy for England and Wales	2009
Water Resources Action Plan for England and Wales	2010
Water White Paper - Water for Life	2011

Table 11.5 Regional Plans and Strategies

Document	Year
Draft Regional Spatial Strategy for the South West	2006
Regional Economic Strategy for South East England 2006-2016: A Framework for Sustainable Prosperity	2003
Regional Economic Strategy for South West England 2006-2015	2003
Regional Planning Guidance for the South West (RPG10)	2001
Secretary of State's Proposed Changes to the Draft Regional Spatial Strategy for the South West	2008
The South East Plan: The Regional Spatial Strategy for the South East	2009
Water Resources Strategy for the South West Region	2009

Table 11.6 Local Plans and Strategies

Document	Year
A Climate Change Action Plan for Swindon Borough 2006-2010	Updated 2008
A Culture and Leisure Strategy for Swindon 2003-13	2003
Air Quality Strategy for Wiltshire 2011-2015	2011
A Shared Vision for Swindon 2008-2030 Sustainable Community Strategy	2007

Document	Year
A Sustainable Community Strategy for Wiltshire 2007-2016	2007
Bristol Avon Catchment Abstraction Management Strategy	2005
Cotswold AONB Landscape Character Assessment	2004
Cotswold Catchment Abstraction Management Strategy	2007
Cotswolds AONB Management Plan	2004
Cotswolds AONB Management Plan 2008 - 2013	2008
Cotswold Water Park Biodiversity Action Plan 2007-2016	2007
Cotswold Water Park Landscape Character Assessment	2007
Cranbourne Chase and West Wiltshire Downs AONB Integrated Landscape Character Assessment	2003
Cranborne Chase and West Wiltshire Downs AONB Management Plan	2004
Cranborne Chase and West Wiltshire Downs AONB Management Plan 2009 – 2014	2009
Dorset Stour Catchment Abstraction Management Strategy	2004
Gloucestershire Cotswolds Geodiversity Audit and Local Geodiversity Action Plan	2005
Hampshire Avon Catchment Abstraction Management Strategy	2006
Kennet and Avon Canal Conservation Plan	
Kennet and Pang Catchment Abstraction Management Strategy	2004
Kennet District Local Plan	2004
Kennet Landscape Character Assessment	1998
Kennet Landscape Conservation Strategy	2005
New Forest National Park Management Plan 2010 - 2015	2009
North Wessex Downs AONB Integrated Landscape Character Assessment	2002
North Wessex Downs AONB Management Plan	2004
North Wessex Downs AONB Management Plan 2009 - 2014	2009
North Wiltshire District Local Plan	2006
North Wiltshire Landscape Character Assessment	2004
People, Places and Promises: The Wiltshire Community Plan 2011-2026	2011
Rights of Way Improvement Plan for Wiltshire County Council 2008-2012	2008
Salisbury District Local Plan	2003

Document	Year
Salisbury Landscape Character Assessment	2008
Severn River Basin Management Plan	2009
South West River Basin Management Plan	2009
South Wiltshire Core Strategy DPD	2012
Stonehenge World Heritage Management Plan 2009	2009
Swindon Borough Local Plan	2006
Swindon Core Strategy DPD	Emerging
Swindon Local Transport Plan (LTP3)	2011
Thames River Basin Management Plan	2009
Vale of White Horse Catchment Abstraction Management Strategy	2006
West Wiltshire District Local Plan	2004
West Wiltshire Landscape Character Assessment	2007
Wiltshire Local Transport Plan (LTP3)	2011
Wiltshire LTP Freight Strategy	2011
Wiltshire and Swindon Minerals Core Strategy DPD	2009
Wiltshire and Swindon Minerals Development Control Policies DPD	2009
Wiltshire and Swindon Minerals Local Plan	2001
Wiltshire and Swindon Minerals Local Plan Review: Rail Aggregate Depot Study	2003
Wiltshire and Swindon Renewable Energy Action Plan	2005
Wiltshire and Swindon Structure Plan 2016	2006
Wiltshire and Swindon Waste Core Strategy DPD	2009
Wiltshire and Swindon Waste Development Control Policies	2009
Wiltshire and Swindon Waste Local Plan	2002
Wiltshire Biodiversity Action Plan	2008
Wiltshire Climate Change Adaption Plan	2010
Wiltshire Core Strategy DPD	Emerging
Wiltshire ECO Strategy 2011-2020	
Wiltshire Landscape Character Assessment	2005

