Gloucestershire
COUNTY COUNCIL

Planning for the Protection of European Sites: Appropriate Assessment

Report on Gloucestershire Waste Core Strategy Issues & Options Paper

May 2007

■ Introduction

This is the Appropriate Assessment (AA) report on Gloucestershire County Council's Waste Core Strategy Issues & Options Paper (July 2006). Its aim is to ensure that the options that have been put forward are screened in terms of their potential impact on protected European sites in and around Gloucestershire.

The Natura 2000 network provides ecological infrastructure for the protection of sites which are of exceptional importance in respect of rare, endangered or vulnerable natural habitats and species within the European Union. These sites which are also referred to as 'European sites' consist of Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Offshore Marine Sites (OMS). Note: there are no OMS designated at present.

In brief, the European sites in and close to Gloucestershire are:

- **Rodborough Common** SAC – (Stroud)
- **Dixton Wood** SAC – (Tewkesbury)
- **Wye Valley and Forest of Dean Bat Sites** SAC – (Forest of Dean, Monmouthshire)
- **River Wye Sites** 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, Stroud, Tewkesbury)
- **Bredon Hill** SAC – (Worcestershire)
- **Walmore Common** SPA – (Forest of Dean)
- **Severn Estuary** SPA – (Stroud, Forest of Dean)

■ The Appropriate Assessment of land use plans

The purpose of the Appropriate Assessment (AA) of land-use plans is to ensure that the protection of the integrity of European sites is a part of the planning process at a regional and local level. The requirement for AA of plans or projects is 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 (the "Habitats Directive").

■ Evidence gathering for AA & links to SA

The Gloucestershire Minerals & Waste Development Framework Sustainability Appraisal (SA) Framework (comprising the SA Context Report and the SA Scoping Report)* contains a large volume of environmental data and specifically details the sites and species protected under the Habitats Directive (92/43/EEC) and the Birds Directive (79/409/EEC).Thus the evidence gathering for the AA started with the SA Framework process.
*Original and updated reports are available at the following website address:
http://www.gloucestershire.gov.uk/index.cfm?articleid=11577

Department for Communities and Local Government (DCLG) Draft Guidance on AA (August 2006) states on page 8 that it would be best practice to collect information for AA, especially in relation to:

1. European sites within and outside the plan area potentially affected;

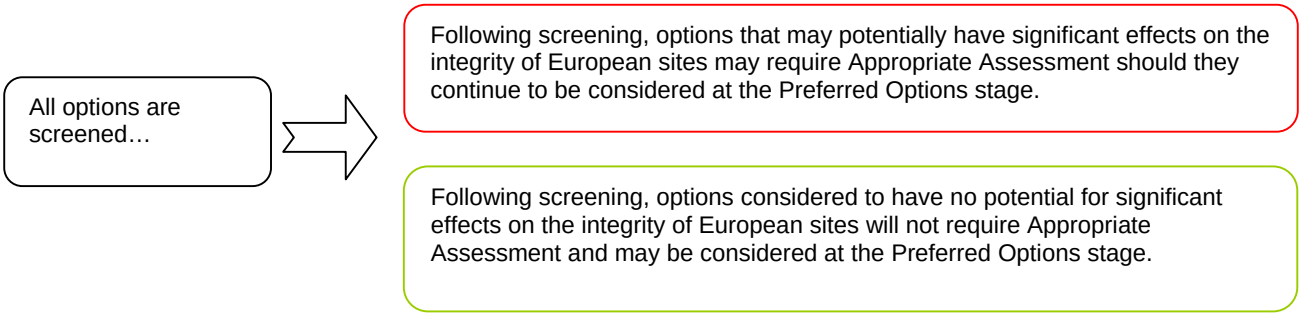
2. The characteristics of these European sites;
3. Their conservation objectives; and
4. Other relevant plans or projects.

This information (Points 1 to 4) is contained in the report: *Gloucestershire Minerals & Waste Development Framework: Evidence gathering / baseline for AA* which was consulted on from 6th November to 4th December should be read in conjunction with this report. This report is available at the following website address: http://www.gloucestershire.gov.uk/index.cfm?articleid=11577

■ Assessing Options - AA Tasks 1- 3

It is important that the AA process informs a plan's emerging options. DCLG Draft Guidance on AA (August 2006) suggests a 3 stage process in order to achieve this. The tasks are as follows:

AA Task 1: Assessing likely significant effects
This report is the AA Task 1 stage. This is basically a 'screening' exercise, with the involvement of Natural England as the statutory nature conservation body for AA.



