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## Habitats Regulations Assessment for the Nottinghamshire and Nottingham Waste Core Strategy

Screening Report – Pre Submission Changes

September 2012

# CONTENTS

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<b>1</b>	<b>INTRODUCTION</b>	<b>2</b>
<b>2</b>	<b>POTENTIAL IMPACTS</b>	<b>10</b>
<b>3</b>	<b>SCREENING SITES</b>	<b>22</b>
<b>4</b>	<b>SCREENING POLICIES</b>	<b>36</b>
<b>5</b>	<b>CONCLUSIONS AND RECOMMENDATIONS</b>	<b>39</b>
	<b>APPENDIX A: SCHEDULE OF EUROPEAN SITES</b>	
	<b>APPENDIX B: REVIEW OF AIR QUALITY DATA FOR EUROPEAN SITES</b>	
	<b>APPENDIX C: POTENTIAL EFFECTS ON PROSPECTIVE SPA</b>	
	<b>APPENDIX D: SCREENING OF POLICIES</b>	
	<b>APPENDIX E: CONSIDERATION OF POTENTIAL IN-COMBINATION EFFECTS</b>	

# 1 INTRODUCTION

## PURPOSE OF THIS REPORT

Nottinghamshire County Council (NCC) appointed WSP Environment and Energy to undertake a Habitats Regulations Assessment (HRA) of the Nottinghamshire and Nottingham Waste Core Strategy, in recognition of its obligations under the Conservation of Habitats and Species Regulations 2010. The work was commissioned at an early stage in the development of the Core Strategy. A 'Preliminary-Screening Report' was prepared and consulted on. In essence, the purpose of that report was to provide the basis for agreeing the scope and method of the next stages of the HRA work with statutory consultees (Natural England and the Environment Agency) and Nottinghamshire Wildlife Trust providing a sound basis for later stages of the work. The Preliminary Screening Report considered both the emerging Waste Core Strategy and a Minerals Core Strategy.

This report takes into account the schedule of pre-submission changes to the Waste Core Strategy produced by the authors of the document.

This HRA Screening Report provides:

- A summary of the role and purpose of the plan that is being assessed;
- A summary of the HRA process and the role of assessment in the context of Core Strategy;
- Identification of potential impacts associated with different waste technologies and consideration of the relevance of in-combination effects at this preliminary stage. In identifying such impacts account is also taken of avoidance and mitigation measures that can reasonably be assumed to apply;
- Screening of European sites – utilising previous work from the Preliminary Screening Report which included the identification of Natura 2000 sites within and adjacent to the Plan areas which may be affected, sites are screened out where this is appropriate. This includes separately assessing the implications of a prospective Special Protection Area (SPA) at Sherwood Forest;
- Analysis of the sites that cannot be screened out and identification of the key environmental conditions required to sustain the sites' integrity;
- Initial Screening of policies in the Core Strategy – to identify the potential for them to contribute to significant effects;
- Recommendations for avoiding and/or mitigating any likely significant effects;

## REPORT STRUCTURE

The HRA process is summarised below. **Section 2** of this report considers the potential impacts that waste technologies can have and also sets out assumed avoidance and mitigation measures. The potential for in-combination effects is also discussed.

**Section 3** of this report identifies a long list of European sites that need to be considered. It then presents the rationale for screening sites and the screening exercise. For sites that cannot be screened out consideration is given to the conditions required to sustain the sites integrity.

**Section 4** Presents the initial screening of policies and considers the potential for significant effects alone or in combination.

Conclusions and recommendations follow in **Section 5**.

## THE ROLE AND PURPOSE OF THE WASTE CORE STRATEGY

The Waste Core Strategy is a strategic document which sets out the overall planning policy towards existing and future waste management facilities within Nottinghamshire and Nottingham. It will be the basis for determining planning applications for all future waste management development and gives guidance on the broad location and type of waste management facilities that will be encouraged. It also provides the context for the later policy documents that will follow.

## Scope of the Waste Core Strategy

The Waste Core Strategy sets out the goals for delivering sustainable waste management over the next 20 years, until 2031, although this may be reviewed sooner if monitoring suggests this is needed. It covers nearly all types of waste, apart from radioactive waste and sets a vision for all levels of waste management including prevention, re-use, recycling, recovery and disposal. It will therefore be relevant to any proposals involving facilities for the storage, sorting, processing or disposal of waste.

The Waste Core Strategy sets out strategic policy and criteria on the general location and types of facilities that are needed, so that it can guide future development, but it does not identify any specific sites. These will be included in a separate site-specific document which will be used to prioritise which sites should be developed based on their environmental impacts and their contribution to delivering the aims of this Core Strategy.

The broad locations identified within the Waste Core Strategy, and the supporting criteria-based policies, will be used to help narrow down the choice of sites. A set of more detailed development management policies which will be used to provide appropriate controls on the way that waste management sites are built and operated is being prepared. These will cover issues such as traffic, dust, noise, odour and other possible impacts.

## Replacing existing waste policies

The Waste Core Strategy replaces many of the existing saved waste policies contained in the Waste Local Plan which was adopted in January 2002. However, the majority of the environmental protection policies will remain in force until they can be replaced by the separate site specific and development management policy documents. The saved policies are considered in Section 4 of this report.

## SUMMARY OF THE HRA PROCESS AND THE ROLE OF ASSESSMENT IN THE CONTEXT OF THE CORE STRATEGY

### Summary of the HRA Process

Natura 2000 is the European Union-wide network of protected areas, recognised as 'sites of Community importance' under the EC Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). These sites, which are also referred to as European sites, consist of Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Offshore Marine Site (OMS). There are no OMS designated at present. Ramsar Sites are also considered under the banner of HRA.

The purpose of HRA of land use plans is to ensure that protection of the integrity of European sites is a part of the planning process at a regional and local level.

HRA of plans and projects is required by Articles 6(3) and 6(4) of the European Habitats Directive:

*"6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public"*

*"6(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted."*

*Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest".*

In the UK, the Habitats Directive is implemented through the Conservation of Habitats and Species Regulations 2010 (the “Habitats Regulations”).

On 20 October 2005, the European Court of Justice (ECJ)<sup>1</sup> ruled that the UK had failed to fully transpose the provisions of Article 6(3) and (4) into the Habitats Regulations because the regulations do not clearly require land use plans to be subject to AA. Land use plans in this respect are Regional Spatial Strategies (RSSs), Development Plan Documents (DPDs) and Supplementary Planning Documents (SPDs)<sup>2</sup>.

Following the ruling from the ECJ, the Department for Environment, Food and Rural Affairs (DEFRA) published amended Habitats Regulations in 2007<sup>3</sup>. The Habitats Regulations – formally known as the Conservation (Natural Habitats, & c.) Regulations 1994 – aim to transpose the requirements of the Habitats Directive into domestic legislation. These amendments to the Regulations apply in England and Wales.

One of the principal requirements of the Regulations is that before a Core Strategy is published under the 2004 Act<sup>4</sup>, the plan making authority shall apply the requirements of Regulation 85. The essential requirement of Regulation 85 is for the plan making authority to assess the potential effects of the Plan on European Sites in Great Britain. The site affected could be in or outside England. The Regulations apply irrespective of when the authority started the review.

It has been recognised that the 30 sets of amendments to the Habitats Regulations since their inception made them difficult to follow. A consolidation of these amendments has now been undertaken and has resulted in the production of The Conservation of Habitats and Species Regulations 2010. Consolidation does not introduce any substantive policy or procedural changes.

The whole process of assessing the effects of the Core Strategy on European sites is referred to in this report as ‘Habitats Regulations Assessment’ (HRA), to clearly distinguish the whole process from the step within it commonly referred to as the ‘Appropriate Assessment’ (AA). The AA is a specific part of the entire assessment process and to use this term generally just adds confusion to the assessment. An AA is undertaken **when it has been determined that a plan or project (alone or in combination) is likely to have a significant effect, and where avoidance measures cannot easily be put in place to remove that likelihood**. In such instances, the next step in the process is to undertake an AA of the plan or project, to determine in far greater detail the type and magnitude of impacts and to try to find suitable mitigation measures that may reduce the impact to a level at which it will no longer be significant.

HRA involves the following key tasks (Figure One at the end of this section provides an overview):

- Brief description of the plan that is being considered;
- Characteristics of the European sites that might be affected;
- Identification of potential effects and the ‘pathways’ that might give rise to these effects;
- An assessment of the significance of potential effects. This will need to consider cumulative effects, including those associated with other plans and projects;
- Reporting – setting out the results of the above tasks and a conclusion as to whether or not we consider that a full AA is needed;
- Consultation;
- Full AA, including if necessary consideration of alternatives and mitigation measures where significant effects are identified. If potential significant effects cannot be mitigated or compensated apply the ‘Imperative Reasons of Overriding Public Interest’ test. (IROPI).

<sup>1</sup> Para. 51-56 in Case C-6/04, Commission of the European Communities v. United Kingdom of Great Britain and Northern Ireland, <http://curia.eu.int/jurisp/cgi-bin/form.pl?lang=en&Submit=Submit&alldocs=alldocs&docj=docj&docop=docop&docor=docor&docjo=docjo&numaff=C-6%2F04&datef=&datefe=&nomusuel=&domaine=&mots=&resmax=100>

<sup>2</sup> Letter from Lisette Simcock (ODPM) to chief planning officers (28 February 2006) “The Application of Appropriate Assessment under Article 6(3) and (4) of the Habitats Directive 92/43/EEC to Development Plans in the Transitional period between now and when the Amending Regulations come into force”

<sup>3</sup> Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 (SI 2007/1843)

<sup>4</sup> The Planning and Compulsory Purchase Act 2004, Part 6

IROPI primarily relates to human health, public safety or benefits of primary importance to the environment. Even if that was the case the Secretary of State would need to consult with the European Commission and be subject to the Secretary of State securing that any necessary compensatory measures are taken to ensure that overall coherence of Natura 2000 is protected (Section 105 of the Regulations).

The Waddenzee decision is important because it interprets the provisions of the Habitats Directive and is discussed below.

The issue of the implementation of the Habitats Directive in the Netherlands was the subject of an infringement procedure. The procedure related to the failure of the Netherlands to provide for an adequate protection of Natura 2000 sites. The case related to Eider Ducks threatened by the cockle-fishing industry in the Wadden Sea.

The decision states (paragraphs 56 and 57 our emphasis):

*“...the plan or project in question may be granted authorisation only on the condition that **the competent national authorities [in this case Nottinghamshire County Council] are convinced that it will not adversely affect the integrity of the site concerned.***

***So where doubt remains as to the absence of adverse effects on the integrity of the site linked to the plan or project being considered, the competent authority will have to refuse authorisation”.***

### **The Role of HRA in the Core Strategy Process**

Hopefully it is clear from the above that the way the Habitats Directive is cast makes it a powerful piece of legislation. A Plan cannot be adopted if it is likely to have a significant effect on a European site or if there is uncertainty as to whether or not this might be the case. Later stages of the process do allow for Plans that would cause harm to be adopted but these are contingent on the Secretary of State securing that any necessary compensatory measures are taken to ensure that overall coherence of Natura 2000 is protected. By way of contrast a Plan that was subjected to Strategic Environmental Assessment (SEA) could still proceed, even if the SEA identified significant potential negative effects. Where plans have been challenged for failure to comply with the SEA Directive the challenge has been around failure to comply with the **process** set out in the Directive and associated Regulations, rather than the identified effects of the Plan.

A key point is that the Core Strategy will not in itself directly result in any change to or effect on any European site. An allocation DPD will be produced to bring sites forward and development cannot occur without planning permission. Whilst the Core Strategy can set a framework for these later decisions (and so to that extent influence them, as found in the Commission v UK decision, October 2007, see reference 1 on the preceding page for details), provided that the framework makes it clear that (i) the requisite requirements of the Directive/Habitats Regulations will have to be satisfied at those later stages; and (ii) that the Core Strategy policies do not provide support for any proposal which would have an adverse effect on the integrity of any European site, the Core Strategy should not impact on any European site. This point has its limits – since the Core Strategy would not be sound if it relied on a strategic location for development that might adversely affect a European site, a contingency would need to be identified in such a situation.