Table 11.7 Other evidence studies

Document	Year
Agricultural Land Classification of England and Wales - MAFF, Defra	1988
Boundless Horizons: historic landscape characterisation	2005
Nature After Minerals: How minerals site restoration can benefit people and wildlife, RSPB	2006
Network Rail Freight Route Utilisation Strategy	2007
Strategic Rail Authority Aggregates Market Study	2005
The Monuments at Risk Survey of England 1995 (Darvill and Fulton)	1998
Wiltshire and Swindon Freight Quality Partnership	

Table 11.8 Data sources and websites

Organisation	Link to website
CLG Housing Live tables	http://www.communities.gov.uk/housing/housingresearch/housingstatistics/livetables/
Department of Energy and Climate Change - UK emissions statistics	http://www.decc.gov.uk/en/content/cms/statistics/statistics.aspx
GeoConservationUK	http://www.ukrigs.org.uk/
Joint Nature Conservation Committee	http://jncc.defra.gov.uk/
Millennium Ecosystem Assessment	http://www.maweb.org/en/index.aspx
Land Registry	http://www.landreg.gov.uk/house-prices
Office for National Statistics	http://www.ons.gov.uk/ons/index.html
Official Labour Market Statistics	http://www.nomisweb.co.uk/
Planarch -Planning and archaeology in North West Europe	http://www.planarch.org/
South West Observatory	http://www.swo.org.uk/
The Building Research Establishment	http://www.breeam.org/

Organisation	Link to website
The National Heritage List for England	http://list.english-heritage.org.uk/
UK National Statistics	http://www.statistics.gov.uk/hub/index.html
United Nations Framework Convention on Climate Change	http://unfccc.int/kyoto_protocol/items/2830.php
Wiltshire Intelligence Network	http://www.intelligencenetwork.org.uk/
Wiltshire Wildlife Trust	http://www.wiltshirewildlife.org/



12 Appendix 2: Sustainable Community Strategy Objectives Tables

Table 1: A Sustainable Community Strategy for Wiltshire – Working together to create stronger and more sustainable communities 2007 – 2016

Table 12.1

Wiltshire Community Strategy Objective	Deliverability through MWDF	Evidence Base Chapter
Improve the basic skills levels of adult learners	N/A	N/A
Develop a local workforce with the right skills base for the economy	N/A	N/A
Number and range of skilled workers available to local employers	N/A	N/A
Increase job opportunities and maintain older workers in employment	N/A	N/A
More Children's Centres linked to extended schools opened	N/A	N/A
More robust and competitive businesses within the food and farming sector	N/A	N/A
Development of a culture of innovation across business sectors	N/A	N/A
Wiltshire businesses able to operate and be competitive in the electronic marketplace	N/A	N/A
Effective Investment Service for Wiltshire	N/A	N/A
Development of business clusters and centres of excellence	N/A	N/A
Greater range of Higher Education opportunities to meet employer needs	N/A	N/A
Business leaders with the knowledge and skills to maximise their business operations	N/A	N/A
Increase the number and range of skilled workers available to local employers	N/A	N/A

More Children's Centres linked to extended schools opened	N/A	N/A
Reduce % of 16-18 year olds not in education, employment & training	N/A	N/A
Improved access to independent advice	N/A	N/A
Increase job opportunities and maintain older workers in employment	N/A	N/A
Incomes of older people raised, particularly in areas of deprivation	N/A	N/A
Individuals taking up 'Third age planning' for paid and voluntary activity	N/A	N/A
More competitive tourism businesses balancing the environment, communities, industry and visitor satisfaction while realising long term economic and social benefit for Wiltshire	Restoration and collaborative working with district authorities to provide beneficial after uses	Culture, Heritage and Tourism
Better understanding of the sustainable development and enterprise needs of Wiltshire SSC&T and other market towns	Minerals and waste needs	Part B Waste; Part C Minerals
An effective Investment Service for Wiltshire	N/A	N/A
Access to services and facilities improved for those without private transport	N/A	N/A
Improved access to services in rural areas, where transport is not an option	N/A	N/A
Older people involved in an integrated approach to transport planning	N/A	N/A
Older people feel that transport is accessible and meets their needs	N/A	N/A
Increased numbers of older people who feel able to drive with confidence	N/A	N/A
Access to services and facilities improved for those without private transport	N/A	N/A
Improved access to services in rural areas, where transport is not an option	N/A	N/A
Older people involved in an integrated approach to transport planning	N/A	N/A
Older people feel that transport is accessible and meets their needs	N/A	N/A