The notion of 'significance'* need to be assessed objectively taking particular account of the site's conservation objectives. The potential impact of options are considered in terms of probability, duration, frequency and reversibility.

*The definition of when an effect is 'significant' is prescribed to varying degrees in EU and national policies, guidelines and standards. However in many cases such definitions are general in nature (e.g. in Circular 2/99) and practitioners have been had to develop definitions and precedents for specific projects. It is broadly accepted that the significance and severity of an effect reflects the relationship between two factors: (1) The magnitude of an impact – the actual change to the environment & (2) The value of the affected resource or receptor and its sensitivity to the impact.

AA Task 2: Appropriate Assessment and ascertaining the effect on site integrity
Following the 'screening' exercise, should options progress to the Preferred Options stage, and should Natural England consider that they are likely to have significant effects on the integrity of European sites, they will then be subject to Appropriate Assessment of the implications for European sites in view of the site's conservation objectives. The work from the evidence gathering stage and from AA Task 1 will be drawn upon in assessing options. 'Integrity' is defined in ODPM Circular 06/2005: Biodiversity and Geological Conservation as "the site's coherence, ecological structure and function across its whole area that enables it to sustain the habitat, complex of habitats and or the levels of populations of species for which it was classified." The assessment at this stage should not be influenced by other environmental, social or economic issues. Decisions made by the Local Planning Authority must be supported with evidence.

AA Task 3: Mitigation measures and alternative solutions
As a result of Appropriate Assessment where an option has been found to have adverse effects, the effects should be mitigated. This may mean that options are modified to some degree and will therefore have to be run through some of the SA / AA stages again. After mitigation measures have been exhausted and it is still considered that the option will potentially have negative effects on site integrity in may be necessary to drop the option. Pursuit of the option can only be justified by 'imperative reasons of overriding public interest.'

AA Task 1: Likely significant effects

■ **The Waste Core Strategy Issues & Options**

Below is the list of the Waste Core Strategy Issues & Options presented for public consulation for 11 weeks ending on 15th September 2006. These issues and options were tested (or screened) by Gloucestershire County Council's Ecologist in terms of what impact they could potentially have on the conservation objectives of Gloucestershire's European sites. (Note: Sites in Wiltshire & Worcestershire, close to Gloucesteshire's border have also be considered). **The results of the initial screening assessment are provided in Appendix 1.**

It is clear from DCLG Guidance on AA that 'the assessment of significant effects of a given option needs to take account of the option's impact in combination with other plans and projects.' These are briefly considered in Appendix 2 of this report and stakeholders should consider the links to others relevant plans and projects in *Gloucestershire Minerals & Waste Development Framework: Evidence gathering / baseline for AA* which has been submitted to Natural England and a number of other stakeholders.

Issue W1: The Spatial vision.

■ **Option 1:** (Business as usual) Current vision in the adopted Waste Local Plan.

■ **Option 2:** "A sustainable and educational waste management system for Gloucestershire that reduces waste produced from businesses and households as a priority and diverts waste from landfill."

Issue W2: Determining the time period over which the WCS operates.

■ **Option 1:** (Business as usual) Gloucestershire Waste Local Plan to 2012.

■ **Option 2:** Up to the year 2018.

■ **Option 3:** Up to the year 2020.

■ **Option 4:** Up to the year 2026.

Issue W3: Implementing the waste hierarchy.

■ **Option 1:** (Business as usual) Proactively minimising waste generation.

■ **Option 2:** Focus on recycling.

■ **Option 3:** Recovering value (energy) from waste.

Issue W4: Making appropriate provision.

■ **Option 1:** (Business as usual)

■ **Option 2:** Identifying sites in a DPD.

■ **Option 3:** Not identifying sites – having a criteria based policy.

■ **Option 4:** A mix of identifying some sites and also using criteria based policies.

Issue W5: Setting out a spatial strategy.

