

***Planning for the Protection of European Sites:
Habitat Regulations Assessment (HRA)***



Main Report
for the
Gloucestershire Minerals Local Plan (MLP)

(Version 1.0 for Site Options & Draft Policy Framework Stage)
(June 2014)

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1.0 Introduction

1.1 The Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna – the ‘Habitats Directive’ provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of interest to the EU in a favourable condition. This is implemented through a network of protected areas referred to as European or Natura 2000 sites. The European Sites are of two types – Special Area of Conservation (SAC) and Special Protection Areas (SPA). SAC’s stem from the Habitats Directive, and are mainly habitat features, whereas SPA’s are features comprising populations of bird species. Each European Site has a number of qualifying features, for which conservation objectives have been developed.

1.2 The ‘Habitats Directive’ is implemented into national law through the Conservation of Habitats and Species Regulations 2010 (as amended) or ‘Habitats Regulations’. Regulation 102 (1) to (5) provides a statutory obligation for land use plans such as the Minerals Local Plan (MLP):

(1) Where a land use plan —

- (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and**
- (b) is not directly connected with or necessary to the management of the site, the plan-making authority for that plan must, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site’s conservation objectives.**

(2) The plan-making authority must for the purposes of the assessment consult the appropriate nature conservation body and have regard to any representations made by that body within such reasonable time as the authority specify.

(3) They must also, if they consider it appropriate, take the opinion of the general public, and if they do so, they must take such steps for that purpose as they consider appropriate.

(4) In the light of the conclusions of the assessment, and subject to regulation 103 (considerations of overriding public interest), the plan-making authority or, in the case of a regional strategy, the Secretary of State must give effect to the land use plan only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

Regulation 61(1) of the Conservation of Habitats and Species Regulations 2010 (“the Habitats Regulations”) in addition provides for any plan or project (e.g. planning application for a minerals development):

(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which —

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications for that site in view of that site's conservation objectives

Part (1)(a) of both Regulations above is sometimes known as the ‘Likely Significant Effect Test (LSE)’.

1.3 The LSE test is a precautionary case by case judgement of the likelihood of a significant effect occurring upon a European Site. English HRA guidanceⁱ advises that ‘likely’ means “probably” and not merely that it is a fanciful possibility. A ‘significant’ effect should be regarded as one that undermines the conservation objectives of a European Site (The European Court of Justiceⁱⁱ). The continued ecological functioning of a European Site is important and not just the proportion or area of a site that is predicted to be impacted uponⁱⁱⁱ. So

1.4 Gloucestershire County Council as Mineral Planning Authority (MPA) is a competent authority under Regulation 7 of the Habitats Regulations. This means that before adopting the Minerals Local Plan it must carry out a Habitats Regulations Assessment (HRA) to determine whether the development plan is likely to result in a significant effect on any European Site.

1.5 The National Planning Policy Framework^{iv} paragraphs at 14, 118, 119 and 192 support the need for HRA in relevant circumstances. In relation to Ramsar sites it is government policy to apply the HRA process to these wetland sites of international importance as though they are European Sites. This assists the government in meeting its obligations under the Ramsar Convention.

1.6 The Minerals Local Plan is a spatial vision with strategic objectives and policies for managing Gloucestershire's mineral resources over the next 15 years. This means that when it is adopted, it will form part of the statutory development plan for Gloucestershire and will be used for determining planning applications for minerals development. It does not consent development in itself which is an important point to remember in terms of the detail required for the HRA process to be completed for the MLP. Consideration of the implications of the adoption of the Minerals Local Plan, alone or in combination with other plans and projects, upon any European Site is made herewith which drawing upon relevant sources of evidence, information, guidance and the views of consultees, including the general public.

2.0 Potential Impacts of Minerals Development on European Sites

2.1 The objective for minerals planning should be to permit and locate development so that it has minimal or positive impact on biodiversity overall (Preferred Options MPO10 & MPO12^y). This is achieved through a combination of strategic planning (i.e. the MLP) and determination of planning applications. In respect of European Sites the potential detrimental effects of minerals extraction that may need to be considered by the two planning stages are summarised in Table 1 below.

Table 1: Checklist of potential site vulnerabilities that might be considered at strategic planning and/or planning application stages (Minerals only)

Broad categories of potential impacts on European Sites	Examples of Minerals operations/impacts identified relevant to European Sites in and in the vicinity of Gloucestershire
Physical loss and damage (habitat/species/substrates and site integrity/habitat fragmentation)	<ul style="list-style-type: none">• Direct loss of site features through excavation and other associated minerals development• Erosion/compaction of soil/vegetation due to construction phase or after-use once restored• Changes in stability, slope and landform
Disturbance (interference with species behaviour - breeding/migration/foraging patterns)	<ul style="list-style-type: none">• Noise/visual presence of machinery, vehicles, people and new structures (during and after development)• Increase in lighting levels• Changes in atmospheric conditions of underground bat roosts if there are proven or likely to be present subterranean connections between a quarry and roosting site
Contamination (toxic and non-toxic)	<ul style="list-style-type: none">• Dust (to air, water, substrates, vegetation)• Import/export & movement of minerals/minerals waste/topsoil/infill material• Litter• Water pollution (surface & ground water)• Soil pollution• Vehicle/machinery emissions (to air)
Changes to hydrology	<ul style="list-style-type: none">• Changes in surface & ground water levels due to increased abstraction/drainage/flooding• Changes in turbidity• Changes in flow/run-off• Changes to water availability• Changes to siltation/sedimentation of water bodies
Ecosystem change	<ul style="list-style-type: none">• Restoration scheme, aftercare & natural succession• Introduction/risk of non-native species or other threatening species

2.2 In 2006 in the very early stages of the current minerals (and waste) planning process Natural England provided the County Council with a summary of potential impacts with respect of the European Sites and this was incorporated into the HRA Evidence Gathering / Baseline Report^{vi} that accompanies this document.

2.3 However during and after the extraction of minerals there can also be opportunities to contribute to the conservation and enhancement of biodiversity as part of a wider spatial picture. This is covered in more detail in the Minerals Local Plan Planning and Environmental Considerations Evidence Paper (2014).

3.0 Consultation

3.1 The HRA process followed by the MPA is compliant with Habitats Regulation 102 (2) and 102(3) as well as the County Council's Statement of Community Involvement which is available at

<http://www.gloucestershire.gov.uk/extra/article/107999/Statement-of-Community-Involvement-SCI> . This has ensured that information has been made freely available and that consultees and the general public have had full opportunity to make representations and to participate in the decision making process. MLP documentation including the HRA has been made accessible via the webpage at <http://www.gloucestershire.gov.uk/extra/article/107647> . HRA documents subject to advertisement and consultation in the past, present and proposed includes:

Issues & Options Consultation 2006 – 2007 ✓

HRA (AA) Evidence Gathering / Baseline Report (February 2007) – now superseded

HRA Report on Gloucestershire MCS Issues & Options Paper (May 2007) – archived

Preferred Options Consultation 2008 ✓

HRA Report on Gloucestershire MCS Preferred Options Paper (January 2008) – now incorporated into new HRA Main Report (see below)

Site Options & Draft Policy Framework consultation summer 2014 (CURRENT STAGE)

HRA Evidence Gathering / Baseline Report (Update 4)

HRA Main Report (New)

Pre-Publication Draft (PROPOSED)

HRA Evidence Gathering / Baseline Report (**Update but only if required**)

HRA Main Report (**Updates as required**)

Publication and Submission (PROPOSED)

HRA Evidence Gathering / Baseline Report (**Update but only if required**)

HRA Main Report (**Updates as required**)

Examination in Public and Adoption (PROPOSED)

HRA Main Report (**Updated as required**)

HRA Addendum Review of any Modifications made to the MLP (**if required prior to Adoption**)

3.2 There has been ongoing dialogue and meetings with statutory advisers Natural England and the Environment Agency to look at the HRA process and judgements that could be made. In 2013 the HRA Evidence Gathering / Baseline Report Update 2 document was revised to an Update 3 version due to changes in government policy and legislation. This was then shared with Natural England and the Environment Agency in 2013 so as to produce an acceptable new version (Update 4) for the Site Options and Draft Policy Framework Consultation and subsequent stages.

3.3 The MPA considers that the opinions of the general public and relevant consultees have been taken into account and that relevant consultation has taken place concerning the HRA. Relevant information has been sought and provided to inform the HRA of the MLP. Through consultation the responses received by the MPA have been (and will be) considered and evaluated as part of the HRA process.

4.0 Methodology

4.1 The HRA methodology used follows best practice and guidance that has been developed and produced by the Department for Communities and Local Government^{vii}, Natural England^{viii}, Assembly of Wales^{ix} and Scottish Natural Heritage^x. This guidance is in accordance with the precautionary approach of the Habitats Directive and any scientific or regulatory or planning uncertainty has been dealt with in a suitable manner^{xxii}. Further details of HRA can also be found in the European Commission guidance produced in 2001^{xiii}, in the ODPM Circular 06/2005^{xiv} and recently in a consultation draft guidance document issued by Defra in 2012^{xv} although this latter document is focused on the project or planning application stage.

4.2 The HRA of the MLP can help to influence the general nature, scale and location of future development proposals so that there is not likely to be a significant effect on a European Site alone or in combination with other plans and projects. The process can inform us of when further assessments may be required and/or where criteria must be met at the planning application stage. The HRA of Local Plans should also rule out aspects (options, such as objectives, site allocations or policies) that would be obviously vulnerable to legal failure and unlikely to be able to be implemented at the planning application stage even with mitigation measures in place^{xxvii}.