Improving access to services for hard to reach and hear groups	N/A	N/A
Improved access to health services provided by a skilled, respectful and sustainable workforce	N/A	N/A
Preparing young people for a lifetime of sustainable living	N/A	N/A
Reduce mode share of pupils travelling to school by car	N/A	N/A
Increase uptake of energy efficiency measures in domestic properties	N/A	N/A
Increase uptake of renewable energy measures in domestic property refits and self-builds	N/A	N/A
Energy audit of public buildings	N/A	N/A
Use of integrated renewables in new buildings	New minerals and waste developments may potentially be able to deliver this objective.	Sustainable development; Environmental Impacts
Energy efficiency of operational property and housing stock	N/A	N/A
Reduce carbon emissions from local authority business travel	N/A	N/A
Sustainable procurement of energy supplies for street lighting, schools and other public buildings	N/A	N/A
Awareness of sustainable energy measures	N/A	N/A
Improved the condition of County Wildlife Sites	Minerals and waste developments protect and where possible enhance CWS	Biodiversity and Geodiversity
Number of landscape scale projects	Minerals and waste developments can contribute to landscape protection and enhancement through restoration.	N/A
Robust and competitive businesses within the food and farming sector	N/A	N/A

Improved the condition of County Wildlife Sites	Minerals and waste developments protect and where possible enhance CWS	Biodiversity and Geodiversity
Robust and competitive businesses within the food and farming sector	N/A	N/A
Reduced growth in total household waste arisings	Wilts and Swindon waste hierarchy	Part B Waste
Increased recycling and composting of household waste	Provision of sufficient waste facilities.	Part B Waste
Support the development of business clusters and centres of excellence	N/A	N/A
Robust and competitive businesses within the food and farming sector	N/A	N/A
Access to affordable homes increased	N/A	N/A
Choice and transparency in the allocation of Social Housing	N/A	N/A
Reduce the total amount of homeless clients in temporary accommodation	N/A	N/A
Increase the amount of suitable move on or supported housing for vulnerable single homeless people in particular ex- substance misusers	N/A	N/A
Increase uptake of energy efficiency measures in domestic properties	N/A	N/A
Increase uptake of renewable energy measures in domestic property refits and self-builds	N/A	N/A
Increased use of integrated renewables in new buildings	New minerals and waste developments may potentially be able to deliver this objective.	Sustainable development; Environmental Impacts
Improve the energy efficiency of operational property and housing stock	N/A	N/A
Improved awareness of sustainable energy measures	N/A	N/A
Children and young people with severe and complex disabilities get the services they need at the right time	N/A	N/A

Preparation and planning for transition to adult services for young people with severe and complex disabilities	N/A	N/A
Children and young people with severe and complex disabilities have equality of access to all public services	N/A	N/A
Access to health services provided by a skilled, respectful and sustainable workforce	N/A	N/A
Older people who want to stay independent receive the support they need to do so from a skilled, respectful and sustainable workforce	N/A	N/A
Integrated support for those older people with complex needs	N/A	N/A
Reduce comparator crime	N/A	N/A
Reduce the fear of crime , increase reassurance in the criminal justice system and Improve perception and reduce worry about the incidence of Anti-Social Behaviour	N/A	N/A
Build respect in communities and reduce anti-social behaviour (especially alcohol related)	N/A	N/A
Reduce the proportion of adult and young offenders and prolific and priority offenders who re-offend	N/A	N/A
older people enabled to take measures to reduce the risk of distraction burglary and deter cold callers	N/A	N/A
Reduce levels of binge drinking, population drinking in excess of recommended Government targets and under age drinking	N/A	N/A
Reduce the number of deliberate fires	N/A	N/A
Increase home fire safety	N/A	N/A
Improve road safety	N/A	N/A

Improve the basic skills levels of adult learners, specifically those workers within public sector organisations	N/A	N/A
Develop a local workforce with the right skills base for the economy	N/A	N/A
Increase the number and range of skilled workers available to local employers by supporting the economically inactive and under-represented groups to join the workforce	N/A	N/A
Reduce % of 16-18 year olds not in education, employment & training	N/A	N/A
Greater range of Higher Education opportunities to meet employer needs. This outcome will contribute to the attraction of new employers to the County with graduate positions which in turn will encourage local graduates to remain in the County for work.	N/A	N/A
Local people involved in influencing design and delivery of public and voluntary services, that address their local priority and support community cohesion	Community Involvement	Sustainable Development
Children's Centres linked to extended schools opened	N/A	N/A
Access to services and facilities improved for those without private transport	N/A	N/A
Improved access to non-urgent advice and service from emergency services and community safety practitioners	N/A	N/A
Improved access to services in rural areas, where transport is not an option	N/A	N/A
Improving access to services for hard to reach and hear groups	N/A	N/A
Access to health services provided by a skilled, respectful and sustainable workforce	N/A	N/A
Older people who want to stay independent receive the support they need to do so from a skilled, respectful and sustainable workforce	N/A	N/A
Integrated support for those older people with complex needs	N/A	N/A