■ **Option 1:** Town locations.

■ **Option 2:** Edge of town locations.

■ **Option 3:** Rural locations.

■ **Option 4:** Centralised facilities.

- **Option 5:** Dispersed facilities.
- **Option 6:** A combination of facilities. (Business as usual).

Issue W6: Implementing the Joint Municipal Waste Management Strategy.

- **Option 1:** (Business as usual)
- **Option 2:** A flexible criteria based approach.
- **Option 3:** A prescriptive approach with particular facility types at particular locations.
- **Option 4:** A combination approach.

Issue W7a: Cumulative impact.

- **Option 1:** Having a policy framework against which cumulative impact can be assessed.
- **Option 2:** Having a policy framework where cumulative impacts are not a specific consideration.

Issue W7b: Safeguarding sites.

- **Option 3:** (Business as usual) Safeguarding sites.
- **Option 4:** Not safeguarding sites.

Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements.

- **Option 1:** (Business as usual).
- **Option 2:** Safeguarding current hazardous waste management capacity if deemed to be environmentally acceptable.
- **Option 3:** Minimising hazardous waste at source.

Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt.

- **Option 1**: (Business as usual)
- **Option 2:** New waste management facilities in the Green Belt.
- **Option 3:** No new waste management facilities in the Green Belt.
- **Option 4:** Redefining the Green Belt.

Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas.

- **Option 1:** (Business as usual) Rolling forward current policies.
- **Option 2:** Amending and adding to currently saved policies.

Issue W11: SA Report.

Not applicable.

Issue W12: Other issues.

Not applicable at this stage.

AA Task 2: Appropriate Assessment and ascertaining the effect on site integrity

AA Task 2 will be completed should Natural England consider that (as a result of AA Task 1 and the information contained in *Gloucestershire Minerals & Waste Development Framework: Evidence gathering / baseline for AA*) the options presented are likely to have significant effects on European site integrity.

AA Task 3: Mitigation measures and alternative solutions

AA Task 3 will be completed as and when, under AA Task 2, as advised by Natural England, an option has been found to have adverse effects on the integrity of a European site.

Contacts:
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Appendix 1. Appropriate Assessment (AA) Screening of Gloucestershire County Council's Waste Core Strategy Issues & Options (Summer 2006)

KEY

CODE:	
NLSE	No Likely Significant Effect(s)
LSE	Likely Significant Effect(s) – 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 at a later stage through the Waste Site Allocations DPD process.
U	Uncertain - cannot determine if NLSE or LSE (see above) so may require (a) 'Dropping' of the option (b) Modification of the Option (c) Modification / mitigation of the option at a later stage through the Waste Site Allocations DPD process.

Waste Core Strategy Issues & Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye Sites (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SPA / Ramsar)	Cotswold Beechwoods (SAC)
Issue W1: The spatial vision. ■ **Option 1:** (Business as usual) Current vision in the adopted Waste Local Plan.	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ U as proposal sites 3, 5, 6, 14, 15 & 20 are derived from the current WLP spatial vision	■ NLSE
■ **Option 2:** The proposed vision: "A sustainable and educational waste management system for Gloucestershire that reduces waste produced from businesses and households as a priority and diverts waste from landfill."	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ NLSE

Waste Core Strategy Issues & Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye Sites (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SPA / Ramsar)	Cotswold Beechwoods (SAC)
Issue W2: Determining the time period over which the WCS operates. ■ **Option 1:** (Business as usual) Gloucestershire Waste Local Plan to 2012.	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	NLSE
■ **Option 2:** Up to the year 2018.	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE
■ **Option 3:** Up to the year 2020.	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE
■ **Option 4:** Up to the year 2026.	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE
Issue W3: Implementing the waste hierarchy. ■ **Option 1:** (Business as usual) Proactively minimising waste generation.	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE
■ **Option 2:** Focus on recycling.	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE
■ **Option 3:** Recovering value (energy) from waste.	■ U	■ U	■ U	■ U	■ U	■ U	■ U	■ U	■ U	■ U

Waste Core Strategy Issues & Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye Sites (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SPA / Ramsar)	Cotswold Beechwoods (SAC)
Issue W4: Making appropriate provision. ■ **Option 1:** (Business as usual)	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ U as proposal sites 3, 5, 6, 14, 15 & 20 are already derived from the current WLP spatial vision	■ NLSE
■ **Option 2:** Identifying sites in a DPD.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.