4.3 The HRA of a plan such as the MLP is likely by its nature to be less specific and detailed than the assessment of an individual planning application would be. In most cases, it is not be possible to subject a development plan to the same level of assessment as can be applied to a specific development project under the Habitats Regulations. There is not normally the same level of information available at the strategic Local Plan stage as this can only properly be produced later at the planning application stage. The MLP does not consent development in itself so the HRA can only be as rigorous as can reasonably be undertaken, so as to enable the Habitats Directive and Regulations to be complied with and the plan adopted^{xviiiixxxx}. At the Examination in Public of the Gloucestershire Waste Core Strategy in 2012 legal opinion, based on the High Court Feeney judgement (Feeney vs. Oxford City Council CO/3797/2011), confirmed this view. In the Counsel Note to the Inspector, Mr Anthony Crean QC stated that *“the Law recognises that high level strategic plans which make land allocations which anticipate further, more detailed proposals are allowed to be more general in their anticipation of effect. You can only know what you can know. You can only assess what you can assess. If a strategic high level plan can only be brought forward three years in advance of a detailed proposal then it plainly cannot discount all the possible effects of such a proposal on a SAC. The most it can do is provide a framework within which the latter application will be approved only if it meets the requirements of the Habitats Directive. Any other solution would bring an end to forward planning. The judge in Feeney dealt with this point in this way”*.

4.4 The first step of the Habitat Regulations Assessment (HRA) process is to screen the MLP to determine if aspects of the plan are likely to have a significant effect on a European Site either alone or in combination with other plans or projects

(European Commission Stage One^{xxi}). If no likely significant effects are concluded then this would complete the HRA and the competent authority can then safely adopt the Local Plan.

4.5 If the MLP could have a likely significant effect, which cannot be avoided by removing or changing aspects of the plan including the use of suitable caveats or criteria, then the HRA must move on to determine which aspects will adversely affect the integrity of the site in terms of its nature conservation objectives. This is referred to as Appropriate Assessment (AA) (European Commission Stage Two). Where negative effects are identified in the AA other options should be examined to see if any potential damaging effects could still be avoided (European Commission Stage Three). If it is not possible to identify mitigation and/or alternatives to avoid a likely significant effect on a European Site then the MLP cannot be adopted unless it can be established that there are 'imperative reasons of overriding public interest' (IROPI). This is not considered a standard part of the process and is only carried out in exceptional circumstances involving notification to and agreement with the Secretary of State (European Commission Stage Four).

4.6 As said in Section 2 above there is an accompanying document to this one called HRA Evidence Gathering / Baseline Report (Update 4). This is where the full details of the relevant European Sites are held which includes their conservation objectives and vulnerabilities to development. To summarise European Sites in Gloucestershire or within 15km of its administrative boundary are:

- **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 – (Stroud, Cotswold, Tewkesbury)
- **Bredon Hill** SAC – (Worcestershire)
- **Walmore Common** SPA, Ramsar – (Forest of Dean)
- **Severn Estuary** SPA, SAC, Ramsar – (Stroud, Forest of Dean, South Gloucestershire, Monmouthshire, Bristol City, North Somerset, Newport, Cardiff, Vale of Glamorgan)
- **Avon Gorge Woodlands** SAC – (City of Bristol)

4.7 For convenience a map (Figure 1) of these sites is reproduced below from the HRA Baseline Report. The Baseline Report as well as mapping and describing the European Sites also suggests other plans and projects which might need to be considered in combination with the MLP as part of the HRA process.

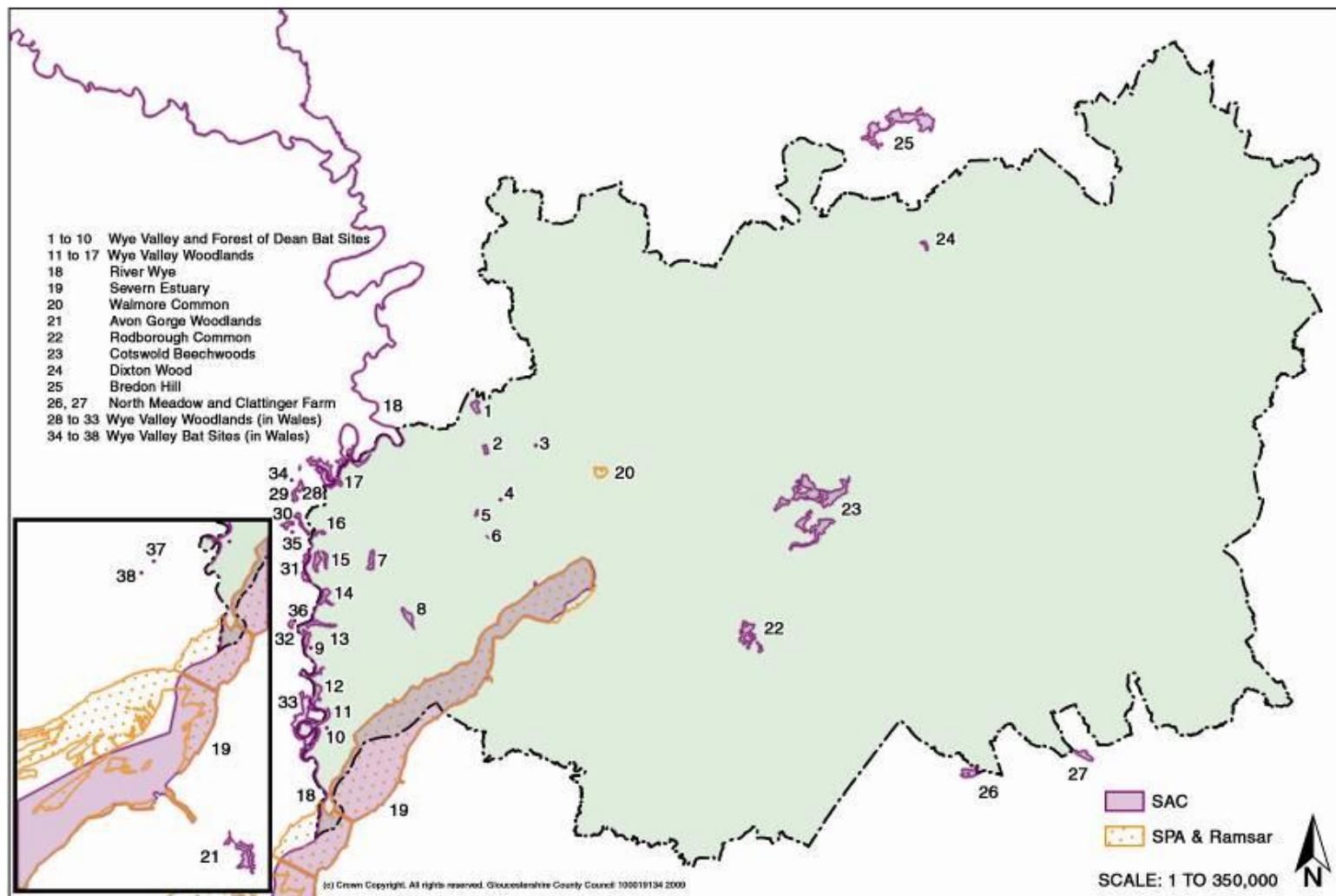


Figure 1: European Sites in and within 15km of Gloucestershire's boundary

5.0 HRA Screening (European Commission^{xxii} Stage One)

5.1 Screening Preferred Options (complete)

5.1.1 In January 2008 an HRA Report^{xxiii} on a Preferred Options Paper for mineral planning was produced. It appraised all the options and many of these were deemed to have no likely significant effect (NLSE) and could be screened out. However for a few options in relation to some European Sites uncertainty remained and these were not screened out (Table 2). Also at Appendix 1 is a reproduction of what appeared in this earlier HRA Report.

Table 2: Preferred Options that could not be screened out of the HRA as at 2008

Preferred Option	European Site(s) upon which the HRA had an <u>uncertain</u> conclusion as to the likely effects (precautionary principle being applied)
MPO3a: Preferred Option for Crushed Rock: <i>seeks to ensure sufficient provision is made to deliver the remaining local apportionment for crushed rock in Gloucestershire (presently 2006 to 2016).</i>	River Wye (SAC) Wye Valley & Forest of Dean Bat Sites (SAC) Wye Valley Woodlands (SAC)
MPO3c: Preferred Option for Crushed Rock: <i>Proposes a local re-assessment within the county resources of delivering Gloucestershire's local apportionment.</i>	Dixton Wood (SAC) River Wye (SAC) Rodborough Common (SAC) Wye Valley & Forest of Dean Bat Sites (SAC) Wye Valley Woodlands (SAC)
MPO4a: Preferred Option for Sand & Gravel: <i>Seeks to ensure sufficient provision is made to meet the remaining local apportionment of sand & gravel for Gloucestershire (presently 2006 to 2016).</i>	North Meadow & Clattinger Farm (SAC) Severn Estuary (SAC/SPA/Ramsar)
MPO4b: Preferred Option for Sand & Gravel: <i>Supports a longer landbank provision through to 2026, which is 10 years beyond the end of the guideline period.</i>	North Meadow & Clattinger Farm (SAC) Severn Estuary (SAC/SPA/Ramsar)
MPO4c: Preferred Option for Sand & Gravel: <i>Proposes a more strategic / sub-regional approach to sand & gravel provision.</i>	North Meadow & Clattinger Farm (SAC) Severn Estuary (SAC/SPA/Ramsar)
MPO5a: Preferred Option for Sand & Gravel locations: <i>Proposes a more dispersed strategy for future sand & gravel working.</i>	North Meadow & Clattinger Farm (SAC) Severn Estuary (SAC/SPA/Ramsar) Walmore Common (SPA/Ramsar)
MPO14: Preferred Option for 'Transport': <i>Proposes an overarching policy principle, which will look to support sustainable forms of transporting minerals – such as rail, sea and water, ahead of road haulage.</i>	River Wye (SAC) Severn Estuary (SAC/SPA/Ramsar)

5.1.2 It was understood that most of these options would be further worked up into draft policy later. This meant they would be better appraised at a later stage of the MLP process and potentially they could be screened out by the HRA then. Natural England commented in 2006 that they would be looking for a greater MLP clarity at the 'allocations' or as it is now called the 'Site Options & Draft Policy Framework

stage. The Environment Agency at the same time stated that they had a particular interest in the River Wye and Severn Estuary European Sites and that their involvement in the HRA process would add value as it progressed.

