Gloucestershire COUNTY COUNCIL

Gloucestershire Minerals Local Plan

Sustainability Appraisal

Scoping Report Update 4

July 2013

CONTENTS PAGE

Section 1. Introduction

1. Sustainability Appraisal (SA) is a statutory requirement under the Planning and Compulsory Purchase Act 2004. It requires all emerging documents within the Minerals and Waste Development Framework (MWDF) to be subjected to 'testing' to determine their sustainability credentials - the idea being to help develop the most sustainable policies and proposals. The SA process aims to ensure that the social, environmental and economic implications of plans are fully considered, and that the most sustainable policies are developed.

2. The National Planning Policy Framework (NPPF) came in to place in March 2012. This also continued the requirement of the production of a Sustainability Appraisal. Paragraph 165 of the NPPF states *'A sustainability appraisal which meets the requirements of the European Directive on strategic environmental assessment should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors.'*

3. The process incorporates the requirement of the SEA Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment. This came into force in July of 2004 and applies to a range of English plans and programmes.

Section 2. What is sustainability/sustainable development?

4. The National Planning Policy Framework (NPPF) published March 2012 uses the definition of sustainable development provided by Resolution 24/187 of the United Nations General Assembly as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.'

5. The NPPF then goes on to state that 'The purpose of the planning system is to contribute to the achievement of sustainable development.

Section 3. Local Development Documents

6. Gloucestershire County Council adopted the Waste Core Strategy (WCS) in November 2012.

7. The County Council will now produce the Minerals Local Plan (MLP). The NPPF now advises (paragraph 156) than planning authorities should produce Local Plans and that a series of separate DPD's should only be produced where justified. Work had begun on a Minerals Core Strategy (MCS) these documents a number of years ago, however at that time the Government Office for the South West (GOSW) advised the County Council that the priority was the Waste Core Strategy. Below is a list of what mineral related documents had been produced in the earlier stages:

    - MCS Issues and Options consultation September 2006 - designed to generate public debate on mineral issues facing the county and to seek out possible ways of resolving them.

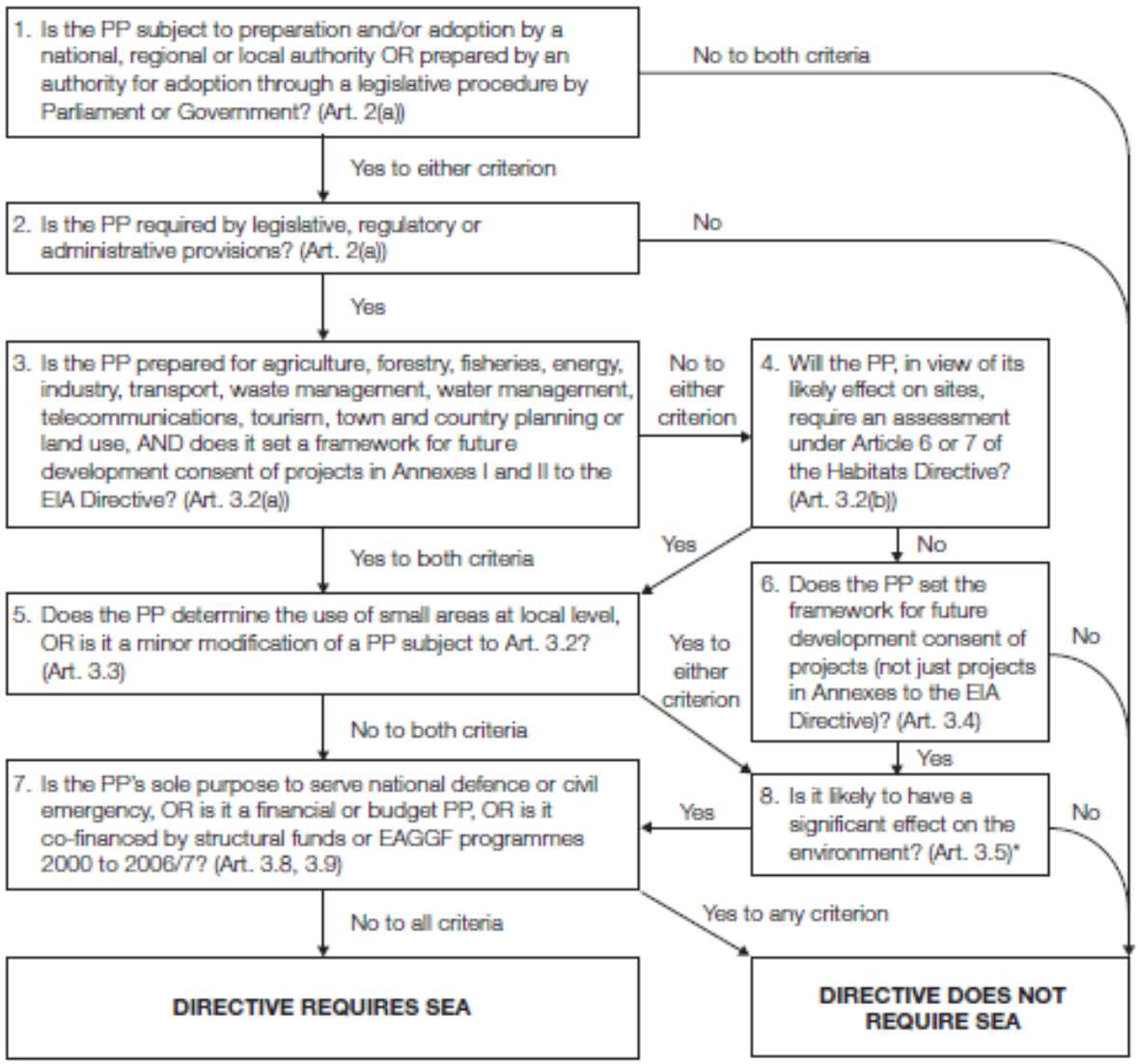
- MCS Preferred Options consultation January 2008 - involved setting out the 'direction of travel' for the planning framework and core policies.

Section 4. Strategic Environmental Assessment and Sustainability Appraisal

8. Strategic Environmental Assessment (SEA): In 2001 a European Union Directive 'the SEA Directive on the assessment of the effects of certain plans and programmes on the environment' (2001/42/EC) was adopted. It came into force in the UK on the 21st of July 2004 and applies to a range of plans and programmes in England including Minerals and Waste Development Frameworks.

Figure 2 – Application of the SEA Directive to plans and programmes

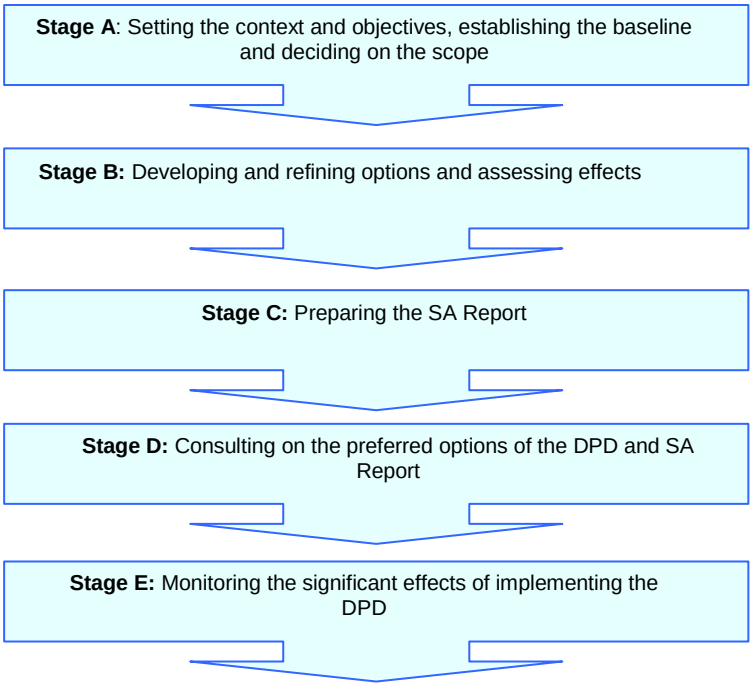
This diagram is intended as a guide to the criteria for application of the Directive to plans and programmes (PPs). It has no legal status.



*The Directive requires Member States to determine whether plans or programmes in this category are likely to have significant environmental effects. These determinations may be made on a case by case basis and/or by specifying types of plan or programme.

9. Sustainability Appraisal (SA): includes a consideration of social and economic issues and impacts as well as environmental ones, thus it has a broader scope and remit than SEA. Under the Planning and Compulsory Purchase Act 2004 Local Planning Authorities (LPAs) are required to undertake Sustainability Appraisals of Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs), this includes Minerals and Waste DPDs and SPDs.

10. The SA process is split into a number of stages.



Stage A contains a number of subsidiary tasks:

Task A1: Identify other relevant plans, programmes, strategies and initiatives and sustainability objectives.

Task A2: Collecting baseline information.

Task A3: Identifying environmental problems.

Task A4: Develop SEA objectives.

Task A5: Consulting on the scope of SEA.

This report will outline how the stages above have been addressed and the relevant information examined to assess its impact upon the production of the MLP.

Section 5. Task A1 - Identifying other relevant plans, programmes, strategies and initiatives and sustainability objectives.

11. ***SEA Directive Annex I*** *– (a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;*

(e) the environmental protection objectives, established at international, Community or Member State level which are relevant to the plan or programme and the way those objectives and any environmental considerations have been take account during its preparation.

12. In order to achieve sustainable development objectives it is essential to take account of national, regional and local Guidance, plans and strategies.

13. The purpose of the review other plans and strategies is how they will influence the preparation of the Minerals Local Plan and the SA.

14. Table 1 below lists relevant plans, programmes and strategies. This table has reviewed the one produced as part of the 2009 scoping report; it has updated and removed redundant documents, plans and policies. Therefore consists of the most up to date documents. The list is not, and cannot be exhaustive. The review has only sought to identify key documents which reflect local, regional, national and international social, economic and environmental issues. Appendix 1 details the relationship that the following plans and policies have with the development of the MLP and the SA.

15. Within the table below are a number of documents that are currently being reviewed as part of the Lord Taylor Review of planning guidance. The aim of this review is 'to support effective planning; what new or updated practice guidance should be published, with clear priorities; and what guidance should be cancelled.' Therefore some of the plans and polices under the national section below may not be relevant at future points.

Table 1 Relevant Plans, policies and documents.

International / European
The World Summit on Sustainable Development, Johannesburg 2002 – Commitments arising from the Summit
EU Air Quality Framework Directives
EU Sixth Environmental Action Plan
EU Drinking Water Directive
EU Water Framework Directive
EU Birds and Habitats Directives (i.e. The Birds Directive (2009/147/EC) and EU Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC))
EU Biodiversity Strategy to 2020
EU Management of waste from extractive industries (2006/21/EC)
EU Waste Framework Directive
National
National Planning Policy Framework (NPPF) (March 2012)

Technical Guidance to the National Planning Policy Framework (March 2012)
PPS 5 : Planning for the Historic Environment: Historic Environment Planning Practice Guide
MPS1: Practice Guide
MPG4: Compensation Regulations
MPG6: Aggregates Provision
National and Regional Guidelines for Aggregates Provision in England 2001 – 2016
MPG8: Interim Development Order Permissions
MPG9: Interim Development Order Permissions – Conditions
MPG12: Treatment of Disused Mine Openings
MPG14: Review of Mineral Planning Permissions
Planning for Freight on Inland Waterways
DEFRA Natural Environment and Rural Communities Act 2006 – Section 41: List of Habitats and Species of Principal Importance in England 2008
The Conservation of Habitats and Species Regulations 2010 (as amended)
Biodiversity 2020 – A strategy for England's wildlife and ecosystem services.
The Sustainable Communities Plan
National Trails Publication
A Development Plan for Marine Aggregate Extraction
Wessex Water Resources Draft Management Plan
Thames Water Resources Management Plan
Severn Trent Water Draft Resources Management Plan
Planning for the Supply of Natural Building Stone
Collation of the Results of The 2009 Aggregate Mineral Survey for England and Wales
Climate Change Act 2008
Minerals Extraction and the Historic Environment 2008
Minerals Extraction and Archaeology: A Practice Guide 2008
Guidance on the Managed Aggregate Supply System October 2012
Regional

South West Nature Map
Regional Planning Guidance for the South West (RPG10 – Interim RSS10)
County & Local
Gloucestershire Strategic Flood Risk Assessment for Minerals & Waste Development Framework
Gloucestershire Landscape Character Assessment
Gloucestershire Nature Map
Gloucestershire Cotswolds Geodiversity Audit & Local Geodiversity Action Plan 2005
West Gloucestershire Geodiversity Audit & Local Geodiversity Action Plan (In print / Aug 2008)
Local Agenda 21 Strategy for a Sustainable Gloucestershire
Gloucestershire Structure Plan Second Review (Adopted Plan)
Gloucestershire Local Transport Plan (3)
The Gloucestershire Economic Strategy
The Rural Economic Strategy for Gloucestershire
Gloucestershire Biodiversity Framework and Delivery Plan 2010
Cotswold Water Park Biodiversity Action Plan 2007 – 2016
Cotswold Water Park Supplementary Planning Guidance
Joint Core Strategy – Gloucester, Cheltenham Tewkesbury
Gloucester Local Plan
Gloucester City Vision
Tewkesbury Local Plan
Stroud Local Plan
Stroud Local Development Framework
Stroud District Community Strategy
Cheltenham Local Plan
Cheltenham's Community Plan
Forest of Dean Core Strategy (awaiting outcome of JR)
Forest of Dean Local Development Framework

Forest of Dean Community Plan
Cotswold Local Plan
Cotswold Local Development Framework
Cotswold Community Strategy

Section 6. Task A2: Collecting baseline information.

16. ***SEA Directive Annex I*** *–(b)the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;*

(c) the environmental characteristics of areas likely to be significantly affected;

17. Collecting baseline data is an essential part of the SA process. It helps provide the basis for predicting and monitoring the effects of policies and in the identification of sustainability problems within the County. The baseline data focuses on key indicators which are readily available and can be updated to demonstrate the issues.

18. The choice of baseline data has been informed by the previous stages in the SA process. As indicated previously, potentially a key limitation of the SA process is gaps in baseline data. Government Guidance on SA takes a pragmatic view in advising that it is acceptable to have data gaps, but that the resulting risks should be documented.

19. In relation to the summary of baseline in Gloucestershire, the following table indicates some potential effects on the environment of minerals development and also the likely future environmental status in the absence of a Minerals Local Plan (MLP).

20. Appendix 2 of this report provides an extensive discussion on the relevant baseline information for the County and in particular the role of minerals development.

Table 2 Potential Environmental Effects of Minerals Development and Likely Future Environmental Status in the Absence of the MWDF.

SEA Topic (SEA Directive 2001/42/EC Annex 1 (f))	Potential effects of minerals and waste development & likely future environmental (or other) status in the absence of the MWDF
Biodiversity **Flora**	Gloucestershire is a highly diverse County with a great variety of wildlife reflected in the large number of sites that have international, national or local designations. Biodiversity outside these areas should also not be

Fauna **Soil**	neglected as habitats that have a linking function are very important. Potential negative effects are: ▪ Impacts on ecosystem services such as flood defences, water purification, soil formation and pollination. ▪ Potential loss of protected species and loss/deterioration of priority habitats. ▪ Habitat deterioration loss and/or fragmentation due to land take. ▪ Changes in soil conditions and or quality or loss of best and most versatile soils. ▪ Changes in the quality of air and water. Pollution potential in terms of noise, vibration, light, dust, air and water pollutants. ▪ Creation of barriers or obstacles affecting wildlife. ▪ Changes in methods of habitat management. ▪ Introduction of new species / habitats. ▪ Changes in ecological balances of prey and predators. ▪ Changes in patterns of human activity. ■ <u>Comment on the likely future environmental status in the absence of the MWDF:</u> Minerals plans aim to provide for the needs of society (i.e. minerals which we all use). But in the process there may be damage to the natural environment. However plans contain policies which aim to protect and enhance the environment. Without these plans it is more likely that environmental designations would be damaged by un-planned development and the opportunity to enhance the environment, and protect and improve environmental networks would be severely limited.

Water	▪ Quarrying may have significant negative impacts on the water table and on surface water regimes. This is a particularly pertinent issue in Gloucestershire in relation to sand and gravel extraction in the Upper Thames Valley. ■ Comment on the likely future environmental status in the absence of the MWDF: In the absence of the MWDF and policies aimed at the protection of the water environment, rivers, streams, lakes as well as subterranean hydrological regimes are more likely to be damaged as a result of un-regulated and environmentally insensitive development.
Air	▪ Traffic associated with mineral sites can increase dust and odour. ■ Comment on the likely future environmental status in the absence of the MWDF: Air quality may deteriorate in the County in the absence of policies which aim at the control and mitigation of the problem.
Climatic factors	▪ Mineral products are, to a large extent, carried by road transport – emissions from which have negative impacts on the climate. ■ Comment on the likely future environmental status in the absence of the MWDF: In the absence of the MWDF and specific policies aimed at combating climate change and reducing the impacts, it is likely that contributions to climate change from minerals development will not be appropriately controlled and mitigated.
Material assets	▪ Minerals development may affect the value of nearby land, property or other material assets. This may also apply to land and property that lies on a lorry route. In terms of aerodromes (as material assets) there are potential safety issues related to the likelihood

	of birdstrike from e.g. open water created as part of mineral restoration. ▪ Conflicts with existing or planned infrastructure such as green infrastructure assets. ■ Comment on the likely future status in the absence of the MWDF: In the absence of the MWDF there may be negative impacts, on material assets (and also safety concerns) as a result of un-regulated, un-mitigated or poorly planned development.
Population	▪ Populations may potentially be affected by mineral workings and associated transportation. Communities can be very sensitive to increases in noise, traffic levels, odour, visual impacts and other negative impacts on amenity. ■ Comment on the likely future status in the absence of the MWDF: In the absence of the MWDF and appropriate policies there may be negative impacts on populations and communities as a result of un-regulated, un-mitigated or poorly planned development.
Human health	Minerals development can have various negative impacts. Noise from quarry working or associated traffic may disturb individuals sleep patterns – causing stress. There is a danger that existing inequalities in health between groups in a community may be exacerbated. It may be that those with resources and influence in a community can successfully object to what they regard as undesirable development. Poorer communities may not have the means or mobilisation. Those at particular risk of discrimination / disadvantage or are particularly vulnerable include, poorer communities (measured through a variety of indicators), black and minority ethnic people, people with disabilities, refugee groups, people seeking asylum, Gypsies and Travellers, single parent families; lesbian, gay, bisexual and transgender

	people; religious groups and carers. (Source: Gloucestershire NHS Primary Care Trust – August 2008). ■ <u>Comment on the likely future status in the absence of the MWDF:</u> In the absence of the MWDF there may be negative impacts on human health as a result of un-regulated, un-mitigated or poorly planned development.
Cultural heritage including architectural & archaeological heritage	Minerals sites along with ancillary development such as road construction, soil bunds and screening, processing and storage areas can potentially damage or destroy artefacts / sites of cultural and archaeological heritage. Indirect effects may include: ▪ A reduction in the legibility of archaeological landscapes as a result of the interruption of features extending beyond the extraction area. ▪ Dewatering and potential disruption to drainage regimes may damage waterlogged archaeological deposits and destroy a sites palaeo-environmental potential. ▪ Subsidence or ground settlement on upstanding monuments and historic buildings. ▪ Dust from workings can have a detrimental impact on historic buildings and monuments – especially if the dust particles are chemically active. ▪ In the long term the setting and character of a historic monument / archaeological landscape / listed building might be affected by extraction. Apart from visual aspects, there may be a detraction of amenity resulting from the disruption of rights of way and access and increased noise and heavy traffic. ■ <u>Comment on the likely future status in the absence of the MWDF:</u>

	In the absence of the MWDF and appropriate policies there may be damage to Gloucestershire's cultural heritage (including architecture and archaeology) as a result of un-regulated, un-mitigated or poorly planned development.
Landscape	Landscapes may be damaged where a development changes the physical character of a particular area. Changes to, or the physical removal of landscape elements e.g. trees, slopes, hedges, field boundaries may change the character of the landscape and how it is experienced. Views may be damaged, both in terms of composition and extent. Potential landscape / visual effects as a result of quarrying / landraise / landfill development may include: ▪ Natural topography being permanently damaged. ▪ Geological exposures in old disused quarries may be lost if they are backfilled. ▪ Loss of hedgerows and hedgerow trees. ▪ Rural character eroded as a result of operational areas, litter trapping fences, stockpiles and mounds, plant and buildings. ▪ Insensitive restoration may weaken the local distinctiveness of a landscape. ▪ On the positive side, mineral operations can create new landscape features such as lakes, ponds and wetlands. A good example being the Cotswold Water Park. ■ <u>Comment on the likely future status in the absence of the MWDF:</u> In the absence of the MWDF and appropriate policies there may be damage to valued landscapes within Gloucestershire as a result of un-regulated, un-mitigated or poorly planned development.
The **inter-relationship** between the issues referred to above	There are numerous, complex inter-relationships between all the aspects of the natural and built environment and all the other

	social and economic factors that have been considered. ■ Comment on the likely future status in the absence of the MWDF: In the absence of the MWDF and appropriate policies, development may cause unforeseen damage or produce knock-on negative impacts as a result of un-regulated, un-mitigated or poorly planned development.

Section 7. Task A3 – Identifying sustainability issues

21. ***SEA Directive Annex I –*** *any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as designated pursuant to Directives 79/409/EEC (the Birds Directive) and 92/43/EEC (the Habitats Directive).*

22. The following are considered to be some of the key sustainability issues/problems for Gloucestershire. In keeping with the principles of SA / SEA, social, economic and environmental issues are taken into account. It is a general list and certain issues are likely to have greater significance to the development of minerals policy in Gloucestershire.

Table 3. Sustainability Issues and Problems in Gloucestershire.