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■ **Option 3:** Not identifying sites – having a criteria based policy.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the policy. Such screening is not particularly proactive or efficient though.
■ **Option 4:** A mix of identifying some sites and also using criteria based policies.	■ U (but see above for options 2 & 3)	■ U (but see above for options 2 & 3)	■ U (but see above for options 2 & 3)	■ U (but see above for options 2 & 3)	■ U (but see above for options 2 & 3)	■ U (but see above for options 2 & 3)	■ U (but see above for options 2 & 3)	■ U (but see above for options 2 & 3)	■ U (but see above for options 2 & 3)	■ U (but see above for options 2 & 3)
Issue W5: Setting out a spatial strategy. ■ **Option 1:** Town locations.	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ U	■ NLSE
■ **Option 2:** Edge of town locations.	■ U	■ NLSE	■ U	■ U	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ U	■ NLSE
■ **Option 3:** Rural locations.	■ U	■ U	■ U	■ U	■ U	■ U	■ U		■ U	■ U
■ **Option 4:** Centralised facilities.	■ U	■ NLSE	■ U	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ U	■ NLSE

Waste Core Strategy Issues & Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye Sites (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SPA / Ramsar)	Cotswold Beechwoods (SAC)
■ **Option 5:** Dispersed facilities.	■ U	■ U	■ U	■ U	■ U	■ U	■ U	■ U	■ U	■ U
■ **Option 6:** A combination of facilities. (Business as usual)	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ U as proposal sites 3, 5, 6, 14, 15 & 20 are already derived from the current WLP spatial vision	■ NLSE
Issue W6: Implementing the Joint Municipal Waste Management Strategy. ■ **Option 1:** (Business as usual)	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ NLSE	■ U as proposal sites 3, 5, 6, 14, 15 & 20 are already derived from the current WLP spatial vision	■ NLSE

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■ **Option 2:** A flexible criteria based approach.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.	■ U but could be NLSE if screening of each development on need for AA is made part of the approach. Such screening is not particularly proactive or efficient though.
■ **Option 3:** A prescriptive approach with particular facility types at particular locations.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.	■ U but NLSE is more probable as need for AA will be determined before sites are confirmed.
■ **Option 4:** A combination approach.	■ U (but see responses to options 1, 2 & 3 above)	■ U (but see responses to options 1, 2 & 3 above)	■ U (but see responses to options 1, 2 & 3 above)	■ U (but see responses to options 1, 2 & 3 above)	■ U (but see responses to options 1, 2 & 3 above)	■ U (but see responses to options 1, 2 & 3 above)	■ U (but see responses to options 1, 2 & 3 above)	■ U (but see responses to options 1, 2 & 3 above)	■ U (but see responses to options 1, 2 & 3 above)	■ U (but see responses to options 1, 2 & 3 above)

Waste Core Strategy Issues & Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye Sites (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SPA / Ramsar)	Cotswold Beechwoods (SAC)
Issue W7a: Cumulative impact. ■ **Option 1:** Having a policy framework against which cumulative impact can be assessed.	■ U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.	U - without knowing where waste sites will be. Note that assessment of cumulative impact increases probability of NLSE.
■ **Option 2:** Having a policy framework where cumulative impacts are not a specific consideration.	■ U - without knowing where waste sites will be. Note that not considering cumulative impacts increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not considering cumulative impacts increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not considering cumulative impacts increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not considering cumulative impacts increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not considering cumulative impacts increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not considering cumulative impacts increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not considering cumulative impacts increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not considering cumulative impacts increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not considering cumulative impacts increases probability of LSE.	■ U - without knowing where waste sites are. Note that not considering cumulative impacts increases probability of LSE.