There are three additional factors that influence the role of HRA in the Core Strategy process;

- Assessing issues down the line,
- The ability to take account of HRA of other plans and programmes, and
- Assessing in-combination effects

These are discussed in turn below.

#### ***Assessing Issues Down the Line***

The principle of assessing issues down the line has also become established practice in HRA of plans and programmes. This principle recognises that it is reasonable to look at issues in more detail in lower tier plans or even at the planning application stage. In the case of the Core Strategies the lower tier plans are the Development Plan documents that would allocate sites. There are limits to what can be passed ‘down the line,’ for example if a policy in the Core Strategy could only be implemented in one location and development in that location would potentially

adversely affect a European site it may not be appropriate to assess the issue down the line. If the later assessment confirmed there was a problem the Core Strategy policy could not be implemented which could potentially trigger the need for a review of the Core Strategy.

### **Taking Account of other HRAs**

The Habitats Directive catches a range of other plans and programmes, including:

- Water Resource Management Plans, prepared by Water Companies - Every five years, water companies in England and Wales are required to produce a Water Resources Management Plan that sets out how they aim to meet predicted demand for water over a 25-year period;
- Catchment Abstraction Management Strategies (CAMS), prepared by the Environment Agency - assesses how much water is reliably available on a catchment by catchment basis and introduces time-limited licences. This means the Environment Agency can periodically review them to determine whether to replace them or not and if so, what conditions should apply to them; and
- Between 2000 and March 2010 the Environment Agency reviewed all permissions that were granted before the Habitats Regulations came into force. This was called the Review of Consents (RoC). The RoC looked at permissions to control emissions to air, land and water.

One of the key points from the Habitats Regulations appears to be that the Council can rely on the Environment Agency (as the Competent Authority for the HRA of the RoC and other documents to assess issues relating to emissions to air, land and water and also water abstraction). The regulations state:

*65.—(1) This regulation applies where a plan or project—*

*(a) is undertaken by more than one competent authority;*

*(b) requires the consent, permission or other authorisation of more than one competent authority; or*

*(c) is undertaken by one or more competent authorities and requires the consent, permission or other authorisation of one or more other competent authorities.*

***(2) Nothing in regulation 61(1) or 63(2) requires a competent authority to assess any implications of a plan or project which would be more appropriately assessed under that provision by another competent authority.***

*(3) The appropriate authority may issue guidance to competent authorities for the purposes of regulations 61 to 64 as to the circumstances in which a competent authority may or should adopt the reasoning or conclusions of another competent authority as to whether a plan or project—*

*(a) is likely to have a significant effect on a European site or a European offshore marine site; or*

*(b) will adversely affect the integrity of a European site or a European offshore marine site.*

*(4) The competent authorities concerned must have regard to any such guidance.*

*(5) In determining whether a plan or project should be agreed to under regulation 62 (considerations of overriding public interest), a competent authority other than the Secretary of State or the Welsh Ministers must seek and have regard to the views of the other competent authority or authorities involved*

The regulations seem to apply where a plan is undertaken by one or more authority and/or requires the consent, permission or authorisation of more than one competent authority. The applicability of these provisions to development plans requires legal clarification. There is scope for the appropriate authority (presumably Communities and Local Government in this instance) to issue guidance to competent authorities as to the circumstances in which a competent authority may or should adopt the reasoning or conclusions of another competent authority.

### **In-combination Effects**

The Regulations require plans to be considered either alone or in combination with other plans or projects, to see if their combined effects would be likely to be significant. In a scenario where the effects have been reduced but not eliminated, the effects of the plan being assessed may have to be combined with the effects of other plans, or other projects.

An important point of principle here is that if the effects of other plans or projects will already be significant on their own they are **not** added to those of the plan being assessed. Only effects of other plans or projects which, like those of the plan under consideration here, alone would not be likely to be significant, need to be added to the in combination test. Consequently, until the elements of the plan that may have a significant effect in combination, but not on their own, are identified, it is pointless attempting to draw up a list of other plans and projects that should be combined. To do so at the outset of assessment could involve substantial abortive or irrelevant work (Natural England Draft Guidance page 31).

### **Sherwood Forest – prospective Special Protection Area**

The potential for a new Special Protection Area within the Sherwood Forest area has been identified. The potential was highlighted during the inquiry into a proposed Energy Recovery Facility at Rufford (APP/L3055/V/09/2102006). The situation is complex and the implications for Development Planning Documents are not clear cut. The key points are:

- The site potentially qualifies as a SPA because of the presence of breeding nightjar and woodlark. The populations in the Sherwood Forest region represent more than 1% of their total UK breeding populations. The site is made up of a number of smaller areas which appear to provide optimal breeding habitat but it is important to stress that the boundary is not yet fixed;
- There is on-going consideration of an additional qualifying Annex 1 species (honey buzzard) in the far north of the Sherwood Forest region which may require the inclusion of additional lands within the prospective SPA. However Natural England have advised that this species is ignored at this stage;
- The formal designation process will take place over a number of years and is taking place in the context of a wider review of sites and policy on such sites across the Country that is being led by Natural England;
- As the full SPA selection process has yet to be formally implemented and the formal UK Review of the existing suite of sites for nightjar and woodlark is pending, Natural England has not yet formed a view on whether a site within the Sherwood Forest region is one of the most suitable territories for these two species<sup>5</sup>;
- The site would only be protected under the Birds Directive once it became a Potential SPA (pSPA). This can occur in one of two ways:
  - 1) The announcement of a formal public consultation on the proposed site on behalf of the Minister; and
  - 2) A Ministerial announcement that a site, or list of sites, has been accepted as pSPAs, such as a list of sites resulting from an UK SPA Review exercise.
- The current intention is that the site is considered through the next UK SPA review exercise, the first stage of that is anticipated to be completed in December 2012.
- As things stand there appears to be no statutory requirement for the HRA of the Core Strategies to consider the prospect of an SPA at this location, however Planning Policy Statement 12<sup>6</sup> (PPS12) highlights the need for Core Strategies to handle contingencies (para. 4.46):

*“A strategy is unlikely to be effective if it cannot deal with changing circumstances. Core strategies should look over a long time frame – 15 years usually but more if necessary. In the arena of the built and natural environment many issues may change over this time. Plans should be able to show how they will handle contingencies:*

*It may not always be possible to have maximum certainty about the deliverability of the strategy. In these cases the core strategy should show what alternative strategies have been prepared to handle this uncertainty and what would trigger their use. Authorities should not necessarily rely on a review of the plan as a means of handling uncertainty.”*
- The prospect of a new European Site being designated in the County is considered by the Council and WSP to warrant a contingency based approach in line with PPS12. Natural England has also confirmed support for this

<sup>5</sup> Revised Response to Planning Inspector’s request for information from Natural England February 2010

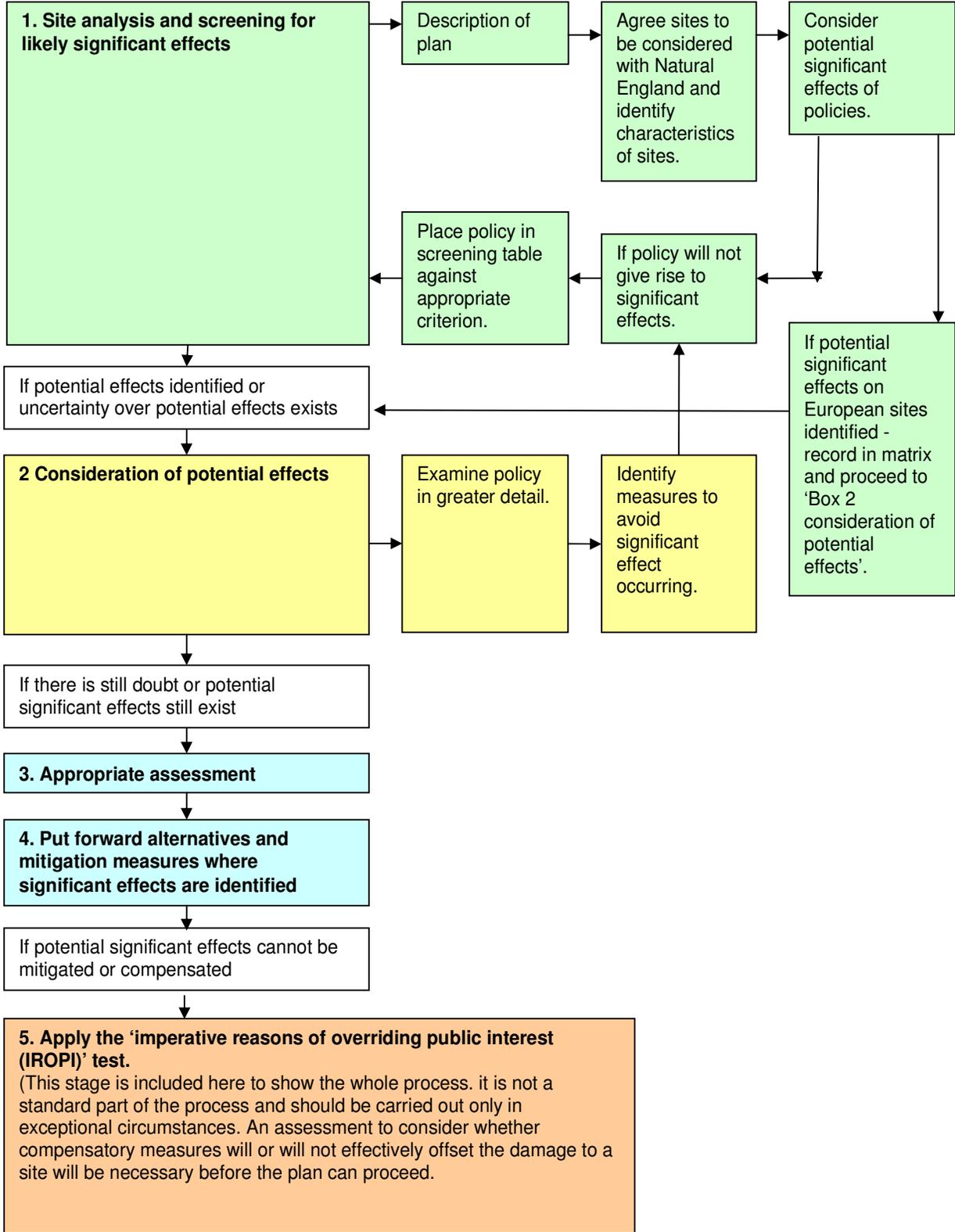
<sup>6</sup> Planning Policy Statement 12: Creating Strong Safe and Prosperous Communities Through Local Spatial Planning, DCLG 2008

approach in the context of earlier work undertaken by WSP on behalf of Newark and Sherwood District Council (HRA Screening of Core Strategy, 2010).

The Preliminary Screening Report therefore looked at the potential implications of a new SPA at Sherwood Forest. It adopted a risk based approach, by examining the implications of the possible designation of a new SPA over the course of the life of the two Core Strategies – and any contingency arrangements, the Core Strategies might make, in the event that the designation occurs. The term 'prospective SPA' is used hereafter to refer to this area.

The potential for impacts on the prospective SPA is further considered in this report. The work has been kept separate from the main HRA to avoid confusing the two elements.

Figure One: Overview of the HRA Process



## 2 POTENTIAL IMPACTS

### INTRODUCTION

This section considers the potential impacts that waste related technologies and developments can have and also sets out assumed avoidance and mitigation measures. The relevance of the assessment of in-combination effects at this stage is also discussed.

### POTENTIAL IMPACTS BY TECHNOLOGY

**Table 2.1** below sets out potential impacts associated with waste management technologies and processes, together with the rationale for screening effects and avoidance and mitigation measures that it can reasonably be assumed will apply at the project level. It considers the following:

- Recycling
- In vessel Composting
- Open air Composting
- Mechanical Biological treatment (including Autoclaving)
- Incineration with Energy Recovery
- Anaerobic Digestion
- Alternative Combustion Technologies (Pyrolysis, gasification and plasma arc technologies), ,
- Landfill/land raise, including disposal of Pulverised Fuel Ash
- Remediation and restoration
- Landfill mining (as a form of recovery)

A set of general considerations are also considered at the end of the table.