5.2 Screening Site Options & Draft Policy Framework (currently under consultation)

5.2.1 Table 3 below summarises the findings of the first three steps that have been used for the Stage One Screening process. This has followed the most recent United Kingdom guidance for HRAs of Development Plans^{xxiv} which advocates sequential screening and re-screening as a plan evolves.

Table 3: Screening of certain options alone (Steps 1 to 3)

Aspect categories of the MLP which would <u>not</u> be likely to have a significant effect on a European Site	Relevant Site or Policy Options
General policy statements, strategic aspirations or general criteria based policies (Step 1)	<p>Draft Policy Framework (Options):</p> <p>Drivers for Change Spatial Vision Strategic Priorities Key Diagram Presumption in Favour of Sustainable Development Options for Safeguarding the Limestone Resource Options for Safeguarding the Sandstone Resource Options for Safeguarding the Sand and Gravel Resource Options for Safeguarding the Coal Resource Options for Safeguarding Other Resources Mineral Safeguarding Areas Standing Advice for Implementation of the Policy for Mineral Safeguarding Areas Safeguarding Policy for Minerals Infrastructure Strategic Policy Aim for Primary Aggregate Minerals - Meeting the Need Strategic Policy Aim for Primary Aggregate Minerals - Identifying Future Supply Areas Policy for Preferred Areas for Aggregates Building Stone Brick Clay Engineering Clay Strategic Aim for the Cotswold Water Park</p> <p>Site Options:</p> <p>None</p>
Aspects excluded from the appraisal because they are not proposals generated or implemented by the MLP [even if referred to by the MLP] (Step 2)	<p>Draft Policy Framework (Options):</p> <p>None</p> <p>Site Options:</p> <p>None</p>
Aspects which protect the natural environment, including biodiversity, or conserve or enhance the natural, built or historic environment. Should result in a beneficial or neutral result. (Step 3a)	<p>Draft Policy Framework (Options):</p> <p>Small Scale Coal Underground Mines Water Quality Landscape Biodiversity & Geodiversity</p>

Aspect categories of the MLP which would <u>not</u> be likely to have a significant effect on a European Site	Relevant Site or Policy Options
	<p>Historic Environment Development Management Criteria for the Historic Environment Restoration Development Management Restoration Policy Mitigation of Environmental Effects Planning Obligations Cumulative Impact Buffer Zones Existing Policy E15 Protecting the Local Environment – Cotswold Water Park</p> <p>Site Options: None</p>
Aspects which themselves will <u>not</u> lead to development or other change that could have a likely significant effect (Step 3b)	<p>Draft Policy Framework (Options): Opcast Coal Re-working of Colliery Spoil Tips Conventional & Unconventional Hydrocarbons Sustainable Transport Safeguarding Aerodromes Soils</p> <p>Site Options: None</p>
Aspects which make provision for change but which could have no conceivable effect on a European Site, because there is no link or pathway between them and the qualifying interests, or any effect would be a positive or neutral effect, or would not otherwise undermine the conservation objectives for the site (Step 3c)	<p>Draft Policy Framework (Options): Mineral Working in the Green Belt</p> <p>Site Options: CRFD1 Stowe Hill/Clearwell (Parcels A & D only) CRFD2 Drybrook CRFD3 Stowfield CRCW1 Daglingworth CRCW2 Huntsmans CRCW3 Three Gates CRCW4 Oathill SGCW1 Dryleaze Farm/Shorncote SGCW2 Cerney Wick/Oaktree Fields (Parcels B & C) SGCW3 Horcott/Lady Lamb Farm SGCW4 Kempsford/Whelford SGCWS Down Ampney SGCW6 Charlham Farm SGCW7 Wetstone Bridge SGCW8 Spratsgate Lane SGTW1 Page's Lane SGTW2 Redpools Farm</p>
Aspects which make provision for change but which are likely to have no significant effect on a European Site (<u>minor residual effects</u>) alone, because any potential effects would be so restricted that they would not undermine the conservation objectives for the site (Step 3d). However taking a precautionary approach some uncertainty remains either alone but particularly in considering cumulative	<p>Draft Policy Framework (Options): None</p> <p>Site Options: CRFD1 Stowe Hill/Clearwell (Parcels B & C only – roosting/commuting/foraging bats from WV & FoD SAC and commuting/foraging bats Wye Valley Woodlands) SGCW2 Cerney Wick/Oaktree Fields (Parcel A) - Hydrological impact on North Meadow & Clattinger Farm SAC CRFD4 Hewelsfield (commuting/foraging bats from Wye Valley Woodlands SAC)</p>

Aspect categories of the MLP which would not be likely to have a significant effect on a European Site	Relevant Site or Policy Options
impacts alongside other plans and projects. Proceed to Step 4 (in combination assessment)	
Aspects which are too general so that it is not known where, when or how the aspect of the plan may be implemented, or where any potential effects may occur, or which European Sites, if any, may be affected (Step 3e)	<p>Draft Policy Framework (Options): Proposals for the Working of Aggregates Outside of Preferred Areas Strategic Policy Aim for Alternative Aggregates Flood Risk Ancillary Development Borrow Pits Public Rights of Way</p> <p>Site Options: None</p>

5.2.2 MLP options identified by Steps 1, 2, 3a, 3b, 3c & 3e can be safely screened out alone. In combination with other options or external plans or projects these elements could have no likely or identifiable significant cumulative effect on a European Site. Options that could have minor residual effects (as identified by Step 3d) could not have a likely significant effect alone but might do so in combination with other MLP options or external plans or projects. So because of this and taking a precautionary approach options picked up at Step 3d need to be carried forward to a further Step 4. More details of Steps 1 to 4 now follow.

5.2.3 **Step 1** has looked at general policy statements, strategic aspirations or general criteria based policies^{xxv} that are unlikely to have a significant effect on a European Site. In the MLP and 20 Draft Policy (Options) have been identified that can be screened out at Step 1. This is a large proportion of the draft policy (options) and it is quite normal for an HRA of a plan that guides development at a strategic level. Included here is the MLP's overall Spatial Vision, Strategic Priorities, Strategic Aims, Drivers for Change and various draft safeguarding policies. Some of these policies included beneficial statements in respect of protecting the environment and hence European Sites e.g. policies for Brick Clay, Meeting the Need for Primary Aggregate Minerals and Strategic Priorities. The safeguarding policies provide a background to the chosen Site Options of the MLP but in themselves do not promote development proposals directly that could affect European Sites.

5.2.4 **Step 2** has looked at options referring to other projects and plans but not proposed or being implemented by the MLP. A useful question to ask here was “*Is the project/plan provided for/proposed as part of another plan/project, by another competent authority, and would it be likely to proceed under the other plan/project irrespective of whether the MLP is adopted?*” If the answer was “yes”, then it would be right to screen out the option at this step. However no MLP options were

identified as being able to be screened out at Step 2. This probably reflects the fact that the MLP is well focused on planning for future minerals development.

5.2.5 **Step 3** is all about identifying options that could have no likely significant effects at all or at the most minor residual effects. The first part is **Step 3a** which looks at draft policy (options) that should result in a beneficial or neutral result on the natural, built or historic environment as the intention is to protect or enhance it. Here 13 draft policy (options) were identified. An obvious beneficial draft policy is that for Biodiversity & Geodiversity which includes generic protection for all European Sites. A generic draft policy such as the one for Biodiversity & Geodiversity should only be included where it has been demonstrated that it is actually warranted and that a more focused policy on a particular topic or location cannot be compiled instead. The Biodiversity & Geodiversity draft policy has been deemed necessary for the MLP because Gloucestershire has a lot of European Sites within and just beyond its boundaries. This often makes it difficult to rule out internationally designated sites as a relevant consideration at the planning application stage. It might be thought that the Biodiversity & Geodiversity draft policy would be enough to make all the other aspects of the MLP safe under the Habitats Regulations (Directive). However all other draft policy (options) must be screened to make sure there is nothing in the MLP that obviously or seriously undermines the protection given to European Sites under the proposed generic draft policy.

5.2.6 Other neutral result or beneficial draft policies for European Sites screened out at Step 3a include those covering Restoration, Water Quality, Cumulative Impact, Buffer Zones, Landscape and the Historic Environment.

5.2.7 **Step 3b** looks for draft policy (options) that in themselves will not lead to development or other change that could have a likely significant effect on a European Site. Six (6) options fell into this category and could be screened out. Four of the policies include statements about protecting the environment. The other two (agricultural) Soils plus Aerodrome Safeguarding are deemed to result in no changes or neutral changes to existing land use and so would not be likely to have a significant effect on European Sites.

5.2.8 **Step 3c** identifies site options which although they make a provision for change such change could have no conceivable effect on a European Site because there is no link or pathway to the protected qualifying interests. Alternatively the change that could come about by the MLP option is one that would have only a positive or neutral effect and not undermine the European Site's conservation objectives. Here 18 options were identified of which only one was a policy option.