Waste Core Strategy Issues & Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye Sites (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SPA / Ramsar)	Cotswold Beechwoods (SAC)
Issue W7b: Safeguarding sites. ■ **Option 3:** (Business as usual) Safeguarding sites.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.	■ U - without knowing where waste sites will be. Note that safeguarding increases probability of NLSE.
■ **Option 4:** Not safeguarding sites.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.	■ U - without knowing where waste sites will be. Note that not safeguarding increases probability of LSE.
Issue W8: Making an appropriate contribution to local, regional and national hazardous waste management requirements. ■ **Option 1:** (Business as usual)	■ U - without knowing where waste sites will be.	■ U - without knowing where waste sites will be.	■ U - without knowing where waste sites will be.	■ U - without knowing where waste sites will be.	■ U - without knowing where waste sites will be.	■ U - without knowing where waste sites will be.	■ U - without knowing where waste sites will be.	■ U - without knowing where waste sites will be.	■ U - without knowing where waste sites will be.	■ U - without knowing where waste sites will be.

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■ **Option 2:** Safeguarding existing hazardous waste management facilities provided that they are environmentally acceptable.	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	U as applies to existing/proposed sites in the current WLP. Note that safeguarding in this way increases probability of NLSE of already allocated sites.	NLSE
■ **Option 3:** Minimising hazardous waste at source.	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
Issue W9: The appropriateness of proposals for new waste management facilities in the Green Belt. ■ **Option 1**: (Business as usual)	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	U	U
■ **Option 2**: New waste management facilities in the Green Belt.	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	U	U

Waste Core Strategy Issues & Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye Sites (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SPA / Ramsar)	Cotswold Beechwoods (SAC)
■ **Option 3:** No new waste management facilities in the Green Belt.	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE
■ **Option 4:** Redefining the Green Belt.	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	U	U
Issue W10: Policies for dealing with proposals for new waste management facilities in other nationally designated areas. ■ **Option 1:** (Business as usual) Rolling forward current policies.	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE	NLSE

Waste Core Strategy Issues & Options	Rodborough Common (SAC)	Dixton Wood (SAC)	Wye Valley & Forest of Dean Bat Sites (SAC)	River Wye Sites (SAC)	Wye Valley Woodlands (SAC)	North Meadow & Clattinger Farm (SAC)	Walmore Common (SPA / Ramsar)	Bredon Hill (SAC)	Severn Estuary (SPA / Ramsar)	Cotswold Beechwoods (SAC)
■ **Option 2:** Amending and adding to currently saved policies.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.	■ NLSE if WCS read in conjunction with the RSS as this is where protection for international sites is highlighted. Approach conforms to PPS9.

Appendix 2: Environmental Features that Need to be Maintained & Statements / Consideration of 'In-Combination' Effects

European Site ⬇	**Environmental features that need to be maintained in order to maintain site integrity* / conservation objectives / reason the site has been selected** ** "..the site's coherence, ecological structure and function across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of species for which it was classified."*	**Statement & comment on 'in-combination' effects**
Rodborough Common **Designation:** (SAC) **District:** Stroud **Grid Reference:** SO849036 **Area:** 104.26ha	Annex I habitats that are a primary reason for selection of this site: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) Rodborough Common is the most extensive area of semi-natural dry grasslands surviving in the Cotswolds of central southern England, and represents CG5 *Bromus erectus – Brachypodium pinnatum* grassland, which is more or less confined to the Cotswolds. The site contains a wide range of structural types, ranging from short turf through to scrub margins, although short-turf vegetation is mainly confined to areas of shallower soils. **Source:** Joint Nature Conservation Committee.	European interest: dry limestone grassland. Not likely to affected by water-borne pollution or effects on the groundwater caused by mineral extraction. Waste sites if close could have an effect through increased atmospheric deposition of nitrogen. Nearby mineral workings could have an adverse effect through dust deposition. **Source:** Natural England comments (July 2006) Consideration of 'in-combination' effects: There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.
Dixton Wood **Designation:** Special Area of Conservation – (SAC) **District:** Tewkesbury **Grid Reference:** SO979313 **Area:** 13.14ha	Habitat of Annex II species that are a primary reason for selection of this site: *Violet click beetle* Limoniscus violaceus. The Violet click beetle *Limoniscus violaceus* was discovered at Dixton Wood in 1998 and it has been found at the site on a single occasion subsequently. It is a small site with large number of ancient ash *Fraxinus excelsior* pollards, and supports a rich fauna of scarce invertebrate species associated with decaying timber on ancient trees. Rare deadwood species such as the violet click beetle are mobile species which may depend on features outside of the wood for their life-cycle. These may include veteran trees beyond the boundary of the wood and hawthorn blossom for feeding. Impact on these features on the scarp slopes between Teddington and Cleeve Common may also affect the integrity of the site. **Source:** Joint Nature Conservation Committee & consultation response from Natural England – Feb 2007).	European interest: *Limoniscus violaceus* - the violet click beetle, which at this site lives in old ash trees. Ash trees like damp soil conditions, and the position of this site on the North west of the Cotswolds has ideal ground conditions. The site would be affected by mineral workings that affect soil water movements, or which cause dust deposition. Similarly the site would be affected by waste sites that led to contamination of the soil water. **Source:** Natural England comments (July 2006) Consideration of 'in-combination' effects: There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.