Potential environmental impacts have been identified using WSP's and the client's experience of working in this field along with guidance from:

- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites<sup>7</sup> (European Union November 2001);
- Unpublished Draft Guidance from Natural England on AA of Regional Spatial Strategies and Local Development Frameworks<sup>8</sup>; and
- Guidance from the Department for Communities and Local Government (DCLG)<sup>9</sup> on Appropriate Assessment of RSSs and LDDs.

This work was also consulted on as part of the Pre Screening Report. Note that landfill mining (as a form of waste recovery has been added in response to changes made to the Proposed Submission Draft of the Core Strategy.

<sup>7</sup> Assessment of Plans and Projects Significantly Affecting Natura 2000 sites, Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC European Union, November 2001 [http://ec.europa.eu/environment/nature/nature\\_conservation/eu\\_nature\\_legislation/specific\\_articles/art6/pdf/natura\\_2000\\_assess\\_en.pdf](http://ec.europa.eu/environment/nature/nature_conservation/eu_nature_legislation/specific_articles/art6/pdf/natura_2000_assess_en.pdf)

<sup>8</sup> Draft Guidance, The Assessment of Regional Spatial Strategies and Sub-Regional Strategies under the Provisions of the Habitats Regulations, David Tyldesley and Associates for English Nature, March 2007.

<sup>9</sup> Planning for the Protection of European Sites: Appropriate Assessment Guidance For Regional Spatial Strategies and Local Development Documents, DCLG, August 2006 [http://www.communities.gov.uk/pub/353/PlanningfortheProtectionofEuropeanSitesAppropriateAssessmentGuidanceForRegionals\\_id1502353.pdf](http://www.communities.gov.uk/pub/353/PlanningfortheProtectionofEuropeanSitesAppropriateAssessmentGuidanceForRegionals_id1502353.pdf)

**Table 2.3 Environmental Impacts Associated with Waste Management Facilities of relevance to European sites**

**Recycling:** Recycling of green waste by different forms of composting is discussed later in this table. Recycling of other forms of municipal waste in the County is done through a combination of kerb-side collection and bring schemes. Construction and demolition waste and commercial waste are also recycled. Most of the dry recycled material collected from kerbsides in the County is currently sorted at a large materials recycling plant in Mansfield that opened in 2009. The equivalent waste collected in the city currently goes to an established recycling plant at Colwick near Nottingham.

Potential Environmental Impacts	Screening Rationale	Assumed mitigation
<p>Air Pollution / Disturbance</p> <ul style="list-style-type: none"> <li>• Road transport impacts,</li> <li>• Dust,</li> <li>• Noise</li> <li>• Odour</li> <li>• vermin</li> </ul>	<p>The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible. Natural England has also confirmed that assessments of Development Plans should focus on European sites within 200m of a road.</p> <p>The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern.</p>	<p>Mitigations include standard good practice environmental management on site and off site (e.g. low emission vehicles, use of renewable energy sources etc)</p> <p>The local planning authority can set conditions on the maximum acceptable noise level.</p> <p>The Environmental Permitting Regulations provide industry, regulators and others with a single extended permitting and compliance system and includes those systems for discharge consenting, groundwater authorisations and radioactive substances regulation. Environmental Permitting also provides a tool for delivering the permitting and compliance requirements of EU directives such as those relating to the Batteries Directive and Mining Waste Directive.</p> <p>Rodent and fly control may be affected by rapid</p>

		<p>turnaround of waste materials. Birds are discouraged by containing operations within a building.</p> <p>Rodenticides and insecticides may be used.</p> <p>Drainage systems may be fitted with grates etc. to prevent rodents entering the building via drains/sewers.</p>
<p><b>In Vessel Composting:</b> In-vessel composting is an industrial form of composting biodegradable waste that occurs in enclosed reactors. These generally consist of metal tanks or concrete bunkers in which air flow and temperature can be controlled, using the principles of a "bioreactor". Generally the air circulation is metered in via buried tubes that allow fresh air to be injected under pressure, with the exhaust being extracted through a biofilter. Sources of biodegradable waste include municipal and commercial waste, including waste from the food industry.</p>		
Potential Environmental Impacts	Screening Rationale	Assumed mitigation
<ul style="list-style-type: none"> <li>• Land take</li> <li>• Road transport impacts</li> <li>• Odour,</li> <li>• Litter,</li> <li>• Possible vermin generation</li> <li>• Release of spores (non-native), requirement for buffer zones (at least 250 metres between composting operations and sensitive receptors)</li> <li>• Production of liquid pollutant</li> <li>• Potential for combustion</li> <li>• Mitigations include the use of in-vessel composting to control gas / odour and ventilation/in-vessel mixing (using different grade of carbon material)</li> <li>• Composting reduces waste to landfill, useful by-product, closed loop waste management.</li> </ul>	<p>The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible. Natural England has also confirmed that assessments of Development Plans should focus on European sites within 200m of a road.</p> <p>The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern.</p> <p>The Environment Agency position statement on composting and bio aerosols applies to both in-vessel</p>	<p>Environmental Permitting</p>

	<p>and open air composting and states that composting activities should be located at least 250m away from sensitive receptors to avoid impacts from non-native spores. Therefore it is not possible to screen any sites which lie within Nottinghamshire or within 250m of Nottinghamshire, to be screened out</p>	
<p><b>Open air Composting:</b> The open windrow composting system is used to process garden waste - such as grass cuttings, pruning's and leaves. It cannot be used to process catering or animal wastes. In an open windrow system, the feedstock is shredded and placed on a non-permeable surface. The materials should be turned on a regular basis, taking up to 16 weeks. The compost that is produced must then be graded and screened to remove any remaining contaminants.</p>		
<b>Potential Environmental Impacts</b>	<b>Screening Rationale</b>	<b>Assumed mitigation</b>
<ul style="list-style-type: none"> <li>• Land take</li> <li>• Road transport impacts</li> <li>• Odour,</li> <li>• Litter,</li> <li>• Possible vermin generation</li> <li>• Release of spores (non-native), requirement for buffer zones (at least 250 metres between composting operations and sensitive receptors)</li> <li>• Production of liquid pollutant</li> <li>• Potential for combustion</li> <li>• Composting reduces waste to landfill, useful by-product, closed loop waste management.</li> </ul>	<p>The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible. Natural England has also confirmed that assessments of Development Plans should focus on European sites within 200m of a road.</p> <p>The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern.</p> <p>The Environment Agency position statement on composting and bio aerosols states that composting activities should be located at least 250m away from sensitive receptors to avoid impacts from non-native spores. Therefore it is not possible to screen any sites which lie within Nottinghamshire or within 250m of Nottinghamshire, to be screened out</p>	<p>Environmental Permitting</p>

**Mechanical Biological Treatment (MBT) including autoclaving:** A mechanical biological treatment system is a type of waste processing facility that combines a sorting facility with a form of biological treatment such as composting or anaerobic digestion. MBT plants are designed to process mixed household waste as well as commercial and industrial wastes. MBT plants may be configured in a variety of ways to achieve the required recycling, recovery and biodegradable municipal waste (BMW) diversion performance. Outputs include biogas, refuse derived fuels and low grade compost/soil conditioner.

Potential Environmental Impacts	Screening Rationale	Assumed mitigation
<ul style="list-style-type: none"> <li>• Land take</li> <li>• Road transport impacts</li> <li>• Processes produce residue</li> <li>• Mitigation measures as for landfill (rejects from mechanical sorting) and composting (outputs from biological treatment)</li> <li>• Final waste inert and diverts waste from landfill, leachate used in process, prevents attraction of vermin, deals with biogas</li> </ul>	<p>The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible. Natural England has also confirmed that assessments of Development Plans should focus on European sites within 200m of a road.</p> <p>The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern.</p> <p>For industrial processes, the current guidance that is used when assessing point source emissions is the IPPC H1 Guidance for the Environmental Assessment and Appraisal of BAT. A simple screening tool is provided with the guidance to determine which pollutants emitted from a process are released in significant amounts and which are not. The H1 document indicates that designated sites (including European sites) which are located within 10 km of the pollutant source should be considered as a sensitive receptor within an assessment. For major emitters (large power stations, refineries, or iron and steelworks) this</p>	<p>Environmental Permitting</p>

	<p>distance increases to 15km.</p> <p>These distances will be used to establish which sites lie within 15km of Nottinghamshire.</p>	
<p><b>Anaerobic Digestion (energy from waste)</b> Anaerobic Digestion (AD) is the process where plant and animal material (biomass) is converted into useful products by micro-organisms in the absence of air. Biomass is put inside sealed tanks and naturally occurring micro-organisms digest it, releasing methane that can be used to provide energy (biogas). The other product of AD is digestate - left over indigestible material and dead micro-organisms that can be used as a fertiliser.</p>		
<b>Potential Environmental Impacts</b>	<b>Screening Rationale</b>	<b>Assumed mitigation</b>
<p>Air/Water Pollution</p> <ul style="list-style-type: none"> <li>• Land take</li> <li>• Road transport impacts</li> <li>• Odour (during collection, transport and pre-treatment)</li> <li>• Wastewater – potential for high concentrations of metals, dissolved nitrogen and organic material</li> </ul>	<p>The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible. Natural England has also confirmed that assessments of Development Plans should focus on European sites within 200m of a road.</p> <p>The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern.</p>	<p>Environmental Permitting</p> <p>Mitigation measures include the use of biofilters to prevent odours</p>
<p><b>Incineration with Energy Recovery</b> - Incineration involves the combustion of typically unprepared (raw or residual) MSW. To allow the combustion to take place a sufficient quantity of oxygen is required to fully oxidise the fuel. Incineration plant combustion temperatures are in excess of 850 degrees centigrade and the waste is mostly converted into carbon dioxide and water and any non- combustible materials (e.g. metals, glass, stones) remain as a solid, known as Incinerator Bottom Ash (IBA) that always contains a small amount of residual carbon.</p>		
<b>Potential Environmental Impacts</b>	<b>Screening Rationale</b>	<b>Assumed mitigation</b>
<ul style="list-style-type: none"> <li>• Land take</li> <li>• Road transport impacts</li> <li>• Noise,</li> <li>• Dust</li> <li>• Deposition of substances on surface water</li> <li>• Solid, liquid emissions</li> </ul>	<p>The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible. Natural</p>	<p>Environmental Permitting</p> <p>IPPC controlled emissions, recovery of metals from ash, flue gas cleaning, onsite water treatment</p>

<ul style="list-style-type: none"> <li>• Gaseous emissions include odour, acid gas, heavy metals, particulates, organic compounds</li> <li>• Ash residues comprising fine particles, [need to landfill ash/scrap] dioxins, heavy metals salts, unreacted lime and carbon</li> <li>• Contamination, accumulation of toxic substance (food chain)</li> </ul>	<p>England has also confirmed that assessments of Development Plans should focus on European sites within 200m of a road.</p> <p>The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern.</p> <p>For industrial processes, the current guidance that is used when assessing point source emissions is the IPPC H1 Guidance for the Environmental Assessment and Appraisal of BAT. A simple screening tool is provided with the guidance to determine which pollutants emitted from a process are released in significant amounts and which are not. The H1 document indicates that designated sites (including European sites) which are located within 10 km of the pollutant source should be considered as a sensitive receptor within an assessment. For major emitters (large power stations, refineries, or iron and steelworks) this distance increases to 15km.</p> <p>These distances will be used to establish which sites lie within 15km of Nottinghamshire</p>	
<p><b>Alternative Combustion Technologies</b> (Pyrolysis, gasification and plasma arc technologies): Pyrolysis is the thermal degradation of a substance in the absence of oxygen. This process requires an external heat source to maintain the pyrolysis process. Typically, temperatures of between 300 to 850 degrees centigrade are used during pyrolysis of materials such as Municipal Solid Waste. The products produced from pyrolysing materials are a solid residue and syngas. Syngas can be used in either a gas engine or hydrogen fuel cell to generate energy. Gasification can be seen as being between pyrolysis and combustion in that it involves the partial oxidation of a substance. The temperatures employed are typically above 650 o C. The main product is a syngas. In plasma technologies the waste is heated with a plasma arc (6,000<sup>o</sup> to 10,000<sup>o</sup> Celsius) to create gases and vitrified slag. In some cases the plasma stage may follow on from a gasification stage.</p>		