5.2.9 The policy of Mineral Working in the Green Belt does not relate to an area very close to any European Site except for perhaps the Cotswold Beechwoods SAC. In any case mineral development in the Green Belt and in the vicinity of the Cotswold Beechwoods SAC is very unlikely given the policy wording. It refers to highest

environmental standards for any development to be allowed to be permitted and that this would be likely to only occur in special circumstances and take account of all other draft policies particularly that on Biodiversity & Geodiversity which protects European Sites. Only development that clearly has no impact on a European Site would clearly be possible under this policy and so it can be screened out at Step 3c.

5.2.10 In considering Site Option **CRFD1 Stowe Hill/Clearwell** it is noted that Wye Valley Woodlands SAC is about 1.5km at its closest point to parcel D and Wye Valley and Forest of Dean Bat sites SAC is less than 1km to parcels B and C. Parcel D is already an active minerals site with some parts already restored. It is covered by an agreed restoration scheme that will deliver real biodiversity enhancements including calcareous grasslands, wetland areas, woodland and hedgerows all of which would benefit any commuting and foraging horseshoe and other bats arising from either SAC. Parcel D has already been through previous planning processes and screening has determined that that there would not be (and has not been) a likely significant effect on these European Sites. Parcel A is adjacent to parcel D and is intensive arable with one short mature hedgerow. The loss of this short hedgerow would be easily compensated through the adjacent restoration scheme and not be likely to measurably fragment bat foraging and commuting in the area. So for **parcels A and D** it is logical to conclude that continuing minerals development at Stowe Hill/Clearwell would not result in any conceivable effect on any conservation objectives of the SAC or any other European Site. However *Parcels B and C at CRFD1 Stowe Hill/Clearwell, due to their closer position to Wye Valley and Forest of Dean Bat sites SAC, are assessed under Step 3d below as there is some potential for minor effects (on underground bat roosts) to occur.*

5.2.11 Site Option **CRFD2 Drybrook** (all parcels) has been screened out because there are no European Sites nearby or with a pathway present to result in any conceivable effect on any conservation objectives. The nearest European Site is the Wye Valley and Forest of Dean SAC at about 1.6km at its closest point (north east) and 1.8km to the south east beyond the village of Drybrook. It is deemed too distant to be possible that there are any significant underground connections to bat roosts in the SAC or that effects of continuing minerals extraction would have any significant effect on foraging or commuting bats as no real barriers to movement or loss of crucial habitat for these species would be likely to occur.

5.2.12 Site Option **CRFD3 Stowfield** has been screened out because there are no European Sites close enough or with a pathway present to result in any conceivable effect on conservation objectives. The nearest European Site is the Wye Valley Woodlands SAC at about 1.5km at its closest point (south west). It is deemed too distant to be possible that the effects of mineral extraction could have a likely significant effect on the listed habitats or lesser horseshoe bats. No barriers to bat movement or loss of important habitat or underground roosting areas could occur. Parcel B is part of an active quarry and consented minerals extension which has

already been screened by previous planning processes and deemed that there would be not likely significant effect on any European Site. Parcel A constitutes a very small linear extension of narrow width to the already consented parcel B and is further away than Parcel B from any part of the Wye valley Woodlands SAC.

5.2.13 The nearest European Site to Site Option **CRCW1 Daglingworth** is Cotswold Beechwoods SAC which at its closest point (Parcel A) is over 9km away. This is deemed to be very distant and no pathway is present from continuing minerals development at Daglingworth that would result in any conceivable effect on conservation objectives of the SAC or any other European Site. Site Option CRCW1 Daglingworth can therefore be safely screened out.

5.2.14 In considering Site Option **CRCW2 Huntsmans** the closest European Site is Dixton Wood SAC at almost 14km away. This is deemed to be very distant and no pathway is present from continuing minerals development at Huntsmans that would result in any conceivable effect on conservation objectives of the SAC or any other European Site. Site Option CRCW2 Huntsmans can therefore be safely screened out.

5.2.15 Site Option **CRCW3 Three Gates** has no European Sites nearby with the closest being Dixton Wood SAC at over 10km away from parcel B. This is deemed to be very distant and no pathway is present from minerals development at Three Gates that would result in any conceivable effect on conservation objectives of the SAC or any other European Site. Site Option CRCW3 Three Gates can therefore be safely screened out.

5.2.16 Site Option **CRCW4 Oathill** does not sit near to any European Site with the closest being Dixton Wood SAC at almost 12km away. This is deemed to be very distant and no pathway is present from continuing minerals development at Oathill that would result in any conceivable effect on conservation objectives of the SAC or any other European Site. Site Option CRCCW4 Oathill can therefore be safely screened out.

5.2.17 Site Option **SGCW2 Cerney Wick/Oaktree Fields** Parcel B lies at its closest point about 225 metres from North Meadow which is part of the European Site North Meadow & Clattinger Farm SAC. Parcel B (Cerney Wick Farm) and additionally Parcel C (Oaktree Fields) have consented minerals development associated with them. Crucially Parcel B has had an HRA completed in connection with the minerals development which concluded that there would be no adverse effect on the integrity of the SAC (North Meadow) if certain restrictions were put in place^{xxvi}. Natural England agreed this position in a letter to the Mineral Planning Authority dated June 2007^{xxvii}. Such restrictions as were required were made part of consent CT.2648/3/L (06/0003/CWFUL) including a S.106 legal agreement that is being implemented. The main restriction, and one relevant to the HRA screening exercise here, is that a 450 metre buffer zone around North Meadow has been established. Inside this zone no

minerals extraction can occur unless it can be concluded from hydrological or botanical monitoring that there could not be a likely significant effect (or any adverse impact on the integrity of North Meadow as part of the wider SAC). This is condition 34 of CT.2648/3/L (06/0003/CWFUL). Hydrological monitoring over a wide number of points has been carried out for a number of years now. The legal agreement established a Cerney Wick Management and Liaison Committee (MLC) and this now sits to review the monitoring evidence on at least an annual basis. Currently there is no evidence to suggest that the precautionary 450 metre buffer is insufficient distance to ensure protect of the European Site. Given this fact it is logical to conclude that the consented parcels are unlikely to have a significant effect on the SAC. Parcel A (which is 1.6km away from North Meadow) however would be a new minerals development and so *it has been decided to look at parcel A under Step 3d below.*

5.2.18 In considering Site Option **SGCW1 Dryleaze Farm/Shorncote** the nearest European Site is North Meadow & Clattinger Farm SAC which is over 2km away (Clattinger Farm) at its closest point (Parcel A). North Meadow the other part of the SAC sits to the east and is almost 5.6km away from Parcel B. To the immediate south lies a confirmed Wiltshire minerals site allocation U22 (Land at Cotswold Community) which has been screened by the HRA^{xxviii} in connection with the Wilshire & Swindon Minerals Site DPD. The conclusion for this Cotswold Community land allocation is that there would be no likely significant impact alone or in combination with other plans and projects upon North Meadow & Clattinger Farm SAC. Given that the Cotswold Community land is situated mainly between Dryleaze and the European Site and that it is in the same part of the catchment then continuing minerals development at Dryleaze Farm/Shorncote should not result in any conceivable effect on the conservation objectives of the SAC or any other European Site. Site Option SGCW1 Dryleaze Farm/Shorncote can therefore be safely screened out.

5.2.19 Site Option **SGCW3 Horcott/Lady Lamb Farm** does not sit near any European Site with the closest being North Meadow & Clattinger Farm SAC at almost 5.8km away (Parcel B). Given the distance away but more importantly the position in the catchment it is deemed that continuing minerals development at Horcott/Lady Lamb Farm would not result in any conceivable effect on conservation objectives of the SAC or any other European Site. Site Option SGCW3 Horcott/Lady Lamb Farm can therefore be safely screened out.

5.2.20 In considering Site Option **SGCW4 Kempsford/Whelford** the nearest European Site is North Meadow & Clattinger Farm SAC which is over 6.7km away (North Meadow) at its closest point (Parcel B). Given the distance away but more importantly the position in the catchment it is deemed that continuing minerals development at Kempsford/Whelford would not result in any conceivable effect on conservation objectives of the SAC or any other European Site. Site Option SGCW4 Kempsford/Whelford can therefore be safely screened out.

5.2.21 Site Option **SGCWS Down Ampney** Parcel D sits about 360m away from North Meadow which is part of the European Site North Meadow & Clattinger Farm SAC. The other Down Ampney parcels are at further distance from this SAC as follows: Parcel A (about 950m), Parcel B (1.4km), Parcel C (1.5km) with Parcel E the most distant. The closest three parcels D, A plus E (the most distant) have been the subject of a recent cross border planning application. Parcel A is the Gloucestershire component whereas D and E lie in the adjoining county of Wiltshire. This planning application has been subject of HRA and a letter dated 29th December 2011 from Natural England^{xxix} confirmed the view of both County Mineral Planning Authorities that the Down Ampney development would not result in any hydrological or other effect on any conservation objectives of the SAC. In conclusion it is logical that Site Option SGCWS Down Ampney can be safely screened out.

5.2.22 Parcels B and C at **SGCW6 Charlham Farm** are outside Gloucestershire in the adjoining county of Wiltshire. The nearest European Site to Charlham Farm is North Meadow & Clattinger Farm SAC which is about 1.9km away (North Meadow) to the south of Parcels A & C. Given the conclusions about Down Ampney above then no likely significant effect on the European Site from minerals development at Charlham Farm is the obvious conclusion. The distance away but more importantly the position of the site option in the catchment it is deemed that minerals development at Charlham Farm would not result in any conceivable effect on conservation objectives of the SAC or any other European Site. Site Option SGCW6 Charlham Farm can therefore be safely screened out.