No.	Sustainability Issues and Problems
1.	Relatively high house prices in the County Gloucestershire is a relatively expensive place to live, with some districts and areas clearly much more expensive than others. Generally it is the high prices in the Cotswolds that keeps the average high. The average price of a house in Gloucestershire in 2012 was £174,876 compared to the UK average in 2012 of £163,376. House prices have begun to increase since early 2010.
2.	Low average income In 2011 the average County income was £26,871, over £1000 lower than the national average. However the average income in Tewkesbury and Cheltenham were well above the national average, Gloucester was well below (ASHE/ONS 2011).
3.	High crime levels in some areas The following are in the Top 10% nationally most deprived wards in terms of crime and disorder (2010): *Cheltenham* – All Saints 3, Hesters Way 1-4, Pitville 3&4, Spingbank 2,

	St Mark's 1, St Pauls 2&3, St Peter's 1&4. *Gloucester* – Barnwood 3, Barton and Tredworth 1 2 5-7, Kingsholm and Wotton 3, Matson and Robinswood 2, Moreland 1 3 7, Podsmead 1, Westgate 1 3. *Stroud* – Central.
4.	Poor health in some areas / amongst certain groups There are pockets of health related deprivation in Gloucester, Cheltenham and the Forest of Dean where life expectancy is lower than the rest of the county. All age, all cause mortality, early death rates from heart disease and stroke and from cancer are lower than the England rates and falling.
5.	High levels of traffic congestion and associated impacts The busiest routes in the County with over 1000 HGVs in a 24 hour working day are, sections of the A40, A417, M50, M5, A46, A438, A435, A4311. There is a trend that the number of vehicle kms is increasing year on year in the County.
6.	The performance of the rural economy Various pressures on the rural economy and rural communities as outlined in 'The Rural Economic Strategy for Gloucestershire'.
7.	Areas of deprivation and social exclusion According to Government Indices of Deprivation there are significant pockets of deprivation in the County mainly in the urban areas of Gloucester and Cheltenham. The Indices of Deprivation are made up of 7 domains: Income; Employment; Health deprivation and disability; Education, Skills and Training deprivation; Barriers to Housing and Services; Crime and Living Environment. These are combined to give the Index of Multiple Deprivation. For Gloucestershire the ID2010 Super Output Areas in the national top 10% (i.e. in the worst 10%) are: *Cheltenham* – St Pauls 2, St Marks 1, Hesters Way 1. *Gloucester* – Podmead 1, Matson and Robinswood 1, Kingsholm and Wotton 3, Westgate 1&3.
8.	Potential for flooding A very serious issue in Gloucestershire. High potential in some areas of the County as outlined in Gloucestershire's SFRA. The summer 2007 flood events resulted in 5,000 homes and businesses being flooded and many communities were cut off.
9.	Issues with mineral site restoration There are issues over the general quality of mineral site restoration and also problematic issues in the Cotswold Water Park regarding wet restoration and 'bird strike' issues in relation to the proximity of RAF Fairford. There are a number of specific issues that need to considered in regards to the Cotswold Water Park – protection and enhancement of existing sites, consideration of the whole environment, coherent approach to restoration and after use, need for ecosystems services and balance conflicting needs of biodiversity and people.

10.	Difficulties in terms of protecting Gloucestershire's environment whilst providing minerals needed by society Minerals can only be worked where they are found and this is often in what is considered to be sensitive environments. In Gloucestershire the two principle limestone resource areas, the Forest of Dean and the Cotswolds are designated as Special Landscape Areas and AONB.
11.	Relatively low levels of renewable energy generation Gloucestershire's renewable electricity and heat capacity has slowly increased over the years. In 2012 the Renewable Survey by RegenSW indicated the following capacities 25.522MWe and 18.845MWth.
12.	The general state of Gloucestershire's biodiversity, the condition of SSSIs / sites protected under the Habitat's Directive / locally designated sites Detailed information on the general state of biodiversity in Gloucestershire can be found in the latest Gloucestershire Biodiversity Framework and Delivery Plan at: http://gloucestershirebiodiversity.net/actionplan/index.php There are 10 International/European sites in and close to Gloucestershire. There are possible threats to them from minerals development although they are protected by law through the Habitat Regulations Assessment (HRA) process. A process which GCC is undertaking as part of plan preparation. The most recent condition of SSSI survey showed that 95.8% of the county's SSSIs were meeting the 'Public Service Agreement' targets. Special consideration should be had to bat populations within the Wye Valley and Forest of Dean SAC. This area has 26% of the national population of the Lesser Horseshoe Bat and 6% of the Greater Horseshoe Bat.
13.	Decline in species biodiversity - in particular of certain bird species in Gloucestershire *Biodiversity decline*: The priority species on the English list relevant to Gloucestershire are reference on the Gloucestershire Biodiversity website at: http://gloucestershirebiodiversity.net/actionplan/priority-species.php *Bird populations:* Over a 40 year period in Gloucestershire there had been a decline in 22 species, 15 species increased in number, 3 species were lost and there were 2 new species. Source: State of the Natural Environment Report 2011.
14.	Increases in serious pollution incidents No figures specifically relating to Gloucestershire but (at least) 1 serous incident in

	September 2006 = Chemical fire in Andoversford area in Cheltenham. January 2004 = Explosion at Lithium battery factory in Tewkesbury. November 2000 = serious fire at CSG waste transfer station in Sandhurst Lane Gloucester.
15.	Water Quality Gloucestershire is within the Severn Vale Catchment. The water quality within the County is not yet meeting 'good' ecological status in regards the Water Framework Directive. Only 7% of rivers and lakes within the county have good ecological and chemical status. Source: River Severn Management Plan
16.	Potential for damage to the historic environment Scheduled Ancient Monuments in Gloucestershire = 602. Conservation Areas = 287 covering 6233 ha. Number of listed buildings = 13,432. Other archaeological sites structures and buildings = 24,962
17.	Detrimental changes in landscape character There are three Areas of Outstanding Natural Beauty (AONB) in the County and other important areas many of which are outlined in the Gloucestershire Landscape Character Assessment available at: www.gloucestershire.gov.uk/extra/article/109519/Landscape-Character-Assessments There is the potential for minerals development to contribute to detrimental changes in landscape character in the County and plans should endeavour to minimise impacts as much as possible. The Gloucestershire Nature Map also identifies four Natural Areas in which the following Strategic Nature Areas (SNA) have been identified: Woodland, Unimproved Limestone Grassland, Unimproved Neutral Grassland, Lowland Wet Grassland and Heathland/Acid Grassland. Climate change represents a major threat to landscape character in the County e.g. with beech woods under particular threat from rising temperatures. More on the Gloucestershire Nature Map at: http://www.gloucestershirebiodiversity.net/actionplan/nature-map.php

Section 8. Task A4 – Developing the Sustainability Appraisal Framework

23. ***SEA Directive Annex I –*** *(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.*

24. The SA Framework contains a number of objectives. Once SA Objectives are developed they provide the basis for testing strategy and policy formulation of relevant aspects of the MWDF. The Objectives derived from this process are the basis for identifying appropriate indicators and targets against which the success of adopted strategies and policies may be judged.

25. The original SA Framework Objectives have changed and evolved with the MWDF. There are several reasons for this:

(a) SA is supposed to be an iterative and evolving process. The Framework is supposed to be regularly updated, particularly in terms of presenting up-to-date baseline data.

(b) The SA process is a consultative one, both in terms of the Framework documents and the SA Reports. The Minerals and Waste Planning Policy team have made every effort to take on board the comments of stakeholders and to make appropriate changes.

(c) Government guidance and planning legislation is constantly changing and being updated and the SA process has to reflect this.

Table 4: Sustainability Appraisal Objectives

SOCIAL
1. To promote sustainable development and sustainable communities and improve the health and wellbeing of people living and working in Gloucestershire as well as visitors to the County.
2. To safeguard the amenity of local communities from the adverse impacts of mineral development.
ECONOMIC
3. To promote sustainable economic development in Gloucestershire giving opportunities to people from all social and ethnic backgrounds.
4. To provide employment opportunities in both rural and urban areas of the County, promoting diversification in the economy.
5. To ensure that mineral sites do not compromise the safety of commercial or military aerodromes.
6. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.
ENVIRONMENTAL
7. To protect, conserve and enhance biodiversity in Gloucestershire.
8. To protect, conserve and enhance the landscape in Gloucestershire.
9. To restore mineral sites to a high standard in order to achieve the maximum after use

benefits including the conservation and enhancement of biodiversity.
10. To protect conserve and enhance Gloucestershire's material, cultural and recreational assets.
11. To protect conserve and enhance geodiversity in Gloucestershire.
12. To protect conserve and enhance townscapes and Gloucestershire's architectural and archaeological heritage.
13. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that minerals development does not compromise sustainable sources of water supply.
14. To protect and enhance soil / land quality in Gloucestershire.
15. To protect and enhance air quality in Gloucestershire.
16. To protect and enhance water quality in Gloucestershire.
17. To reduce the adverse impacts of lorry traffic on the environment and communities through means such as: a) reducing the need to travel b) promoting more sustainable means of transport e.g. by rail or water c) sensitive lorry routing d) the use of sustainable alternative fuels
19. To reduce contributions to and to adapt to Climate Change.

26. Each objective has a number of subsidiary questions, which provide criteria when conducting assessment. The subsidiary questions can be found in Appendix 3.

Section 9. Task A5 – Consulting on the scope of the sustainability appraisal

27. ***SEA Directive Article 5(4) –*** *The authorities' refered to in Article 6(3) shall be consulted when deciding on the scope and level of detail of the information which must be included in the environmental report.*

Article 6(3) – *Member States shall designate the authorities to be consulted which by reason of their specific environmental responsibilities are likely to be concerned y the environmental effects of implementing plans and programmes.*

28. The SEA directive specifically requires consultation with statutory bodies on the scoping report. The three statutory bodies with England are English Heritage,

Environment Agency and Natural England. Alongside these the County Council will consult a number of other relevant stakeholders, and the document will be made available on the Council's website. The aim of the consultation is to ensure that the scope of the SA has been fully identified and that the subsequent reports will be comprehensive enough.

10. Consultation Responses.

29. To be added post the consultation with statutory bodies and relevant stakeholders.

APPENDIX 1 Relevant Plans, Programmes, Strategies And Initiatives

INTERNATIONAL			
THE WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT – JOHANNESBURG 2002 – COMMITMENTS ARISING FROM THE SUMMIT			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
▪ Sustainable consumption and production patterns. ▪ Accelerate shift towards sustainable consumption and production – 10 year framework of programmes of action. Reverse trend in loss of natural Resources. ▪ Renewable Energy and Energy Efficiency. ▪ Urgently and substantially increase Global share of renewable energy. ▪ Significantly reduce the rate of biodiversity loss by 2010.	No targets or indicators, however actions include: ▪ Greater resource efficiency. ▪ Support business innovation and take up of best practice in technology and management. ▪ Sustainable consumer consumption and procurement. ▪ Creating a level playing field for renewable energy and energy efficiency. ▪ New technology development. ▪ Push on energy efficiency.	The MLP should encourage greater efficiency of resources. Plans should acknowledge the importance of protecting biodiversity. They should consider the maintenance of good air quality, the measures that can be taken to improve it and encouragement to reduce vehicle movements.	The SA should include objectives that broadly cover the action areas. Greater resource efficiency is key.
EU AIR QUALITY FRAMEWORK DIRECTIVES			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**

	PLAN AND SA		
The 6th EAP identifies four priority areas: ▪ Climate Change ▪ Nature and Biodiversity ▪ Environment and Health ▪ Natural Resources & Waste.	No relevant key targets.	The MLP should consider its relationship with the priority areas.	The SA should consider its relationship with the priority areas.
EU DRINKING WATER DIRECTIVE (98/83/EC)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
Provide for the quality of drinking water throughout the EU.	The standards in the Directive are legally binding.	Plans should clearly recognise that minerals development can impact upon drinking water quality and should include policy measures to protect these resources.	The SA Framework should consider water quality.
EU WATER FRAMEWORK DIRECTIVE (2000/60/EC)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The WFD sets a framework for the long-term sustainable	All rivers must be of ‘good’ quality by 2015, although this has yet to be	Include policies which promote water quality in line with the	Check to ensure that the objectives of the Framework

management of water resources. It establishes a river catchment structure for the management of all inland and costal waters including groundwater.	defined. EA publishes substantial information on river quality. Develop trend or target indicators based on these.	Directive. Many of the objectives will be achieved through River Basin Management Plans. Give consideration to the water needs of wetland areas. Through the plan - promote the protection of Natura 2000 sites. Consider that wetland creation(after-use) may impose obligations under the WFD.	Directive are reflected in the SA Framework – The conservation and protection of groundwater, rivers and lakes in the county and bordering catchments needs to be included in the assessment of objectives. Consider specific objectives for the Cotswolds Water Park.
EU BIODIVERSITY STRATEGY TO 2020			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The European Commission has adopted an ambitious new strategy to halt the loss of biodiversity and ecosystem services in the EU by 2020. The six targets cover: • Full implementation of EU nature legislation to protect biodiversity	Biodiversity loss is an enormous challenge in the EU, with around one in four species currently threatened with extinction and 88% of fish stocks over-exploited or significantly depleted.	Include policies that protect biodiversity.	Check to ensure that the requirements of the strategy is covered in the SA Framework objectives and appraisal criteria.

• Better protection for ecosystems, and more use of green infrastructure • More sustainable agriculture and forestry • Better management of fish stocks • Tighter controls on invasive alien species • A bigger EU contribution to averting global biodiversity loss			
EU BIRDS AND HABITATS DIRECTIVE I.E. BIRDS DIRECTIVE (2009/147/EC) AND EU DIRECTIVE ON THE CONSERVATION OF NATURAL HABITATS AND OF WILD FAUNA AND FLORA (92/43/EEC) BIRDS DIRECTIVE (2009/147/EC))			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
EC Directive 92/43/EEC, known as The Habitats Directive aims to conserve fauna, flora and natural habitats of EU importance. The fundamental purpose of this directive is to establish a network of protected areas throughout the Community designed to maintain both the distribution and the	No relevant key targets.	The MPA should be aware of the locations of SPAs and SACs and take this into account during any site selection and area of search activity. The plan should also ensure that provision is made for undertaking 'appropriate	Check to ensure that the requirements of the Directive(s) are covered in the SA Framework objectives and appraisal criteria.

abundance of threatened species and habitats, both terrestrial and marine. The Directive complements the EU Directive on the Birds Directive. The network of Special Areas of Conservation (SAC) and Special Protection Areas (SPAs) is called Natura 2000. The Conservation (Natural Habitats & c.) Regulations 1994 (known as the Habitats Regulations) implement the Habitats Directive and the Birds Directive. These make it an offence deliberately to kill, capture, or disturb a European Protected Species, or to damage or destroy the breeding site or resting place of such an animal. The Habitats Regulations require the review of outstanding decisions, permissions, consents and other authorisations which would be likely to have a significant effect on a European Site. If as a result of an application there is 'likely to be a significant effect' on the designated features of the SAC (this could include impacts from		assessments' where required. The MPA should be aware of the presence of European Protected Species within Gloucestershire.	

activities not within the boundaries of the SAC and the cumulative effect of several separate applications) then the planning authority must obtain an Appropriate Assessment' of the application and its likely effect. Local authorities should be aware of the presence of European Protected Species and their obligations to afford them protection.			
EU DIRECTIVE ON THE MANAGEMENT OF WASTE FROM THE EXTRACTIVE INDUSTRIES (2006/21/EC)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The purpose of the Directive is to prevent water and soil pollution from the deposition of waste into heaps or ponds and puts emphasis on the long-term stability of waste facilities to help avoid major accidents, such as the pollution of the Danube river caused by a cyanide spill, following a damburst of a tailings pond in Baia Mare/Romania in 2000. The Directive is not yet finalised. It is likely to be agreed in	No relevant key targets.	Plans should clearly recognise that some minerals development can cause pollution and harm human health where they produce dangerous substances.	The Directive encourages recycling and the prudent use of natural resources and the protection of the environment. It aims for a reduction in water and soil pollution. The SA Framework should include objectives that reflect the tenor of the proposed Directive.

the second half of 2005. Member States would therefore have to transpose the EU legislation by the end of 2007. The main elements of the Draft Directive are: • Conditions for operating permits. • General obligations concerning waste management. • The obligation to characterise waste before disposing of it or treating it. • Measures to ensure the safety of waste management facilities. • A requirement to draw up closure plans. • An obligation to provide for an appropriate level of financial security ("polluter pays" principle).			
EU WASTE FRAMEWORK DIRECTIVE (2008/98/EC)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
This Directive establishes a legal framework for the treatment of	No key targets.	The waste hierarchy is encouraging the reduction in the	The SA should consider he impacts of the policy on mineral

waste * within the Community. It aims at protecting the environment and human health through the prevention of the harmful effects of waste generation and waste management.		use of landfills, which has an impact upon minerals.	planning.
NATIONAL			
NATIONAL PLANNING POLICY FRAMEWORK (NPPF)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied. The purpose of the planning system is to contribute to the achievement of sustainable development – economic, social and environmental.	No key target.	Policies in the plan need to consider the NPPF.	Include sustainability objectives within the SA Framework that address the policy requirements of the guidance.
TECHNICAL GUIDANCE TO THE NATIONAL PLANNING POLICY FRAMEWORK			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
This document provides additional guidance to local planning authorities to ensure the effective implementation of the planning policy set out in the National Planning Policy Framework on	Targets are set for noise and dust but this depends on the proposal.	Policies in the plan need to consider the technical guidance.	Include sustainability objectives within the SA Framework that address the policy requirements of the guidance.

development in areas at risk of flooding and in relation to mineral extraction. The technical guidance in regards to minerals covers: • Dust. • Noise emissions. • Stability in surface mine workings and tips. • Restoration and aftercare of mineral sites. • Landbanks of industrial minerals.			
PPS5 PLANNING FOR THE HISTORIC ENVIRONMENT: HISTORIC ENVIRONMENT PLANNING PRACTICE GUIDE			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
Objective: *That the value of the historic environment is recognised by all who have the power to shape it; that Government gives it proper recognition and that it is managed intelligently and in a way that fully realises its contribution to the economic, social and cultural life of the nation*. The purpose of this guide is to assist local authorities, owners, applicants and other interested parties in implementing Planning	No key targets.	Policies need to consider the guidance.	Check to ensure that the guidelines are reflected in the SA Framework objectives.

Policy Statement 5 (Planning for the Historic Environment) and to help in the interpretation of policies within the PPS. (Although PPS5 has been replaced by the NPPF this practice guide still remains in place.			
MINERALS PLANNING GUIDANCE 4: REVOCATION, MODIFICATION, DISCONTINUANCE AND SUSPENSION ORDERS ETC			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The MPG gives guidance on the orders and effects of the Town and Country Planning (Compensation for Restrictions on Mineral Working and Mineral Waste Depositing) Regulations 1997. Sites with planning permission for mineral working or depositing mineral waste must be reviewed every 15 years. Compensation is payable if new conditions, other than for restoration and aftercare, restrict working rights. Minerals planning authorities have powers to revoke, modify or discontinue mineral working in cases of urgency or default. Compensation payable in such cases has been brought into line with that payable as a result of the periodic reviews. The guidance describes the order-making powers available and the	No key targets.	Not relevant to preparation and content of plan.	Not relevant.

compensation applicable.			
MINERALS PLANNING GUIDANCE 6: GUIDELINES FOR AGGREGATE PROVISION IN ENGLAND (1994)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	IMPLICATIONS FOR PLAN	IMPLICATIONS FOR SA
<u>Paragraphs 9 –11 Policy and objectives.</u> ▪ The Government wishes to see indigenous mineral resources encouraged. ▪ The objectives of sustainable development for minerals planning are: ▪ To conserve minerals as far as possible, whilst ensuring an adequate supply to meet the needs of society for minerals. ▪ To encourage sensitive working practices during minerals extraction and to preserve or enhance the overall quality of the environment once extraction has ceased. ▪ To protect areas of designated landscape or nature conservation from development, other than in exceptional circumstances where it has been demonstrated that development is in the public	The MPG sets the aggregates apportionment mechanism that establishes the amount of aggregate to be supplied within Gloucestershire – land won, recycled and imported aggregates. This MPG has now been replaced by Annex 1 'Aggregates' of MPS 1 & the current National and Regional Guidelines for Aggregates Provision in England.	The plan should provide for an adequate supply of aggregate in line with sustainable development objectives.	The key requirements of MPG 6 (and its subsequent review – Annex 1 of MPS 1) should be reflected in the SA Framework objectives.

interest.			
<u>Paragraph 28 – Efficiency of use.</u> It is necessary to use all construction aggregate materials efficiently. Unnecessary wastage of mineral resources should be avoided as such wastage can increase the volume of extraction and overall level of environmental impact.		Plan policies should encourage efficiency of use.	
Para Aggregates should be recycled where possible.		Plan policies should encourage the recycling of aggregates where possible.	
Provision for the siting of long term or semi-permanent recycling plants may be needed.		The plan should consider policies that facilitate the use of secondary and waste materials.	
<u>Paragraph 51 – Marine dredged aggregates</u> Identify and safeguard suitable locations for aggregates wharves. Efforts should also be made to retain or improve existing facilities where these are environmentally acceptable and serve, or have potential for, a useful function.		Consider in the plan.	
MLPs should make provision for the appropriate apportionment of		The plan should make provision for the regional apportionment.	

the Regional Guidelines.			
Provision for aggregates can be made in several ways – by specific sites, preferred areas or areas of search.		As above.	
To ensure that the areas identified in the development plan can be translated into workable reserves, MPAs should make reasonable efforts to satisfy themselves that the land is: Underlain by economically workable deposits of mineral and likely to become available to the minerals industry within the plan period.		Consider in the plan.	
<u>Paragraphs 62-63 – Landbanks</u> Landbanks should be maintained for all aggregate minerals. In the case of sand and gravel MPAs should aim to maintain a landbank for an appropriate local area, sufficient for at least 7 years extraction, unless exceptional circumstances prevail.		Include policies for relating to landbanks.	
<u>Paragraph 67 – Safeguarding</u> Planning authorities should make		Include policies that safeguard resources.	

every effort to safeguard resources of all types of construction aggregates, which are, or may become, of economic importance, against other types of development which would be a serious hindrance to their extraction.			
<u>Paragraph 69 – Extensions</u> Extensions may be generally preferable, as a means of minimising environmental disturbance. However, this will not always be the case and each case will need to be considered on its own merits.		Consider in the plan.	
<u>Paragraphs 70–76 – National Parks, the Broads, the New Forest and Areas of Outstanding Natural Beauty (AONBs)</u> Paragraphs 70-76 cover a range of designations including: National Parks, The Broads, The New Forest, AONBs, SSSIs, NNRs, Other environmentally important areas, Ancient monuments and archaeological and other cultural interests. These paragraphs set		Reflect in plan policy.	

out how mineral workings should be treated in such areas, and how adequate protection should be ensured. In relation to the first four designations, which include the AONBs, Paragraph 71 states that consideration of mineral applications in such areas should normally include an assessment of: The need for the development, in terms of national considerations of mineral supply; and the impact of permitting the development, or refusing it, on the local economy. Whether alternative supplies can be made available at reasonable cost; and the scope for meeting the need in some other way. Any detrimental effect of the proposals on the environment and landscape and the extent to which that should be moderated; and in the case of extensions to existing quarries, the extent to which the proposal would achieve an enhancement to the local landscape.			
<u>Paragraph 77 – Agricultural land</u>		Consider in the policies of the plan.	