Potential Environmental Impacts	Screening Rationale	Assumed mitigation
<ul style="list-style-type: none"> <li>• Land take</li> <li>• Road transport impacts</li> <li>• if the gases and oils coming off the process are then burnt, this may also generate emissions to air</li> </ul>	<p>The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible. Natural England has also confirmed that assessments of Development Plans should focus on European sites within 200m of a road.</p> <p>The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern.</p> <p>For industrial processes, the current guidance that is used when assessing point source emissions is the IPPC H1 Guidance for the Environmental Assessment and Appraisal of BAT. A simple screening tool is provided with the guidance to determine which pollutants emitted from a process are released in significant amounts and which are not. The H1 document indicates that designated sites (including European sites) which are located within 10 km of the pollutant source should be considered as a sensitive receptor within an assessment. For major emitters (large power stations, refineries, or iron and steelworks) this distance increases to 15km.</p> <p>These distances will be used to establish which sites lie within 15km of Nottinghamshire.</p>	
<b>Landfill and Landraise, including PFA</b>		

Potential Environmental Impacts	Screening Rationale	Assumed mitigation
<ul style="list-style-type: none"> <li>• Land take</li> <li>• Road transport impacts</li> <li>• Methane and carbon monoxide emissions.</li> <li>• Leachate, salts, heavy metals, biodegradable and persistent organics, ammonia</li> <li>• Accumulation of hazardous substances in soil</li> <li>• Topography alteration,</li> <li>• Soil occupancy, prevention of other land uses</li> <li>• Attraction of vermin</li> <li>• Contamination, accumulation of toxic substances</li> <li>• Potential exposure to hazardous substances</li> <li>• Impact on surface water runoff, flood risk</li> <li>• Potential to extract and utilise landfill gas.</li> </ul>	<p>The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible. Natural England has also confirmed that assessments of Development Plans should focus on European sites within 200m of a road.</p> <p>The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern.</p>	<p>Mitigation includes, liner systems, leachate collection, compaction to increase density and stability and covering to reduce impacts of vermin</p> <p>Environmental Permitting associated will require monitoring of environmental effects arising from:</p> <ul style="list-style-type: none"> <li>• Emissions to water and groundwater;</li> <li>• Particulate matter (dust and aerosols):</li> <li>• Litter;</li> <li>• Mud on the road;</li> <li>• Odour;</li> <li>• Noise and Vibration; and</li> <li>• Pests.</li> </ul> <p>Under the requirements of the permit, abatement procedures should be in place to address and address effects arising from these.</p>
<b>Remediation and Restoration</b>		
Potential Environmental Impacts	Screening Rationale	Assumed mitigation
<ul style="list-style-type: none"> <li>• Road transport impacts</li> <li>• Restoring waste sites (such as landfill) can be positive for nature conservation.</li> <li>• Partial and full restoration of sites has the potential to improve the SACs and SPAs through increasing the robustness of sites. This could be either through enhancing buffers or improving the connectivity of sites.</li> <li>• Restoration and mitigation could potentially lead to the introduction or increased abundance of potential invasive species which could comprise an adverse impact on integrity of Natura 2000 sites.</li> </ul>	<p>Issues around remediation will be restricted to those sites within the plan area, although effects could extend to other sites, e.g. because of transport related emissions.</p>	<p>Well - designed phasing can assist with restoration process.</p> <p>Under section 14 of the Wildlife and Countryside Act 1981, it is an offence to introduce a species which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state; or is included within Schedule 9 of the Act.</p> <p>Long term commitment of funds to management</p>

		<p>of restored habitats on site may provide additional enhancement to increase the robustness of important habitats on adjacent land.</p> <p>Planting schemes should include the use of native species and reflect priorities in the Biodiversity Action Plan.</p>
<p><b>Landfill mining (as a form of resource recovery). This involves the mining of resources that have previously been landfilled, their excavation and processing. This could include the recovery of recyclable materials, a combustible fraction, soil and landfill space. Potential effects will in part be influenced by how resources are recovered, for example alternative combustion technologies (outline above) could be utilised on site.</b></p>		
Potential Environmental Impacts	Screening Rationale	Assumed mitigation
<ul style="list-style-type: none"> <li>• Land take associated with excavation or energy recovery;</li> <li>• Road transport impacts</li> <li>• Methane and carbon monoxide emissions.</li> <li>• Leachate, salts, heavy metals, biodegradable and persistent organics, ammonia</li> <li>• Accumulation of hazardous substances in soil</li> <li>• Topography alteration,</li> <li>• Soil occupancy, prevention of other land uses</li> <li>• Attraction of vermin</li> <li>• Contamination, accumulation of toxic substances</li> <li>• Potential exposure to hazardous substances</li> <li>• Impact on surface water runoff, flood risk</li> </ul>	<p>The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible. Natural England has also confirmed that assessments of Development Plans should focus on European sites within 200m of a road.</p> <p>The impacts of nitrogen and nitrogen oxides deposition on vegetation growth are of particular concern.</p>	<p>Mitigation includes, liner systems, leachate collection, compaction to increase density and stability and covering to reduce impacts of vermin</p> <p>Environmental Permitting associated will require monitoring of environmental effects arising from:</p> <ul style="list-style-type: none"> <li>• Emissions to water and groundwater;</li> <li>• Particulate matter (dust and aerosols);</li> <li>• Litter;</li> <li>• Mud on the road;</li> <li>• Odour;</li> <li>• Noise and Vibration; and</li> <li>• Pests.</li> </ul> <p>Under the requirements of the permit, abatement procedures should be in place to address and address effects arising from these.</p>
<p><b>General Considerations (the factors considered below are considered to be potentially relevant to all forms of waste technology/development)</b></p>		

Potential Environmental Impacts	Screening Rationale	Assumed mitigation
<p>Predatory Animals: In its response to the Pre-Screening Report Natural England (letter dated 14<sup>th</sup> September 2011) suggested that predatory animals should be added to the list of potential issues associated with waste related developments.</p>	<p>Cats, dogs, mink, weasels, stoats, polecats, foxes, otter and badgers will all predate on birds (esp. ground/water nesting birds). Where operations tend to take place within a building and waste materials are only present for short periods facilities are not normally associated with the attraction of animals (Planning for Waste Management Facilities – a research study, ODPM [now DCLG] 2004). The range of animals varies but such effects are only considered likely to be relevant to sites within the plan area, one scenario is possible scenario is where development displaces a predator into a European site.</p>	<p>Potential mitigation includes the use of Site Management Plans.</p>
<p>Human activity: This was raised as an issue by both Natural England and the Nottinghamshire Wildlife Trust in their response to the Pre – Screening report.</p>	<p>This could potentially relate to all types of waste facilities but will be localised in nature and will depend on the scale and nature of the operation. Waste facilities will not attract visitors (other than contractors etc.) unless they include education/viewing facilities and bring facilities, e.g. for recycling.</p> <p>A distance of 500 metres is commonly used in HRAs to cover issues around human activity and potential impacts on European sites. This is in the context of residential developments and therefore represents a worst case in the context of waste facilities. It is therefore only considered relevant to sites within the</p>	<p>Potential mitigation includes the use of Site Management Plans and planning conditions to restrict operations to daylight hours in order to avoid disturbance.</p>

	plan area.	
Building mass: This was raised by Nottinghamshire Wildlife Trust in their response to the Pre – Screening report.	Waste facilities, which may comprise large, permanent structures in the landscape, may affect European Protected bird species through their presence as a built mass which can interfere with breeding and foraging activity. This is only considered relevant to sites within the plan area.	
Lighting: This was raised by Nottinghamshire Wildlife Trust in their response to the Pre – Screening report.	This is only considered relevant to sites within the plan area.	Use of directional lighting

# 3 SCREENING SITES

## INTRODUCTION

This section identifies a long list of European sites that need to be considered. It then re-caps the rationale for screening sites and the screening exercise. For sites that cannot be screened out consideration is given to the conditions required to sustain the sites integrity.

## THE LONG LIST OF SITES

There is no prescribed method for identifying the sites that need to be considered in a HRA. The most common approach is to identify an area of search based on distance from the plan area. The distance used can vary from 10km, 15km to 20km. Irrespective of distance there is a need to consider any sites where a linkage or pathway between the plan that is being assessed and a site might exist. The principle of source-pathway-receptor is relevant in both instances.

The original brief required consideration of sites within 20km of the plan area and also identified the Humber Estuary SPA as appropriate for consideration. The brief also identified the need for any other sites to be identified, irrespective of distance from the plan area if a potential linkage could be identified.

The site and their reason for inclusion are summarised in **Table 3.1** below and are shown on **Figure 3.1**:

**Table 3.1: European Sites**

Reason for inclusion	Site(s)
Confirmed European Site within Nottinghamshire	1 Birklands and Bilhaugh SAC
A further nine European Sites fall within a 20 kilometre buffer zone around Nottinghamshire	2 Peak District Dales SAC 3 South Pennine Moors SAC 4 Peak District Moors (South Pennine Moors Phase 1) SPA 5 Bees Nest and Green Clay Pits SAC 6 Gang Mine SAC 7 Hatfield Moor SAC 8 Thorne Moor SAC 9 Thorne and Hatfield Moors SPA 10 Humber Estuary SAC 11 River Mease SAC
Beyond 20Km but potential for linkages or pathways	12 Humber Estuary SPA/Ramsar
prospective European Site	13 Sherwood Forest prospective SPA

The characteristics of the relevant sites are set summarised below and more detail is provided in **Appendix A**. This information has been used to inform the screening exercise.

## 1. Birklands and Billhaugh SAC

Birklands and Billhaugh SAC is designated for ANNEX 1 habitat: 9190 Old acidophilous oak woods with *Quercus robur* on sandy plains.

This is one of only four known outstanding localities in the UK. It is the most northerly of these localities and is also notable for its rich invertebrate fauna, particularly spiders, and for a diverse fungal assemblage.

Birklands and Billhaugh SAC lies within Sherwood Forest which is a popular recreation area. The delicate habitat is considered vulnerable to damage from visitors.

The SAC experiences air pollution from urban areas, which has led to a reduction in lichen diversity.

The SAC has been dependent on grazing regimes, which have now ceased. This cessation has meant that there has been birch invasion and scrubbing up of grass/heath glades. This has altered the open nature of the understorey and threatens future deadwood habitats.

## 2. Peak District Dales SAC

The primary reasons for the designation of the Peak District Dales includes *Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia)*, for which it is one of the most extensive surviving areas in England. The diversity of structural types of grassland at this site is unparalleled in the UK. There is also a great physical diversity due to rock outcrops, cliffs, screes and a variety of slope gradients and aspects.

Tilio-Acerion forests of slopes, screes and ravines are present as a primary reason for designation and a priority feature, for which the site represents the north-central part of its UK range, this site in the English Midlands contains a large area of *Tilio-Acerion*, dominated by ash *Fraxinus excelsior*. The Dales provide good examples of woodland-scrub-grassland transitions, with associated rich invertebrate populations and plant communities.

Other Annex 1 habitats on the site, which are qualifying features but not the primary reason for designation include:

- European dry heaths;
- Calaminarian grasslands of the *Violetalia calaminariae*;
- Alkaline fens;
- Calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*); and
- Calcareous rocky slopes with chasmophytic vegetation.

Annex II species White-clawed Crayfish *Austropotamobius pallipes* are present within the SAC as a primary reason for designation. The River Dove represents the species in a high-quality, upland limestone river, in the north-east of the species' UK range.

Two species are also present as non-primary qualifying features, Brook Lamprey *Lampetra planeri* and Bullhead *Cottus gobio*.

## 3. South Pennine Moors SAC

The site is designated for Annex I habitats. The primary reasons for designation include European dry heaths, Blanket bogs (priority feature) and Old sessile oak woods with Ilex and Blechnum. The site is representative of upland dry heath at the southern end of the Pennine range, the habitat's most south-easterly upland location in the UK. The moors support a rich invertebrate fauna, especially moths, and important bird assemblages.