Local people involved in influencing design and delivery of public and voluntary services, that address their local priority and support community cohesion	Community Involvement	Sustainable Development
Better understanding of the sustainable development and enterprise needs of Wiltshire SSC&T and other market towns	N/A	N/A
An effective Investment Service for Wiltshire	N/A	N/A
Halt rising trend of obesity in population (increase physical activity)	N/A	N/A
Local people involved in influencing design and delivery of public and voluntary services that address their local priority and support community cohesion	Community Involvement	Sustainable Development
A developed sense of place	Community Involvement	Sustainable Development
Community cohesion built through bringing people together to address environmental issues	Community Involvement	Sustainable Development
A range of community groups established to deliver sport and physical activity projects in each local authority area	N/A	N/A
Extended services in and around schools	N/A	N/A
A robust volunteering sector which promotes a wide range of opportunities is in place	N/A	N/A

Table 2: A Shared Vision for Swindon – 2008 - 2030

Table 12.2

Swindon Community Strategy Objective	Deliverability through MWDF	Evidence Base Chapter
Seeks to achieve a sustainable community that: <ul style="list-style-type: none"> Balance integrates the social, economic and environmental components of their community. 	The MWDF will play a role in providing sufficient mineral and waste management facilities to achieve a sustainable community.	Sustainable Development

<ul style="list-style-type: none"> meet the needs of existing and future generations. Respect the needs of other communities in the wider region, nationally or even internationally, to make their own communities sustainable. 	<p>Swindon will have an attractive and well-equipped town that has successfully blended traditional architecture with high quality contemporary buildings that incorporate sustainable design and construction principles.</p>	<p>The MWDF will play a role in providing sufficient mineral and waste management facilities that are well designed to achieve the objective.</p>	<p>Sustainable Development</p>
<p>Economically Swindon will be booming</p>	<p>The MWDF will play a role in providing sufficient mineral and waste management facilities to achieve economic growth.</p>	<p>Economy</p>	
<p>To have a local and highly skilled workforce to attract new business investment.</p>	<p>N/A</p>	<p>N/A</p>	
<p>For the educational achievement in the Borough to be above the national average. Have strong further and higher education facilities and its own university.</p>	<p>N/A</p>	<p>N/A</p>	
<p>To invest in its leisure and cultural offering.</p>	<p>Restoration of minerals sites</p>	<p>Culture, Heritage and Tourism</p>	
<p>For Swindon to become a town where national sporting and artistic events regularly occur.</p>	<p>N/A</p>	<p>N/A</p>	
<p>To provide new houses that provides excellent quality with the right balance of tenure and affordability for all needs. Built to the very highest environmental and architectural standards.</p>	<p>The MWDF will ensure waste audits are undertaken for large new housing developments. This will ensure that during the construction the highest environmental standards are being met.</p>	<p>Part B - Waste</p>	
<p>To achieve an international reputation as both a centre of innovation, science and technology and an example of sustainable living and commerce.</p>	<p>The MWDF will play a role in promoting innovative waste management techniques.</p>	<p>Part B - Waste</p>	

Invest in transport technology so that businesses will benefit from easy communication around the area without gridlock and pollution that similar towns might be facing.	N/A	N/A
To balance the needs of a growing population in a way that protects the natural environment as much as possible.	The MWDF will play a role in ensuring that any minerals or waste development avoids adverse impacts upon the environment.	Sustainable Development
Safeguard and enhance the built and natural environment for future generations.	The MWDF will play a role in ensuring that any minerals or waste development avoids adverse impacts upon the environment and that any built structure is well designed.	Sustainable Development
The landscaping and open spaces in new developments will be designed to look attractive and be havens for wildlife. This will be achieved through the use of ecologically sound planting and by retaining existing features like hedges or ponds.	Restoration projects associated with mineral and waste developments may have the opportunity to enhance havens for wildlife.	Landscape; Biodiversity and Geodiversity
New homes will use the latest environmental technology to reduce carbon emissions.	N/A	N/A
Provide reliable, affordable and convenient public transport to reduce the need for car use.	N/A	N/A
Local residents will recycle, compost or recover resources from more than half of household waste.	The MWDF will be responsible for delivering this objective. The MWDF will need to provide sufficient sites to meet these targets.	Part B - Waste
For local businesses to set and deliver targets to reduce their carbon footprint.	The MWDF will encourage local businesses to reduce their waste and manage what waste is produced in the most sustainable method.	Part B - Waste
For people living in Swindon to live longer, healthier happier and more active lives.	N/A	N/A
High quality services for families, children, young people and their communities will be primarily locally based.	N/A	N/A