Unlike other development on agricultural land, mineral workings can be restored back to agricultural land. Therefore, when considering the allocation of land for minerals development the agricultural implications must be considered together with the environmental and economic aspects. Such as whether the land should be restored to an agricultural after-use and the standard of reclamation likely to be achieved.			
<u>Paragraphs 82 – 86 – Assessment of need and supply</u> Address need and supply of minerals.		Address the issues of need and supply.	
<u>Paragraphs 87 – 88 Environmental effects</u> Identifies range of impacts minerals workings can have and states that the industry should demonstrate that it is taking all practicable steps to satisfy the environmental concerns of site operation and restoration.		Consider in plan policy	
<u>Paragraph 94 – Transport</u> Minimising the impact of traffic.		Include policies that minimise or mitigate against the impact of traffic	
<u>Paragraph 96 – Transport</u> Safeguard existing railhead		Consider in plan policies.	

facilities, and consider possible new sites.			
Paragraph 97 – Water interests Highlights the need to consider water interests, such as impacts on water supply, pollution control and land drainage.		Consider water interests in plan policies.	
Paragraph 98 – Working practices, restoration, aftercare and after-use See guidance in MPG 7.		Consider in the plan as per the requirements of MPG 7.	
NATIONAL AND REGIONAL GUIDELINES FOR AGGREGATES PROVISION IN ENGLAND – 2001- 2016 (2003)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The Guidelines set out revised national and regional guidelines for aggregates provision in England for the period 2001 to 2016 inclusive. There is an indication how the guidelines should be taken into account in the planning process, and outlines arrangements for future monitoring and review. From the date of its issue it is a material planning consideration. The guidelines replace those in Annex A of Minerals Planning Guidance Note 6 (MPG6)	▪ Guidelines for the South West Land-won Sand & Gravel = 106 million tonnes. Land-won Crushed Rock = 453 million tonnes. ▪ Assumptions Marine Sand & Gravel = 9 million tonnes. Alternative Materials = 121 million tonnes. Net Imports to England = 4 million	Policies in the plan need to consider the apportionment figures.	Check to ensure that the guidelines are reflected in the SA Framework objectives.

"Guidelines for aggregates provision in England", published in May 1994. All other parts of MPG6 remain in force until revised.	tonnes.		
MINERALS PLANNING GUIDANCE 8: INTERIM DEVELOPMENT ORDER PERMISSIONS (IDOs) – STATUTORY PROVISIONS AND PROCEDURES (1991)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
Provides advice on the regime introduced by the Planning and Compensation Act 1991 for the regularisation of old minerals permissions. It outlines the legal requirements for registration of old permissions in order to secure their continuing validity, and the criteria applicable. Further advice on the conditions which might be imposed on such continued permissions, to ensure that the operational standards are brought up to modern environmental requirements, is contained in MPG9.	No key targets.	To be considered along with other MPGs and MPSs (as they emerge).	Consider the importance of minerals workings being brought in line with modern environmental requirements. Consider when developing SA Framework objectives.
MINERALS PLANNING GUIDANCE 9: PLANNING AND COMPENSATION ACT 1991: INTERIM DEVELOPMENT ORDER PERMISSIONS (IDOs) – CONDITIONS (1992)			

KEY OBJECTIVES RELEVANT TO PLAN AND SA	KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA	IMPLICATIONS FOR PLAN	IMPLICATIONS FOR SA
Provides advice on the considerations to be taken into account when setting conditions to be imposed on old minerals permissions to provide proper environmental protection, and to ensure that future working is carried out to an acceptable environmental standard.	No relevant targets.	Consider guidance.	Consider the importance of minerals workings being brought in line with modern environmental requirements and standards. Consider when developing SA Framework objectives.
MINERALS PLANNING GUIDANCE 12 - TREATMENT OF DISUSED MINE OPENINGS (1994)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
<u>Introduction</u> This MPG builds on the advice given in PPG 14 Development on Unstable Land (1990), which sets out the broad planning and technical issues in respect of development on unstable land. This is developed in MPG 12 with particular reference to problems caused by disused mine openings. Guidance is given on the role of the planning system, and stresses the importance of ensuring that adequate information is available for both planning control and treatment works.	No specific targets.	Develop policies that address the treatment of disused mine openings.	Include sustainability objectives within the SA Framework that address the policy requirements of the guidance.

Paragraph 32 – Planning control The stability of ground, in so far as it affects land use, is a material planning consideration. Mine openings can affect the stability of the ground and may, thus, affect land use. It is important, therefore, that these be considered at all stages in the planning process, including development plans.	No specific targets.	Develop policies that address the treatment of disused mine openings.	Check to insure that this area is covered in the SA Framework.
Paragraphs 61-62 – (iii) Consideration of mine openings in development plans There is a need for development plans to take account of the presence of mine openings and their potential effects on ground stability and land use. Local planning authorities should identify, where possible, the locations of mine entries and openings in surveys of their areas. Areas where mine openings are suspected to exist but have not been located should be recorded. This information should be generalised to define areas within which mine openings may be a physical constraint to development and within checks and investigations might be expected	No specific targets.	Develop policies that address the treatment of disused mine openings.	Check to insure that this area is covered in the SA Framework.

prior to any planning applications.			
MINERALS PLANNING GUIDANCE 14: ENVIRONMENT ACT 1995: REVIEW OF MINERAL PLANNING PERMISSIONS (1995)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
This MPG explains the requirements introduced by the Environment Act 1995 for an initial review and updating of old mineral planning permissions, and the periodic review of all mineral permissions in the future. The requirements came into affect on the 1st November 1995, and gives guidance to MPAs and the minerals industry on statutory procedures and approaches to the preparation and consideration of updated planning conditions in the review process.	No specific targets.	Consider how the plan can contribute to a periodic review of all mineral permissions in line with statutory procedures.	Check to ensure that the key policy requirements are reflected in the SA Framework objectives and appraisal criteria.
PLANNING FOR FREIGHT ON INLAND WATERWAYS (DFT / DEFRA APRIL 2004)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The Government wants to encourage more freight to travel by water instead of by road. The 4 Waterway Categories are: ▪ Estuaries & tidal rivers	No specific targets, but clear encouragement to move certain types of freight off the roads and make the best use of use of water transport and to preserve and increase wharf capacity.	Consider how the plan can best utilise the water transport options available in Gloucestershire, e.g. the River Severn, and the Gloucester – Sharpness Canal.	Ensure that the SA Framework fully considers the issue of sustainable transport modes other than by road. The SA Objectives or sub-objectives should reference canal use and the safeguarding / expansion of

▪ Large non-tidal waterways ▪ Broad waterways ▪ Narrow canals <u>Aggregates</u> Currently sand, gravel and stone form the greatest volume of freight currently transported on inland waterways in the UK. Related to the above, there are also objectives to safeguard and utilise existing wharf capacity and also to add to it.		Consider how the plan can safeguard existing wharfs and promote additional capacity in line with Government guidance.	wharfs.
DEFRA NATURAL ENVIRONMENT AND RURAL COMMUNITIES ACT 2006 – SECTION 41: LIST OF HABITATS AND SPECIES OF PRINCIPAL IMPORTANCE IN ENGLAND 2008			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The lists have been prepared by the Secretary of State for Environment, Food and Rural Affairs as required under section 41(1) of the Natural Environment and Rural Communities (NERC) Act 2006. They identify the living organisms (species) and types of habitat which the Secretary of State considers are of principal	The extensive lists of habitats and species are available on the DEFRA website at: http://www.defra.gov.uk/wildlife-countryside/biodiversity/sect41-nerc.htm	The plan should further the conservation of the habitats and species on the list.	The SA Framework and particularly the SA Objectives and sub-objectives focusing on biodiversity should reflect the requirements of the NERC Act.

importance for the purpose of conserving biodiversity in England. In accordance with section 41(2) of the NERC Act, the Secretary of State has consulted Natural England on the species and habitats to be included on the list. Under section 41(3) of the NERC Act the Secretary of State must take steps (where they are reasonably practicable), and promote the taking of steps by others, to further the conservation of the habitats and species on the list. In light of this duty, seven sectors have been identified where actions taken by public bodies and other stakeholders could deliver significant conservation benefits for habitats and species on the list.			
THE CONVSERVATION OF HABITATS AND SPECICIES REGULATIONS 2010 (AS AMENDED)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The Regulations provide for the	No targets or indicators specifically,	Consider how the plan can	Include sustainability objectives

designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites.	or directly relevant to minerals plans.	contribute to meeting the regulations.	relating to protection of European sites.
BIODIVERSITY 2020 – A STRATEGY FOR ENGLAND'S WILDLIFE AND ECOSYSTEM SERVICES			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
Sets out how the quality of our environment on land and at sea will be improved over the next ten years. The strategy has focused on four main themes: • A more integrated large-scale approach to conservation on land and at sea. • Putting people at the heart of biodiversity policy. • Reducing environmental pressures. • Improving our knowledge. **The Strategy includes the**	No targets or indicators specifically, or directly relevant to minerals plans.	Consider how the plan can contribute to meeting the strategy.	Include sustainability objectives relating to the quality of the environment.

following priorities: • Creating 200,000 hectares of new wildlife habitats by 2020 – this is equivalent to an area the size of Warwickshire • Securing 50% of SSSIs in favourable condition, while maintaining at least 95% in favourable or recovering condition • Trialling new approaches to setting fishing quotas to reduce discards • Encouraging more people to get involved in conservation by supporting wildlife gardening and outdoor learning programmes • Introducing a new designation for local green spaces to enable communities to protect places that are important to them			

THE SUSTAINABLE COMMUNITIES PLAN (2003) FOCUSING ON: SUSTAINABLE COMMUNITIES IN THE SOUTH WEST			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The plan does not cover all issues of importance to communities but it does address: ▪ Housing ▪ Planning and neighbourhood renewal issues ▪ Transport.	No targets or indicators specifically, or directly relevant to minerals and waste plans.	Consider how the plan can contribute to the broad objectives and aims of the strategy.	Include sustainability objectives that aim to build 'sustainable communities' in line with the Sustainable Communities Plan.
NATIONAL TRAILS PUBLICATION			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
This leaflet published by the Countryside Agency in 2005 details 15 of the most popular National Trails in the England and Wales. National Trails pass through some of the most stunning and diverse landscapes in Britain. Of particular relevance to Gloucestershire is the Cotswold Way Natural Trail and the Thames	No targets or indicators specifically, or directly relevant to minerals and waste plans.	Consider how the plan can protect those National Trails upon which it may have an impact.	Consider rights of way issues, the enjoyment of the countryside and the protection of National Trails in the SA Framework.

Path and Ridgeway National Trail.			
A DEVELOPMENT PLAN FOR MARINE AGGREGATE EXTRACTION IN ENGLAND – A SCOPING STUDY			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
A recommendation for: ▪ A national scale plan for marine minerals. ▪ A clear national framework of policies. ▪ A strong regional element in regional chapters.	Providing for an appropriate amount of dredging from marine areas so that they make their full contribution to sustainable aggregates supply overall.	Relates to: Minerals Core Strategy Minerals Site Allocations Consider how plans can appropriately consider the sustainable use of marine aggregates.	Include sustainability objectives relating to the sustainable use of marine aggregate extraction.
WESSEX WATER RESOURCES DRAFT MANAGEMENT PLAN			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
To improve the water supply network to guarantee the security of supply in the event of source failure, to help overcome low river flow problems and to provide alternative supplies when some sources are affected by elevated	No specific targets or indicators that are directly relevant.	Consider the needs and requirements of all licensed water suppliers and statutory waste water undertakers.	The SA should contain objectives protecting water supplies and water bodies from pollution, promoting the efficient and sustainable management of waste water.

nitrate levels. To move progressively towards metering when a property changes hands, accompanied by tariffs aimed at encouraging sustainable use and protecting those in 'water poverty'. Communicating more clearly how customers can be more efficient in their use of water and offering additional services to promote water efficient behaviour. Protecting the quality of our water supplies by working with farmers and encouraging the Environment Agency to make full use of their powers to protect groundwater.			
THAMES WATER RESOURCES MANAGEMENT PLAN			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
Further significant reductions in leakage resulting in the reduction in leakage by a third by 2020. A ten year programme of targeted	Reduction in leakage by one third by 2020 followed by further reductions. Household meter penetration of	Consider the needs and requirements of all licensed water suppliers and statutory waste water undertakers.	The SA should contain objectives protecting water supplies and water bodies from pollution.

compulsory metering. An enhanced water efficiency programme. An integrated Demand Management (IDM) approach to planning and delivery. Development of key schemes including Upper Thames Major Resource Development in 2021/22. The development of 'what if' analysis and contingency options.	around 80% by 2020 and the metering of all connected properties.		
SEVERN TRENT WATER DRAFT RESOURCES MANAGEMENT PLAN			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
▪ Meet statutory obligations as a licensed water supply and waste water undertaker. ▪ Comply with environmental legislation and meet environmental obligations. ▪ Adopt the overall least financial, social and environmental cost	None specifically relevant to the WCS.	Consider the needs and requirements of all licensed water suppliers and statutory waste water undertakers.	The SA should contain objectives protecting water supplies and water bodies from pollution and promote the efficient and sustainable management of waste water.

strategy for achieving and maintaining target headroom throughout the planning period to 2035. ▪ Continue to promote and expand water efficiency programmes and water reuse options. ▪ Accelerate the installation of water meters and more sophisticated tariffs. ▪ Continue to drive down the level of leakage from the network. ▪ Reinforce the network to avoid interruptions to supply. ▪ Design and maintain water resource and supply systems to achieve no more than three hosepipe bans in 100 years. ▪ Increase the scope for water transfers across our own region and between water companies. ▪ Develop new sustainable water resources when needed. ▪ Ensure no failures in treated water quality outside the standards			

that are set.			
PLANNING FOR THE SUPPLY OF NATURAL BUILDING AND ROOFING STONE IN ENGLAND AND WALES			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
This report describes the nature and significance of the building and roofing stone industry in England and Wales and its relationship to planning and development. The report highlights the fact that there is demand for natural stone products in three main areas: ▪ Repair and maintenance to historic buildings and structures using materials from original or compatible sources. ▪ Maintaining vernacular styles in new construction, using materials that are compatible with traditional local building practices. ▪ Contemporary design requirements for new buildings and structures, including internal	No key targets.	Consider policies in the plan that support the continuing use of natural building stone – where there is demonstrated need. Consider the potential implications for waste minimisation in this sector in that 'building stone production necessarily involves a relatively high proportion of waste'.	Include sustainability objectives in the SA Framework that aim to provide for the demand for natural stone products, balanced against environmental and other considerations.

and external decoration. The report concludes that there is a need to protect areas of designated interest and value, to prevent the unnecessary sterilisation of resources and also 'the need for positive action to encourage the continued operation of existing and new building stone quarries by minimising the burden placed upon them by the planning system as far as possible.			
COLLATION OF THE 2009 AGGREGATE MINERALS SURVEY FOR ENGLAND AND WALES			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The report provides comprehensive information for monitoring and facilitating aggregates provision at local, regional and national level. Aggregate Minerals (AM) surveys, based at four-yearly intervals since 1973, provide an in depth and up-to-date understanding of regional and national sales, inter-regional flows, transportation, consumption	No targets, but there are a number of significant indicators for example The South West (15.2 Mt) was the largest producer of limestone for aggregates.	Develop appropriate and sustainable policies in the light of the survey results.	Consider the results of the AM Survey.

and permitted reserves of primary aggregates. The Aggregate Minerals 2009 survey report also presents data on the movement and consumption of primary aggregates by subregion. Information is also presented on the quantity of aggregate minerals granted and refused planning permission and, for the first time, planning permission applications withdrawn or awaiting a decision, between 2006 and 2009, by site type and environmental designation.			
CLIMATE CHANGE ACT 2008			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The purpose of the act is to provide a legally binding long-term framework to cut carbon emissions to ensure the UK meets its commitments to tackle climate change. The main elements of the Act are:	National target of reducing emissions by 80% by 2050 compared to 1990 levels.	Consider how the plan can help to contribute to reducing emissions.	Ensure the issue of climate change is addressed.

• Reducing emissions by 80% by2050 compared to 1990 levels. • Production of a Climate Change Risk Assessment every 5 years. • A national adaption programme which will be reviewed every 5 years which will address the most pressing climate change issues in England.			
MINERALS EXTRACTION AND THE HISTORIC ENVIRONMENT			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The document sets out English Heritage's position on mineral extraction and the high-level policies that will form the basis for responses and views put forward by English Heritage on any matter relating to the winning, working and safeguarding of minerals. Although it was produced before the NPPF English Heritage consider the document and a majority of the contents are still relevant. Its principal purpose is to guide the work of English Heritage, but it will also be of interest to the wider historic environment sector,	No key targets (as yet).	Ensure English Heritage's formal policy on mineral extraction is taken into account in the development of the MLP.	Consider the impacts upon the historic environment.

government, local authorities, the minerals industry and other organisations that care for the environment. The document sets out English Heritage's formal policy on mineral extraction, including: □ Sustainability and supply □ Safeguarding the industry's heritage □ Impacts and mitigating of current and future extraction □ Maintaining historic fabric and local distinctiveness			
MINERALS EXTRACTION AND ARCHAEOLOGY: A PRACTICE GUIDE 2008			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The document provides guidance specifically for dealing with archaeological remains as part of mineral development through the planning process. Although it was produced before the NPPF English Heritage consider the document and a majority of the contents are still relevant. The principal purpose of this Practice Guide is to provide clear and practical guidance on the archaeological evaluation of	No key targets (as yet).	Ensure the best practice is taken into account in the development of the LDF.	Consider the impacts upon archaeology.

mineral development sites. The guide seeks to ensure that: • the best-informed decisions are made regarding the level of archaeological knowledge needed at each stage of the planning process • the use of the full range of up to date and appropriate investigative techniques is considered • there is consistency in planning authority responses, proportionate to the archaeological potential of the site and reasonable in all other respects.			
GUIDANCE ON THE MANAGED AGGREGATE SUPPLY SYSTEM			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The Managed Aggregate Supply System has provided the mechanism to deliver long term planning for the supply of aggregates, based on sound evidence. It has also served to proactively manage the rate of primary extraction, by placing added emphasis on the need to meet demand from other sources – including secondary	No Key Targets	There is a requirement to produce a Local Aggregate Assessment. This will contribute towards figures within the MLP.	Consider the impacts on the mineral resource.

and recycled materials and marine dredged aggregates.			
REGIONAL			
SOUTH WEST NATURE MAP			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
To identify where most of the major biodiversity concentrations are found and where targets to maintain, restore and re-create wildlife might best be met. To formulate sustainable choices for development, e.g. through Local Development Frameworks and the Regional Spatial Strategy. To assist in targeting the new Environmental Stewardship Scheme. To develop partnerships and projects for biodiversity in the region. To provide a focus for projects that	No specific relevant targets but aims to prevent further biodiversity losses, re-establish lost wildlife and enable it to adapt to the pressures of climate change. The Map shows the best areas to maintain and expand (through restoration and/or re-creation) terrestrial wildlife habitats at a landscape scale.	See Gloucestershire Nature Map.	See Gloucestershire Nature Map.

will help biodiversity to adapt to climate change.			
REGIONAL PLANNING GUIDANCE FOR THE SOUTH WEST (RPG 10) (INTERIM RSS10)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
Policies SS1 & SS3 *Regional Spatial Strategy* *The Sub-Regional Strategy* (Pg 19 & 21) Contributing to promoting national prosperity. Northern-sub region remain the focus for growth in the South West.	No specific targets.	Consider how the plan can encourage prudence in the use of resources – whilst promoting prosperity and viability of the Northern sub-region.	Check to ensure that the SA Framework reflects the objective of the Northern-sub region remaining the focus for growth in the South West.
Cotswold AONB (Pg 47).	Maintain current 25,000ha and create and rehabilitate 4,000ha by 2010.	Consider how the plan can protect and enhance the Cotswold AONB.	Check to ensure that the SA Framework reflects the need to protect and enhance the Cotswold AONB.
Policy SS12 *Gloucester and*	Increase in proportion of new housing and employment	Consider how the plan can take on board the requirements of	Check to ensure that the SA Framework reflects these

Cheltenham (Pg 31).	development at Principal Urban Areas (PUAs). Review of the Green Belt.	economic and housing development at sustainable locations. Consider how the plan can take on board the review of the Green Belt and the implications.	requirements.
Policy SS19 *Rural Areas* (Pg 39).	No specific targets.	Consider how the plan can encourage and support the restructuring of the rural economy and help to provide employment to satisfy local needs.	Include sustainability objectives that aim to support the rural economy in Gloucestershire.
Policy SS20 *Rural Land (including Urban Fringe) Uses* (Pg 40).	No specific targets.	Develop policies to preserve the regions best and most versatile agricultural soils.	Include sustainability objectives that aim to preserve the regions best and most versatile agricultural land and soils.
Policy EN1 *Landscape and Biodiversity* (Pg 51).	Targets covered by BAP for Gloucestershire.	Consider how the plan can encourage the protection and enhancement of the biodiversity of the region.	Check to insure that Biodiversity targets are reflected in the SA Framework objectives and appraisal criteria.
Policy EN2 Air Quality (Pg 51).	No specific targets but developments should be in line with PPG23.	Consider how the plan can improve air quality and mitigate against the effects of potentially polluting minerals developments in sensitive areas.	Check to ensure that air quality issues are reflected in the SA Framework.
Policy EC1 *Economic*	Increases in prosperity relative to	Consider how the plan can	Check to ensure that the SA

Development (Pg 60).	the national/EU averages.	promote and encourage new economic activity, ensuring that economic development is located in sustainable locations.	Framework reflects these objectives – to increase the prosperity of the county/region in a sustainable manner.
Policy EC2 *Areas of Special Need* (Pg 60).	No specific targets.	Consider the development of policies that promote economic regeneration in areas of Gloucestershire highlighted under Policy EC2 of RPG10.	Check to ensure that the SA Framework considers the particular needs of areas of Gloucestershire highlighted under Policy EC2 of RPG10.
Policy TCS1 *Tourism* (Pg 68) and TCS2 *Culture, Leisure and Sport* (Pg 70).	No specific targets.	Consider how the plan can promote and encourage sustainable tourism and recreation and mitigate against any damaging effects of minerals and waste development.	Check to ensure that the promotion of sustainable tourism, culture and recreation are reflected in the SA Framework.
Policy HO1 *Levels of Housing Development 1996- 2016* (Pg 75).	Average annual rate for Gloucestershire = 2,400 dwellings* (*Refer to Cheltenham and Gloucester JSA submission document).	Consider how the plan can help to sustainably accommodate growth in housing development. Consider the implications in terms of the supply of aggregates.	Check to ensure that sustainably accommodating housing growth and the implication in terms of resource requirements are reflected in the objectives of the SA Framework.
Policy HO3 *Affordable Housing* (Pg 77).	Indicative regional context requirement of 6,000 – 10,000 affordable housing units pa.	As above.	Check to ensure that sustainably accommodating housing growth (including affordable housing units) and the implication in terms of resource requirement and the

			associated need for waste management and minimisation are reflected in the objectives of the SA Framework.
Policy TRAN1 *Reducing the need to travel* (Pg 84).	No specific targets.	Produce policies that assist in reducing the impact of transport on the environment.	Check that these issues are covered in the objectives of the SA Framework.
Policy TRAN 6 *Movement of Goods* (Pg 91).	No specific targets.	Consider how the plan can lead to the achievement of more sustainable patterns of distribution and the reduction of the impact of large vehicles on the environment.	Check that these issues are covered in the objectives of the SA Framework.
Policy TRANS 8 *Ports and Inland Waterways* (Pg 92).	No specific targets.	Consider policies in the plan that encourage the development of waterborne transport for minerals and waste.	Check that these issues are covered in the objectives of the SA Framework.
Policy RE1 *Water Resources and Water Quality* (Pg 99).	No specific targets.	Include policies in the plan that promote and encourage the long-term sustainable use of water.	Check that these issues are covered in the objectives of the SA Framework.
Policy RE3 *Minerals Planning* (Pg	No specific targets.	Consider how the plan can safeguard mineral resources,	Check that these areas are fully covered in the objectives of the