5.2.23 Parcel B at **SGCW7 Wetstone Bridge** is outside Gloucestershire in the adjoining county of Wiltshire. The nearest European Site is North Meadow & Clattinger Farm SAC which is about 2.8km away (North Meadow) to both parcels of this site option. Wetstone Bridge adjoins the Down Ampney Site Option on the south eastern side which is discussed above and has been screened out. Roundhouse Farm is also adjacent and lies to the immediate east. This Wiltshire site has been granted a minerals consent which was based on a conclusion that there would be no likely significant impact on North Meadow & Clattinger Farm SAC. Wetstone Bridge itself is the subject of a minerals development proposal and a significant effect on the SAC has also not been identified. In conclusion it is logical that Site Option SGCW7 Wetstone Bridge can be safely screened out.

5.2.24 In considering Site Option **SGCW8 Spratsgate Lane** the nearest European Site is North Meadow & Clattinger Farm SAC which is almost 2.2km away (Clattinger Farm). This site option has been the subject of proposed minerals development and a likely significant effect on the SAC has not been an issue. Just to the north and west sits Dryleaze Farm (see above) and also the Wiltshire minerals allocation at the Cotswold Community neither of which has it been concluded there could be any likely significant effect on the SAC. Given the distance away but more importantly the position in the catchment it is deemed that minerals development at Spratsgate Lane would not result in any conceivable effect on conservation objectives of the SAC or

any other European Site. Site Option SGCW8 Spratsgate Lane can therefore be safely screened out.

5.2.25 Site Option **SGTW1 Page's Lane** is not located very near any European Site with the closest being Bredon Hill SAC at about 4.7km away from Parcel C. Although Page's Lane sits within land associated with the River Severn catchment the Severn Estuary SAC/SPA/Ramsar site is at least 32km away. This is deemed to be very distant and no pathway is present from having minerals development at Page's Lane that could result in any conceivable effect on conservation objectives of the estuary or any other European Site. Site Option SGTW1 Page's Lane can therefore be safely screened out.

5.2.26 In considering the Site Option **SGTW2 Redpools Farm** it has been determined that the nearest European Site is Bredon Hill SAC which is about 5.4km away from Parcel D. Although Redpools Farm sits within the River Severn catchment the Severn Estuary SAC/SPA/Ramsar site is at least 31km away. This is deemed to be very distant and no pathway is present from having minerals development at Redpools Farm that would result in any conceivable effect on conservation objectives of the estuary or any other European Site. Site Option SGTW2 Redpools Farm can therefore be safely screened out.

5.2.27 **Step 3d** of the screening process identifies options that may have a potential for minor residual or uncertain effects and could mean there is a possibility of cumulative impact in combination with other MLP options or external plans and projects. No Draft Policy Framework (options) were identified at Step 3d but three Site Options are considered below.

5.2.28 The Wye Valley Woodlands SAC is about 500 metres at its closest point to Site Option **CRFD4 Hewelsfield**. Currently the Hewelsfield site is improved grazing pasture with mainly defunct hedgerows but with some intact hedgerows in places. It is surrounded by a significant area of woodland to the south and west plus small woods, thick tree belts, much pasture and a good hedgerow network to the north. Temporary loss of limited lengths of intact hedgerows alone from minerals development would not be very likely to have any significant impact on bats originating from or related to the SAC. Some pasture would also be lost to any future minerals development but this is a small proportion of what is available in the area to any commuting and foraging horseshoe bats arising from the SAC. Extensive pasture occurs much closer to the European Site and also extensively beyond this to the north, west and south. Taking this all into account it is perhaps safest not to yet conclude that there could be no conceivable effect on the SAC's conservation objectives (horseshoe bats). This means a precautionary approach should be taken at this point in the HRA to arrive at a conclusion for Step 3 of minor residual effect alone on commuting/foraging bats related to the European Site. This means in terms of the methodology being used that the site option **CRFD4 Hewelsfield** still needs to be looked at in combination with other plans and projects before it can be safely

screened out. However in terms of the conservation objectives of the Wye Valley Woodlands SAC it can be concluded that a pathway is not present to result in any conceivable effect on non bat or the habitat based objectives of the SAC.

5.2.29 In considering Site Option **CRFD1 Stowe Hill/Clearwell** the nearest European Site is Wye Valley & Forest of Dean Bat Sites SAC (Old Bow & Old Ham Mines) which is about 710 metres away from Parcel B. The same SAC component is about 1.2km from Parcel C at its closest point. Parcel C is also about 960 metres north west of another component part of the SAC (Devil's Chapel Scowles). Although not particularly close to parts of the SAC this does raise some possibilities. This is because there may be underground connections between either Parcels B or C to bat roost areas in the SAC components. Theoretically minerals development could cut into such cavities so that their atmospheric conditions would be altered (although not likely to be that great). No such connections may exist of course but there is some reason to be cautious here. Some assessment of this risk is best carried out at the planning application stage and this can then inform whether precautionary working measures may need to be employed during minerals extraction. Horseshoe bats from Wye Valley Woodlands SAC may use what remains of a much degraded hedgerows network within Parcels B and C but such loss of these hedgerows is not likely to be significant. This is because consented biodiversity enhancement and ongoing restoration in adjoining consented minerals areas will benefit bats. Any development consented in parcels B or C would however be subject to making sure hedgerow provision was maintained or more accurately enhanced for commuting and foraging bats. *This means in terms of the methodology being used site option **CRFD1 Stowe Hill/Clearwell (Parcels B and C only)** cannot yet be screened out and needs to be looked at in combination with other plans and projects.*

5.2.30 The un-worked minerals site option of **SGCW2 Cerney Wick/Oaktree Fields (Parcel A)** is 1.6km away from North Meadow which is a greater distance than consented minerals area parcel B (Cerney Wick Farm). The Management and Liaison Committee (MLC) for the dry working consent at Cerney Wick Farm has yet to confirm whether the precautionary buffer needed around North Meadow (i.e. 450m or more probably less) can be breached for minerals extraction so a little uncertainty remains in being able to screen out adjacent Parcel A for minerals development. *This means that an effect alone or in combination from new minerals development being consented for **SGCW2 Cerney Wick/Oaktree Fields (Parcel A)** cannot be completely ruled out and a minor residual or uncertain effect is concluded at this stage of the HRA process.*

5.2.31 **Step 3e** looks for draft policy (options) that are so general in terms of their implementation that it is not possible to identify where, when or how the draft policy (options) may be implemented, or where effects may occur, or which European Sites, if any, may be affected. This step is similar to Step 1 above. In the MLP there are 6 draft policy (options) identified that can be screened out at Step 3e. The policies concerned are Working Outside Preferred Areas, Alternative Aggregates, Flood Risk, Ancillary Development, Borrow Pits and Public Rights of Way which are very focused on the planning application stage. It is not possible at the strategic MLP

level to identify if these policies could lead to any effects on European Sites. These draft policy (options) cannot however be used in isolation and would be implemented in the context of the rest of the MLP not least with full consideration of the policy on Biodiversity and Geodiversity.

5.2.32 **Step 4** takes the site options above from Step 3d (with potential minor residual effects - although these are not very likely to lead to a significant effect on any European Site) and carries out some in combination screening on them. **Step 4a** looks at the remaining options in combination with all the other options of the MLP which have not been able to be screened out so far. The options of the MLP considered at Step 4 are listed in Table 4 below.

Table 4: Options not yet screened out after Step 3 has been completed

Options of the MLP which cannot yet be ruled out because they have <u>potential</u> for minor residual effects (although these are <u>not very likely</u> to lead to a significant effect on a European Site).
Items from Step 3d above – to take to in combination screening Steps 4a & 4b below
CRFD1 Stowe Hill/Clearwell (Parcels B & C only) – roosting/commuting/foraging bats from WV & FoD SAC and commuting/foraging bats Wye Valley Woodlands SAC)
SGCW2 Cerney Wick/Oaktree Fields (Parcel A) - Hydrological impact on North Meadow & Clattinger Farm SAC
CRFD4 Hewelsfield - commuting/foraging bats from Wye Valley Woodlands SAC
Other items not yet screened out so far – take directly to Step 5 below, i.e. Avoidance, Modification & Mitigation
None

5.2.33 Note that there were no draft policy (options) identified that alone or in combination with other MLP options could have a likely significant effect on any European Site. The 3 site options identified as potentially having some minor residual effects are now screened to look at potential in combination effects within the MLP only (summarised in Table 5).