Wye Valley & Forest of Dean Bat Sites **Designation:** Special Area of Conservation – (SAC) **District:** Forest of Dean / Fynwy (Monmouthshire) **Grid Reference:** SO605044 **Area:** 142.7ha	Annex II species that are a primary reason for selection of this site: *Lesser horseshoe bat* Rhinolophus hipposideros. This complex of sites on the border between England and Wales contains by far the greatest concentration of lesser horseshoe bat *Rhinolophus hipposideros* in the UK, totaling about 26% of the national population. It has been selected on the grounds of the exceptional breeding population, and the majority of sites within the complex are maternity roosts. The bats are believed to hibernate in the many disused mines in the area. Greater horseshoe bat *Rhinolophus ferrumequinum* This complex of sites on the border between England and Wales represents greater horseshoe bat *Rhinolophus ferrumequinum* in the northern part of its range, with about 6% of the UK population. The site contains the main maternity roost for bats in this area, which are believed to hibernate in the many disused mines in the Forest. **Source:** Joint Nature Conservation Committee	European interest: bat species, greater horseshoe bat; lesser horseshoe bats. These sites are especially vulnerable to mineral workings that could affect the integrity of the underground network of sites used by the bats for summer or winter roosts. Damage to these underground systems even if at distance from the notified site could harm their integrity by eg affecting underground air flows or temperature gradients. On the surface workings could affect important flight lines or feeding areas which, although outside of the notified area, are crucial to the survival of the bat colonies. Waste sites present a risk both in habitat loss and the potential for pollutants to enter the underground systems. **Source:** Natural England comments (July 2006) <u>Consideration of 'in-combination' effects:</u> There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.

River Wye Sites **Designation:** Special Area of Conservation – (SAC) **District:** Forest of Dean / Fynwy - Monmouthshire / Herefordshire / Powys **Grid Reference:** S0109369 **Area:** 2234.89ha	Annex I habitats that are a primary reason for selection of this site: Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Transition mires and quaking bogs Annex II species that are a primary reason for selection of this site: White-clawed (or Atlantic stream) crayfish *Austropotamobius pallipes* Sea lamprey *Petromyzon marinus* Brook lamprey *Lampetra planeri* River lamprey *Lampetra fluviatilis* Twaite shad *Alosa fallax* Atlantic salmon *Salmo salar* Bullhead *Cottus gobio* Otter *Lutra lutra* Annex II species present as a qualifying feature, but not a primary reason for site selection: Allis shad *Alosa alosa* **Source:** Joint Nature Conservation Committee	European interest: allis shad; twaite shad; white-clawed crayfish; bullhead; river lamprey; brook lamprey; sea lamprey; otter; salmon; transition mires and quaking bogs; water-crowfoot communities. Mineral workings could affect these interests by damaging side water flows into the river and associated habitats and by pollution arising from the run-off from the workings. Waste sites would be a possible pollution source. **Source:** Natural England comments (July 2006) <u>Consideration of 'in-combination' effects:</u> There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.
Wye Valley Woodlands **Designation:** Special Area of Conservation – (SAC) **District:** Forest of Dean / Monmouthshire / Herefordshire **Grid Reference:** SO530957 **Area:** 916.24	Annex I habitats that are a primary reason for selection of this site: *Asperulo-Fagetum* beech forests. The Wye Valley contains abundant and near-continuous semi-natural woodland along the gorge. Beech stands occur as part of a mosaic with a wide range of other woodland types, and represent the western range of *Asperulo-Fagetum* beech forests. Such a variety of woodland types is rare within the UK. In places lime *Tilia* sp., elm *Ulmus* sp. and oak *Quercus* sp. share dominance with the beech. Structurally the woods include old coppice, pollards and high forest types. Lady Park Wood, one of the component sites, is an outstanding example of near-natural old-growth structure in mixed broad-leaved woodland, and has been the subject of detailed long-term monitoring studies.	European interest: yew woods; lime/maple woods; beech woods; lesser horseshoe bats. Not likely to affected by water-borne pollution or effects on the groundwater caused by mineral extraction. Waste sites if close could have an effect through increased atmospheric deposition of nitrogen. Nearby mineral workings could have an adverse effect through dust deposition. **Source:** Natural England comments (July 2006) <u>Consideration of 'in-combination' effects:</u> There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.