102).		identify mineral consultation areas, protect against adverse environmental impacts, promote environmentally acceptable means of extraction and transportation, promote non-road modes of transport, promote beneficial reclamation and aftercare.	SA Framework.
Policy RE4 *Use and Supply of Aggregates* (Pg 103).	Apportionment figure for Gloucestershire.	Make provision for Gloucestershire's apportionment of the Region's supply of minerals. The plan should seek to reduce the reliance on primary aggregates, and use resources efficiently.	Check that the sustainable use and supply of aggregates are addressed in the objectives of the SA Framework.
Policy RE6 *Energy Generation and Use* (Pg 108).	A 12.5% reduction in greenhouse gas emissions below 1990 levels by 2008-2012. A 20% reduction (from 1990 levels) in carbon dioxide emissions by 2010; a minimum of 11-15% of electricity production to be from renewable energy sources by 2010.	Consider how the plan can help to meet national targets for the reduction of green house gas emissions and carbon dioxide emissions and promote greater use of renewable energy sources.	Include sustainability objectives that aim to achieve these reductions and targets.
COUNTY AND LOCAL			
GLOUCESTERSHIRE STRATEGIC FLOOD RISK ASSESSMENT FOR MINERALS & WASTE DEVELOPMENT FRAMEWORK (SEPTEMBER 2008)			

KEY OBJECTIVES RELEVANT TO PLAN AND SA	KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA	IMPLICATIONS FOR PLAN	IMPLICATIONS FOR SA
The purpose of the SFRA is to: ▪ inform the SA so that flood risk is taken into account when considering options in the preparation of strategic land use policies. ▪ Propose appropriate policy recommendations for the management of flood risk within Local Development Documents (LDDs). ▪ Determine the acceptability of flood risk in relation to emergency planning capability. ▪ Identify the level of detail required for future site-specific Flood Risk Assessments (FRAs) that support planning applications.	No specific targets.	Carefully consider the implications of the SFRA in terms of the development of strategic policies and site allocations. Guide development to the areas of lowest flood risk. Guidance is provided within the NPPF. The EA have stated that the SFRA is 'a fundamental document for assessing strategic waste sites…'	The SA process should facilitate the assessment of flood risk from all sources of flooding as detailed in the SFRA.
GLOUCESTERSHIRE LANDSCAPE CHARACTER ASSESSMENT			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**

	PLAN AND SA		
In October 2004 Gloucestershire County Council in association with the 6 Districts appointed consultants to undertake a Landscape Character Assessment (LCA) of: ▪ The Severn Vale ▪ The Upper Thames Valley ▪ The Vale of Moreton ▪ The Vale of Evesham Fringe Those sections of the county for which a detailed LCA had already been completed include: ▪ The Forest of Dean District ▪ The Cotswold's AONB The LCA has the following objectives: ▪ To provide an assessment of the character, distinctiveness and qualities of each of the separate study areas, including the cultural	No relevant key targets.	The plan should contain polices which: ensure that proposals for the location and form of mineral and waste sites are considered in light the recommendations of the Gloucestershire Landscape Character Assessment.	Landscape objectives could be used as part of the SA Framework.

and natural heritage resources, and to identify and describe the component landscape character types and landscape character areas. ▪ To summarise the key characteristics associated with each landscape type to inform the principles in respect of landscape change. ▪ To promote awareness of landscape character and the importance of landscape conservation, enhancement and restoration. The LCA can be used in a variety of forward planning strategies, land management schemes and in planning control and it provides a widely accepted assessment of landscape character.			
GLOUCESTERSHIRE NATURE MAP			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The Gloucestershire Nature Map is	The 2007 DEFRA Guidance to	Plans should reflect the aims	The SA Objectives should

established in the emerging Regional Spatial Strategy (RSS) where a broad South West nature map identifies the best areas at a regional scale to conserve, create and connect wildlife habitats. Policy ENV4 of the RSS states that local authorities should use their nature map to show where the characteristic habitats that typify the county and support its wildlife can be enhanced, expanded and linked to help wildlife survive. It can achieve this by linking together isolated, fragmented habitat areas and this in turn creates larger, more sustainable, areas of continuous habitat.	Local Authorities on the NERC Act s.40 duties includes the following statements and objectives: ▪ *"Conserving biodiversity includes restoring and enhancing"* ▪ *"Strategic planning offers opportunities to identify broad locations where priorities should be given to biodiversity conservation and to establish ecological networks between existing and improved habitats"* ▪ *"Planning obligations are particularly useful when seeking to secure enhancement or mitigation outside of the application site, for example, through financial payments to ensure improved and ongoing management of nature conservation sites"* The Gloucestershire Nature Map is a response to the above.	and objectives of the Gloucestershire Nature Map in terms of enhancing wildlife (where possible) and protecting habitats and species when changes e.g. climate change. threaten their existence.	reflect the aims and objectives of the Gloucestershire Nature Map.
GLOUCESTERSHIRE COTSWOLDS GEODIVERSITY AUDIT & LOCAL GEODIVERSITY ACTION PLAN 2005			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**

The LGAP is intended to: ▪ Protect and manage the unique geodiversity of the Gloucestershire Cotswolds. ▪ Increase understanding and awareness of geodiversity. ▪ Promote geotourism, education and lifelong learning.	No key targets as such.	Implications particularly for minerals plans and mineral working in the Cotswolds.	The SA Framework should consider and reflect the importance geodiversity in Gloucestershire and reflect the aims of the LDAP for the Gloucestershire Cotswolds.
LOCAL AGENDA 21 STRATEGY FOR A SUSTAINABLE GLOUCESTERSHIRE			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
To create communities that give people the best possible access to housing, work, education and services with the least possible travel. Promote the strengths of out local economy and encourage community enterprise to grow. prove wildlife habitats, historic and built environment and landscape. Encourage renewable resources.	No specific targets – but there are aims to meet government sustainability targets.	Consider how the plan can contribute to the objectives of the LA21 strategy.	Check to ensure that the key relevant objectives are reflected in the SA Framework.

Use fewer non-renewable resources and reduce waste. Prevent pollution. Identify and promote local character and culture. Involve our community in decision-making and local action. Help people to make the most of themselves through education, training and advice. Help people to deal with problems which hold them back from a healthy and fulfilling life. Help people to live free from the fear of crime and poverty.			
GLOUCESTERSHIRE STRUCTURE PLAN – SECOND REVIEW – ADOPTED PLAN (1999)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
<u>MINERALS STRATEGY</u>: The broad strategy embraces the principles of sustainable development and takes into account national guidance	No key targets.	Consider the Structure Plan as a whole but particularly the specific minerals strategies and policies within it. Consider their relevance to the plan.	Include sustainability objectives in the SA Framework that reflect the key objectives of the Adopted Structure Plan.

especially that given in MPG1 and MPG6. The strategy is as follows: ▪ Conserve minerals resources as far as possible whilst ensuring an adequate and steady supply required to meet the essential economic and social needs of the community for minerals. ▪ Ensure that any adverse environmental impacts of mineral operations (including the transport of minerals) are kept to an acceptable minimum; for example by encouraging sensitive working practices to minimise conflict with, and where necessary safeguard, non-mineral interests. ▪ to preserve, and where possible enhance, the overall quality of the environment once extraction has ceased; for example by ensuring land is reclaimed to a beneficial afteruse. ▪ make optimum use of minerals by minimising waste, by encouraging the recycling of material, and by encouraging their			

efficient use; for example, by discouraging the use of higher quality materials where lower grade materials would suffice and by ensuring that they are worked to the maximum extent possible and are not unnecessarily sterilised. ▪ safeguard areas of internationally designated landscape or nature conservation from mineral development other than in exceptional circumstances in the public interest.			
GLOUCESTERSHIRE LOCAL TRANSPORT PLAN (3)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
<u>The vision is as follows:</u> 'Providing a safe and sustainable transport network with in Gloucestershire'. The objectives that relate to this	No relevant targets or indicators.	The plan should consider LTP(3). The main consideration is to minimise the impact of minerals related freight transport on the environment and local	Ensure that minerals and waste freight issues are covered in the SA Objectives.

vision are as follows: • A Greener, Healthier County. • Sustainable Economic Growth. • A Safer Secure Transport System. • Good Access to Services.		communities.	
THE GLOUCESTERSHIRE ECONOMIC STRATEGY 2003 - 2014			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
<u>The three broad aims of the strategy are as follows:</u> ▪ To address known deficiencies and short-term problems facing the County. ▪ To identify the longer term economic programme that will help achieve the vision for Gloucestersire. ▪ To build on our strengths. <u>The 6 over-riding themes of the</u>	No key targets relevant to plan or to the SA.	Consider how the plan and minerals development can contribute to the economic objectives contained within the strategy. Consider how to balance economic considerations alongside social and environmental ones in the interests of sustainable development. Encourage the use of alternative	Include objectives that reflect the broad aims of the economic strategy.

strategy are as follows: ▪ The need to address social exclusion and equality of opportunity. ▪ The desire for a more sustainable approach to development. ▪ The need to encourage innovation. ▪ The importance of added value. ▪ The need for a pragmatic approach to environmental protection. ▪ The value of partnership working.		/ renewable fuels.	
THE RURAL ECONOMIC STRATEGY FOR GLOUCESTERSHIRE			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The strategy has 4 strategic objectives, which are as follows: Objective 1 - To raise business productivity in rural Gloucestershire to achieve a gradual adjustment of the	No key targets of particular relevance to minerals and waste development.	Consider how the plan can contribute to the strategic objectives of the rural strategy, for the benefit of rural Gloucestershire. Consider the importance of the	Check to ensure that the strategic objectives are reflected in the SA Framework.

proportions of employment in the current key sectors, whilst developing new sectors. Objective 2 - To increase economic inclusion in rural Gloucestershire to achieve a measurable increase in the lowest household incomes, particularly in the most deprived areas and especially in the Forest of Dean, as a result of higher wages and less unemployment, combined with an increase of affordable housing leading to a better, more prosperous quality of life in rural communities. Objective 3 - To strengthen rural communities in Gloucestershire through communications and partnership to achieve more cohesive, supportive and economically active rural communities with better physical and electronic access. Objective 4 - To realise fully the economic potential of Gloucestershire's rural environment whilst protecting the		employment generated by quarries, particularly in the Forest of Dean. But consider also the possible detrimental effect on the tourist industry which is (and may increasingly become) more important in rural areas.	

exceptional quality of the countryside for future generations. (Pg.16) The strategy highlights the following as future growth sectors: Environmental technology, including bio-fuels, the recycling and reprocessing of waste, renewable energy and other market leaders, which could be particularly suitable for the needs and opportunities that Gloucestershire uniquely provides. (Pg.14) Leisure and Tourism should sit within the economic strategy and the implications for the sector considered when other policies, such as those on transport, access or waste management, are developed. (Pg.32) Exploiting existing resources – 'Both the Forest of Dean and the Cotswolds are already significant sources of stone either as aggregate, gravel or for building. There are however indications that the major quarrying activities are hitting up against landscaping constraints			

and further expansion will be limited. An alternative is to stimulate “delving” – essentially the re-opening of small farm-based quarries that are generally more easily accommodated within the landscape.’			
GLOUCESTERSHIRE BIODIVERSITY FRAMEWORK AND DELIVERY PLAN 2010			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
To provide clear strategic objectives and priorities, through an agreed joint work programme, for the development of the Gloucestershire Biodiversity Partnership and the implementation of the Gloucestershire Biodiversity Delivery Plan (Local Biodiversity Action Plan) during the period 2010 - 2015 Strategic Objective 1: Enhance and protect biodiversity by preventing habitat loss and degradation	A top priority is to ensure that our remaining important wildlife areas - SSSIs, Key Wildlife Sites, non-designated areas of priority habitat, etc, - are not eroded any further and that they achieve and maintain favourable condition.	Develop policies that contribute to the protection of biodiversity within the county and specifically the protection of the identified habitats and species. Ensure that the biodiversity value of any site is taken into account when assessing planning permissions concerning, or restoration of, minerals and waste sites or facilities.	Ensure that the protection of the biodiversity of habitats, (balanced against the need for mineral sites and waste management facilities in the County) is fully reflected in the SA Framework’s environmental objectives and criteria.

to secure healthy, functioning ecosystems Strategic Objective 2: Facilitate the adaptation of the natural environment so that it can be resilient to climate change Strategic Objective 3: To realise fully the true value of Gloucestershire's natural environment as a foundation for sustainable development and the health and well-being of our local communities. Strategic Objective 4: Develop the Gloucestershire Biodiversity Partnership so that it is financially sound, well supported and effective in delivering its work programme through enhanced joint working			
COTSWOLD WATER PARK BIODIVERSITY ACTION PLAN (2007-2016)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**

	PLAN AND SA		
Note: This BAP replaces the 1997 – 2007 BAP above. <u>The 50 year Vision is as follows:</u> "The Cotswold Water Park should be a premier site for nature conservation where the requirements of industry, leisure, people and wildlife are successfully integrated." <u>The Generic Action Plan is as follows:</u> 1. Landscape-scale approach – The Head of the Thames Wetland Corridor. 2. Planning. Minerals planning and Development Control. 3. Promote and facilitate collection and availability of biological information in the CWP. 4. Promote ecological and environmental research of priority habitats and species in the CWP. 5. Promote the balance of sports and recreation with nature	Various targets and actions under each Generic Action Plan 'Theme' 1 to 10. Various targets and actions under each of the following Habitat Action Plans (HAPs) and Species Action Plans (SAPs). ▪ HAP for Boundary Features ▪ HAP for Built Structures ▪ HAP for Canals ▪ HAP for Framed Land ▪ HAP for Fen, Marsh & Reedswamp ▪ HAP for Lowland Neutral Grassland ▪ HAP for Sand & Gravel Quarries ▪ Habitat Statement: Bare ground & early successional habitats for invertebrates ▪ HAP for Standing Open Water ▪ Habitat Statement: Ponds	Consider how the plan can contribute to the vision and targets of the Action Plan - as outlined in this table. Consider how conflicts of interest between the minerals industry and wildlife can be successfully resolved and mitigated against. Consider policies in the plan that protect and enhance biodiversity wherever possible.	Include SA Objectives in the Framework that reflect the vision and objectives of the latest Cotswold Water Park BAP.

conservation. Sports and recreation is a key part of the CWP. 6. Promote and enable land acquisition to safeguard sites of current and potential nature conservation importance. 7. Grants & Funding. 8. Education, Advice & Training. 9. Publicity, Interpretation and Awareness-raising. 10. Policy.	▪ HAP for Rivers & Streams ▪ HAP for Woodland ▪ SAP for Barberry Carpet Moth ▪ SAP for Bats ▪ SAP for Bittern ▪ SAP for Black Poplar ▪ SAP for Breeding Waterbirds ▪ SAP for Dragonflies & Damselflies ▪ Species Statement for Glow Worms ▪ SAP for Great Crested Newts ▪ Species Statement for Nightingale ▪ Species Statement for Otter ▪ Species Statement for Reed Bunting ▪ SAP for Stoneworts ▪ SAP for Water Voles ▪ Species Statement for White-Clawed Crayfish		

	▪ SAP for Wintering Waterbirds ▪ SAP for Non-Native Invasive Species.		
COTSWOLD WATER PARK SUPPLEMENTARY PLANNING GUIDANCE			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The SPG zones the Water Park (within the Cotswold District) into zones of 4 types: A = Quiet Zone - Development for low intensity uses B = Low Intensity Recreation Zone – recreational use of land and or water is acceptable in principle. C = Sport, Recreation and Tourism – medium to high intensity uses will normally be allowed in this zone. D = Agriculture and Forestry – future gravel extraction will provide the opportunity to establish new forms of landscape. The	No targets.	Consider how the plan can further the aspirations of the SPG and ensure that the Water Park is made up of a successful variety of landuses. Consider the obvious importance of sand and gravel extraction in Zone D and the importance of varied and high quality restoration schemes and programmes. In terms of wet-restoration, consider bird-strike issues.	Check to ensure that the priorities of the SPG are reflected in the SA Framework objectives.

development of land in Zone D will include the restoration of land to agriculture and forestry; the creation of woodland, lakes, marsh and other dry or wetland habitats for nature conservation management. The creation of wetland areas will not be acceptable within the vicinity of RAF Fairford because of problems associated with bird-strike.			
JOINT CORE STRATEGY – GLOUCESTER, CHELTENHAM, TEWKESBURY			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The JCS was formed to produce a co-ordinated strategic development plan to show how this area will develop during the period up to 2013. A preferred options consultation is due in Summer 2013	Not clear at this stage.	Unclear at this point in time.	Unclear at this point in time.
GLOUCESTER LOCAL PLAN (SECOND STAGE DEPOSIT 2002)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
Sustainable development is seen	The plan does not specify any	Consider how the plan can	Check to ensure the sustainable

as being of key importance in the Gloucester plan. Policy ST.1 states that "In assessing proposed new development the City Council will seek to optimise the economic, social, and environmental contribution of the development to the quality of life in the city". The guiding aim of the plan is stated as being "To promote the economic, social, and environmental well-being of the city through careful husbandry of new development and by capitalising on the unique character and traditional urban form of this historic city." <u>References to Minerals and Waste</u> The plan recognises the relationship between the local plan and the MLP & WLP. Section 1.3 "…the Local Plan, together with the Gloucestershire Structure Plan, Minerals Local Plan and Waste Local Plan, will form the Development Plan for the city." The need to minimize waste and work valuable mineral deposits is	targets or indicators relevant to minerals and waste development.	promote sustainable development in Gloucester, in relation to resource use in new development.	development objectives for Gloucester are reflected in the SA framework objectives.

recognized in Sc 6.11 which deals with the redevelopment of Quedgeley RAF base.			
GLOUCESTER CITY VISION			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
VISION Gloucester will be a flourishing, modern ambitious city which all residents can enjoy. AIMS - A flourishing economy and City Centre which meets the needs of our residents, businesses and visitors. - A vibrant evening economy. - City which improves through regeneration and development. - A City where people feel safe and happy in their community. - A healthy City with opportunities available to all.	No relevant targets	Consider how the plan can contribute to realising the vision.	The SA Framework should include objectives that relate to the vision and aims.
TEWKESBURY BOROUGH LOCAL PLAN – SECOND PROPOSED MODIFICATIONS			

KEY OBJECTIVES RELEVANT TO PLAN AND SA	KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA	IMPLICATIONS FOR PLAN	IMPLICATIONS FOR SA
Overall Vision of the Plan The Plan's overall vision for the Borough is to ensure that development within the area contributes positively to creating sustainable communities. This will be achieved by directing development to locations where the mix of uses and proximity to existing facilities minimises the increase in transport demand whilst maximising residents' choice for access to the range of destinations they use in their daily lives. Key Objectives ▪ To promote sustainable development. ▪ To conserve and enhance the built and natural heritage of the Borough. ▪ To stimulate an approach to new	No relevant key targets.	Consider how the plan can contribute to the realising the vision and objectives of the local plan. Consider how the plan can encourage waste minimisation in Tewkesbury Borough.	The SA Framework should include objectives that relate to the vision and objectives of the local plan.

development which: Respects local environmental conditions in the detailed siting and design. Takes full account of local eco-systems and biodiversity. Encourages the use of renewable resources and minimises unnecessary reliance on private transport. Emphasises the re-use of brownfield land in sustainable locations. Supports innovative design solutions consistent with sustainability objectives supports more efficient use of land and promotes mixed-use development. ▪ To stimulate a healthy local economic base. ▪ To meet the needs of residents whilst enhancing their quality of life.			

KEY OBJECTIVES RELEVANT TO PLAN AND SA	KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA	IMPLICATIONS FOR PLAN	IMPLICATIONS FOR SA
Stroud District Local Plan seeks to be in accordance with the Government's approach to sustainable development as set out in 'A Better Quality of Life, a strategy for sustainable development in the UK' (May 1999). In this, four broad objectives are identified: ▪ Social progress which recognises the needs of everyone. ▪ Effective protection of the environment. ▪ Prudent use of natural resources ▪ Maintenance of high and stable levels of economic growth and employment. The Local Plan seeks to play its part in working a sustainable society in a number of ways: ▪ Influencing the location of new development in order to reduce the	There are no relevant key targets and there is little reference to matters directly related to minerals or waste development.	Consider how the plan can promote sustainable development in Stroud District through appropriate policies.	Check the wording of the sustainability objectives in the Framework to ensure that the main aims and objectives of the plan are appropriately reflected.

need to travel and make provision for an integrated transport network. ▪ Supporting and encouraging the growth of the economy to provide job opportunities. ▪ Helping to make provision for homes for all - reducing social exclusion. ▪ Making the best use of previously used land and property, particularly in the larger settlements of the District. ▪ Looking at accommodating new means of producing energy especially from renewable resources. ▪ Planning for new development that takes account of energy conservation in terms of site layouts, building design, provision for pedestrians, cyclists and public			

transport ▪ Protecting and enhancing the natural and built environment giving particular priority to those resources which are finite.			
STROUD LOCAL DEVELOPMENT FRAMEWORK (AS OF Spring 2013)			
COMPONENTS OF LDF & KEY RELEVANT ISSUES	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
<u>Core Strategy:</u> Pre-submission local plan due for consultation Summer 2013.	The DPD has not progressed sufficiently - not clear at this stage.	The DPD has not progressed sufficiently - not clear at this stage.	The DPD has not progressed sufficiently - not clear at this stage.
STROUD DISTRICT COMMUNITY STRATEGY			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The main objectives are as follows: ▪ Improving Housing Opportunities. To take every opportunity to maximise the supply of affordable housing units available to local	No relevant key targets.	Consider how the plan can contribute to the objectives of the strategy.	Include sustainability objectives that reflect the main objectives of the community strategy.

people in need. To maximise investment in the private and public housing stocks in order to encourage homeowners and landlords to make their homes decent by 2010. ▪ Creating Wealth. ▪ Access to Services and Rural ▪ Transport. ▪ Health and Well-Being. ▪ Addressing Crime and Disorder. ▪ The protection of the Cultural and Natural Environment. ▪ To conserve and enhance the natural and built identity of the district. To develop a sustainable environment for both wildlife and people to live and enjoy.			
CHELTENHAM BOROUGH LOCAL PLAN SECOND REVIEW REVISED DEPOSIT DRAFT 2004			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**

Following the publication of 'A Better Quality of Life' the plan seeks: • social progress which recognises the needs of everyone. • effective protection of the environment. • prudent use of natural resources. • maintenance of high and stable levels of economic growth and employment.' <u>References to Minerals</u> - Reusing materials wherever possible or using materials from sustainable sources. (Pg.70) Applications for substantial <u>mineral workings</u>, or extensions to existing workings, in AONBs should be subject to the most rigorous assessment of the need for the minerals and the environmental effects of the proposal.	No key targets.	Consider how the plan can contribute to Cheltenham's aims and objectives.	Check to ensure that the aims and objectives of the plan for the promotion of sustainable development in Cheltenham Borough are reflected in the SA Framework.
CHELTENHAM'S COMMUNITY PLAN			

KEY OBJECTIVES RELEVANT TO PLAN AND SA	KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA	IMPLICATIONS FOR PLAN	IMPLICATIONS FOR SA
'The vision for Cheltenham in the year 2020 is for it to be a vibrant, safe and sustainable town where residents, workers and visitors enjoy the benefits of social, environmental and economic wellbeing.' Top 20 priorities: Reducing crime, the fear of crime and antisocial behaviour. Promoting a clean and pleasant environment. Protecting air and water quality and controlling noise pollution. Providing a quality bus service. Reducing inequalities in healthcare. Encouraging tolerance and respect. Providing opportunities for	No relevant targets but reducing waste and encouraging recycling is high on the list of priorities.	Consider how the plan can contribute to addressing the priority areas with Cheltenham Borough,.	Check to ensure that the relevant aims and objectives are reflected in the SA Framework.

residents to comment on and influence decisions. Providing education and training opportunities. Protecting our architecture. Reducing vehicle speeds and accidents. Reducing accidents at work. Providing quick and accurate information to the public. Supporting local shops and businesses. Reducing the use of water and materials that cannot be replaced. Reducing the amount of energy used. Promoting good physical and mental health. Providing support to help people to live independently. Making sure all services and events are open to all.			