Table 5 – In Combination Screening of Options (within MLP – Step 4a)

Key	
NLSE	No Likely Significant Effect – can be screened out
LSE	Likely Significant Effect(s) – Precautionary principle dictates this option cannot be screened out. A likely significant effect on the site's conservation objectives requiring (a) 'Dropping' of the option (b) Modification of the option (c) Modification / mitigation of the option including use of caveats/criteria at a later stage of the MLP preparation
U	Uncertain – Precautionary principle dictates it is not possible to determine if NLSE or LSE (see above) so keep in for further screening. May require (a) 'Dropping' of the option (b) Modification of the option (c) Modification / mitigation of the option including use of caveats/criteria at a later stage of the MLP preparation

In Combination Screening within plan	CRFD1 Stowe Hill/Clearwell (Parcels B & C only) – roosting/commuting/foraging bats from WV & FoD SAC and commuting/foraging bats Wye Valley Woodlands	SGCW2 Cerney Wick/Oaktree Fields - Hydrological (vegetation) impact on North Meadow & Clattinger Farm SAC	CRFD4 Hewelsfield - commuting/foraging bats from Wye Valley Woodlands SAC	Combinations of CRFD1, SGCW2 & CRFD4
CRFD1 Stowe Hill/Clearwell (Parcels B & C only) – roosting/commuting/foraging bats from WV & FoD SAC and commuting/foraging bats Wye Valley Woodlands	N/A	NLSE	NLSE	None identified
SGCW2 Cerney Wick/Oaktree Fields (Parcel A) - Hydrological (vegetation) impact on North Meadow & Clattinger Farm SAC	NLSE	N/A	NLSE	None identified
CRFD4 Hewelsfield - commuting/foraging bats from Wye Valley Woodlands SAC	NLSE	NLSE	N/A	None identified
Combinations of CRFD1, SGCW2 & CRFD4	None identified	None identified	None identified	N/A

5.2.34 In looking at in combination effects and also taking a precautionary approach a consideration of foraging/commuting bats arising from the Wye Valley Woodlands SAC in relation to confirming both Site Options **CRFD1 Stowe Hill/Clearwell (Parcels B & C only)** and **CRFD4 Hewelsfield** in the MLP could be justified. These mineral site options however have over 4km of intervening countryside between them. Groups of foraging and commuting bats arising from any of the Wye Valley Woodlands SAC units would be unlikely to visit both proposed minerals sites in the same journey. Groups of bats arising from the Wye Valley Woodlands SAC arriving at Stowe Hill would be most likely to continue to travel further outwards into the Forest of Dean rather than divert abruptly southwards to reach Hewelsfield across less favourable countryside for feeding. Similarly bats arriving at Hewelsfield would not be likely to divert abruptly northwards to reach Stowe Hill. It is therefore difficult to conclude there would be any real negative additive effect on groups of bats or the Wye Woodlands SAC population as a whole, i.e. no likely significant effect on conservation objectives of the SAC. **SGCW2 Cerney Wick/Oaktree Fields (Parcel A)** is at the opposite end of the county to CRFD1 and CRFD4 and so no in combination effect are predicted for this site option with the other site options.

5.2.35 **Step 4b** is summarised in Table 6 below. Here the same MLP options as listed in Table 5 above are looked at again but this time in relation to other external plans and projects to see if there could be a likely significant in combination effect. The HRA Baseline Report^{xxx} reveals an extensive list of such plans and projects that may be of relevance here but in reality there are very few that could have any conceivable in combination effect with the three site options left to consider. Table 6 presents other pertinent local development plans as these are the only ones identified as having any potential for in combination effects with the remaining site options being screened. Natural England requested that aspects of these external plans were the most pertinent and although some of the plans are not fully adopted or complete they have still been included and given careful consideration in this HRA of the MLP. The local development plans identified were for Wiltshire & Swindon, Cotswold, Stroud, Forest of Dean, and Gloucester, Cheltenham & Tewkesbury. It should be noted that existing and completed minerals consents have already been considered in reviewing the likely effects of each MLP site option (Steps 3c & 4a above) so these do not need to be considered again here.

Table 6 – In Combination with Other Plans and Projects (external to proposed MLP – Step 4b)

Key						
NLSE	No Likely Significant Effect – can be screened out					
LSE	Likely Significant Effect(s) – Precautionary principle dictates this option cannot be screened out. A likely significant effect on the site's conservation objectives requiring (a) 'Dropping' of the option (b) Modification of the option (c) Modification / mitigation of the option including use of caveats/criteria at a later stage of the MLP preparation					
U	Uncertain – Precautionary principle dictates it is not possible to determine if NLSE or LSE (see above) so keep in for further screening. May require (a) 'Dropping' of the option (b) Modification of the option (c) Modification / mitigation of the option including use of caveats/criteria at a later stage of the MLP preparation					
Elements of other plans or projects to consider for in combination effects → All Elements of the plan screened under step 3d as minor residual effect alone ↓	Wiltshire & Swindon Minerals and Waste Development Plan	Cotswold District Draft Local Plan	Stroud District Local Plan	Forest of Dean District Development Framework (Core Strategy & Cinderford NQ Plan)	Joint Core Strategy Gloucester, Cheltenham & Tewkesbury	Combinations of other Development Plans
CRFD1 Stowe Hill/Clearwell (Parcels B & C only) – roosting/commuting/foraging bats from WV & FoD SAC and commuting/foraging bats Wye Valley Woodlands)	NLSE	NLSE	NLSE	U	NLSE	None identified
SGCW2 Cerney Wick/Oaktree Fields (Parcel A) - Hydrological (vegetation) impact on North Meadow & Clattinger Farm SAC	NLSE	NLSE	NLSE	NLSE	NLSE	None identified
CRFD4 Hewelsfield - commuting/foraging bats from Wye Valley Woodlands SAC	NLSE	NLSE	NLSE	U	NLSE	None identified
Combinations of CRFD1, SGCW2 & CRFD4	None identified	None identified	None identified	None identified	None identified	None identified

5.2.36 Taking a precautionary approach three site options in the MLP have been identified as having potential for a residual effect on some European Sites in combination with other plans and projects. The SAC sites related to these site options being confirmed are **North Meadow & Clattinger Farm, Wye Valley & Forest of Dean Bat Sites** and the **Wye Valley Woodlands**. In turning to the relevant local development plans it is their potential to have residual or a likely significant effect on the same European Sites as the remaining MLP site options that is the focus for in combination assessment summarised in Table 6.

5.2.37 The most obvious development plan to consider is the Wiltshire & Swindon Minerals and Waste Development Framework as it also affects the Cotswold Water Park where Site Option **SGCW2 Cerney Wick/Oaktree Fields (Parcel A)** occurs. The Wiltshire & Swindon suite of documents has themselves been subject to HRA^{xxxii} of which the only conclusions relevant to the Gloucestershire MLP were that some sites were identified as having potential for impact on North Meadow & Clattinger Farm SAC. However further inspection of site allocations for Site U7 - Land East of Calcutt, Site U22 - Land at Cotswold Community & Site SE2/SE3 - Extension to Brickworth Quarry alone and in combination concluded there would not be a likely significant effect on the SAC. Given this conclusion no in combination likely significant effects should be assigned to **SGCW2 Cerney Wick/Oaktree Fields (Parcel A)**.

5.2.38 The existing Cotswold Local Plan 2001-2011 is considered not likely to have a significant effect on European Sites and in any case is of reduced weight given it predates the NPPF and is therefore in the process of being replaced. Although only a part of one European Site falls inside the Cotswold District boundary (Cotswold Beechwoods SAC) others such as North Meadow & Clattinger Farm SAC, Rodborough Common SAC and Dixton Wood SAC occur nearby and so there is perhaps some small potential for them to be affected indirectly by development policy in the Local Plan (e.g. recreational pressure, water resources). An HRA^{xxxiii} produced in May 2013 for the Preferred Development Strategy Consultation stage has identified potential significant effects resulting from increased recreation on Rodborough Common SAC, Cotswold Beechwoods SAC and North Meadow and Clattinger Farm SAC. Increased vehicle traffic and water abstraction and waste water discharges have also been identified as having potential to result in significant effects. In relation to **SGCW2 Cerney Wick/Oaktree Fields (Parcel A)** it is difficult to see that a small short lived extraction which would be quickly restored could act in combination to increase the identified potential impacts in the Cotswold HRA so as to have a likely significant impact on North Meadow and Clattinger Farm SAC. The minerals developments within Cerney Wick/Oaktree Fields in the longer term should add to ecological assets of the area and help to buffer North Meadow (the nearest component of the SAC) from impacts that might arise out of the implementation of the Cotswold Local Plan. No likely significant in combination effect on North Meadow and Clattinger Farm SAC is therefore concluded here.

5.2.39 Natural England raised concerns (2013) about the potential effects of the Stroud Local Plan on Rodborough Common SAC and the Severn Estuary SAC/SPA/Ramsar site, particularly with respect to increased recreation pressure.

However as none of the site options in the MLP could have a likely significant effect on these particular European Sites (due to their location) an in combination effect between the site options and the Stroud District Plan is highly unlikely.

5.2.40 The HRA^{xxxiii} for the Cheltenham, Tewkesbury and Gloucester Draft Joint Core Strategy (JCS) suggests that the strategy will not result in a likely significant effect on any European Site. It therefore follows that it is very unlikely for there to be an in combination significant effect between the remaining MLP site options and the JCS (or the more local Cheltenham, Gloucester & Tewkesbury Development Plans) upon North Meadow & Clattinger Farm SAC, Wye Valley & Forest of Dean Bat Sites and the Wye Valley Woodlands.

5.2.41 As the Forest of Dean District contains both the Wye Valley & Forest of Dean Bat Sites and the Wye Valley Woodlands SACs then its Development Framework is a relevant consideration and in particular the HRA reports concerned with the Core Strategy^{xxxiv} and the Cinderford Area Action Plan^{xxxv}. Some concerns were raised in the Core Strategy HRA about increased development in the Lydney area and impact on the Severn Estuary but not for the European Sites of relevance to the in combination assessment of the remaining site options of the MLP. The HRA for the Forest of Dean Core Strategy determined that HRA was better left to the Area Action Plan, Site Allocation or planning application stage where sufficient detail would be known to complete an HRA and an AA if required. Related to this the Cinderford Northern Quarter HRA screened out likely significant effects on the Wye Valley Woodlands SAC and also determined there would be no likely significant effects on the Wye Valley & Forest of Dean Bat Sites SAC from disturbance or pollution in connection with new development. Avoidance of such effects was deemed deliverable due to safeguards that were in place and in the context of amended (and now adopted) local policies. Remaining site options **CRFD1 Stowe Hill/Clearwell (Parcels B & C only)** and **CRFD4 Hewelsfield** are in the Forest of Dean District but neither is close to either Cinderford or Lydney (the main areas of initial concern in the Forest of Dean HRA process). New development generated by the Core Strategy and confirmed site allocations are unlikely to result in an in combination effect due to long distances or at least that there is no in combination likely significant effect that can be identified at the MLP stage of the planning process. *However as some uncertainty exists about the site allocations in the Forest of Dean District Development Framework then safeguards are recommended for **CRFD1 Stowe Hill/Clearwell (Parcels B & C only)** and **CRFD4 Hewelsfield** the MLP. This is considered further at Step 5 (avoidance, modification and mitigation) below.*

5.2.42 A general comment has been received from Natural England for the Site & Policy Options Stage saying that while the MLP is unlikely to result in significant increases in recreational activity, it may provide future opportunities to off-set such effects from other external development plans through appropriate restoration schemes. The MLP provides for such opportunities. There is potential support for beneficial restoration to accessible green space in key locations (e.g. Policies: Strategic Priorities, Spatial Vision, Biodiversity & Geodiversity, Restoration Policy, Development Management Restoration Policy, Mitigation of Environmental Effects, Green Belt, Public Rights of Way and Planning Obligations) and so this matter would be a material consideration in planning application decisions.