Blanket bogs are a priority feature and the site represents the habitat in the south Pennines, the most south-easterly occurrence of the habitat in Europe. Substantial areas of the bog surface are eroding, and there are extensive areas of bare peat. In some areas erosion may be a natural process reflecting the great age (9000 years) of the south Pennine peats.

Old sessile oak woods with Ilex and Blechnum in the British Isles are present around the fringes of the upland heath and bog of the south Pennines are blocks of old sessile oak woods, usually on slopes. These tend to be dryer than

those further north and west, such that the bryophyte communities are less developed (although this lowered diversity may in some instances have been exaggerated by the effects of 19th century air pollution).

Other Annex I habitats present as non-primary qualifying features include Northern Atlantic wet heaths with *Erica tetralix* and Transition mires and quaking bogs.

#### **4. Peak District Moors (South Pennine Moors Phase I) SPA**

The habitats associated with the South Pennine Moors regularly support significant breeding populations of short eared owl *Asio flammeus*, merlin *Falco columbarius* and golden plover *Pluvialis apricaria*.

#### **5. Bees Nest and Green Clay Pits SAC**

The primary reason for the designation of the site is the Annex II species great crested newt *Triturus cristatus*, for which this is one of the best areas in the United Kingdom. The Annex 1 habitat Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) is present as a qualifying feature, but not as the primary reason for selection.

Historically the site has been disturbed by, and partially created by, mineral abstraction of silica sands. An extant permission for extraction is currently dormant and would require review by the planning authority before re-enactment. This extant permission would require the disposal of any waste generated to be disposed of on site, which could result in the ponds being filled.

There have been possible problems with unauthorised excavation and tipping. Several applications for tipping at the site have been submitted, it is unclear if any of these have been approved.

The land is currently grazed by a tenant who is part of a Natural England wildlife enhancement scheme; however there are problems with grazing management at the site affecting the quality of the grassland.

#### **6. Gang Mine SAC**

The site is designated for the Annex 1 habitat Calaminarian grasslands of the *Violetalia calaminariae* for which it is considered one of the best areas in the UK. A fifth of the site is not currently grazed and if this continues then the accumulation of plant litter could lead to successional change. However, temporary cessation of grazing does allow for the development of the unusual lichen-rich sub community.

The majority of the site is currently under the ownership of Derbyshire Wildlife Trust who are developing it as a nature reserve. The remaining area is well grazed and is under the Countryside Stewardship Scheme.

The impact of deposition of dust from nearby limestone quarry needs to be assessed. An assessment of adjacent land should also be undertaken for inclusion as a SSSI or as part of the SAC designation.

#### **7. Hatfield Moor SAC**

The site is designated for its Annex 1 habitat Degraded raised bogs still capable of natural regeneration. The site is formed of 1425 ha of raised peat bog, a large area of which is classed as degraded due to historic peat cutting. Water abstraction from the underlying aquifer and agricultural land drainage affect the ability to successfully restore the bog. Scrub invasion following drainage and peat cutting is controlled via Site management Statements, NNR management and WES agreements.

Sand and Gravel Abstraction in close proximity to the site effects water levels and will be addressed via the review of planning consents.

## 8. Thorne Moor SAC

The site is designated for its Annex 1 habitat Degraded raised bogs still capable of natural regeneration. The site comprises of approximately 1900 ha of raised peat bog. Much of the site has already been restored to active bog through the maintenance of water levels, although large areas are classed as degraded because restoration to its previous habitat are still at the early stages.

Peat cutting, water abstraction from the underlying aquifer and drainage of agricultural land all affect the ability to restore the bog.

Scrub invasion following drainage and peat cutting is controlled via Site management Statements, NNR management and WES agreements.

## 9. Thorne and Hatfield Moors SPA

During the breeding season the area regularly supports 1.9% of the UK breeding population of European nightjar *Caprimulgus europaeus* (5 count peak mean 1993, 1995-98).

Thorne Moor and Hatfield Moor form an extensive lowland raised mire system. The main threats to the nightjar's habitat are lack of management and re-wetting operations. Lack of management is being addressed by a programme of scrub clearance work to create a mosaic of open spaces. The National Nature Reserve Management Plan, which relates to the site, incorporates information regarding the requirements and previous site usage by nightjars, thus ensuring that both the interests of the raised mire system and the nightjar are addressed.

## 10. Humber Estuary SAC

The Humber Estuary SAC features Estuaries as a primary reason for designation. The Humber is the second-largest coastal plain estuary in the UK, and the largest coastal plain estuary on the east coast of Britain. It is a muddy, macrotidal estuary, fed by the Rivers Ouse, Trent and Hull, Ancholme and Graveney. Habitats within the Humber Estuary include Atlantic salt meadows and a range of sand dune types in the outer estuary, together with subtidal sandbanks (Sandbanks which are slightly covered by sea water all the time), extensive intertidal mudflats (Mudflats and sandflats not covered by seawater at low tide), glasswort beds (*Salicornia* and other annuals colonising mud and sand), and coastal lagoons. Significant fish species include river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus* which breed in the River Derwent, a tributary of the River Ouse.

Another primary reason for designation is the Annex I habitat Mudflats and sandflats not covered by seawater at low tide, for which the site represents an extensive area.

Other Annex I habitats present on the site include:

- Sandbanks which are slightly covered by sea water all the time;
- Coastal lagoons (Priority feature);
- *Salicornia* and other annuals colonising mud and sand;
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*);
- Embryonic shifting dunes;
- Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes');
- Fixed dunes with herbaceous vegetation ('grey dunes') (Priority feature); and
- Dunes with *Hippophae rhamnoides*.

## 11. River Mease SAC

The primary reasons for the sites designation includes the Annex II species Spined loach *Cobitis taenia*, for which the site is a good example of a riverine population. The river has retained a reasonable degree of channel diversity compared to other similar rivers containing spined loach populations. It has extensive beds of submerged plants along much of its length which, together with its relatively sandy sediments (as opposed to cohesive mud) provides good habitat opportunities for the species.

Bullhead *Cottus gobio* are present as a primary reason for designation. The site is an example of a population in the rivers of central England. Sediments are generally not as coarse as other sites selected for the species, reflecting the nature of many rivers in this geographical area, but are suitable in patches due to the river's retained sinuosity. The patchy cover from submerged macrophytes is also important for the species.

The Annex II species White-clawed Crayfish *Austropotamobius pallipes* and Otter *Lutra lutra* are also present in the site as non-primary qualifying features.

The Annex I habitat Water courses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation is also present on the site as a non-primary qualifying feature

## 12. Humber Estuary SPA/Ramsar

The Humber Estuary SPA/Ramsar represents an important habitat for large assemblages of waterfowl. During the breeding season the area supports significant proportions of the populations of species such as Bittern *Botaurus stellaris*, Marsh Harrier *Circus aeruginosus*, Acocet *Recurvirostra avosetta* and Little Tern *Sterna albifrons*

During the non-breeding season the estuary supports a 5 year average of 153,934 waterfowl, with many species occurring at levels of international importance. The estuary also represents an important migratory route for species passing through on passage.

## 13. Sherwood Forest prospective SPA

As noted in the introduction to this report the potential for a new European site has been highlighted during the inquiry into a proposed Energy Recovery Facility at Rufford (APP/L3055/V/09/2102006). The key points are:

- The site potentially qualifies as a SPA because of the presence of breeding nightjar and woodlark. The populations in the Sherwood Forest region represent more than 1% of their total UK breeding populations. The site is made up of a number of smaller areas which appear to provide optimal breeding habitat but it is important to stress that the boundary is not yet fixed;
- There is on-going consideration of an additional qualifying Annex 1 species (honey buzzard) in the far north of the Sherwood Forest region which may require the inclusion of additional lands within the prospective SPA. However Natural England have advised that this species is ignored at this stage;
- The formal designation process will take place over a number of years and is taking place in the context of a wider review of sites and policy on such sites across the Country that is being led by Natural England;

## RATIONALE FOR SCREENING

It is important that European sites are screened against a set of factors that are transparent and applied consistently across sites. Table 2.1 identified relevant factors.

## RESULTS OF THE SCREENING EXERCISE

Table 3.2 presents the results of an exercise that has taken the factors identified in Table 2.1 and considered their applicability to the European sites identified in Table 3.1, thereby providing a transparent audit trail of this element of the work. The key before the table explains the reasons for excluding sites against specific issues.

## CRITICAL ISSUES

The nature of the HRA process means that a transparent approach to screening is essential with all potentially relevant European sites screened against all relevant issues. Table 3.2 makes a start on that process. At the same time the HRA needs to focus on those issues that will be critical to determining whether or not the Waste Core Strategy will have a significant negative impact on the integrity of a European site.

The review of issues suggests that potential significant effects are mainly localised and potentially affect sites within the plan boundaries. This includes potential impacts on the prospective SPA. For sites within the plan area, including the prospective SPA the issues are around disturbance, including noise and light and land take (associated with supporting habitat). Dust could also be an issue depending on proximity to the site and the nature of the material. These are all matters that should be capable of mitigation but it would be premature to screen such issues out at this stage.

### Air Quality

Air quality associated with point source emissions and road haulage is another key issue. This potentially affects sites outside of the plan areas, as well as those within the plan areas. For point source emissions the distance could be 10 to 15km depending on the size of the facility.

Transport related emissions are most relevant to sites within 200 metres of a major road and these are indicated in Table 3.2. The Design Manual for Roads and Bridges (DMRB) identifies 200m as the distance beyond which the contribution of traffic emissions to local pollutant concentrations is considered to be negligible (see Figure 3.1 below). Natural England has also confirmed that assessments of Development Plans should focus on European sites within 200m of an affected road<sup>10</sup>. The main pollutants and issues associated with air quality effects on Designated Sites are atmospheric concentrations of oxides of nitrogen (NOX), ammonia (NH3) sulphur dioxide (SO2) and ozone (O3), and subsequent nutrient nitrogen and acid deposition. The nature and severity of effects on Designated Sites are related, amongst other issues, to the types of habitats and species present.

It is likely that the potential effects of the Plan associated with traffic related emissions will be difficult to assess, therefore a policy highlighting the need for projects to demonstrate no significant effect on the integrity of a European site in terms of air pollution and avoidance measures may be appropriate. In this context avoidance measures would include measures to optimise loads, promoting alternatives to road haulage where feasible and routing of vehicles.

An affected road is defined as one where:

- Road alignment will change by 5 m or more; or
- Daily traffic flows will change by 1,000 Annual Average Daily Traffic (AADT) or more; or
- Heavy Duty Vehicle (HDV) flows will change by 200 AADT or more; or
- Daily average speed will change by 10 km/hr or more; or
- Peak hour speed will change by 20 km/hr or more

The changes in traffic flow identified above are therefore those that would trigger likely significant effects for the purposes of HRA.

Information available on the Air Pollution Information System (APIS) website (<http://apis.ac.uk>) relating to the habitats present in each of the identified European sites in Nottinghamshire has been reviewed. The applicable critical loads for nitrogen deposition and acidity for each habitat, the total deposition rates for both nitrogen and acidity, and the key sources (of nitrogen and sulphur) have been identified. For the majority of habitats present within the Natura Sites it appears that total nitrogen deposition rates are typically exceeding the relevant critical load ranges. Furthermore, whilst there are some exceedences of the critical loads for acidity, total deposition rates generally fall within the critical load ranges given.

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<sup>10</sup> English Nature (16 May 2006) letter to Runnymede Borough Council, 'Conservation (Natural Habitats &c.) Regulations 1994, Runnymede Borough Council Local Development Framework'.

The majority of the habitats within the European sites are identified as being sensitive to both nitrogen deposition and acidity (sulphur). A review of the source attribution data indicates that some of the key sources for both pollutants include: Livestock production (including IPPC installations); Imported Emissions (e.g. from Europe, Ireland and other Countries); ammonia from non-agricultural sources; and 'other' (not defined). Road transport is also identified as a notable source but generally contributes less than 10%. For a number of sites (e.g. Humber Estuary SPA) other transport sources (e.g. aircraft and/or shipping) and power stations also make notable contributions.

At this stage it would be difficult to determine how vulnerable [with respect to air quality] each of these sites would be to future developments within the area as this would depend on a number of factors including the nature and scale of any development and the proximity of the development to the European sites.