	Taxus baccata woods of the British Isles Wye Valley is representative of yew *Taxus baccata* woods in the south-west of the habitat's range. It lies on the southern Carboniferous limestone, and yew occurs both as an understorey to other woodland trees and as major yew-dominated groves, particularly on the more stony slopes and crags. Annex II species present as a qualifying feature, but not a primary reason for site selection: Lesser horseshoe bat *Rhinolophus hipposideros* **Source:** Joint Nature Conservation Committee	
North Meadow & Clattinger Farm (Wiltshire Sites) **Designation:** Special Area of Conservation – (SAC) **District:** Wiltshire **Grid Reference:** SU014934 **Area:** 104.88ha	Annex I habitats that are a primary reason for selection of this site: Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) North Meadow and Clattinger Farm in the Thames Valley in southern England is one of two sites representing lowland hay meadows near the centre of its UK range. As in the case of the Oxford Meadows, this site represents an exceptional survival of the traditional pattern of management and so exhibits a high degree of conservation of structure and function. This site also contains a very high proportion (>90%) of the surviving UK population of fritillary *Fritillaria meleagris*, a species highly characteristic of damp lowland meadows in Europe and now rare throughout its range. **Source:** Joint Nature Conservation Committee	European interest: lowland hay meadow on river valley alluvial soil. Mineral extraction in or near the site could affect groundwater levels or surface or subsurface water movements. Extraction above the site could also lead to pollution from runoff. Waste sites could pose a pollution threat, especially from nutrient enrichment. **Source:** Natural England comments (July 2006) Consideration of 'in-combination' effects: There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.

Cotswold Beechwoods **Designation:** Special Area of Conservation – (SAC) **District:** Cotswold **Grid Reference:** SO898134 **Area:** 585.85ha	Annex I habitats that are a primary reason for selection of this site: *Asperulo-Fagetum* beech forests The Cotswold Beechwoods represent the most westerly extensive blocks of *Asperulo-Fagetum* beech forests in the UK. The woods are floristically richer than the Chilterns, and rare plants include red helleborine *Cephalanthera rubra*, stinking hellebore *Helleborus foetidus*, narrow-lipped helleborine *Epipactis leptochila* and wood barley *Hordelymus europaeus*. There is a rich mollusc fauna. The woods are structurally varied, including blocks of high forest and some areas of remnant beech coppice. Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) **Source:** Joint Nature Conservation Committee	European interest: beech woodlands; dry limestone grasslands. Not likely to affected by water-borne pollution or effects on the groundwater caused by mineral extraction. Waste sites if close could have an effect through increased atmospheric deposition of nitrogen. Nearby mineral workings could have an adverse effect through dust deposition. **Source:** Natural England comments (July 2006) Consideration of 'in-combination' effects: There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.
Bredon Hill **Designation:** Special Area of Conservation – (SAC) **District:** Wychavon, Worcestershire **Grid Reference:** SO965406 **Area:** 359.86ha	Annex II species that are a primary reason for selection of this site: Violet click beetle *Limoniscus violaceus* Violet click beetle *Limoniscus violaceus* were recorded at Bredon Hill in 1989, although there is a 1939 record from 'Tewkesbury', which may refer to Bredon Hill. It has been found in each of several years since. It should be noted that the Violet click beetle is a mobile species. The scarp slope that begins at Cleeve Common and extends north into Worcestershire contains many veteran trees in woods and hedgerows and is an important resource for deadwood invertebrates including the Violet click beetle. Impacts on the hedgerow and veteran tree resource in this area may affect the integrity of the site. Bredon Hill is a very important site for fauna associated with decaying timber on ancient trees, including many Red Data Book and Nationally Scarce invertebrate species. Source: Joint Nature Conservation Committee & consultation response from Natural England – Feb 2007.	European interest: *Limoniscus violaceus* - the violet click beetle. Similar issues as for Dixton Wood with respect to how the site may potentially be affected by minerals or waste development. Consideration of 'in-combination' effects: There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.