5.3 Avoidance/Modification/Mitigation of Options

5.3.1 This is Step 5 and it has been decided on a precautionary basis that even though the 3 Site Options at Step 4 are not very likely to lead to a significant effect on a European Site (and could be screened out) they should still be looked at in detail. This is to see if avoidance, modification or mitigation measures can additionally be used to remove even minor and not very likely effects from occurring at all. Table 7 lists the remaining 3 Site Options which are being looked at in detail.

Table 7 – Options that are being screened out by using simple Avoidance / Modification / Mitigation Measures

Options of the MLP which under steps 1-4 have not been fully screened out as they might have <u>potential</u> for minor residual effects (although these are <u>not very likely</u> to lead to a significant effect on a European Site)	Avoidance/Modification/Mitigation Measure(s) <u>being applied</u> in order to conclude that there would be no likely significant effect on a European Site
Site Option: CRFD1 Stowe Hill/Clearwell (Parcels B & C only)	A precautionary approach is being adopted. Minor residual effects on a European Site were identified by the MLP HRA process which can be avoided at the planning application stage by ensuring there is suitable policy safeguarding in the MLP. Any new minerals development in relation to Parcel B or C of CRFD1 Stowe Hill/Clearwell will be subject to HRA screening to see if there could be a likely significant effect on the Wye Valley & FoD Bat Sites or Wye Valley Woodlands SAC. This would be done initially by the developer before submitting a planning application and then by the MPA once an application had been received. The MLP Policy for Biodiversity & Geodiversity and Site Schedule (Profile) for CRFD1 Stowe Hill/Clearwell ensures that this will happen. Additionally the new County Council planning application validation requirements (2014) now highlight that HRA screening is required for certain minerals, waste and county development proposals such as for this site option. It is concluded that the MLP site option CRFD1 could have no likely significant effect on any European Site.
Site Option: CRFD4 Hewelsfield	A precautionary approach is being adopted. Minor residual effects on a European Site were identified by the MLP HRA process which can be avoided at the planning application stage by ensuring there is suitable policy safeguarding in the MLP. Any new minerals development in relation to CRFD4 Hewelsfield should be subject to HRA screening to see if there could be a likely significant effect on the Wye Valley Woodlands SAC. This would be done by the developer before submitting a planning application and then by the MPA once such an application had been received. The MLP Policy for Biodiversity & Geodiversity and Site Schedule (Profile) for CRFD4 Hewelsfield ensure that this will happen. Additionally the new County Council planning

	application validation requirements (2014) now highlight that HRA screening is required for certain minerals, waste and county development proposals such as for this site option. It is concluded that the MLP site option CRFD4 could have no likely significant effect on any European Site.
Site option: SGCW2 Cerney Wick/Oaktree Fields (Parcel A)	A precautionary approach is being adopted. Uncertain effects on a European Site were identified by the MLP HRA process which can be avoided at the planning application stage by ensuring there is suitable policy safeguarding in the MLP. Any new minerals development in relation to SGCW2 Cerney Wick/Oaktree Fields (Parcel A) should be subject to HRA screening to see if there could be a likely significant effect on the North Meadow & Clattinger Farm SAC. This would be done by the developer before submitting a planning application and then by the MPA once such an application had been received. Much will be dependent on the hydrological conclusions arising out of the adjacent minerals consent at Cerney Wick Farm (Parcel B). The MLP Policy for Biodiversity & Geodiversity and Site Schedule (Profile) for SGCW2 Cerney Wick/Oaktree Fields ensure that this will happen. Additionally the new County Council planning application validation requirements (2014) now highlight that HRA screening is required for certain minerals, waste and county development proposals such as for this site option. It is concluded that the MLP site option SGCW2 could have no likely significant effect on any European Site.

5.3.2 Although the methodology dictates that Site Option **SGCW2 Cerney Wick/Oaktree Fields (Parcel A)** could be safely screened out at Step 4 it has nevertheless been kept in because Step 5 provides a good opportunity to set out more clearly why this option could not have a likely significant effect on North Meadow & Clattinger Farm SAC. Paragraph 5.2.30 above indicated that a small uncertainty for this site option alone might arise at the planning application stage. However taking account of proposed MLP policy, the legal agreement of the adjacent minerals land parcel that already has consent (Cerney Wick Farm) and the new county planning application validation requirements being introduced in 2014 no likely significant effect on the SAC could occur. Step 5 has concluded that Site Option **SGCW2 Cerney Wick/Oaktree Fields (Parcel A)** can now be safely screened out.

5.3.3 In respect of Site Option **CRFD1 Stowe Hill/Clearwell (Parcels B & C only)** Table 7 sets out that MLP policy, a site schedule (profile) and new planning validation requirements will mean that no likely significant effect on either Wye Valley & Forest of Dean Bat Sites SAC or Wye Valley Woodlands SAC could occur. Site Option **CRFD1 Stowe Hill/Clearwell (Parcels B & C only)** can be safely screened out.

5.3.4 Lastly turning to Site Option **CRFD4 Hewelsfield** Table 7 sets out that MLP policy, a site schedule (profile) and new planning validation requirements will mean that no likely significant effect on the Wye Valley Woodlands SAC could occur. Site Option **CRFD4 Hewelsfield** can be safely screened out.

5.3.5 All the options in the MLP Site & Policy Options Stage (summer 2014) have now been screened out of the HRA and so there is no need to progress to Stage 6 which is Appropriate Assessment (AA) which is also known as European Commission Stage Two (see paragraph 4.5 above).

5.4 Pre Publication Draft Version of the MLP (to follow)

5.4.1 The Pre Publication Draft Version of the MLP is to be confirmed later and will be based on the outcome of the Site Option & Draft Policy Framework stage. Changes to the MLP at the Publication Stage will be screened and incorporated into an update of this HRA Main Report.

5.5 Formal Publication and Submission Version of the MLP (to follow)

5.5.1 The formal Publication and Submission Version of the MLP will be produced after the Pre Publication Draft Version (see 5.4). At this point a further review of the HRA will be carried out where necessary and an appropriate version of this HRA Main Report subsequently confirmed.

5.6 Modification Version of the MLP (if required)

5.6.1 If any late modifications to the Submission Version of the MLP are made they will be screened to see if there could be a likely significant effect on any European Site from them being adopted. Modifications that would trigger an AA are very unlikely to come forward at this advanced stage of the MLP. The HRA results produced from this screening procedure will be presented as a separate HRA addendum to the Modification Version of the MLP.

5.7 Appropriate Assessment

(European Commissionxxxvi Stage Two - if necessary for any option this will be carried out for the next MLP stage)

5.7.1 Table 8 below lists any MLP options (i.e. not screened out by the HRA Steps 1 to 5) that if confirmed would lead to an Appropriate Assessment (AA) being required as part of this HRA. Currently as there are no options listed in Table 7 and so there is no need for AA to be carried out on the MLP.

Table 8 – Options currently identified as requiring Appropriate Assessment (AA) or with measures to screen them out not yet applied

Aspect of the plan likely to have a significant effect, alone or in combination	Summary of Qualifying interest of the European Site(s) concerned	Summary of the Likely Significant Effect (<i>that could not be screened out</i>)	Avoidance/Modification/Mitigation Measure(s) <u>not yet applied</u> which would screen out option from AA before the next MLP stage
None	None	None	None

5.7.2 Should MLP options change (sections 5.4 to 5.6 above) to such an extent that they could result in a likely significant effect on any European Site (ascertained by further screening) then AA would be triggered. As part of any AA that may subsequently be required further amendments to the changed MLP options could be made to avoid adverse effects on the integrity of any European Site occurring.

5.8 Conclusions (as at Site Options & Draft Policy Framework Stage)

5.8.1 The Minerals Local Plan (MLP) is a land use plan that is not directly connected with or necessary for the management of any European Site. This means that under Regulation 102 (b) of The Conservation of Habitats and Species Regulations 2010 (the ‘Habitats Regulations’ as amended) the MLP has been screened to ascertain whether it is likely to have a significant effect on a European Site either alone or in combination with other plans or projects (Regulation 102 (a)). The screening process used to do this follows HRA methodology that was agreed and shared with Natural England and the Environment Agency in 2013.

5.8.2 Relevant European Sites, their qualifying interests and conservation objectives have been considered. These are set out in the HRA Baseline Report (Update 4) and also summarised here at paragraphs 4.6, 4.7 and in Figure 1.

5.8.3 All MLP site options and policy framework have been screened alone and in combination with each other and with other pertinent external plans and projects. Where a likely significant or uncertain effect on a European Site was identified

avoidance, modification and mitigation measures were recommended and then applied to the MLP at the relevant stage of its production.

5.8.4 The HRA considered the advice of Natural England and the Environment Agency and through consultation has given and will give Local Authorities, other organisations and members of the general public an opportunity to comment on and inform its content.