The main impact on air quality relates to the exhaust emissions (and most notably emissions of oxides of nitrogen) arising from road traffic generated by the developments or emissions from proposed energy generating measures (e.g. CHP or biomass plants). For there to be an impact on the identified habitats, the European sites would need to be located in close proximity to the emission sources or one or more of the roads affected by development. However, for there to be a notable impact it is considered that a large increase in local pollutant concentrations would be required. The Highways Agency's Design Manual for Roads and Bridges (DMRB) (Volume 11, Section 3, Part 1, 2007) provides a methodology for the assessment of the impact of road traffic on designated sites and estimates that  $1\mu\text{g}/\text{m}^3$  of  $\text{NO}_2$  is the equivalent to a nitrogen deposition rate of just 0.1 Kg N/Ha/Yr.

It should be noted that effects may also arise during the construction phase of a development, although these effects will generally be temporary and will mainly be concerned with the direct deposition of dust and particulate matter.

The table at **Appendix B** provides a summary of some of the key data relating to the identified Natura 2000 Sites, including the relevant key habitats, critical loads, main sources of pollutants and the effects of exceedences of the critical loads. Focus has been placed on the primary habitats and/or priority habitats for which the sites have been designated and the particularly sensitive sites. The remaining habitats (not discussed in the table) typically have similar or more forgiving critical loads. Similarly, not all sources have been discussed; only the most significant contributors. The main focus is also on nitrogen deposition although consideration has also been given to acidity.

### **Impact on Water Quality**

Impact on water quality (surface waters and ground water) is another issue that is relevant but probably can be confined to sites within the plan areas at this stage; we have also flagged up sites that are downstream of the plan area.

Potential impacts on hydrology are also relevant and could impact on sites outside the plan area if there is a hydrological connection.

The European sites identified in Derbyshire and the Peak Park are in the Carboniferous Limestone and maybe overlying Millstone Grit which are aquifers that lie below and are unconnected with the Permo-Triassic aquifers in Nottinghamshire. These are separated by thick coal measures which are not aquifers (albeit some ground waters will exist). It is difficult to see how a minerals or waste proposal that depleted or polluted the Nottinghamshire aquifers could have any impact on the Carboniferous aquifers in Derbyshire which are stratigraphically located 1000's of feet below them but because of uplift and erosion are at a higher altitude. They are hydraulically separated by intervening low permeability strata. Furthermore these are located downstream of surface waters within the catchment which flow approximately from west to east. It is therefore suggested that it is reasonable to screen these sites out. Without more detailed consideration it is difficult to screen other sites out at this stage and these are indicted in Table 3.2.

The following extract is from a response by Natural England to consultation on the HRA for another HRA. It acknowledges the difficulties associated with assessing such effects at the plan level<sup>11</sup>:

*"We acknowledge that for water related impacts it is not possible to use a set distance as these effects depend on hydrological continuity between minerals and the Natura 2000 site. In terms of determining likely significant effects it is not possible to determine significant effects at this stage as site specific data, including actual groundwater flow direction, groundwater levels, gradients, volumes and details of the proposed activity including depth in relation to water table, necessity for dewatering, depth of proposed abstraction,*

<sup>11</sup> Hampshire Minerals Plan: Habitats Regulations Assessment Screening Report, Response by Natural England 31<sup>st</sup> August 2007

*potential for migration and ability to redirect localised groundwater flows are required in order to determine significance of any impact. **This data is unlikely to be available until an application for the proposed activity is submitted and fully assessed and supporting data is provided. There is the potential for significant effect in all areas where mineral sites have been identified within reasonable proximity to Natura 2000 sites however the actual significance will be determined by the specifics of the proposed activity and the ability to implement appropriate mitigation or enhancement as part of the works***”.

This suggests that if the Waste Core Strategy or Development Management Document has a policy that highlights this issue and the need for projects to demonstrate that they will not significantly affect the integrity of a European site through changes in hydrology the HRA should be able to conclude that the Core Strategy will not significantly affect a European site. This is not to suggest that the issue is screened out but that that passing the issue down the line (as discussed in the introduction to this report) appears to be the appropriate response in this instance. The HRA will have a role in demonstrating that relevant policies in the Core Strategies are sufficiently robust to allow the issue to be passed down the line.

<b>Key to Table 3.2</b>	
Potential for significant adverse effect cannot be ruled out at this stage	✓
There is uncertainty as to whether or not a potential significant adverse effect will occur – hence the issue cannot be screened out at this stage	✓?
No significant adverse effect anticipated at this stage (see comments on specific issues below)	-
<b>Air quality (AQ)</b> - Screened out on the basis that the European site is outside the plan area (15km or more from the plan boundary) and more than 200m from a road.	-
<b>Hydrology (H)</b> – Sites are screened out on the grounds that there is unlikely to be any hydrological connectivity (see main text)	-
<b>Noise (N)</b> - Screened out on the basis that the European site is outside the plan area and noise issues are more localised in nature	-
<b>Lighting (L)</b> - Screened out on the basis that the European site is outside the plan area and lighting issues associated with relevant developments are likely to be more localised in nature	-
<b>Dust (D)</b> - Screened out on the basis that the European site is outside the plan areas and issues associated with dust and relevant developments are likely to be more localised in nature	-
<b>Water Quality (WQ)</b> – Screened out on the basis that the European site is up - stream of the Plan areas and/or there is unlikely to be any hydrological connectivity (see main text). For some sites that have been screened in a question mark has been used to highlight uncertainty.	-
<b>Land take, habitat loss fragmentation (LT)</b> - Screened out on the basis that the European site is wholly outside the plan area and issues associated with land take are therefore not relevant	-
<b>Point source pollution – (P)</b> Screened out on the basis that the European site is over 15 km from the plan boundary and therefore point source pollution is unlikely to be an issue	-
<b>Introduction of invasive species (IS)</b> – Screened out on the basis that the site is outside the plan area. This issue will only be relevant where proposals are within 250m of a European site.	-
<b>Attraction of predatory animals – (PA)</b> Screened out on the basis that the site is outside the plan area. This issue will only be relevant where proposals are the plan area.	-
<b>Human disturbance – (HD)</b> Screened out on the basis that the site is outside the plan area. This issue is only likely to be relevant where proposals are within 500m of a European site.	-
<b>Building mass – (BM)</b> Screened out on the basis that the site is outside the plan area.	-

**Table 3.2: Application of Screening Criteria**

	Birklands and Bilhaugh SAC	Peak District Dales SAC	South Pennine Moors SAC	Peak District Moors (South	Bees Nest and Green Clay Pits	Gang Mine SAC	Hatfield Moor SAC	Thorne Moor SAC	Thorne and Hatfield Moors	Humber Estuary SAC	River Mease SAC	Humber Estuary SPA / Ramsar	Sherwood Forest prospective SPA
AQ - Does the site lie within 200m of a major road – potentially air quality issues from haulage routes	✓	✓	✓	✓	▪	▪	▪	▪	▪	✓	✓	✓	✓
H - Changes in hydrology, including groundwater levels effecting site integrity	✓	▪	▪	▪	▪	▪	✓?	✓?	✓?	✓?	▪	✓?	✓
N- Disturbance from noise during construction and/or operation	✓	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	✓
L - Disturbance from artificial lighting during construction and/or operation	✓	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	✓
D - Dust generation resulting in deposition, and resulting effect on integrity of site during construction and/or operation	✓	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	✓
WQ - Water Quality – discharges effecting water quality and integrity of the site during construction and/or operation	✓	▪	▪	▪	▪	▪	▪	▪	▪	✓?	▪	✓	✓
L - Landtake / habitat loss /fragmentation – this is particularly the case if supporting habitats are removed during construction and/or operation	✓	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	✓
P - Pollution from point sources, including	✓	▪	▪	▪	▪	▪	✓	✓	✓	▪	▪	▪	✓

**Table 3.2: Application of Screening Criteria**

	Birklands and Bilhaugh SAC	Peak District Dales SAC	South Pennine Moors SAC	Peak District Moors (South	Bees Nest and Green Clay Pits	Gang Mine SAC	Hatfield Moor SAC	Thorne Moor SAC	Thorne and Hatfield Moors	Humber Estuary SAC	River Mease SAC	Humber Estuary SPA / Ramsar	Sherwood Forest prospective SPA
energy from waste during operation													
IS - Introduction of invasive species, spores during operation.	✓	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	✓
PA – Attraction of predatory animals	✓	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	✓
HD – human disturbance	✓	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	✓
BM – Building Mass	✓	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	▪	✓

**Appendix C** to this report includes more detailed consideration of issues associated with the prospective SPA at Sherwood Forest. This is based on the evidence submitted to the Rufford inquiry referred to in the introduction. This identifies potential issues associated with disturbance as an issue that could be specific to the prospective SPA. The other issues considered are covered in Table 3.2 above. Note that the table is intended to be a generic review of the issues and is not intended to be specific to the Rufford proposals.

## SUSTAINING SITE INTEGRITY

General Natural England Policy in relation to site integrity dictates that sites are to be maintained in favourable condition, or restored to favourable condition where this does not exist.

Table 3.3 below specifies the factors that are key to maintaining integrity at each site having regard to the range of effects that the Core Strategies might give rise to.

**Table 3.3 Key Factors Regarding Site Integrity**

Site	Factors that are key to maintaining site integrity
Birklands and Bilhaugh SAC	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Air Quality, including effects from haulage routes and point sources (site features include fungal assemblages sensitive to deterioration) – so maintaining air quality at existing levels or better is important for maintaining site integrity</li> <li>• Hydrology (vegetation on site, including designated woodland, is sensitive to changes in level of groundwater) – avoiding significant effects on water levels etc will help maintain site integrity</li> <li>• Dust deposition (effects on habitats and fungal assemblage) – avoiding significant effects associated with dust will help maintain site integrity</li> <li>• Water Quality (to maintain woodland habitats) – avoiding significant effects on water quality will help maintain site integrity</li> <li>• Habitat loss/fragmentation resulting in deterioration in age diversity and regeneration – avoiding habitat loss will help maintain site integrity</li> <li>• Disturbance (noise/light) should be avoided to maintain site integrity</li> <li>• Invasive species resulting in change of ecology for which the site is designated. – avoid introduction of invasive species to help maintain site integrity</li> </ul> <p>Birklands &amp; Bilhaugh SAC is also vulnerable to subsidence as a result of mineral extraction.</p>
Peak District Dales SAC	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Air Quality, including effects from haulage routes (this has the potential to cause localised damage to areas of site close to major roads) – so maintaining air quality at existing levels or better is important for maintaining site integrity</li> <li>• Hydrology (aquatic species present within site) – avoiding significant effects on water levels etc will help maintain site integrity</li> </ul>
South Pennine Moors SAC	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Air Quality, including effects from haulage routes (this has the potential to cause localised damage to areas of the site close to major roads) – so maintaining air quality at existing levels or better is important for maintaining site integrity</li> <li>• Hydrology (bog, wet heath and mire habitats present within site) – avoiding significant effects on water levels etc will help maintain site integrity</li> </ul>