THE FOREST OF DEAN DISTRICT CORE STRATEGY (awaiting outcome of JR)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
<u>CORE STRATEGY VISION</u> The Forest of Dean will be a thriving sustainable community with a high quality environment, a developing local economy including tourism, housing which meets the needs of residents (including affordable homes) and safer communities. The existing complementary nature of the three southern forest towns will be reinforced to ensure Coleford, Lydney and Cinderford work together with their hinterlands to provide a more sustainable future. Much of the planned change will be in the towns, especially Lydney and Cinderford, with improved shopping and services, meeting the needs of the existing and new population. Improved town centres, services and a wider range of employment will reduce commuting and other journeys. Newent will become a more effective local centre through	No directly relevant indicators for Minerals.	Consider how the plan can contribute to the Forest of Dean's nature conservation objectives. Address and mitigate the conflict between the MPA permitting quarrying and local district conservation objectives. Check to ensure that the plan balances the need for extraction and the need to protect natural resources. Ensure that the impact caused by extraction is balanced by restoration and nature conservation initiatives. Need to consider traffic impacts.	Check to ensure that the aims and objectives of the plan for the promotion of sustainable development in Forest of Dean are reflected in the SA Framework.

improvements in the centre and additional employment. The quality of the countryside and the built environment will be maintained through the careful promotion of the economy, and safeguarding of the landscape. <u>Objectives</u> 1. Providing quality environments throughout the district- to protect the environment for the benefit of the community and in order to attract new businesses. 2. Develop a more self contained and diverse local economy including tourism- to address out commuting and enable more sustainable transport patterns while providing a greater range and number of jobs, and improving the services and facilities that are accessible. 3. Providing homes including affordable homes- to meet the housing needs of the community. 4. Facilitate regeneration- to support a stronger more sustainable economy in a better			

quality environment. 5. Creating safer communities with better facilities.			
COTSWOLD DISTRICT COUNCIL LOCAL PLAN (REVISED DEPOSIT 2003)			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The revised deposit plan gives considerable weight to sustainable development principles (as stated in Sc 1.4.2) The plan recognises that the natural environment of the Cotswolds district is of high value. As a result the District's natural environment and heritage are examined early in the document before dealing with development issues. The objectives listed in Table 1 of the plan are consistent with the broadly accepted principles of SD. The Local Plan (Sc11) makes	The linkages between plan objectives and relevant policies are shown in Table 1 of the revised deposit. This also includes targets and monitoring/performance indicators for each policy. No directly relevant indicators for Minerals.	Consider how the plan can contribute to Cotswold's aims and objectives, particularly in relation to conservation of the environment, sustainable construction.	Check to ensure that the aims and objectives of the plan for the promotion of sustainable development in Cotswold DC are reflected in the SA Framework. Check to ensure M&W plan balances need for extraction and protection of natural resources Ensure that opportunities to enhance biodiversity created by minerals extraction are maximised.

specific reference to natural habitats, biodiversity etc. in the Cotswold Water Park. The park is internationally significant for its nature conservation interest. This may conflict with the mineral extraction requirements in the area. The plan recognises the relationship between the MLP and the District Local Plan. It recognises that GCC are the determining authority for mineral extraction. “Reference should be made to the Gloucestershire Minerals Local Plan, which sets out the sites and development policies for mineral development in the County to 2007, and also to Policy 48, of this Plan, which covers environmentally sustainable construction and design” <u>References to Minerals and Waste</u> Paragraph (1.5.2) The Local Plan,			

together with the Gloucestershire Structure Plan (Second Review) and the Minerals and Waste Local Plans prepared by the County Council, form the Development Plan for Cotswold District. Paragraph (2.2.3) The prudent use of natural resources is one of the Government's objectives for sustainable development, and, given the high quality of the Cotswold environment, is of particular importance locally. This involves conserving resources, developing alternatives to their use and minimising waste by promoting more sustainable methods of waste management, both during the construction and operation of new development. Paragraph (2.2.4) The Council … will promote, through the implementation of Policy 1, the sustainable management and enhancement of resources during the construction and operation of			

all new development. The objectives of the policy are to: reduce the demand for, and make the most efficient use of, natural resources; promote the use of alternatives; optimise the re-use and recycling of waste resources, including minerals; and protect and enhance natural resources where possible. <u>Policy 17:</u> Minimising The Impact Of Lorries states: 1.Development that is likely to generate increased or new lorry movements which would cause an unacceptable adverse impact on the highway, residential amenity, safety or the local environment, will not be permitted unless the impact can be adequately mitigated. 2. Proposals for developments with significant freight requirements should be located along, or adjacent to, appropriate transport routes, particularly near alternative modes of transport,		Minerals can only be worked where they are found, this could give rise to possible conflicts with Policy 17. However, mitigation measures could include: reducing the need to travel by locating processing facilities closer to collection points and encouraging the movement of materials by rail and water. The use of alternative fuels should also be encouraged along with appropriate and sensitive routing.	

such as rail terminals. Policy 48: (The Cotswolds District Design Code) also recognises that environmentally sustainable construction should minimise waste. Chapter 11: deals with the Upper Thames area and recognises that minerals extraction and processing is an important source of employment that is likely to continue into the middle of this century. Section 11.1.8 identifies areas where mineral extraction is currently underway and where other resources exist.			
COTSWOLD LOCAL DEVELOPMENT FRAMEWORK (AS OF SUMMER 2008)			
COMPONENTS OF LDF & KEY RELEVANT ISSUES	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**

Pre-submission local plan due for consultation Summer 2013.	Unclear until plan progresses further.	Unclear.	The SA Framework should appropriately reflect the key components of Cotswolds LDF and the promotion of sustainable development in the District and in Gloucestershire.
COTSWOLDS COMMUNITY STRATEGY			
KEY OBJECTIVES RELEVANT TO PLAN AND SA	**KEY TARGETS AND INDICATORS RELEVANT TO PLAN AND SA**	**IMPLICATIONS FOR PLAN**	**IMPLICATIONS FOR SA**
The vision for the District up to 2011: <u>Society and Community</u> Our ambition is for a Cotswold District where: all people feel that they can have real influence over and can participate in the decisions that affect their daily lives. ▪ All people have the opportunity to participate in leisure, cultural and sporting activities and there are the quality facilities and activities to meet their reasonable needs	The level of household waste recycling in the district is high at around 17%. The Government has set the Council the highest target level in the county for recycling and composting domestic waste (40% by 2005-6). This is a substantial financial challenge for the Council. (Pg. 53). The need to reduce the amount of waste produced and increase recycling will lead to people having to change how they deal with the waste they produce, what is thrown away and how goods are	Consider how the plan can contribute to sustainable development in the Cotswolds by developing policies that support the objectives of the community strategy. Consider that a large percentage of the Cotswolds is made up of AONB. Waste recycling targets for the District – relevant to Waste Minimisation SPD.	Check to ensure that the aims and objectives of the strategy are reflected in the objectives of the SA Framework.

and aspirations. ▪ The general health of the population is improving, inequalities in health are being reduced and where everyone has access to the health facilities and care they need. ▪ Everyone is able to live in a home that meets their reasonable needs and aspirations. ▪ People are safe, they feel secure and crime is maintained at or below current levels, ▪ The pockets of deprivation present in the district are being minimised. ▪ Reasonable access will have been attained for local people to all basic services and facilities. <u>Economy</u> Our ambition is for a Cotswold District: ▪ That has a positive and sustainable business environment	packaged. It will also require there to be greater joint working across the County and with other districts. (Pg. 54-55).		

which enables companies to develop and thrive in the district. ▪ Where employment opportunities have been created and maximised in a sustainable way that enables the economy of the whole District to remain successful and well mixed. ▪ Agriculture will have adapted to changing circumstances in a manner that is sensitive to the local environment, whilst maintaining a vibrant rural economy. ▪ Where all people are well educated and have the skills they need to participate effectively in local life so that they are able to maximize their potential and the contribution they can make to their communities. ▪ Where local employers have the people with the skills they need to prosper, ▪ That has a safe, efficient and sustainable transport infrastructure, which facilitates a			

thriving economy and ease of access to communities and services across the district. ▪ Where new development will have been planned and located so that it minimises car use, the need to travel and the impact of traffic generally, and encourages use of public transport, cycling and walking. <u>Environment</u> Our ambition is for an environment In the Cotswolds where: ▪ Development will have been controlled in a way which continues to conserve and enhance the district's landscape, natural resources, built heritage and biodiversity. ▪ The strategy of restraint on development in the district will have been maintained, whilst sufficient affordable housing will have been provided in the right sustainable locations to meet the district's needs.			

▪ Cirencester's role as the district's main service centre, together with the role of the Principal Settlements in providing everyday services to local communities, will have been enhanced, or, at the very least, maintained. ▪ Pollution is kept at or below existing levels. ▪ The river environment is protected, incidents of flooding have been reduced and domestic drinking water is safe and efficiently used. ▪ Where our towns and villages are clean and well cared for. ▪ The amount of waste produced and the use of finite natural resources, including energy, is minimised and as much waste, as possible is recycled (Pg. 62).			

APPENDIX 2 Baseline Information

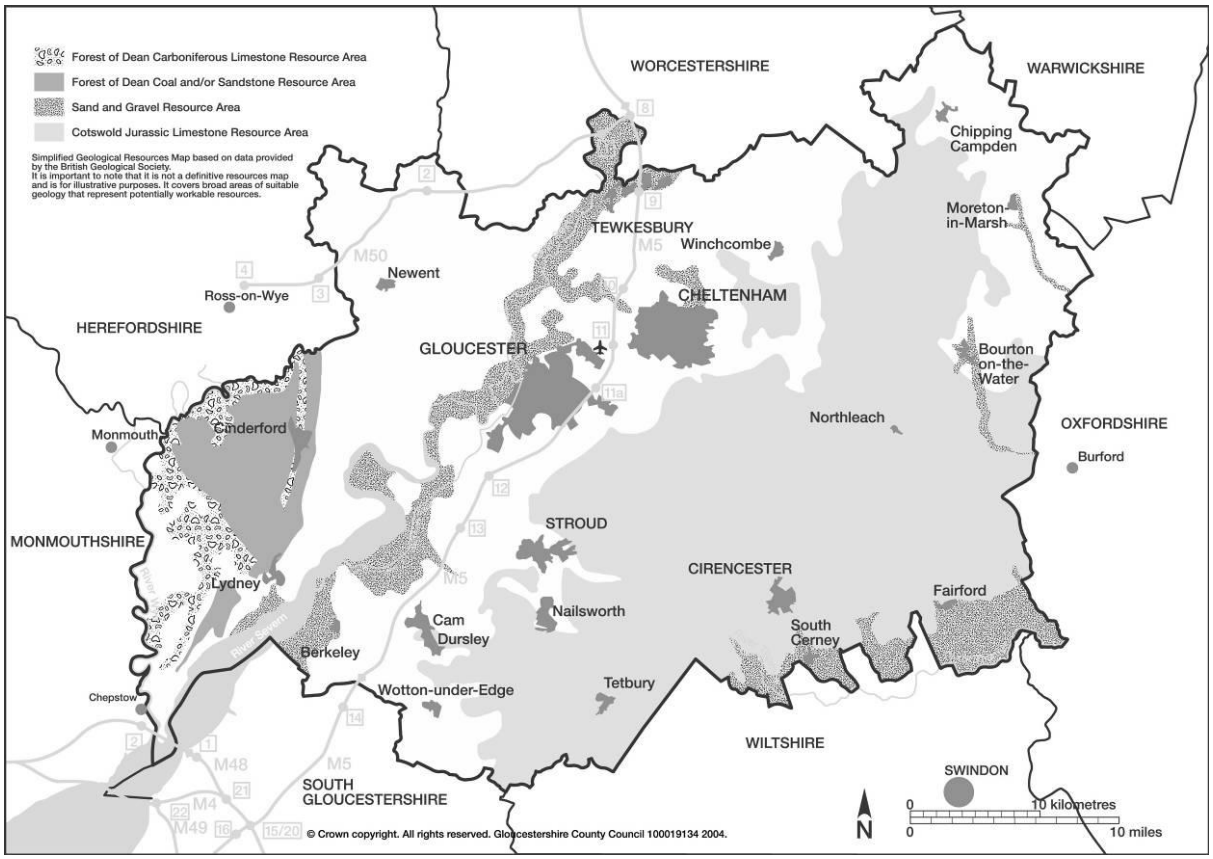
1. Mineral baseline

Gloucestershire has a diverse geological base with significant mineral deposits of economic value. The County can be subdivided into the following mineral resource areas:

Mineral Resource Areas in Gloucestershire.

Resource Area	Mineral Type
Forest of Dean	❑ Limestone (Carboniferous) ❑ Sandstone ❑ Clay ❑ Iron Ore ❑ Coal
Cotswolds	❑ Limestone (Jurassic)
Upper Thames Valley	❑ Sand and Gravel ❑ Clay ❑ Cornbrash (Jurassic Limestone)
Vale of Moreton	❑ Sand and Gravel
Severn Vale	❑ Sand and Gravel ❑ Clay

Gloucestershire possesses a range of mineral resources of local, regional and national importance. These include primary land-won and recycled / secondary aggregates, energy minerals such as coal, and non energy minerals that include clays and building stone. The map below gives a simplified indication of Gloucestershire's mineral resources.



a. Sand and Gravel

The sand & gravel resources of Gloucestershire comprise of fluvio-glacial and fluvial deposits that occur irregularly, but extensively over a number of lowland areas and river valleys around the County. Notable concentrations of sand & gravel deposits can be found to the southeast within the Upper Thames Valley, throughout the central lowland corridor of the Severn Vale, and to the far northeast of Gloucestershire, along a wide river valley area, called the Vale of Moreton. There are also some very small pockets of sand working around the Bromsberrow Heath area.

- Supplies

In 2011, 0.85 million tonnes of sand & gravel was supplied from Gloucestershire. The majority of this supply was sourced from the Upper Thames Valley resource area. The remainder originated from sources elsewhere across the county. As of 01/01/2012 the Aggregate Reserve total was 6.75 million tonnes.

- Infrastructure

The vast majority of sand and gravel sites are concentrated within the Upper Thames Valley (UTV) resource area. However, there are minor sources in the Severn Vale corridor and in the Bromsberrow area. In terms of sand & gravel processing, the Upper Thames Valley area has the most capacity available in the county. Minerals Core Strategy Technical Evidence Paper MCS-A (July 2007) indicates that there are two concrete batching plants, four fixed processing plants and a block-making factory which benefit from planning permission. In

addition, substantial processing opportunities can be found across the county boundary within Wiltshire. Example sites include: the Cleveland Farm Complex near Ashton Keynes and Eysey Manor Farm to the East of Latton. Outside of the Upper Thames Valley there is much less processing capacity, including two ready mixed concrete plants and several mobile processors. One of the ready mixed concrete plants is a stand-alone, satellite operation, which is fed by imported aterial some of which is occasionally barged along the River Severn and Sharpness Canal from Ryall quarry in Worcestershire.

- Markets

Market information for sand & gravel is based on washed and graded materials rather than as a finished aggregate product. Consequently, it is difficult to establish true market information and trends of local supplies as it is often transported from one site to another (sometimes across county and regional boundaries) depending upon the availability of plant and the proposed end-use. 2005 data would suggest that only a small fraction of sand & gravel is marketed directly within Gloucestershire. However, it is likely that a high proportion of the county's sand & gravel supplies are brought back to Gloucestershire as a finished aggregate product.

The four yearly national survey of aggregates (AM survey) has provided marketing data for 2009 (the next national survey would be for 2013). This indicates that in 2009 the Gloucestershire industry was responsible for 30% of the south west's sales of land won sand and gravel but of the county's sales only 19% (0.173mt) was marketed within Gloucestershire (the same proportion as shown for 2005 in the AM05 national survey).

b. Crushed Rock

Gloucestershire's crushed rock resources can be divided into two specific types of limestone. These are separated over geological time and by geographical location. The older resources, known as Carboniferous limestone, occur within the Forest of Dean. And the younger resources, called Jurassic limestones are found in the Cotswolds. The Carboniferous limestones have the greatest degree of flexibility as an aggregate mineral. This is because they are more durable and harder than the Jurassic limestones. Whilst both limestone types can be used in general construction, it is generally only Carboniferous limestones that can provide for a wider range of high specification projects. Although two distinct crushed rock resource areas have been identified within Gloucestershire, the overall distribution of these resources is not confined to the County's administrative boundaries. For the Jurassic limestones of the Cotswolds, the resource area is much wider and covers parts of the neighbouring authorities of Bath & North East Somerset, Oxfordshire, Warwickshire, and Wiltshire. In the case of the Carboniferous limestones from the Forest of Dean, comparable resources have been worked in the adjoining Welsh authority of Monmouthshire and more significantly to the Northwest of South Gloucestershire. There are also significant crushed rock resources further a field, which may have a relationship to Gloucestershire. These are found within North Somerset and Somerset.

- Supplies

In 2010, 1.2 million tonnes of crushed rock was supplied from Gloucestershire.

- Infrastructure

Minerals Core Strategy Technical Evidence Paper MCS-B (July 2007) states that, according to recent data a total of 20 quarries with the potential for crushed rock working are identified in Gloucestershire. Of these, 12 quarries are in active production, and 13 are classed as either not in production or only supplying other quarried products (e.g. building stone and agricultural lime) There are a further five un-worked and "dormant" quarries which will require additional planning permissions for schemes of conditions of working before their reserves can be worked.

Most of the County's crushed rock infrastructure and operational capacity is focused within the existing quarry sites of the Forest of Dean resource area. Minerals Core Strategy Technical Evidence Paper MCS-B details the fact that, according to recent figures there are three fixed processing plants, two roadstone coating plants, a concrete batching plant, a ready-mix concrete plant and several aggregate recycling facilities within this resource area. In contrast, crushed rock infrastructure within the Cotswold resource area are considerably less, with only two fixed processing plants, one concrete batching plant and one aggregate recycling facility in operation. Nevertheless, some mobile crushing plants are used intermittently at several hybrid-quarries that produce small amounts of crushed rock in association with building stone.

It should be noted that the majority of ancillary plant used in the Cotswold resource area is of a mobile nature and is also required for building stone purposes (e.g. cutting, dressing, bagging etc.) and agricultural lime production.

- Markets

In 2009, 0.609 million tonnes of crushed rock supplies were marketed within Gloucestershire. 12% was marketed elsewhere in the South West, with 36% being marketed in destinations outside of the region. However, due to some external processing outside of the county a proportion of the non-Gloucestershire supply may actually end up back in the county as a finished construction product.

- Reserves

As at 2011 the countywide reserves of crushed rock totalled 31.1 million tonnes.

- Remaining years of the crushed rock landbank

Based on 2005 to 2020 Guidelines, the remaining landbank for the County is 13.83 years.

c. Natural Building & Roofing Stone

The working of natural building & roofing stone is an important part of the mineral industry in Gloucestershire. It is required for the ongoing repair and maintenance of the county's rich and diverse historic built environment and for supplying new-build and specialist, high-grade architectural projects. Gloucestershire's natural building & roofing stone resources are divided into two mineral types: Limestone and Sandstone.

These are separated over geological time and resource location across the county.

- Supplies

In 2011 the total sales of non-aggregate stone, for building and roofing stone the figures are as follows: limestone 38,640 tonnes, sandstone 11,266 tonnes, making a total of 49,906 tonnes.

- Markets

There are two principal markets for natural building & roofing stone – repair of historic buildings and new build projects. In Gloucestershire, the repair of historic buildings is a significant driver of local demand. The county has a renowned and rich built heritage, which includes over 13,432 listed buildings and 287 conservation areas. A significant number of buildings and structures covered by one of the listings or which lie within a conservation area will at some point require new stone for repair and maintenance purposes.

Despite the UK wide downturn in the production of building stone over the last 100 years or so, the local market has remained relatively constant. Planning policies and controls have also had an influence on the strength of this local market. This is demonstrated through district local plans and technical planning guides wherein policy support is given for the use of natural local stone, where it will act as a direct or suitable replacement in the repair of the historic environment.

The other key market for local building stone is new build projects. This is concerned with maintaining vernacular styles and local distinctiveness through the greater use of local building materials. It also refers to the specific requirements of certain contemporary styles in both external and internal decoration (e.g. carved fireplaces, sculptures, ornaments and flagstones). Similar to the sector for historic stone, district planning policies look to encourage the use of local building stone, where it contributes to the quality of the built environment.

- Reserves

Due to the variability of the county's building stone resources, particularly those found in the Cotswolds it has proved extremely difficult to provide an accurate level of permitted reserves, which remain within the county.

As well as having to contend with a wide range of different stone types within each of the key mineral resources, there are also considerable variations in the type of building stone products that can be produced.