5.8.5 ***The current conclusion presented in this HRA report is that the MLP would not be likely to have a significant effect on any European Site, either alone or in combination with other plans or projects (Habitats Regulation 102 (a)).***

5.8.6 The results and conclusion of the HRA are provided as a public record to facilitate scrutiny and observations as part of the MLP process. The HRA has and will be revised as necessary to inform the contents of the proposed MLP. This is needed so that the final version of the MLP can be safely adopted in compliance with The Conservation of Habitats and Species Regulations 2010 (the 'Habitats Regulations' as amended) and Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna ('Habitats Directive').

Appendices

Appendix 1: HRA Screening of Gloucestershire County Council's Minerals Preferred Options (2007)

Appendix 2: End Notes/References

Appendix 1: HRA Screening of Gloucestershire County Council's Minerals Preferred Options (2007)

(See Section 4 for further details)

Key	
NLSE	No Likely Significant Effect – can be screened out
LSE	Likely Significant Effect(s) – Precautionary principle dictates this option cannot be screened out. A likely significant effect on the site's conservation objectives requiring (a) 'Dropping' of the option (b) Modification of the option (c) Modification / mitigation of the option including use of caveats/criteria at a later stage of the MLP preparation
U	Uncertain – Precautionary principle dictates it is not possible to determine if NLSE or LSE (see above) so keep in for further screening. May require (a) 'Dropping' of the option (b) Modification of the option (c) Modification / mitigation of the option including use of caveats/criteria at a later stage of the MLP preparation

Minerals Core Strategy Preferred Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SAC / SPA / Ramsar)	Cotswold Beechwoods (SAC)
◆ MPO1 Spatial Vision	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO2 Strategic objectives	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO3a Preferred Option for Crushed Rock	NLSE	NLSE	U	U	U	NLSE	NLSE	NLSE	NLSE	NLSE

Minerals Core Strategy Preferred Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SAC / SPA / Ramsar)	Cotswold Beechwoods (SAC)
◆ MPO3b Preferred Option for Crushed Rock	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO3c Preferred Option for Crushed Rock	U	U	U	U	U	NLSE	NLSE	NLSE	NLSE	U
◆ MPO4a Preferred Option for Sand & Gravel	NLSE	NLSE	NLSE	NLSE	NLSE	U	NLSE	NLSE	U	NLSE
◆ MPO4b Preferred Option for Sand & Gravel	NLSE	NLSE	NLSE	NLSE	NLSE	U	NLSE	NLSE	U	NLSE
◆ MPO4c Preferred Option for Sand & Gravel	NLSE	NLSE	NLSE	NLSE	NLSE	U	NLSE	NLSE	U	NLSE
◆ MPO5a Preferred Option for Sand & Gravel locations	NLSE	NLSE	NLSE	NLSE	NLSE	U	U	NLSE	U	NLSE

Minerals Core Strategy Preferred Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SAC / SPA / Ramsar)	Cotswold Beechwoods (SAC)
◆ MPO5b Preferred Option for Sand & Gravel locations	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO6 Preferred Option for Clay	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO7a Preferred Option for Building Stone	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO7b Preferred Option for Building Stone	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO7c Preferred Option for Building Stone	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO8 Preferred Option for Coal	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE

Minerals Core Strategy Preferred Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SAC / SPA / Ramsar)	Cotswold Beechwoods (SAC)
◆ MPO9 Preferred Option for Reuse and Recycling	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO10 Preferred Option for 'The Environment'	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO11 Preferred Option for 'People'	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO12a Preferred Option for 'Reclamation'	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO12b Preferred Option for 'Reclamation'	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
◆ MPO13 Preferred Option for 'Resource Management'	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE

Minerals Core Strategy Preferred Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SAC / SPA / Ramsar)	Cotswold Beechwoods (SAC)
◆ MPO14 Preferred Option for 'Transport'	NLSE	NLSE	NLSE	U	NLSE	NLSE	NLSE	NLSE	U	NLSE

Appendix 2: End Notes/References

ⁱ David Tyldesley & Associates (2009) 'The Habitats Regulations Assessment of Local Development Documents' revised Draft Guidance for Natural England

ⁱⁱ European Court of Justice (September 2004) 'The Waddenze Judgment' Case C-127/02 dated 7th September 2004.

ⁱⁱⁱ Scottish Natural Heritage (2012) 'Habitats Regulations Appraisal of Plans – Guidance for Plan-Making Bodies in Scotland' Version 2.0, Initially Prepared by David Tyldesley & Associates.

^{iv} Department for Communities and Local Government (2012) 'National Planning Policy Framework'.

^v Gloucestershire County Council (January 2008) 'HRA/AA Report on Gloucestershire's Minerals Core Strategy Preferred Options Paper'.

^{vi} Gloucestershire County Council (2013) HRA Evidence Gathering / Baseline Report (Update 4).

^{vii} Department for Communities & Local Government (2006) 'Planning for the Protection of European Sites: Appropriate Assessment' Guidance for Regional Spatial Strategies & Local Development Frameworks.

^{viii} David Tyldesley & Associates (2009) 'The Habitats Regulations Assessment of Local Development Documents' revised Draft Guidance for Natural England.

^{ix} Welsh Assembly Government (2009) 'Nature Conservation and Planning' Planning Policy Wales, TAN5.

^x Scottish Natural Heritage (2012) 'Habitats Regulations Appraisal of Plans – Guidance for Plan-Making Bodies in Scotland' Version 2.0, Initially Prepared by David Tyldesley & Associates.

^{xi} David Tyldesley & Associates (2009) 'The Habitats Regulations Assessment of Local Development Documents' revised Draft Guidance for Natural England.

^{xii} Scottish Natural Heritage (2012) 'Habitats Regulations Appraisal of Plans – Guidance for Plan-Making Bodies in Scotland' Version 2.0, Initially Prepared by David Tyldesley & Associates.

^{xiii} European Commission (2001) 'Assessment of Plans and Projects Significantly affecting Natura 2000 Sites'.

^{xiv} ODPM/Defra (2005) 'Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning System' ODPM Circular 06/2005, Defra Circular 01/2005.

^{xv} Defra (2012) 'The Habitats and Wild Birds Directives in England and its seas. Core guidance for developers, regulators & land/marine managers. December 2012 (draft for consultation)'.

^{xvi} David Tyldesley & Associates (2009) 'The Habitats Regulations Assessment of Local Development Documents' revised Draft Guidance for Natural England.

^{xvii} Scottish Natural Heritage (2012) 'Habitats Regulations Appraisal of Plans – Guidance for Plan-Making Bodies in Scotland' Version 2.0, Initially Prepared by David Tyldesley & Associates.

^{xviii} David Tyldesley & Associates (2009) 'The Habitats Regulations Assessment of Local Development Documents' revised Draft Guidance for Natural England.

^{xxix} Welsh Assembly Government (2009) 'Nature Conservation and Planning' Planning Policy Wales, TAN5.

^{xx} Scottish Natural Heritage (2012) 'Habitats Regulations Appraisal of Plans – Guidance for Plan-Making Bodies in Scotland' Version 2.0, Initially Prepared by David Tyldesley & Associates.

^{xxi} European Commission (2001) 'Assessment of Plans and Projects Significantly affecting Natura 2000 Sites'.

^{xxii} European Commission (2001) 'Assessment of Plans and Projects Significantly affecting Natura 2000 Sites'.

^{xxiii} Gloucestershire County Council (January 2008) 'HRA/AA Report on Gloucestershire's Minerals Core Strategy Preferred Options Paper'.

^{xxiv} Scottish Natural Heritage (2012) 'Habitats Regulations Appraisal of Plans – Guidance for Plan-Making Bodies in Scotland' Version 2.0, Initially Prepared by David Tyldesley & Associates.

^{xxv} Scottish Natural Heritage (2012) 'HRA Advice Sheet. Screening general policies and applying simple mitigation measures'.

^{xxvi} Gloucestershire County Council (2008) 'Report for Gloucestershire County Council Planning Committee'.

^{xxvii} Natural England (2007) 'Variation of Conditions 4 & 10 of Planning Consent CT.2648/3/A to enable dry working at Cerney Wick Farm, South Cerney' Letter from Alisa Watson to Gavin Jones at Gloucestershire County Council.

^{xxviii} Wiltshire Council & Swindon Borough Council (2012) 'Wiltshire & Swindon Aggregate Minerals Site Allocations DPD. Pre-submission HRA Screening Report' produced by Centre for Sustainability at TRL in association with Enfusion.

^{xxix} Natural England (2011) 'Down Ampney Quarry' Letter from Sally King to Jason Betty at Gloucestershire County Council on planning application Ref. 09/0050/CWMAJM/CAPS.

^{xxx} Gloucestershire County Council (2013) 'HRA Evidence Gathering / Baseline Report (Update 4)'

^{xxxi} C4S Enfusion (2012) 'Wiltshire & Swindon Aggregate Minerals Site Allocations DPD, HRA Screening Report, January 2012.'

^{xxxii} Land Use Consultants (2013) 'Cotswold District Local Plan Consultation Paper: Preferred Development Strategy. HRA Screening Report.'

^{xxxiii} Enfusion (2013) 'Draft Joint Core Strategy. HRA Report. October 2013.'

^{xxxiv} Forest of Dean District Council (2012) 'Sustainability Appraisal - Appendix 10 Habitats Regulations Assessment (HRA)'

^{xxxv} ERM (2011) 'Cinderford Northern Quarter Pre Submission Draft AAP Habitats Regulations Screening Assessment' and Forest of Dean District Council (2011) 'Keynote – Biodiversity & Nature Conservation Cinderford Northern Quarter'

^{xxxvi} European Commission (2001) 'Assessment of Plans and Projects Significantly affecting Natura 2000 Sites'.