Site	Factors that are key to maintaining site integrity
Peak District Moors (South Pennine Moors Phase 1) SPA	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Air Quality, including effects from haulage routes (this has the potential to cause localised damage to areas of the site close to major roads) – so maintaining air quality at existing levels or better is important for maintaining site integrity</li> <li>• Hydrology (supporting habitats include bog, wet heath and mire) – avoiding significant effects on water levels etc will help maintain site integrity</li> </ul>
Bees Nest and Green Clay Pits SAC	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Hydrology (great crested newt, for which the site is designated, dependent on aquatic elements in habitat) – avoiding significant effects on water levels etc will help maintain site integrity</li> </ul>
Hatfield Moor SAC	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Hydrology (site designated for bog habitat) – avoiding significant effects on water levels etc will help maintain site integrity</li> </ul>
Thorne Moor SAC	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Hydrology (site designated for bog habitat) – avoiding significant effects on water levels etc will help maintain site integrity</li> </ul>
Thorne and Hatfield Moors SPA	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Hydrology (Designated for European nightjar which are dependent on mosaic of habits including open water bodies and bog/marsh habitats) – avoiding significant effects on water levels etc will help maintain site integrity</li> </ul>
Humber Estuary SAC	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Air Quality, including effects from haulage routes (this has the potential to cause localised damage to areas of the site close to major roads) – so maintaining air quality at existing levels or better is important for maintaining site integrity</li> <li>• Hydrology (Designated aquatic habitats and aquatic species, both salt and freshwater) – avoiding significant effects on water levels etc will help maintain site integrity</li> <li>• Water Quality (to maintain aquatic habitats and species) – avoiding significant effects on water quality will help maintain site integrity</li> </ul>
River Mease SAC	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Air Quality, including effects from haulage routes (this has the potential to cause localised damage to areas of the site close to major roads) – so maintaining air quality at existing levels or better is important for maintaining site integrity</li> <li>• Hydrology (Designated aquatic habitats and aquatic species) – avoiding significant effects on water levels and water quality will help maintain site integrity</li> </ul>
Humber Estuary SPA/Ramsar	<p>The qualifying site features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Air Quality, including effects from haulage routes (this has the potential to cause localised damage to areas of the site close to major roads, which may impact on designated species) – so maintaining air quality at existing levels or better is important for maintaining site integrity</li> <li>• Hydrology (Designated aquatic habitats and aquatic species, both salt and freshwater) – avoiding significant effects on water levels and water quality will</li> </ul>

Site	Factors that are key to maintaining site integrity
	<p>help maintain site integrity</p> <ul style="list-style-type: none"> <li>• Water Quality (to maintain aquatic habitats and species on which the designated features rely) – avoiding significant effects on water quality will help maintain site integrity</li> </ul>
Gang Mine SAC	<p>The likely qualifying features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Dust deposition (from adjacent limestone quarry) – effect unknown and needs to be assessed further – potential effect on habitat, vegetation and lichen rich sub community.</li> </ul>
Sherwood Forest prospective SPA	<p>The likely qualifying features are considered to be sensitive to changes in:</p> <ul style="list-style-type: none"> <li>• Air Quality, including effects from haulage routes and point sources (deterioration in air quality could affect supporting habitats, such as those at Birklands and Bilhaugh SAC) – so maintaining air quality at existing levels or better is important for maintaining site integrity</li> <li>• Sherwood prospective SPA is potentially sensitive to atmospheric nitrogen. Nitrogen could increase sward height, accelerate the invasion of scrub and reduce the amount of bare making the site unsuitable as nesting and feeding habitat</li> <li>• Hydrology (range of supporting habitats will depend on groundwater levels) – avoiding significant effects on water levels etc will help maintain site integrity</li> <li>• Disturbance from noise and artificial lighting (effects on prospective designated species) – avoiding significant effects from lighting/noise will help maintain site in favourable condition for qualifying species</li> <li>• Disturbance to ground nesting birds – limit access to site, avoid development in close proximity to the site</li> <li>• Dust deposition (effects on supporting habitats) – avoiding significant effects associated with dust will help maintain site integrity</li> <li>• Water Quality (to maintain range of supporting habitats) – avoiding significant effects on water quality will help maintain site integrity</li> <li>• Habitat loss/fragmentation resulting in breaking up of area of suitability and resulting in a reduction of area and a reduction in favourability of remaining area – avoiding habitat loss will help maintain site integrity</li> </ul> <p>Invasive species resulting in change of ecology of supporting habitats. – avoid introduction of invasive species to help maintain site integrity</p>

## 4 SCREENING POLICIES

### INTRODUCTION

This section assesses the thematic policies in the Core Strategy. Thematic policies are those that apply to the whole of the Core Strategy area and in assessing these regard has been had to the opportunity to provide avoidance and mitigation measures that are relevant to the assessment.

Each policy has been categorised against the screening criteria developed by Natural England and the results are set out in **Appendix D**. This process is necessary to help provide a clear audit trail for the assessment and, if necessary, identify the need for the wording of policies to be amended or new policies added to be certain that the Core Strategy will not have a significant negative effect on a European site.

### APPROACH

In undertaking the assessment regard has been had to the Council's stated intention to use saved policies from the Adopted Waste Local Plan 2002. The majority of the environmental protection policies will remain in force until they can be replaced by the separate site specific and development management policy documents. Saved policies include Policy W3.23, which states in part:

*“WASTE MANAGEMENT PROPOSALS WHICH, EITHER INDIVIDUALLY OR IN COMBINATION WITH OTHER PROPOSALS, ARE LIKELY TO AFFECT SITES OR CANDIDATE SITES OF NATURE CONSERVATION OR GEOLOGICAL INTEREST WILL BE ASSESSED AS FOLLOWS:*

*(a) PROPOSALS WHICH ARE LIKELY TO SIGNIFICANTLY ADVERSELY AFFECT SITES OF INTERNATIONAL IMPORTANCE WILL NOT BE PERMITTED UNLESS:*

*(i) THERE IS NO ALTERNATIVE SOLUTION; AND*

*(ii) THERE ARE IMPERATIVE REASONS OF OVERRIDING PUBLIC INTEREST. WHERE THE SITE HOSTS A PRIORITY HABITAT OR SPECIES, THOSE REASONS MUST RELATE TO HUMAN HEALTH, PUBLIC SAFETY, OR BENEFICIAL CONSEQUENCES OF PRIMARY IMPORTANCE TO THE ENVIRONMENT; AND*

*(iii) ALL NECESSARY COMPENSATORY MEASURES ARE TAKEN TO ENSURE THE OVERALL COHERENCE OF THE NETWORK OF SUCH SITES.*

.....

*THE ASSESSMENT OF ANY ADVERSE IMPACT WILL TAKE ACCOUNT OF THE SCOPE FOR MITIGATION AND/OR COMPENSATORY MEASURES TO REPLACE THE LOSS. “*

**A key assumption in this HRA Screening Report and a key recommendation is that this policy is carried forward into the Development Management Policy Document.**

The explanatory text accompanying this policy could highlight the range of issues that need to be considered, including issues around, water and air quality associated with transport and point source emissions, disturbance, and attraction of predators (Table 3.2 provides a comprehensive list).

In addition it is noted that the draft Core Strategy states at paragraph 7.53:

*“Sites of international importance are specifically protected under national legislation and any proposal that would be likely to have a significant effect on a European site, either alone or in combination with other plans or projects, would not be in accordance with the development plan. This protection applies to candidate sites as well as those that have already been designated. The Councils are aware that a possible Special Protection Area is under consideration for part of Nottinghamshire which could therefore become a candidate site. If a Special Protection Area is subsequently identified and sent to the European Commission for designation, the Councils will assess the implications of this and what action is necessary to deal with any issues raised.”*

This statement reflects recommendations in the Pre-Screening report for the HRA. Combined with the saved policies it is considered that this provides safeguards for the protection of both designated and potential sites.

The Proposed Submission changes include the following addition to paragraph 7.53:

*“In the meantime the Councils will adopt a “risk based” approach, as advised by Natural England, and assess any applications in accordance with the requirements of the Birds Directive. Further screening regarding the effect on European sites may be required for individual proposals at the planning application stage”.*

This addition provides further safeguards in relation to the prospective Special Protection Area.

Other relevant saved policies from the Adopted Waste Local Plan 2002 are:

- Policies W3.5 and W3.6 relating to the protection of surface water, groundwater and the function of flood plains;
- Policy W3 .9 noise;
- W3.10 – dust;
- W3.13 – floodplains, flood defences and local drainage system;
- W3.14 and W3.15 – vehicle movements and routing (primarily concerned with avoiding impacts on communities);
- W3.19 – Protection of Ancient and other woodlands;
- W3.20 – Heathlands;
- W.321 – water courses, wetlands and lakes;

**A key assumption in this HRA is that these or similar policies are carried forward into the Development Management Policy Document.**

The discussion in Section 3 of this report confirms that issues relating to water quality can be passed down the line but it is suggested that saved Policy W3.5 is amended to ensure that the potential for impacts on European sites is considered

From a review of saved policies a key gap identified is in relation to the potential impact of waste related developments on Air Quality. **It is recommended that a policy relating to air quality is included in the Development Management Document.** This should reference the need to consider the potential impacts of vehicles on European sites as well as new sources of point source emissions, with a study area of up to 15km adopted, depending on the scale and nature of the development envisaged.

## **RESULTS OF THE SCREENING EXERCISE**

The criteria used were as follows:

- Category A1: The policy will not itself lead to development e.g. because it relates to design or other qualitative criteria for development;
- Category A2: The policy is intended to protect the natural environment;
- Category A3: The policy is intended to conserve or enhance the natural, built or historic environment;
- Category A4: The policy would positively steer development away from European sites and associated sensitive areas;
- Category A5: The policy would have no effect because no development could occur through the policy itself, the development being implemented through later policies in the same plan or another plan, which are more specific and therefore more appropriate to assess for their effects on European Sites and associated sensitive areas.
- Category B – no significant effect;
- Category C – likely significant effect alone; and
- Category D – Likely significant effects in combination.

Note an amendment has been made to Category A5 to recognise that the Allocations DPD may be the appropriate point at which to assess potential impacts.

The majority of policies are judged to fall into Categories A1, A3 and A5 (see **Appendix D**). No policies were judged to fall under categories C or D.

### **ASSESSMENT OF POTENTIAL FOR IN-COMBINATION EFFECTS**

It is a requirement of Article 6(3) of the Habitats Directive that HRA examines the potential for plans and programmes to have a significant effect either individually or 'in combination' with other plans and programmes (PPs). In practice the 'in-combination' test is most relevant in situations where the effects of the plan or project alone are unlikely to have a significant effect, but when combined with the effects of other plan or project, would be likely to be significant. Identifying and assessing other PPs requires a pragmatic approach (given the extensive range of PPs underway in the wider area). For this screening, the consideration of other PPs has focused on other development plans in the wider area. The plans considered are consistent with those considered within earlier HRAs undertaken in the area. The results of this exercise are set out in **Appendix E**. The work does not identify potential for in-combination effects for those plans that are currently available. Waste Core Strategies for Derbyshire and Lincolnshire were not available at the time of preparing this work and will need to be reviewed if available when the next iteration of this report is undertaken.

A common approach in HRA screening work, following on from the tasks already described in this report, is to prepare a matrix for each relevant European site. Each matrix considers the potential for likely significant effects, the policies that may give rise to such effects, required avoidance/mitigation measure and assessment of residual effects. The results of the policy screening exercise suggest that this stage is not required in this instance. The nature of the policies is such that they are not considered to give rise to significant effects, alone or in combination. This conclusion is reached taking into account saved policies from the Waste Local Plan 2002 and a key recommendation from this report is that the saved policies are carried forward to the Development Management DPD. Suggestions for an additional policy relating to air quality have been made based on the precautionary principle.

# 5 CONCLUSIONS AND RECOMMENDATIONS

## CONCLUSIONS

This report has considered the potential for the Waste Core Strategy to impact on European sites. Sites that might be affected have been identified and the potential effects associated with Waste related developments considered.

The Core Strategy is a strategic document. It does not allocate specific locations for development and the majority of policies are criteria based.

The potential for significant effects on European sites has been considered in **Appendix D and E** and Section 4 above. In undertaking the assessment account has been had to saved policies from the Waste Local Plan 2002.

A key assumption of this HRA is that these policies, or similar, are carried forward into the Development Management Document. The draft Core Strategy also contains a statement in relation to impact on European sites that provides further safeguards.

This report concludes that the Core Strategy as currently drafted will not give rise to significant adverse effects on European sites alone or in-combination because of the strategic nature of the policies. In coming to this conclusion regard has been had to the saved policies from the Waste Local Plan 2002.

## RECOMMENDATIONS

The following recommendations are made:

- Saved policy W3.23, or a similar policy relating to the protection of European sites should be carried forward into the Development Management DPD;
- The explanatory text accompanying W3.23 could highlight the range of issues that need to be considered, including issues around, water and air quality associated with transport and point source emissions, disturbance, and attraction of predators (Table 3.2 sets out a comprehensive list);
- Other saved policies should also be carried forward into the Development Management DPD; these are identified in Section 4 of this report.
- Issues relating to water quality can be passed down the line but it is also suggested that saved Policy W3.5 is amended to ensure that the potential for impacts on European sites is considered;
- From a review of saved policies a key gap identified is in relation to the potential impact of waste related developments on Air Quality. It is recommended that a policy relating to air quality is included in the Development Management Document. This should reference the need to consider the potential impacts of vehicles on European sites as well as new sources of point source emissions, with a study area of up to 15km adopted, depending on the scale and nature of the development envisaged.