Furthermore, the variability in local resources can change significantly over a short space of time and within a relatively small area. Different layers / stone strata can become exhausted or revealed in a matter of weeks as quarry faces are worked through. A further complication in determining reserves is concerned with the opportunity to extract different quarried products alongside building stone. This is a key issue with the county's Carboniferous and Jurassic limestone, which also provides for a supply of crushed rock aggregate and small quantities of agricultural lime. Where reserve assessments are carried out at relevant quarries it can prove extremely difficult to distinguish between which part of the reserve will prove suitable as a building stone, or for another quarried product.

Nevertheless, local operators are still actively encouraged to provide annual estimates of their non-aggregate reserves. These estimates cover all natural building stone products, and

agricultural lime, where it is also worked. In 2011, non-aggregate reserves in Gloucestershire were estimated to be 6.34 million tonnes of limestone and 1.73 million tonnes for sandstone.

d. Recycled Aggregates

Recycled Aggregates in Gloucestershire are principally derived from the reprocessing of waste materials from construction and demolition projects. It is mainly made up of concrete and hardcore, although can also include railway ballast and road planings. The availability of recycled aggregates is very much dependant upon the level of activity of the construction industry and other infrastructure scheme such as road maintenance.

e. Secondary Aggregates

The availability of secondary aggregates in Gloucestershire is currently limited. The Forest of Dean coalfield represents the only notable source, associated with the re-working of old colliery spoil tips. Unfortunately the quality and marketability for this material is extremely variable and some spoil tips are constrained by environmental and other recreational interests. A further very limited source includes foundry ash and brick waste.

f. Energy Minerals

Energy minerals in Gloucestershire comprise of coal, and potential resources of gas and oil, which are principally used as a fuel in energy generation. Coal resources are focused around a 90km2 area to the west of the County, in the Forest of Dean Coalfield. Less clear is the occurrence of potential gas and oil resources.

Despite extensive seismic and other investigations, with exploratory drilling for hydrocarbons in the County between 1975 and 1990, oil and gas resources remain an unquantified resource in Gloucestershire.

Non - Energy Minerals

Non-energy minerals provide a small but no less important, contribution to Gloucestershire's mineral industry.

These resources include non-aggregate limestone and sandstones from the Forest of Dean and nonaggregate limestone from the Cotswolds used for building stone and agricultural lime. In some areas these minerals are worked in-conjunction with crushed rock aggregate. In addition clay minerals that occur in the Severn Vale, Vale of Moreton and Forest of Dean are used as a bulk fill, landfill cover, flood defence and for brick manufacturing. Resources of Iron Ore located within Forest of Dean also fall into this category.

However, this resource has not been worked in the County since the Second World War.

2. Other Baseline Information

a. Overview and character of the county

The heritage, culture and environment of the County helps support the County's quality of life and economy. Gloucestershire is substantially a rural county with the main urban focus in Gloucester and Cheltenham. It supports a wealth of international, national and locally important environmental assets, which need the appropriate level of protection from minerals and waste development.

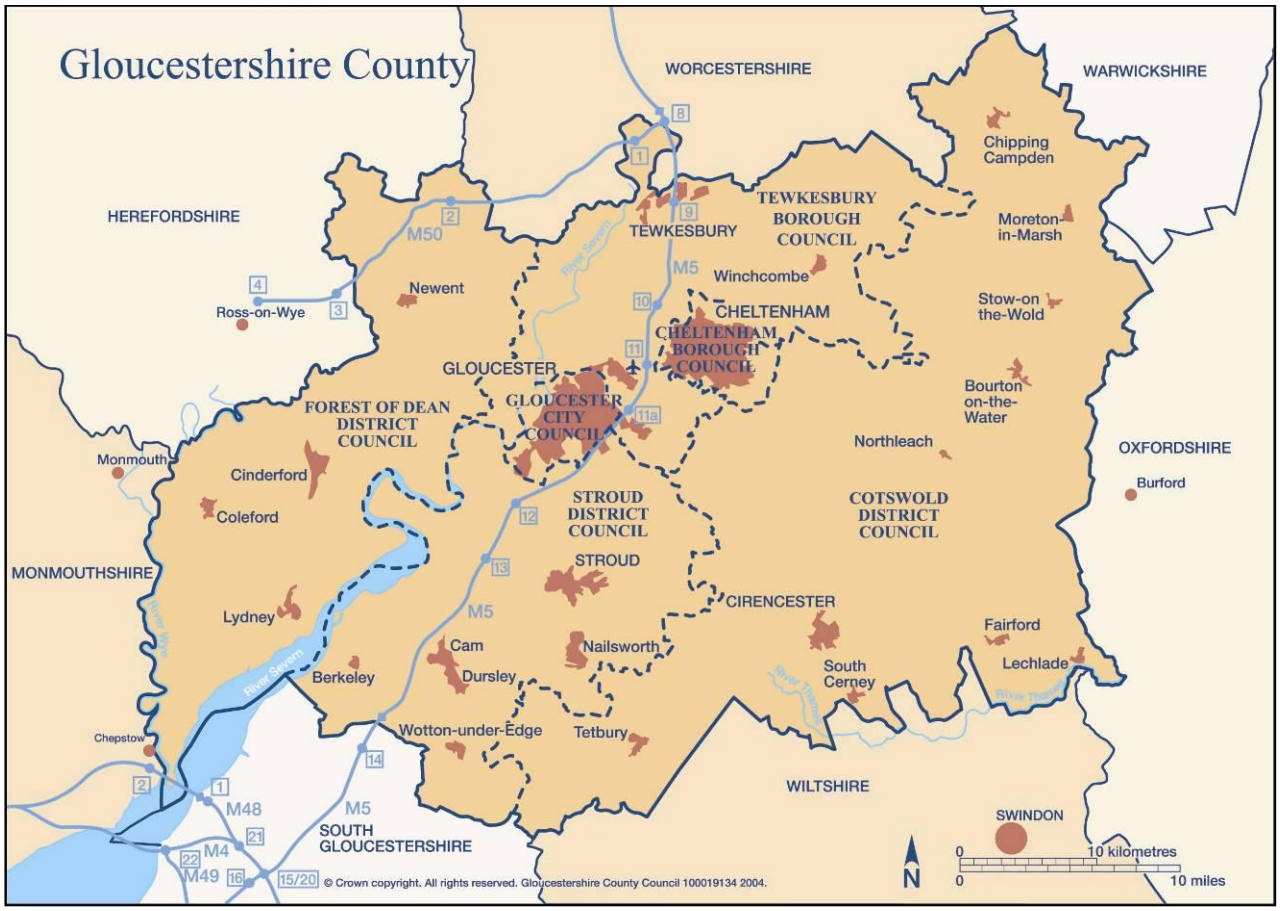


Figure 8. Gloucestershire and the six Districts.

b. Gloucestershire in relation to the factors in Annex 1 of the SEA Directive

<u>Biodiversity</u>

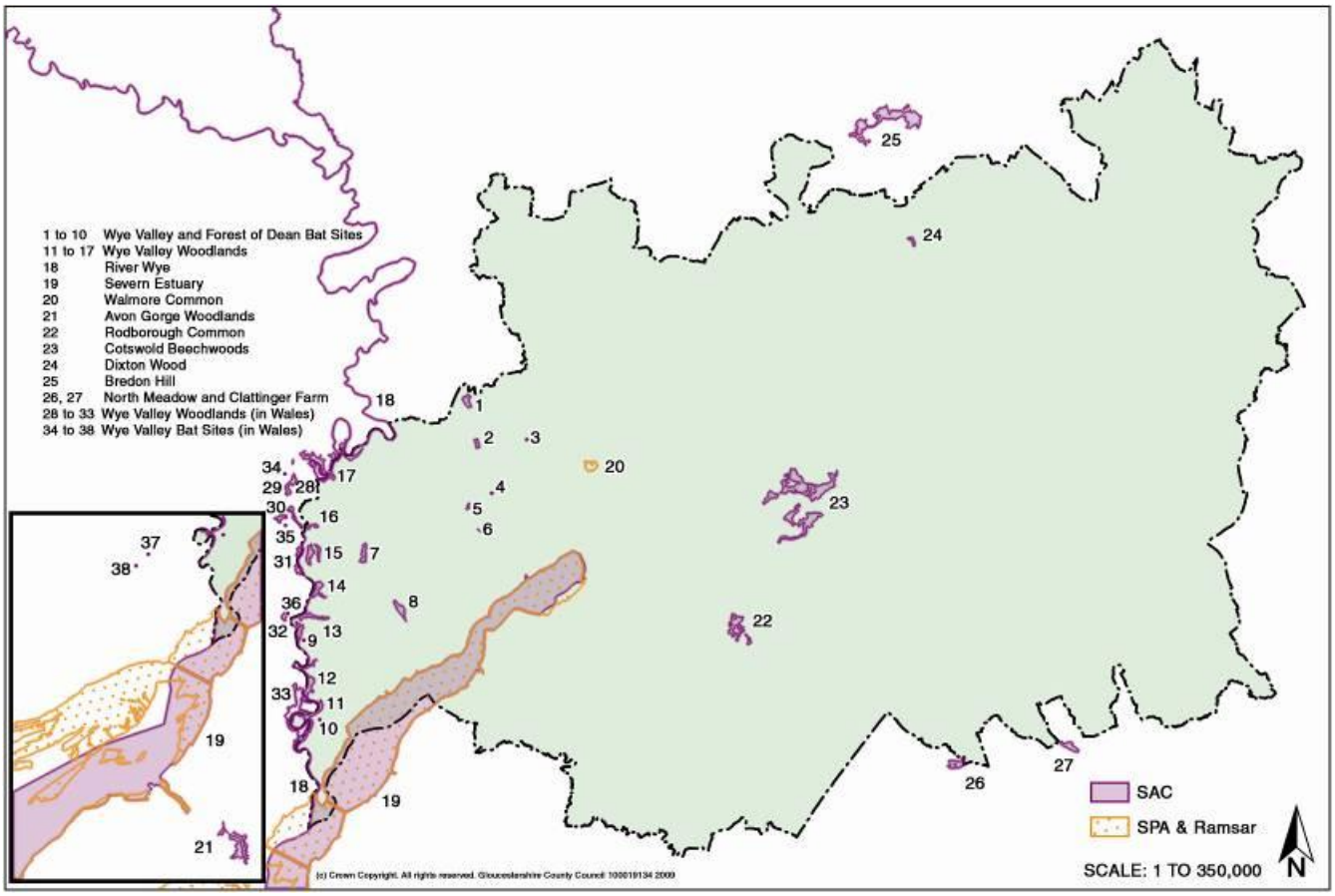
As a rural county Gloucestershire is relatively rich in habitats and species and much has been achieved through the Biodiversity Action Plan (BAP) process and on going through the new Local Nature Partnership, see: http://www.gloucestershirebap.org.uk/ for more details. However certain species are still in decline and habitats are being lost. Climate Change may prove to be very serious long term threat adding to declines. The County has a wide array of nature conservation designations ranging from the International level to the Local. International nature conservation designations include Ramsar sites, Special Protection Areas (SPAs) and Special Areas of Conservation (SACs).

The MLP should conserve and enhance biodiversity by minimizing impacts of development.

Ramsar sites are Wetlands of International Importance listed under the auspices of the Ramsar Convention on Wetlands (established in Ramsar, Iran, in 1971. SPAs are designated under the EU Birds Directive (79/409/EEC) in order to conserve the habitats of vulnerable species (listed in Annex I of the Directive) and of migratory birds. SACs are designated under the EU Habitats Directive (92/43/EEC). As a requirement of DPD preparation, the Minerals and Waste Planning Policy Team have to undertake a Habitat Regulations Assessment (HRA) of the plans it is producing. The purpose of HRA of land use plans is to ensure that protection of the integrity of European sites is a part of the planning process at a regional and local level. The requirements are outlined in Article 6(3) and (4) of the European Communities (1992) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("Habitats Directive"). To date, the process has involved producing a Baseline report on European Sites (i.e. on SPAs and SACs) that are in and close to Gloucestershire well as a report at each stage of formal consultation which assesses options. See the link below for all the details on the HRA process:

http://www.gloucestershire.gov.uk/extra/article/107942/Habitats-Regulations-Assessment-HRA-and-Appropriate-Assessment-AA

Map 2 below and the related table details the European Sites in and close to Gloucestershire.

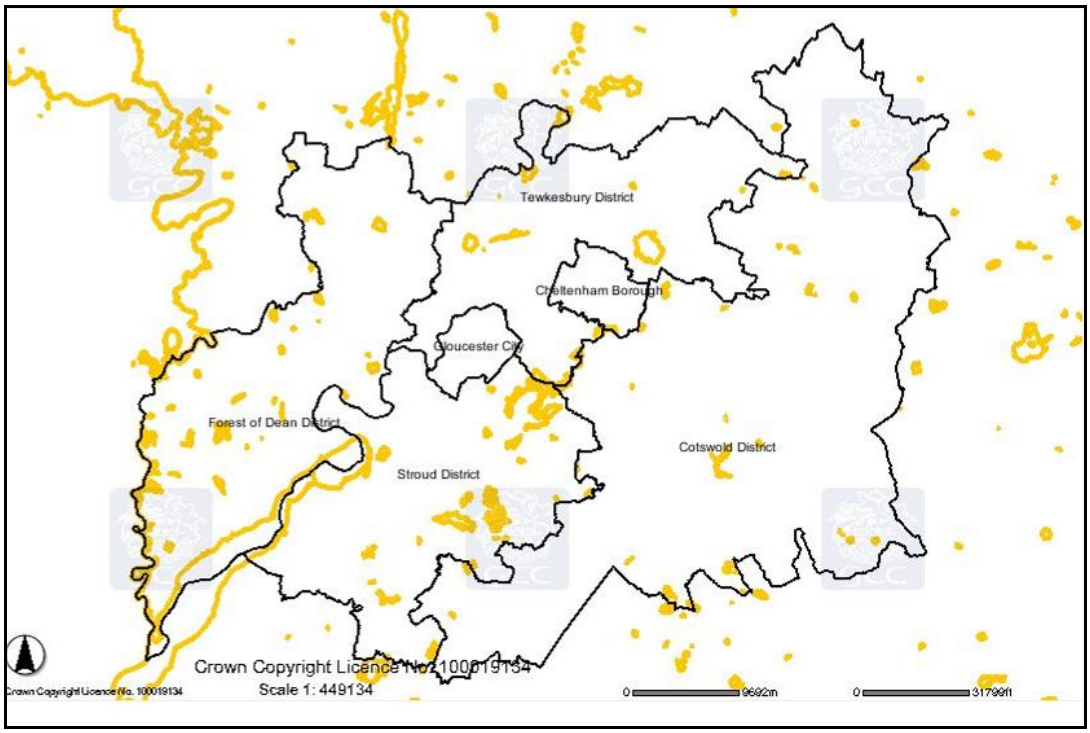


European Sites In and Close to Gloucestershire.

European Site	Designation	District / Area
Rodborough Common	SAC	Stroud
Dixton Wood	SAC	Tewkesbury
Wye Valley and Forest of Dean Bat Sites	SAC	Forest of Dean, Monmouthshire
River Wye	SAC	Forest of Dean, Monmouthshire, Herefordshire, Powys
Wye Valley Woodlands	SAC	Forest of Dean, Monmouthshire, Herefordshire
North Meadow and Clattinger Farm	SAC	Wiltshire
Cotswold Beechwoods	SAC	Cotswold

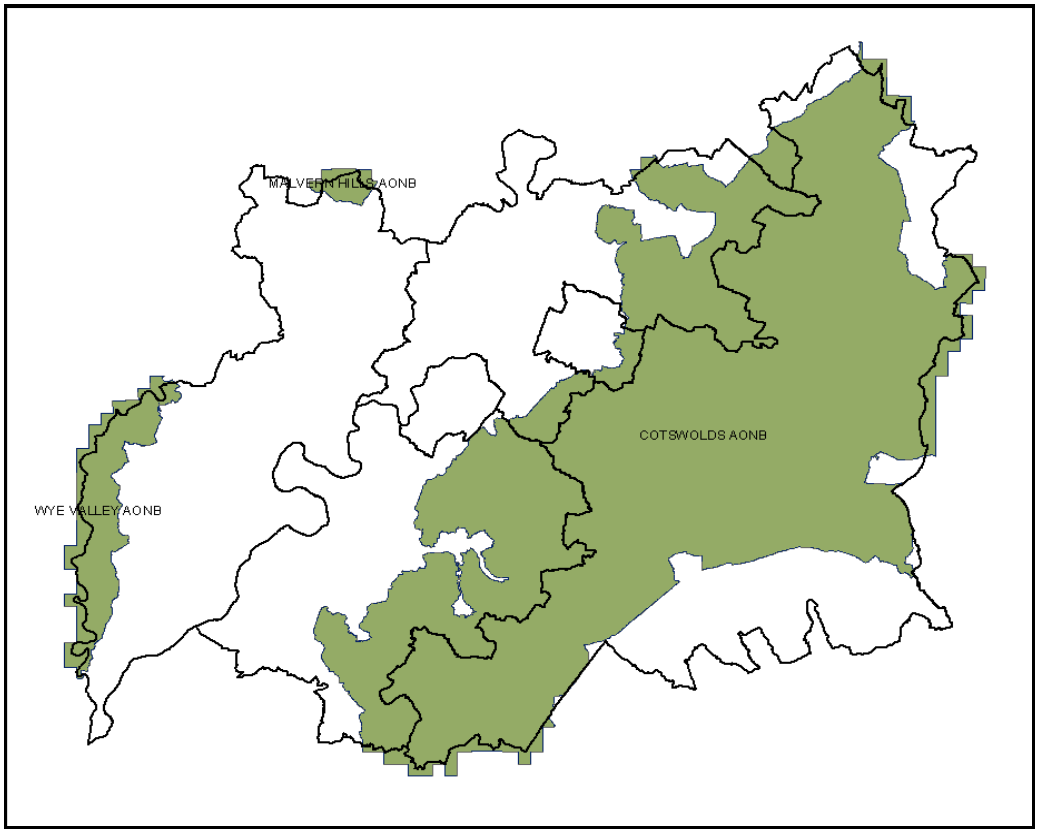
Bredon Hill	SAC	Worcestershire
Walmore Common	SPA & Ramsar	Forest of Dean
Severn Estuary	SPA & Ramsar	Stroud, Forest of Dean

All SPAs and SACs in Gloucestershire are also designated Sites of Special Scientific Interest (SSSI). SSSI are designated by Natural England to provide statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features. Consultation is required if they are threatened in any way. There are over 100 SSSIs in Gloucestershire – see Map 3 below. Four SSSIs have been additionally designated as National Nature Reserves (NNRs).



Broad View of SSSI in Gloucestershire.

The largest designation in terms of extent are the three Areas of Outstanding Natural Beauty (AONB) in the County: the Cotswolds, part of the Wye Valley and a very small section of the Malvern Hills. AONBs cover 136,400 hectares or 51.4% of the County area – see Map 4 below.

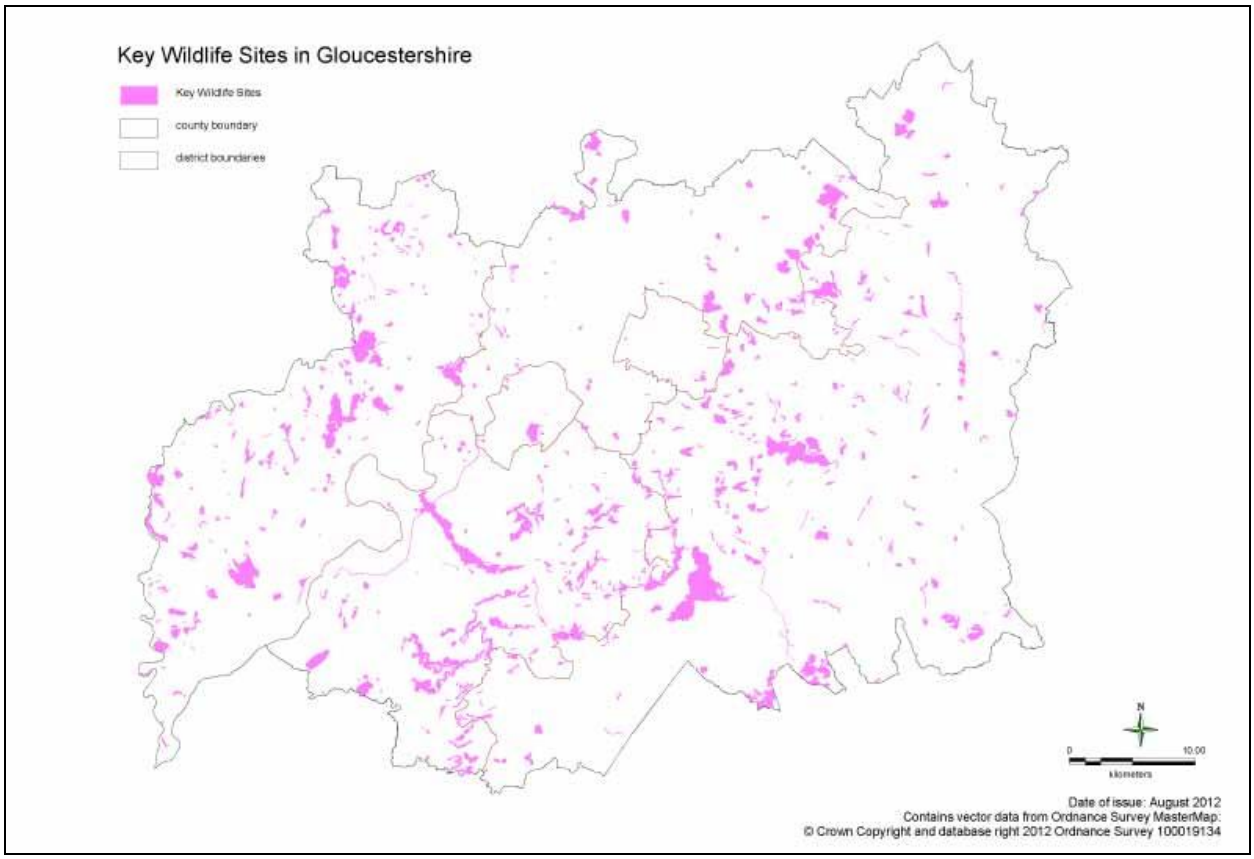


Extent of AONB in Gloucestershire.