Walmore Common **Designation:** Special Protection Area (SPA) & Ramsar site **District:** Forest of Dean **Grid Reference:** SO745150 **Area:** 52.85ha	This site qualifies under Ramsar criterion 6 by supporting species/populations occurring at levels of international importance: The qualifying species/populations (peak counts in winter) is Bewick's swan *Cygnus columbianus bewickii*, 43 individuals, representing an average of 0.5% of Great Britain's population (5 year peak mean 1998/9 – 2002/3). **Source:** Joint Nature Conservation Committee.	European interest: wintering Bewick's swans. Mineral extraction in or near the catchment could affect groundwater levels or water movements. Extraction above the site could also lead to pollution from runoff. Waste sites could pose a pollution threat. **Source:** Natural England comments (July 2006) <u>Consideration of 'in-combination' effects:</u> There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.
Severn Estuary **Designation:** Special Protection Area (SPA) & Ramsar site **District:** Stroud / Forest of Dean **Grid Reference:** 51 13 29N 03 02 57W **Area:** 24662.98 ha	Article 4.1 Qualification 79/409/EEC Over winter the area regularly supports: *Cygnus columbianus bewickii* (Western Siberia/North-eastern & North-western Europe) 3.9% of the GB population 5 year peak mean 1991/92-1995/96 --- Article 4.2 Qualification 79/409/EEC Over winter the area regularly supports: *Anas strepera* (North-western Europe) 0.9% of the population 5 year peak mean 1991/92-1995/96 *Anser albifrons albifrons* (North-western Siberia/North-eastern & Northwestern Europe) 0.4% of the population 5 year peak mean 1991/92-1995/96 *Calidris alpina alpine* (Northern Siberia/Europe/Western Africa) 3.3% of the population 5 year peak mean 1991/92-1995/96 *Tadorna tadorna* (North-western Europe) 1.1% of the population 5 year peak mean 1991/92-1995/96 *Tringa tetanus* (Eastern Atlantic - wintering) 1.3% of the population 5 year peak mean 1991/92-1995/96 ---	European interest: 1) as SPA - wintering wildfowl (>10,000 regularly), plus important numbers of individual species Bewick's swan, European whitefronted goose, wigeon, gadwall, shoveler, pochard. 2) as pSAC – Allis shad; twaite shad; Atlantic salt meadows; estuaries; river lamprey; intertidal mudflats and sandflats; sea lamprey; reefs; subtidal sandbanks. This site is unlikely to be affected directly by on land mineral extraction but there could be significant indirect effects from changes to water flow patterns into the site. (Note : marine aggregate extraction could have implications for many of the sites features by disruption of the sedimentary systems and natural processes operating throughout the estuary). Waste sites pose a threat from pollution. **Source:** Natural England comments (July 2006) <u>Consideration of 'in-combination' effects:</u> There may potentially be 'in-combination' effects on the site as a result of other plans and projects. To be advised by consultees and further examined at the Preferred Options stage of DPD preparation.

	Article 4.2 Qualification 79/409/EEC – An Internationally Important Assemblage of Birds Over winter the area regularly supports: 84317 waterfowl (5 year peak mean 01/04/1998) Including: *Cygnus columbianus bewickii , Anser albifrons albifrons , Tadorna tadorna , Anas strepera , Calidris alpine alpina , Tringa totanus.* **Source:** Joint Nature Conservation Committee.	

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