In 2030, neighbourhoods will be designed with opportunities for everyone to be physically active as part of everyday living.	N/A	N/A
Provide excellent, accessible, responsive and personalised emergency health, care and support services.	N/A	N/A
By 2030, local communities will be working with public organisations like the Police, the Borough Council and a wide range of voluntary groups to reduce crime, keep people safe and develop a sense of community and belonging.	N/A	N/A
The factors that generate the fear of crime among residents such as large groups of young people congregating in inappropriate places, graffiti, fly-posting, abandoned cars and fly-tipping will have been addressed so that, as a result people feel safer.	The MWDF will need to reduce fly-tipping by providing sufficient accessible sites.	Part B - Waste
The town centre will be a far more attractive place for everyone to visit in the evenings thanks to significant reductions in the amount of crime and anti-social behaviour.	N/A	N/A

Table 3: People, Places and Promises - The Wiltshire Community Plan 2011-2026

Table 12.3

Wiltshire Community Plan Objective	Deliverability through MWDF	Evidence Base Chapter
Strengthen communication (IT) connectivity to become a more digitally inclusive county.	N/A	N/A
Respond in an optimal way to the UK's financial difficulties so that the long-term impact on the county is minimised.	The MWDF will play a role in providing sufficient mineral and waste management facilities to achieve economic growth.	Economy
Ensure the establishment of the super garrison on Salisbury Plain, and other armed forces changes within the county, bring positive benefits both to local communities and to military personnel and their families.	N/A	N/A

Use the Local Development Framework (LDF) process to arrive at the best pattern of new development across the county to support the delivery of the other promises in the community plan.	The MWDF will play a role in providing sufficient mineral and waste management facilities to achieve a sustainable community.	Sustainable Development; Part B - Waste; Part C - Minerals
Ensure that the Wiltshire workforce is ready for changing economic demands by effectively preparing young people for work, supporting people to enter or rejoin the workforce, providing opportunities for skills development, and by enabling older people to work beyond retirement age should they so wish.	N/A	N/A
Ensure that Wiltshire is able to meet the needs of its rapidly growing older population.	The MWDF will play a role in providing sufficient mineral for development and waste management facilities to serve the population.	Population
Address the lack of affordable housing by building new housing, bringing empty homes back into use, and through any other means that may become available to meet housing need.	The MWDF will play a significant role in providing sufficient mineral for housebuilding.	Housing; Part C - Minerals
Focus on safeguarding against the key factors that disadvantage particular communities and individuals in securing equal life chances and fair access to services, as identified by local evidence.	N/A	N/A
Encourage and support people to take more responsibility for their current and future health.	N/A	N/A
Continue to develop and support the Voluntary and Community Sector (VCS) so that it can play an expanded and more innovative role in addressing local needs and delivering services.	N/A	N/A
Significantly reduce domestic, business and transport CO2 emissions across the county in line with national targets.	The considered location of new minerals and waste developments may potentially be able to help deliver this objective.	Transport; Environmental Impacts
Contribute to creating greater energy security by significantly increasing the amount of electricity and heat generated in the county at community	New minerals and waste developments may potentially be able to deliver this objective.	Environmental Impacts; Part B - Waste

level and on a large-scale through renewable schemes to bring Wiltshire more in line with the rest of the South West region.			
Provide a safer and more integrated transport system that achieves a major shift to sustainable transport.	The considered location of new minerals and waste developments may potentially be able to help deliver this objective.	Transport; Environmental Impacts	
Prepare for the impacts of unavoidable climate change, by increasing the resilience of communities, businesses and wildlife to events such as extreme heat waves, droughts and frequent flooding, through designing and implementing appropriate adaptive responses.	N/A	N/A	
Increase Wiltshire's food security by, for example, improving the business and environmental sustainability of food production, focusing more on agricultural production for local markets, and encouraging people to become more involved in growing their own food.	N/A	N/A	
Continue to reduce the amount of waste produced in the county and increase the proportion of waste which is recycled.	The MWDF will play a pivotal role in driving up the waste management hierarchy.	Part B - Waste	
Promote greater public understanding and ownership of the difficult choices facing Wiltshire.	Community Engagement.	Sustainable Development	