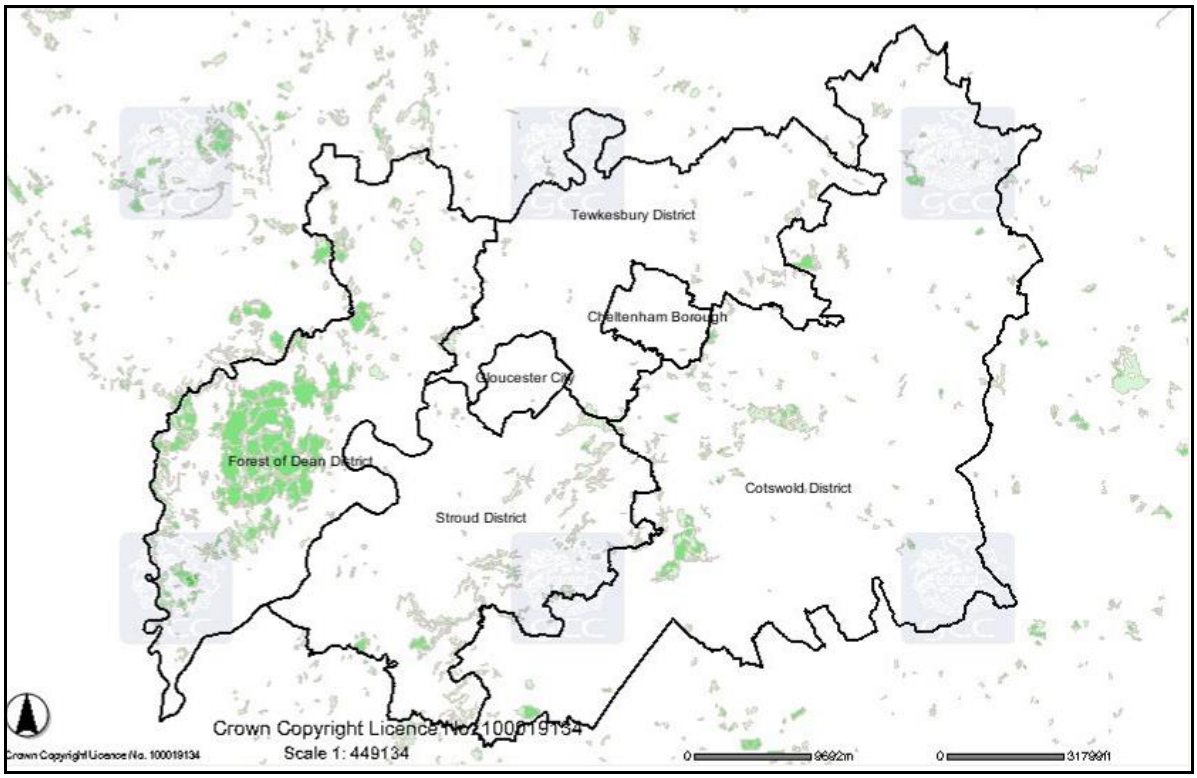
Their primary purpose is to conserve and enhance natural beauty while taking into account the economic and social needs of the area.

In addition to the international and national designations listed above there are a range of local designations including Key Wildlife Sites (see Map 4 below), Local Nature Reserves, Private Nature Reserves (for example those managed by the Wildlife Trust, Woodland Trust and Royal Society for the Protection of Birds (RSPB), Regionally Important Geological Sites (RIGS), Special Landscape Areas, Ancient Woodland Sites (see Map 5 below), and Registered Commons.

The MLP should conserve and enhance the landscape and scenic beauty of the AONB.



Key wildlife sites.



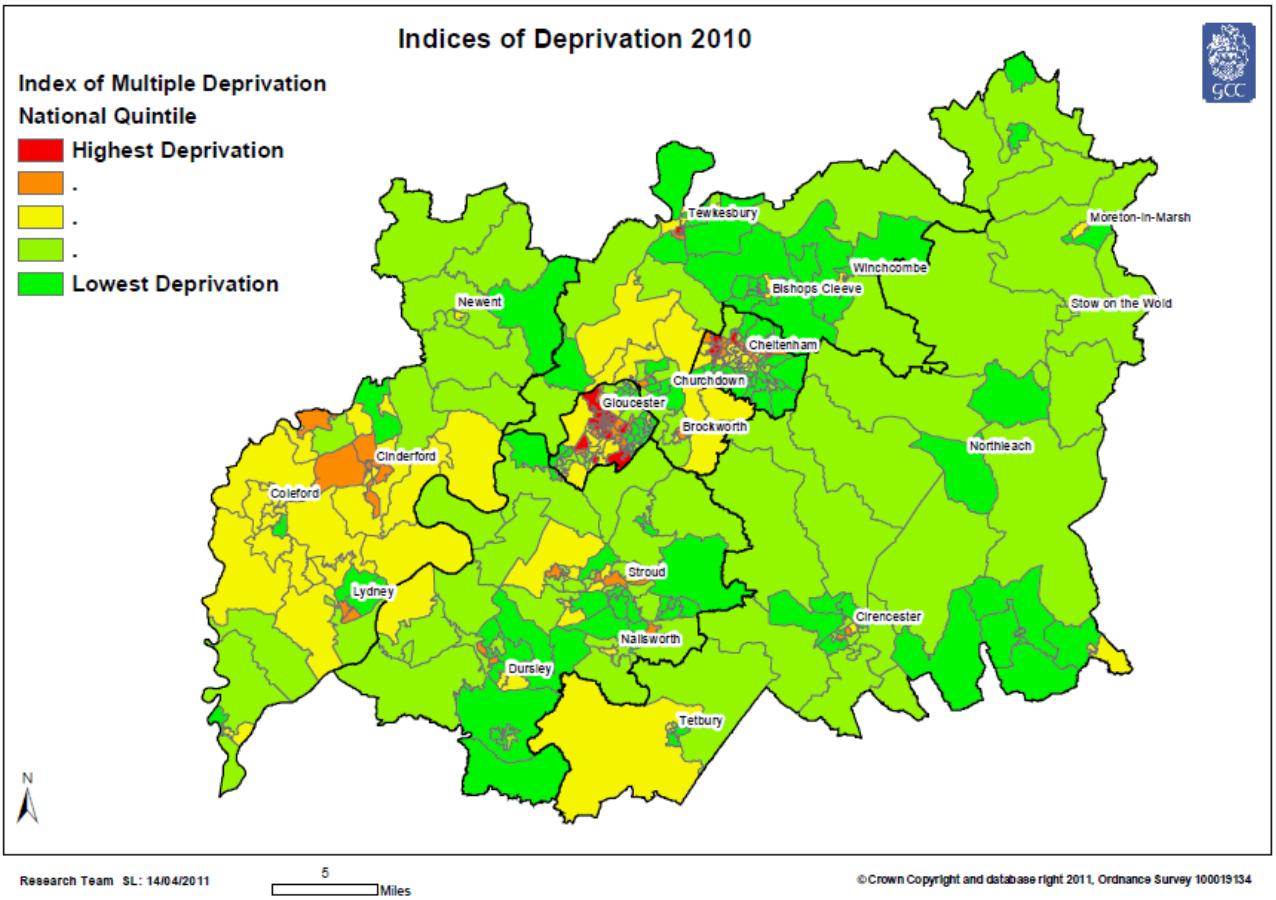
Extent of Ancient Woodland in Gloucestershire.

Population

There are approximately 593,000 people living in Gloucestershire. The large majority (84%) of people in Gloucestershire described themselves as "White British". A further 9.7% were also "White" but from a minority group (i.e. White Irish/ White Other). Around 6.2% people were from a BME (non-white) group. The County's population grew by 32, 400 between 2001 and 2011 (the date of the last census) and is projected to grow by about 0.51% each year, and is expected to reach 670,000 by 2035. Most of the increase in population has resulted from net in-migration and natural growth. Clearly this has implications in terms of the levels of housing and infrastructure required in the County over the next years. Population projections are used to estimate how many residential units might be required in future years.

In terms of the local economy, key economic indicators show Gloucestershire in a favourable light. The County has historically low levels of unemployment, and gross value added per head similar to the national average. Unemployment in Gloucestershire was 5% in 2012 (figures from South West Observatory), well below the national figure of 7.6% . In 2011 the average County income was £25, 817, almost £1000 lower than the national average. However the average income in Tewkesbury and Cheltenham were well above the national average. The Gloucester was well below. The County Average Weekly Earnings (Resident based gross – ASHE 2011) was £482 (figures from Gloucestershire First). The National figure in 2011 was £491 (figures from ONS ASHE 2011). For more information of Gloucestershire's economy see Appendix 3.

According to Government Indices of Deprivation there are significant pockets of deprivation in the County mainly in the urban areas of Gloucester and Cheltenham. The Indices of Deprivation are made up of 7 domains: Income; Employment; Health deprivation and disability; Education, Skills and Training deprivation; Barriers to Housing and Services; Crime and Living Environment. These are combined to give the Index of Multiple Deprivation. For Gloucestershire the ID2007 Super Output Areas in the national top 10% (i.e. in the worst 10%) are: Podsmead (1), Matson & Robinswood (1), Westgate (1), Westgate (3) Kingsholm and Wotton (3) St Mark's (1), St Paul's (2), and Hesters Way (1). (See Figure 13 Below).

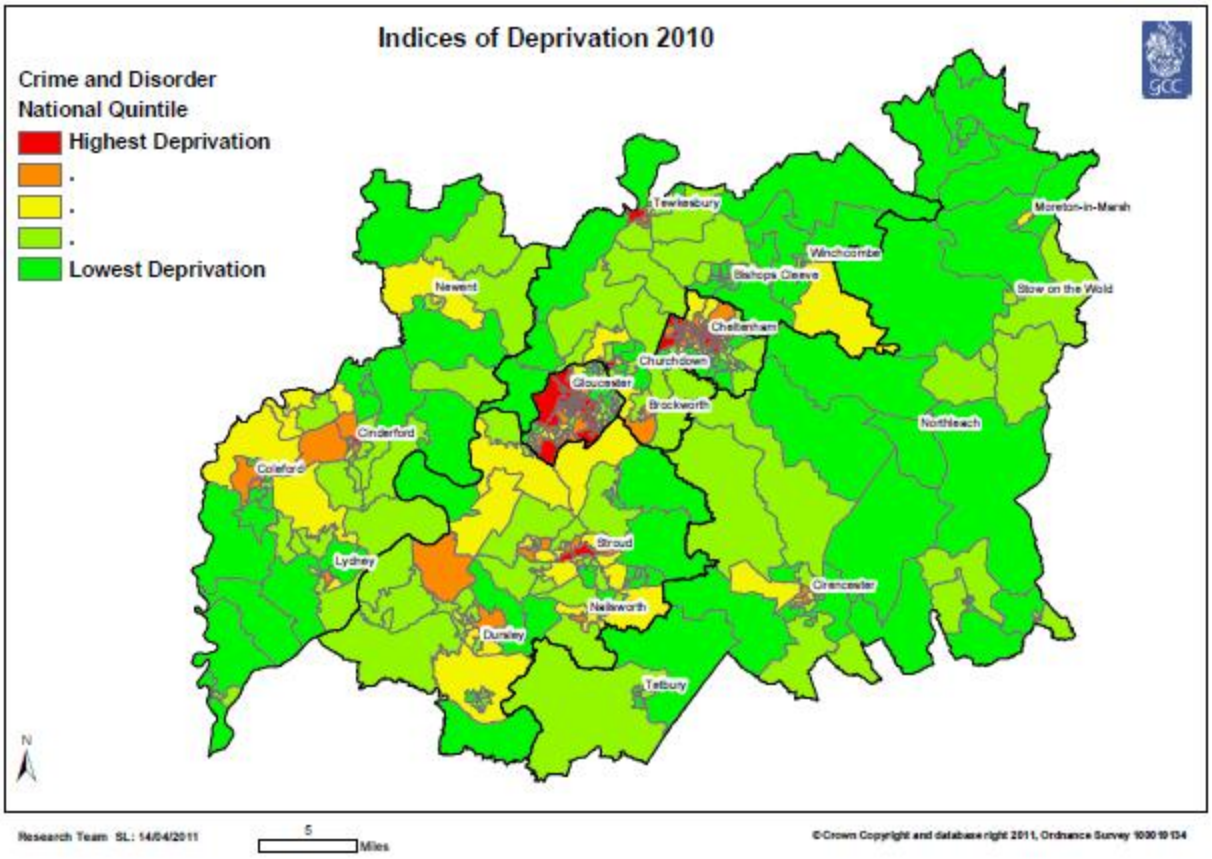


Gloucestershire Index of Multiple Deprivation 2010.

More information is available through *MAIDeN*, the multi-agency database for neighbourhoods in Gloucestershire at the following website:

http://www.maiden.gov.uk/

In terms of crime rates the figures for Gloucestershire are relatively low, compared to the national average for the key crimes such as domestic burglaries, violent offences, vehicle crimes and robberies. See Map 7. below for an indication of Gloucestershire's crime 'hotspots'.



. Crime 'Hotspots' in Gloucestershire 2010.

Human Health

General health

The following information on health in Gloucestershire comes from a 2008 Health Profile which was funded by the Department of Health and produced annually by the Association of Public Health Observatories. Health indicators in Gloucestershire are generally better than for England. On average, people live longer than the England average. Levels of deprivation across Gloucestershire are generally low compared to the rest of England. However, there are pockets of deprivation in Gloucester and Cheltenham where life expectancy is lower than the rest of the county. All age, all cause mortality, early death rates from heart disease and stroke and from cancer are lower than the England rates and falling.

Life expectancy

The following chart shows that for both men and women, life expectancy at birth in Cotswold District, Tewkesbury Borough, Cheltenham Borough and Stroud District is higher than the average for England. Gloucester City is very close to the national average. Men in Gloucester are below the English average.

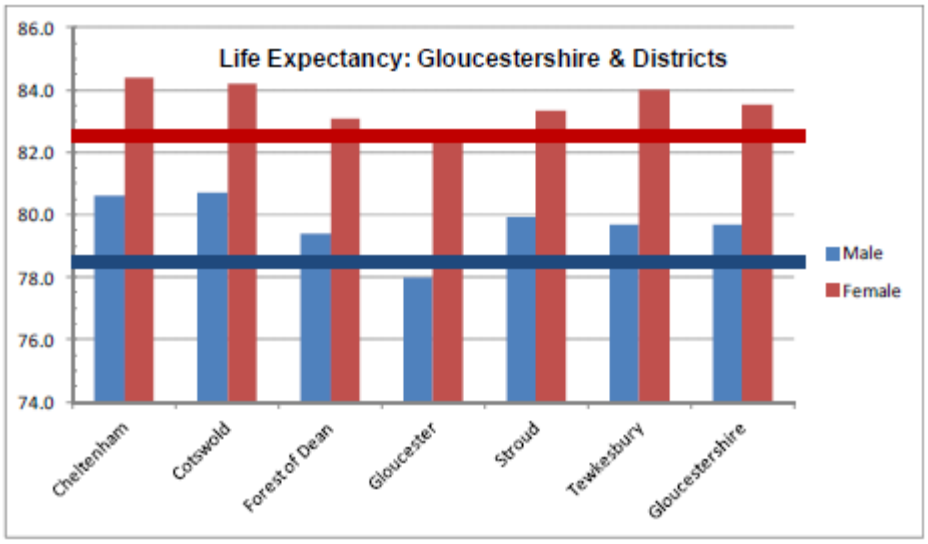
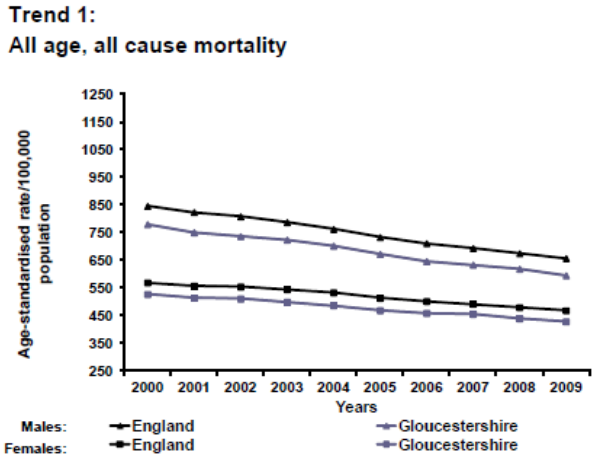


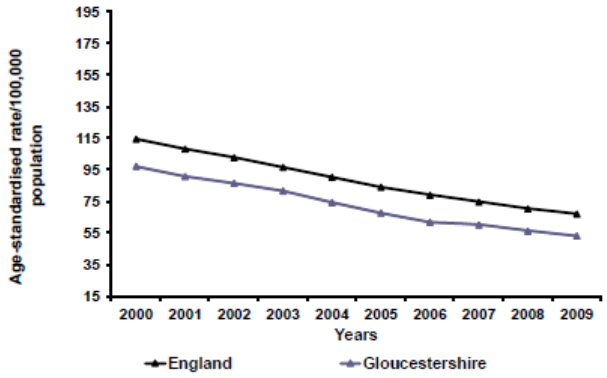
Figure 15. Life Expectancy at Birth – England & Districts in Gloucestershire.

Key trends

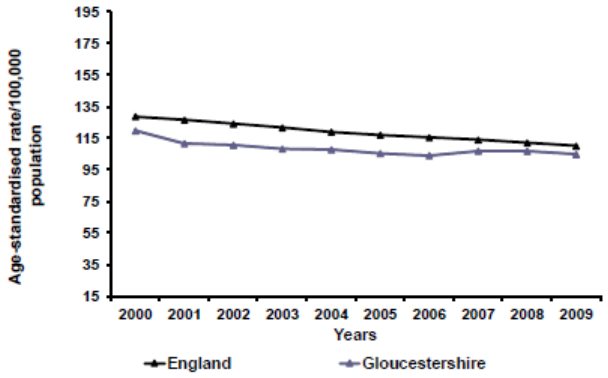
The following trend charts showing 1. All cause mortality, 2. Early death rates from heart disease and stroke, 3. Early death from cancer indicate that broadly, for both men and women, Gloucestershire is following national trends in terms of improved health.



Trend 2:
Early death rates from heart disease and stroke



Trend 3:
Early death rates from cancer



Flora and Fauna

Despite the large number of statutory and local designations, Gloucestershire has suffered from large-scale habitat and species loss over the last 50 years. This has largely been due to changes in farming practices. Among the species that have suffered from decline are farmland birds. At present approximately 100 species identified in the as UK priority species are thought to occur in Gloucestershire. Many of these species are also listed for protection under the European Union Habitats Directive including: the European Otter, the Dormouse, the Lesser Horseshoe and Greater Horseshoe Bat and the Pipistrelle Bat. Over 60 bird species listed under the EU Birds Directive have been recorded in Gloucestershire. Wetlands areas such as the Severn Estuary, Slimbridge Wildfowl Centre and the Cotswolds Water Park centre provide important habitats for over-wintering and migratory birds.

In terms of the protection of flora and fauna, under Section 41(3) of the Natural Environment and Rural Communities Act 2006 (NERC) the Secretary of State must take steps (where they are reasonably practicable), and promote the taking of steps by others, to further the conservation of certain listed habitats and species. In light of this duty, seven sectors have been identified where actions taken by public bodies and other stakeholders could deliver significant conservation benefits for the habitats and species on the list. The English List is available on the Natural England website at:

http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/protectandmanage/habsandspeciesimportance.aspx

The Gloucestershire Biodiversity Framework & Delivery Plan 2010 provides a basis for the conservation of local biodiversity which targets the conservation, enhancement and creation of priority habitats within the Gloucestershire Nature Map. The Gloucestershire Nature Map consists of a number of priority areas called Strategic Nature Areas (SNAs). When viewed alongside the rivers targeted by the Environment Agency through the Water Framework Directive process the Gloucestershire Nature Map represents a strategic ecological network for Gloucestershire. Additional to the county approach the Cotswold Water Park Biodiversity

Action Plan 2007-2016 provides detailed information and biodiversity targets for the south west corner of the County and into Wiltshire and Swindon which can be found at:

http://www.waterpark.org/wp-content/uploads/2013/01/FINALCWP-BAP-2007-16-v8print.pdf

Soil, Air and Water

Soil

Soil erosion is an increasing problem throughout the UK. About 50% of all land in the South West is thought to be at risk and about 6% of agricultural soils already suffer from erosion. Certain soils found in the far south west of the County, straddling the boundary with South Gloucestershire are listed as having an inherent vulnerability to high or severe structural problems. Such soils are easily sealed by heavy rain increasing the likelihood of local flooding and mud on roads. The increased sediment in rivers caused by soil runoff also poses a threat to aquatic ecosystems.

The MLP should where possible use poorer quality land in preference to the best and most versatile agricultural land.

Air

Air quality is a less significant issue in Gloucestershire than in some counties as a result of the largely rural nature of the County. However, road transport is a major source of local air pollution and both Gloucester City and Cheltenham Borough exhibit significantly higher concentrations of pollutants associated with road traffic than the more rural districts. The issue of air quality has been considered within the Gloucestershire Local Transport Plan 3. The six district authorities in conjunction with Gloucestershire County Council have undertaken individual air quality reviews and assessments. These have examined the extent of any potential exceedances of national air quality objectives for nitrogen dioxide and particulate matter. The results from local authority air quality review and assessment work indicate that the contribution of road traffic emissions to local air quality is potentially significant within the County. However, an overall reduction of between 20 to 30%, and in some cases even greater, in the annual mean nitrogen dioxide was predicted between 1998 and 2005 across the County. For particulate matter concentrations, the predicted reduction in the annual mean between 1998 and 2004 was even greater, with a reduction of almost 50% predicted. Results from Stage 2 of this assessment work, indicate that exceedances are envisaged along the M5 motorway corridor, at receptors within 50 metres of the carriageway. A small number of road links have also been identified as having the potential to cause future exceedances of the air quality objectives.

The table below lists the Local Air Quality Management Areas that have been declared in the County. An Air Quality Management Area is defined where members of the public are likely

to be exposed to exceedances in the levels of pollutant. The higher the number of Air Quality Management Areas in a District would indicate generally higher levels of air pollution.

Local Air Quality Management Areas in Gloucestershire.	
Gloucester City	Barton Street
	Priory Road / St Oswald's Road
	Painswick Road (West of Eastern Avenue)
Tewkesbury	Withy Bridge M5 / J10
Forest of Dean	None
Cheltenham	Old Bath Road (A46)
Stroud	None
Cotswold	Birdlip, Air Balloon Roundabout (A417)

The MLP should help meet local, national and international objectives for air quality.

Water

Gloucestershire has around 690 km of rivers (11% of the total in the South West), which are monitored by the Environment Agency for river quality.

The water quality is monitored as part of meeting the Water Framework Directive (WFD). The WRD will help protect and enhance the quality of:

- surface freshwater (including lakes, streams and rivers)
- groundwaters
- groundwater dependant ecosystems
- estuaries
- coastal waters out to one mile from low-water

In terms of WFD the River Severn Water Management Plan details that the Severn Vale Catchment in regards to Rivers and Lake water bodies has:

- 7% good ecological status or potential;
- 38% good or high biological status;
- 88% good chemical status;

- 7% good ecological and chemical status.

The Thames Water Management Plan which covers the Cotswold Catchment has:

- 38% good ecological status or potential;
- 28% good or high biological status;
- 100% good chemical status
- 38% good ecological and chemical status.
-

Within the Forest of Dean there are water quality problems associated with uncontrolled discharges from former mine workings. These are often acidic and contain metals and other harmful substances that can have significant ecological impacts.

There are 6 Catchment Abstraction Plans (CAMS) which cover Gloucestershire. These detail how the Environment Agency manage water resources, existing and future abstraction licences and water availability within river catchments.

Flooding in Gloucestershire

There is a long history of serious flooding in Gloucestershire. There was a major flood in 1947 and again in 2000. In June and July 2007, very heavy and prolonged rains caused major disruption in the County. 5,000 homes and businesses were flooded and many communities cut off. 200 people had to be rescued by boat, helicopter or land rescues. Electricity was lost to 48,000 homes for two days, and the whole county came close to having no power at. Over half the homes in Gloucestershire and 7,500 businesses were without any mains water for up to 12 days - and 17 days for drinking water. Across the County, 825 homes have had to be evacuated, resulting in approximately 1,950 people (including 490 children) seeking temporary accommodation. Widespread damage to the highways infrastructure was estimated to cost £25 million to repair.

The County Council commissioned a Level 1 Assessment by *Halcrow Group Ltd* in September 2008.

More information on flooding within Gloucestershire can be found at www.gloucestershire.gov.uk/flooding

Climatic factors

Climate change is recognised as one of the greatest threats facing the world today. It is now widely accepted that man-made emissions of greenhouse gases are responsibly for the increase in temperatures and that temperatures are rising faster than previously thought. As

shown in Tables 13 & 14 below, the changes resulting from global warming are likely to result in warmer, drier summers and milder, wetter winters.

Future Seasonal Climate in the South West.

Season	Seasonal Climate 2050s*	Seasonal Climate 2080s*
Spring	Warmer by 1.0 to 2.0°C Precipitation totals similar to now	Warmer by 1.5 to 3.5°C Precipitation totals similar to now
Summer	Warmer by 1.5 to 3.5°C Drier by 15 to 30%	Warmer by 2.0 to 5.5°C Drier by 25 to 55%
Autumn	Warmer by 1.5 to 3.0°C Drier by 0 to 10%	Warmer by 2.0 to 5.0°C Drier by 5 to 15%
Winter	Milder by 1.0 to 2.0°C Wetter by 5 to 15%	Milder by 1.5 to 3.5°C Wetter by 10 to 30% Snowfall will decrease by up to 70 - 90%.

** The range of figures indicates Low and High Emissions scenario results.*

Source: UK Climate Impacts Programme.

Summary of Potential Changes to the Climate of the South West by the 2050s.	
Temperature	• Annual warming of 1.0 to 2.5°C (annual warming of 1.5 to 4.5°C in the 2080s) • Greater night-time than day-time warming in winter • Years as warm as 1999 (+1.2°C hotter than average) more common • Greater warming in summer and autumn than in winter and spring • Greater day-time than night-time warming in summer
Precipitation	• Winters 5 to 15% wetter (winters 10 to 30% wetter by the 2080s) • Heavy rainfall in winter becomes more common • Summers as dry as 1995 (37% drier than average) become more common • Snowfall totals decrease significantly • Summers 15 to 30% drier (summers 25 to 50% drier by the 2080s) • Greater contrast between summer (drier) and winter (wetter) seasons • Winter and spring precipitation becomes more variable
Cloud cover	• Reduction in summer and autumn cloud and increase in radiation • Small increase in winter cloud cover
Humidity	• Relative humidity decreases in summer • Specific humidity increases throughout the year
Soil moisture	• Decreases in summer • Slight increase in winter soil moisture
Storm tracks	• Winter depressions become more frequent including deepest ones
North Atlantic Oscillation	• North Atlantic Oscillation may become more positive in the future, bringing more wet, windy and mild winters
Source: UK Climate Impacts Programme.	

It is likely that such changes will have significant and far-reaching effects on the man-made and natural environment. Changes in temperature are likely to alter habitats and it is likely that many species will not be able to adapt quickly enough to survive. Recent published

research indicates that there has been a decline in over-wintering birds from Arctic areas. Increasing sea temperatures are likely to alter the balance in marine species and alter the marine food chain.

Rising sea levels and wetter winters will also increase the likelihood of flooding in low-lying areas. This issue is of particular relevance in Gloucestershire with significant numbers of people living close to, or in, the floodplain of the River Severn. The Summer 2007 floods in Gloucestershire highlighted the seriousness of the issue and demonstrated that extreme summer events may also have to be contended with. Very warm, dry summers may result in increased soil compaction which could result in increased runoff and consequently greater flood risk.

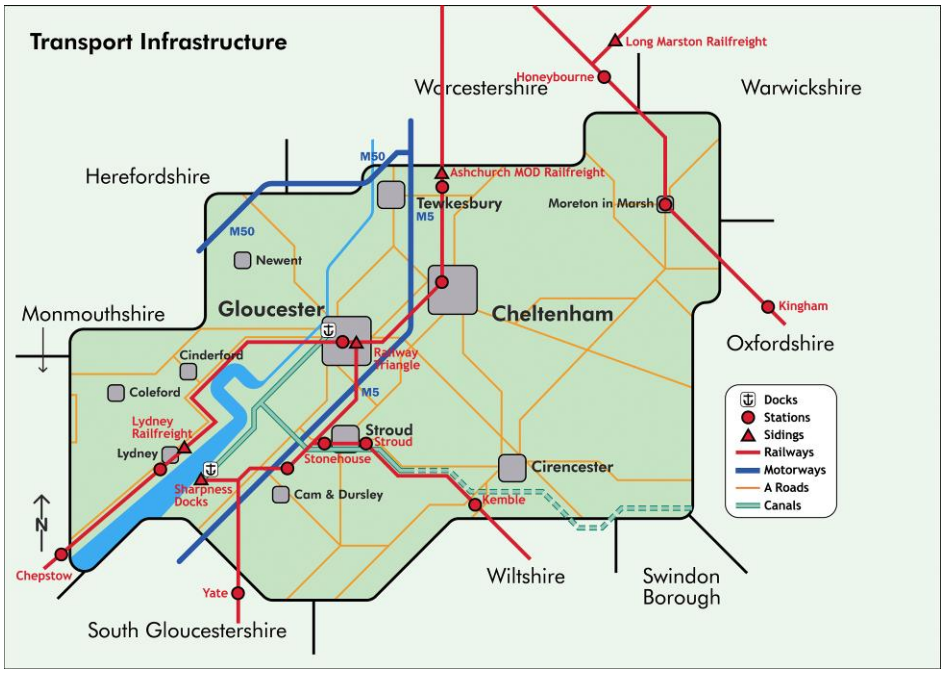
Materials assets

Motorways and major roads

The M5 runs through the County linking, northbound, to Birmingham and the West Midlands and, to the south, to Bristol, the South West and Wales. A dual-carriageway (A417/419) provides access to Swindon and the M4 with a two-hour drive time to Heathrow, three hours to the South East and channel ports. The M50 is on the County's northern boundary.

Rail links

High-speed rail services bring London Paddington and Heathrow within two hours reach. The regional network provides access to Birmingham, Bristol, Cardiff, Oxford and Swindon. Gloucestershire has railway stations at Ashchurch (Tewkesbury), Cam and Dursley, Cheltenham, Gloucester, Kemble (near Cirencester), Lydney, Moreton-in-Marsh, Stonehouse and Stroud. The rail network in Gloucestershire was reduced significantly during the Beeching era and there are now just four trunk lines. The mainline bisects Gloucestershire north to south with tracks from Gloucester running to South Wales and from Stonehouse towards the South East. A line passes through Moreton-in-Marsh in the north east of the County. The County Council and District and Parish councils have supported the building and re-opening of stations at Ashchurch (Tewkesbury), and Cam & / Dursley.



Transport Infrastructure in Gloucestershire.

Airports

Gloucestershire Airport is centrally located between Gloucester and Cheltenham providing facilities for air transport, executive jets, helicopters, charter flights, flying schools, aero engineering and maintenance. RAF Fairford is a significant material asset. It is designated as a TransOceanic Abort Landing site for NASA's Space Shuttle with its 3km long runway and NASA-trained fire and medical crews stationed at the base.

Docks

Gloucester Docks in the heart of the city is now a focal point for water-based leisure activities. Two working dry docks continue to provide ship repair and refit facilities with access to the sea through the Gloucester and Sharpness Canal. Sharpness Docks on the Bristol Channel provides extensive cargo-handling facilities and port-related services accommodating vessels up to 6,000 dead weight tonnes. In terms of waterbourne transport potential, at present the majority of traffic on the river Severn consists of privately owned small craft, although in early 2005 movement of sand and gravel took place from Ryall Quarry in Worcestershire to Gloucester. The river and the Gloucester and Sharpness canal provide Gloucestershire with the possibility to develop sustainable waterborne freight transport. This should be encouraged, particularly as other parts of the UK (London in particular) are very successfully transporting large volumes of waste by water.

Public rights of way

Gloucestershire has almost 3,500 miles of footpaths, bridleways and green lanes that make up its public rights of way network (PROW). They are an important landscape element in both rural and urban areas of the County, playing an important part in the daily lives of many

people who use them for leisure, exercise and the up-keep of health, or as part of their daily routine. Nationally 15 per cent of all visitors to the countryside go walking, which brings many benefits from supporting the rural economy to improving the health and well being of participants. Three 'National Trails' run through Gloucestershire namely; the Thames Path, the Cotswold Way and Offa's Dyke Path. The PROW network is managed by the County Council who maintain a definitive map of all paths and rights of way in the County. Volunteers and local conservation groups assist in the maintenance of PROW.

Tourist assets

The landscape and historic villages and towns of Gloucestershire are clearly a major material asset. During 2011 Gloucestershire Cathedral was the 7th top free attraction within in the South West in terms of visitor numbers.

Cultural heritage including architectural and archaeological heritage

The historic environment of the County has been formed as a result of the activities of human communities over many thousands of years in clearing, farming and settling the landscape. There is extensive evidence of the past in the form of prehistoric settlement and burial sites, Roman towns and villas, medieval churches and other features of more local importance. The historic legacy of agriculture, industry, architecture and social organisation makes a significant contribution to the distinctive landscapes found in Gloucestershire.

There are around 18,000 archaeological sites recorded in the Gloucestershire Sites and Monuments Record. Approximately 521 of these are Scheduled Ancient Monuments of national importance. Archaeological investigations continue to reveal many sites of historical importance in all areas of the County. These range from Neolithic and Iron Age sites, through extensive Roman and Romano British Settlements, important medieval sites, Regency and Georgian buildings, and the legacy of past industrial activities.

Conservation areas and the register of listed buildings held by district councils affords protection to areas of particular architectural or historic interest. The Cotswold district has by far the highest number of conservation areas of any district local authority in Great Britain at 144. There are approximately 100 buildings within the County which are on the Heritage At Risk Register (2011).

Gloucestershire's natural and historic environment makes an important contribution to the local economy in terms of its tourism value. Both minerals and waste development can have major impacts on their surroundings. Great care must be taken to ensure that such development does not intrude on the archaeological legacy of the County and does not

result in damage to their wider settings, or alter their relationship with the wider rural area around them.

Even where visible archaeological remains and elements of the historic environment are not destroyed by minerals development, their setting can be compromised either by the proximity of surface workings themselves or by unsympathetic structures or developments to the infrastructure supporting both surface and below ground minerals operations.

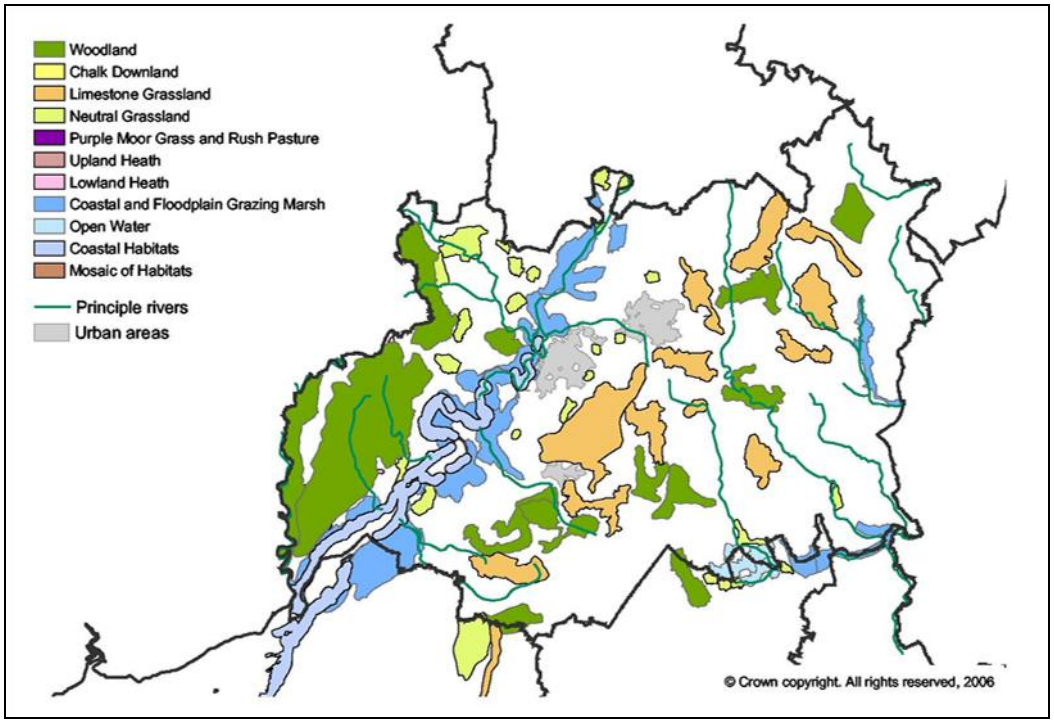
Increased levels of dust produced by minerals development may affect the setting of archaeological and historically significant sites even where these do not impact directly on the monument or structure itself.

Unsympathetic landscape restoration following minerals development can also have a major impact on the setting of surviving archaeological or historically significant remains and may significantly reduce the historic character and legibility of the landscape in which these are sited.

(For information on archaeology and the historic environment see Joint Technical Evidence Paper WCS-MCS 6 Archaeology and the Historic Environment http://www.gloucestershire.gov.uk/extra/article/107668/Evidence-Base-for-the-MCS)

Landscape

Gloucestershire's landscape is characterised by three broad distinct areas. From west to east these are: the Forest of Dean, the Severn Vale and the upland limestone areas of the Cotswolds and Stroud. The Upper Thames Valley, (although a smaller area) may also be regarded as relatively distinct in terms of its landscape character and features. In terms of a more detailed landscape character assessment, the County is divided into 33 distinct areas (See Appendix 3). The Gloucestershire Nature Map, launched in the Spring of 2008, identifies the main priority habitats in the County as: Woodland, Unimproved Limestone Grassland, Unimproved Neutral Grassland, Lowland Wetland Grassland and Healthland/Acid Grassland. (See below).



Gloucestershire Nature Map. From: http://gloucestershirebap.org.uk/actionplan/nature-map.php

The different geological formations and soils of each area have determined the nature of the vegetation within the County as well as its building styles and settlement patterns. Many local industries have also left their particular mark on the landscape.

There are five National Character Areas (NCA) within Gloucestershire. These are based on natural lines within the landscape and not on administrative boundaries. The five are Malvern Hills, Forest of Dean and Lower Wye, Severn and Avon Vales, Cotswolds, and Bristol, Avon Valleys and Ridges.

The Forest of Dean is situated on an upland trough of old red sandstone that has been overlaid twice by carboniferous limestone, and then by millstone grit containing iron ores and coal measures. It lies in a hilly area between the Rivers Wye and Severn and is still heavily forested with constrained access.

The Wye Valley, on the Forest of Dean's western boundary, is a designated Area of Outstanding Natural Beauty and contains some of the most important semi-natural woodland in Britain and some of the scarcest trees. The River Wye itself is also important as a largely natural system of high water quality and conservation interest. Settlement in the Forest has tended to be linear, following the watercourses and coal measures and villages are built of the grey-brown and red stone local to the area.

The Forest of Dean is one of England's largest ancient forests containing over 11,000 hectares of woodland. This area forms the largest single area of public access in the County, attracting over 1.5 million visits per year. The area of the Royal Forest still contains

extensive areas of old oak woods with abundant flora and fauna in a variety of different habitats.

The area also has a range of habitats on the coal measures and sandstone, which are scarce in the County as a whole. The historic industries of tin mining and coal mining have left local features such as abandoned spoil heaps and dismantled railways that, now regenerated, give distinctive character. ‘Free miners’ continue to operate very small coal mines in the area and there are many kilometres of old underground mine workings and extensive natural cave systems which have contributed to a nationally important population of rare lesser and greater horseshoe bats.

The Severn Vale is an area created by the floodplain of the River Severn between the foot of the Cotswold escarpment and the hilly area of the Forest of Dean. It is this area of the County that is most urbanised with Cheltenham and Gloucester and major transport routes concentrated through it. The designated Green Belt between Gloucester and Cheltenham has been successful in defining limits to urban areas, but in recent years it has come under increasing pressure in terms of the need for sustainable communities and efficient transport networks.

The Severn Vale is of particular significance for bird life, with several sites in the floodplain of the River Severn seasonally providing ideal conditions for wintering wildfowl. As an estuarine system the Severn Estuary is an internationally important site.

The area known as ‘The Cotswolds’ contains a number of different landscape character areas. The dramatic edge landscape of the main escarpment runs south west to north east and is very steep in places, resulting in a strong visual impact. The many indentations within the escarpment run into the Cotswolds. On the north west side of the escarpment are five hills known as outliers. Around Stroud and Winchcombe the landscape is more incised. In the northern part of the Cotswolds there is an area of high wold where the topography is softer with smaller and narrower valleys and broad plateau tops, which merge into a dip slope in the middle of the Cotswolds.

The Oolitic limestone belt from which the Cotswolds are formed has also resulted in unimproved limestone grassland habitat of great wildlife value. The grassland of commons, valleys and scarp contain ancient turf formed by grazing over many centuries and now support an abundance of attractive wild flowers and butterflies. They are also home to one of the prime areas of beech woodland in Britain. Beech woods are habitats for many scarce species. In addition, the unmistakable vernacular of Cotswold villages and towns has made it an international target for recreation and tourism.

The Upper Thames Valley, to the south / south east of the Cotswolds is dominated by the physical impacts of sand and gravel extraction. The development of recreation and natural areas in the Cotswold Water Park provide an excellent example of sensitive restoration of mineral workings. The lakes and wetland areas are gaining in wildlife importance, and increasing in national and international recognition.

The interrelationship between the above factors

There are obviously numerous and complex inter-relationships between all the baseline issues and factors that have been considered in this section of the report. For instance the protection, preservation and enhancement of Gloucestershire's natural environment – its biodiversity, landscape, flora, fauna, soil /air /water quality has a direct relationship with people's quality of life and the benefit to the local economy in terms of the numbers of tourists who visit the County. Population increases will have a significant impact in coming years. Gloucestershire may see pressure for houses and services having an impact on the environment.

In terms of mineral development a balance has to be struck between protecting Gloucestershire's environment, the amenity of its residents and visitors and providing minerals which are needed by society and from which we all derive benefit. Progress needs to be made in reducing the levels of primary minerals that are extracted, through the reduction, reuse and recycling of appropriate materials.

Arguably, of all the issues dealt with in this review of baseline, climate change has the greatest potential to have wide-spread and long lasting social, economic and environmental impacts.

APPENDIX 3 Subsidiary Questions

SOCIAL	SUB- QUESTIONS
1. To promote sustainable development and sustainable communities and improve the health and wellbeing of people living and working in Gloucestershire as well as visitors to the County.	-What are the potential health impacts on communities? - What are the potential health impacts on the employees at the site or facility?
2. To safeguard the amenity of local communities from the adverse impacts of mineral development.	- What are the impacts in terms of noise and vibration? - To what extent are there potential landuse conflict issues? -Are there any cumulative effects in terms of adverse impacts on environmental quality, social cohesion and inclusion or economic potential?
ECONOMIC	
3. To promote sustainable economic development in Gloucestershire giving opportunities to people from all social and ethnic backgrounds.	- Does the site present opportunities for spin off employment or other opportunities?
4. To provide employment opportunities in both rural and urban areas of the County, promoting diversification in the economy.	- How many new jobs are likely to be created? - How far will employees have to travel to work? - Are there opportunities for employees to use sustainable transport?
5. To ensure that mineral sites do not compromise the safety of commercial or military aerodromes.	- Is the site close to an aerodrome or low flying area? - Will the site or potential restoration of attract large numbers of birds?
6. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	
ENVIRONMENTAL	
7. To protect, conserve and enhance biodiversity in Gloucestershire.	- What are the potential impacts on sites which are Internationally and Nationally designated? - Are there any other potential significant impacts over and above the effects on designated sites - including on local sites, protected species and habitats and species of principle importance for biodiversity? - What potential is there for achieving biodiversity targets?

8. To protect, conserve and enhance the landscape in Gloucestershire.	- What are the impacts on AONB? - What is the likely impact on specific landscape character as detailed in Gloucestershire's Landscape Character Assessment? - What is the scope for landscape improvement
9. To restore mineral sites to a high standard in order to achieve the maximum after use benefits including the conservation and enhancement of biodiversity.	- Can the existisng landscape be enhanced? - What restoration issues are there? - Would the restored sites contribute to the Biodiversity 2020 targets?
10. To protect conserve and enhance Gloucestershire's material, cultural and recreational assets.	- What are the likely impacts on material, cultural and recreational assets? - Have any material assets been overlooked? - Will the development contribute to providing traditional building materials?
11. To protect conserve and enhance geodiversity in Gloucestershire.	- What if any are the likely impacts on geodiversity? - Will it enhance geodiversity?
12. To protect conserve and enhance the historic environment, heritage assets and their setting.	- What are the potential adverse effects on heritage sites of International importance and / or sites or buildings with a nationally recognised designation. - What are the impacts upon the wider historic landscape?
13. To prevent flooding, in particular preventing inappropriate development in the floodplain and to ensure that minerals development does not compromise sustainable sources of water supply.	-Can the risk of flooding be managed and reduced through site design? - Will surface water runoff be sustainably managed? - Is there the potential to protect and promote areas for future flood alleviation schemes?
14. To protect and enhance soil / land quality in Gloucestershire.	- What is the landtake? - Would it improve the soil quality?
15. To protect and enhance air quality in Gloucestershire.	- What is the proximity of sensitive receptors and to what extent can air emissions, including dust be controlled?
16. To protect and enhance water quality in Gloucestershire.	- What is the proximity of vulnerable surface or groundwater and what are the likely impacts on these features? - What are the impacts on water consumption?
17. To reduce the adverse impacts of lorry traffic on the environment and communities through means such as: a) reducing the need to travel	- What is the capacity of the site and transport infrastructure to support the sustainable movement of minerals and products arising from resource recovery?.

b) promoting more sustainable means of transport e.g. by rail or water c) sensitive lorry routing d) the use of sustainable alternative fuels	
18. To reduce contributions to and to adapt to Climate Change.	- How flexible or adaptable is the site or facility in terms of a) adapting to Climate Change and b) using new technology as it develops.