13 Appendix 3: Acronyms

Table 13.1 List of acronyms

Acronym	Definition
AW	Ancient Woodland
AADT	Annual Average Daily Traffic
ASHE	Annual Survey of Housing and Earnings
AONB	Area of Outstanding Natural Beauty
BAP	Biodiversity Action Plan
BREEAM	BRE Environmental Assessment Method
BGS	British Geological Survey
CO2	Carbon Dioxide
CAMS	Catchment Abstraction Management Strategy
CBI	Confederation of British Industry
CRoW	Countryside and Rights of Way
CWS	County Wildlife Site
DCLG	Department for Communities and Local Government
Defra	Department for Environment, Food and Rural Affairs
DECC	Department of Energy and Climate Change
DoE	Department of the Environment
DPD	Development Plan Document
EfW	Energy from Waste
EA	Environment Agency
EIA	Environmental Impact Assessment
EPA	Environmental Protection Act
EC	European Commission
ELC	European Landscape Convention
EU	European Union
FRCA	Farming and Rural Conservation Agency
FQP	Freight Quality Partnership
GQA	General Quality Agreement

Acronym	Definition
GIS	Geographic Information System
GOSW	Government Office for the South West
GDHI	Gross Disposable Housing Income
GDP	Gross Domestic Product
GVA	Gross Value Added
HAP	Habitats Action Plan
HRA	Habitats Regulations Assessment
HGV	Heavy Goods Vehicle
Ha	Hectare
HER	Historic Environment Record
HLC	Historic Landscape Characterisation
ICT	Information and Communications Technology
IPCC	Intergovernmental Panel on Climate Change
LATS	Landfill Allowance Trading Scheme
LCA	Landscape Character Assessment
LCS	Local Cultural Strategy
LDF	Local Development Framework
LGAP	Local Geodiversity Action Plan
LNR	Local Nature Reserve
LPA	Local Planning Authority
LSP	Local Strategic Partnership
LTP	Local Transport Plan
MBT	Mechanical Biological Treatment
MWDF	Minerals and Waste Development Framework
MLP	Minerals Local Plan
MPA	Minerals Planning Authority
MAFF	Ministry of Agriculture, Fisheries and Food
NNR	National Nature Reserve
NPPF	National Planning Policy Framework

Acronym	Definition
NFNP	New Forest National Park
N2O	Nitrous Oxide
ODPM	Office of the Deputy Prime Minister
ONS	Office for National Statistics
PM10	Paticulates
PPG	Planning Policy Guidance
PPS	Planning Policy Statement
PAWS	Planted Ancient Woodland Sites
PRoW	Public Right of Way
RAD	Rail Aggregate Depot
RDA	Regional Development Agency
RFRA	Regional Flood Risk Appraisal
RIGS	Regionally Important Geological Sites
RPG	Regional Planning Guidance
RPG 10	Regional Planning Guidance for the South West
RSS	Regional Spatial Strategy
RAF	Royal Air Force
RDPE	Rural Development Programme for England
SM	Scheduled Monument
SNCI	Site of Nature Conservation Interest
SSSI	Site of Special Scientific Interest
SEEDA	South East England Development Agency
SW	South West
SWO	South West Observatory
SPZ	Source Protection Zone
SAC	Special Area of Conservation
SLA	Special Landscape Area
SAP	Species Action Plan
SOUV	Statement of Outstanding Universal Value

Acronym	Definition
SSCT	Strategically Significant Cities and Towns
SEA	Strategic Environmental Assessment
SFRA	Strategic Flood Risk Assessment
SHMA	Strategic Housing Market Assessment
SNA	Strategic Nature Area
SRA	Strategic Rail Authority
SPD	Supplementary Planning Document
SA	Sustainability Appraisal
SCP	Sustainable Consumption and Production
SBC	Swindon Borough Council
SSP	Swindon Strategic Partnership
TA	Traffic Assessment
TTWA	Travel To Work Area
UK	United Kingdom
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
VCS	Voluntary and Community Sector
WPA	Waste Planning Authority
WRS	Water Resources Strategy
WHS	World Heritage Site