A common approach in HRA screening work, following on from the tasks already described in this report, is to prepare a matrix for each relevant European. Each matrix considers the potential for likely significant effects, the policies that may give rise to such effects, required avoidance/mitigation measure and assessment of residual effects. The results of the policy screening exercise suggest that this stage is not required in this instance. The nature of the policies is such that they are not considered to give rise to significant effects, alone or in combination. This conclusion is reached taking into account saved policies from the Waste Local Plan 2002 discussed above.

## Appendix A SCHEDULE OF EUROPEAN SITES

<b>Site Name</b>	<b>Birklands and Bilhaugh</b>		
<b>Status</b>	<b>Special Area of Conservation</b>		
<b>Details of primary habitats for which site is designated</b>	<p><b>Annex 1 Habitats that are a primary reason for selection of this site</b>  <b>9190 Old acidophilous oak woods with Quercus robur on sandy plains</b>            Birklands and Bilhaugh is the most northerly site selected for old acidophilous oak woods and is notable for its rich invertebrate fauna, particularly spiders, and for a diverse fungal assemblage, including <i>Grifoa sulphurea</i> and <i>Fistulina hepatica</i>. Both native oak species, <i>Quercus petraea</i> and <i>Quercus robur</i>, are present, with a mixture of age-classes, so there is good potential for maintaining the structure and function of the woodland system and a continuity of dead-wood habitats.</p>		
<b>Details of primary species for which site is designated</b>	N/A		
<b>Other Qualifying Habitats/ Species</b>	N/A		
<b>Conservation objectives</b>	Natural England Draft Conservation Objectives for Birklands and Bilhaugh SAC (Taken from living legend AA)		
	<b>Ecological Feature</b>	<b>Attribute</b>	<b>Target</b>
	Ancient semi-natural woodland, pasture mosaic/Old acidophilus oak wood on sandy plains W10 & W16a	Area	There is no decrease in the area of ancient semi-natural wood-pasture
			No loss of the semi-natural wood-pasture mosaic
	Structure and natural processes	At least three age classes present and spread across the average life expectancy of the commonest trees	
No reduction in the number of veteran trees other than through natural processes			
All standing veteran trees (>120cms dbh) are retained indefinitely and number ideally between 5-10 per hectare [Current distribution of veteran trees given in ENRR 361]			

Site Name	Birklands and Bilhaugh		
Status	Special Area of Conservation		
			All standing veterans have free crowns and are clear of competitive woody growth within at least a 5-10 metre radius of their canopy
			Mature native oak trees (>80cms dbh) average at least 5 trees per hectare
			Associated areas of permanent open (i.e.<25% tree cover) semi-natural habitat (e.g. acid grass-heath) covers between 10-30% of the wood-pasture mosaic
			Fallen decaying wood is visibly abundant from any one place (presence of one or more large fallen trunks/major boughs >50 cms in diameter, smaller pieces of timber numerous)
	Regeneration		At least 5 native oak saplings or young trees (>1.5 m high) visible from any one place OR 10% of the number of veteran trees occur as young trees (>3m high) measured every 10 Years
			Any planting material is composed of locally native stock
			Saplings of trees and shrubs such as rowan, hawthorn and birch present
	Composition		Less than 1% of woodpasture, canopy and shrub layer occupied by non-native species. Beech and sweet chestnut are included as introductions, but retention of existing mature and veteran specimens of this species is acceptable.
			Canopy cover (>25% tree cover) is present across no less than 70-80% of the unit Area
			Less than 5% of mature trees > 80cms dbh show severe stress or

<b>Site Name</b>	<b>Birklands and Bilhaugh</b>		
<b>Status</b>	<b>Special Area of Conservation</b>		
			death attributable to disease, subsurface activities or pollution
	Local distinctiveness		Less than 5% of semi-natural wood-pasture mosaic area is heavily poached (by grazing animals) or heavily trampled (by recreational pressure)
			Less than 5% of semi-natural wood-pasture mosaic is heavily modified, improved or composed of vegetation characteristic of high disturbance levels
			At least 80% of woodland vegetation referable to appropriate NVC type (mainly W10, W16a)
			At least 95% of permanent open space within woodpasture mosaic referable to an appropriate NVC vegetation type (mainly H9, U2, U4)
	Associated species		No evidence from periodic expert surveys (at least once every 6 years) of a loss of key saproxylic species or a significant decline in their habitat quality (as assessed by more frequent simple visual surveys)
<b>Condition assessment</b>	Condition of the Birklands and Bilhaugh SSSI is assessed as 'Unfavourable Recovering'.		
<b>A summary of the Management Plan for the site (where one is in place)</b>	The site is managed as part of the Sherwood Forest National Nature Reserve, which is subject to a management plan.		
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	The site is currently open to the public and features a visitor centre. Some visitor paths are fenced.		

<b>Site Name</b>	<b>Peak District Dales</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Details of primary habitats for which site is designated</b>	<p><b>Annex 1 Habitats that are a primary reason for selection of this site</b></p> <p><b>6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>)</b>  Peak District Dales is one of the most extensive surviving areas in England of CG2 <i>Festuca ovina</i> – <i>Avenula pratensis</i> grassland. Grasslands at this site range from hard-grazed short turf through to tall herb-rich vegetation, with transitions through to calcareous scrub and 9180 <i>Tilio-Acerion</i> forests – a diversity of structural types unparalleled in the UK. There is also a great physical diversity due to rock outcrops, cliffs, screes and a variety of slope gradients and aspects. In contrast to examples of <i>Festuca</i> – <i>Avenula</i> grassland on chalk to the south, these grasslands are less at risk from the threat of invasion by upright brome <i>Bromopsis erecta</i> and tor-grass <i>Brachypodium pinnatum</i>, which are at the edge of their range here and have limited vigour. The relatively cold oceanic nature of the climate means that there is enrichment with northern floristic elements, such as limestone bedstraw <i>Galium sternerii</i> and globeflower <i>Trollius europaeus</i>.</p> <p><b>9180 Tilio-Acerion forests of slopes, screes and ravines * Priority feature</b>  Representing the north-central part of its UK range, this site in the English Midlands contains a large area of <i>Tilio-Acerion</i>, dominated by ash <i>Fraxinus excelsior</i>. Locally, sycamore <i>Acer pseudoplatanus</i> is abundant. The Dales provide good examples of woodland-scrub-grassland transitions, with associated rich invertebrate populations and plant communities. Among the uncommon plants present in the woods are mezereum <i>Daphne mezereum</i> and green hellebore <i>Helleborus viridis</i>, as well as whitebeams <i>Sorbus spp.</i> on the crags.</p>
<b>Details of primary species for which site is designated</b>	<p><b>Annex II species that are a primary reason for selection of this site</b></p> <p><b>1092 White-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i></b>  The River Dove represents white-clawed crayfish <i>Austropotamobius pallipes</i> in a high-quality, upland limestone river, in the north-east of the species' UK range.</p>
<b>Other Qualifying Habitats/ Species</b>	<p><b>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</b></p> <ul style="list-style-type: none"> <li>• 4030 European dry heaths</li> <li>• 6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i></li> <li>• 7230 Alkaline fens</li> <li>• 8120 Calcareous and calcshist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>)</li> <li>• 8210 Calcareous rocky slopes with chasmophytic vegetation</li> </ul> <p><b>Annex II species present as a qualifying feature, but not a primary reason for site selection</b></p> <ul style="list-style-type: none"> <li>• 1096 Brook lamprey <i>Lampetra planeri</i></li> <li>• 1163 Bullhead <i>Cottus gobio</i></li> </ul>

<b>Site Name</b>	<b>Peak District Dales</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), Trewick Environmental Consultants & Environ, March 2009)
<b>Condition assessment</b>	A Condition assessment has been undertaken for Dove Valley and Biggin Dale SSSI, which lies within the SAC. This assessment found that majority of the SSI is in Favourable condition, or Unfavourable Recovering. A small area (3.51%) was found to be Unfavourable No Change.
<b>A summary of the Management Plan for the site (where one is in place)</b>	Some of the dalesides are now managed under Countryside Stewardship, which has brought about considerable improvements in their management. Similarly since 1996 Natural England's White Peak Wildlife Enhancement Scheme has been successful in attracting land managers and enhancing the conservation value of sites. Neglect has resulted in invasion by non-native species in some woods. This is now being addressed where possible through management under a Wildlife Enhancement Scheme. In some areas access by grazing livestock to some of the woodlands has resulted in a degraded ground flora, and limited regeneration of the shrub and canopy species. Once again, this is to be addressed, wherever practicable, through the Wildlife Enhancement Scheme.
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	This extensive area is largely open to the public.

<b>Site Name</b>	<b>South Pennine Moors</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Details of primary habitats for which site is designated</b>	<p><b>Annex I habitats that are a primary reason for selection of this site</b></p> <p><b>4030 European dry heaths</b>  The site is representative of upland dry heath at the southern end of the Pennine range, the habitat's most south-easterly upland location in the UK. Dry heath covers extensive areas, occupies the lower slopes of the moors on mineral soils or where peat is thin, and occurs in transitions to acid grassland, wet heath and 7130 blanket bogs. The upland heath of the South Pennines is strongly dominated by heather <i>Calluna vulgaris</i>. Its main NVC types are H9 <i>Calluna vulgaris</i> – <i>Deschampsia flexuosa</i> heath and H12 <i>Calluna vulgaris</i> – <i>Vaccinium myrtillus</i> heath. More rarely H8 <i>Calluna vulgaris</i> – <i>Ulex gallii</i> heath and H10 <i>Calluna vulgaris</i> – <i>Erica cinerea</i> heath are found. On the higher, more exposed ground H18 <i>Vaccinium myrtillus</i> – <i>Deschampsia flexuosa</i> heath becomes more prominent. In the cloughs, or valleys, which extend into the heather moorlands, a greater mix of dwarf shrubs can be found together with more lichens and mosses. The moors support a rich invertebrate fauna, especially moths, and important bird assemblages.</p> <p><b>7130 Blanket bogs * Priority feature</b>  This site represents blanket bog in the south Pennines, the most south-easterly occurrence of the habitat in Europe. The bog vegetation communities are botanically poor. Hare's-tail cottongrass <i>Eriophorum vaginatum</i> is often overwhelmingly dominant and the usual bog-building Sphagnum mosses are scarce. Where the blanket peats are slightly drier, heather <i>Calluna vulgaris</i>, crowberry <i>Empetrum nigrum</i> and bilberry <i>Vaccinium myrtillus</i> become more prominent. The uncommon cloudberry <i>Rubus chamaemorus</i> is locally abundant in bog vegetation. Bog pools provide diversity and are often characterised by common cottongrass <i>E. angustifolium</i>. Substantial areas of the bog surface are eroding, and there are extensive areas of bare peat. In some areas erosion may be a natural process reflecting the great age (9000 years) of the south Pennine peats.</p> <p><b>91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles</b>  Around the fringes of the upland heath and bog of the south Pennines are blocks of old sessile oak woods, usually on slopes. These tend to be dryer than those further north and west, such that the bryophyte communities are less developed (although this lowered diversity may in some instances have been exaggerated by the effects of 19th century air pollution). Other components of the ground flora such as grasses, dwarf shrubs and ferns are common. Small areas of alder woodland along stream-sides add to the overall richness of the woods.</p>
<b>Details of primary species for which site is designated</b>	N/A
<b>Other Qualifying Habitats/ Species</b>	Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: <ul style="list-style-type: none"> <li>• 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i></li> <li>• 7140 Transition mires and quaking bogs</li> </ul>
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), Treweek Environmental Consultants & Environ, March 2009)

<b>Site Name</b>	<b>South Pennine Moors</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Condition assessment</b>	A condition assessment has been undertaken for the Dark Peak SSSI, which falls within the site. The majority of this SSSI has been assessed as Unfavourable Recovering.
<b>A summary of the Management Plan for the site (where one is in place)</b>	The South Pennine Moors is subject to The South Pennine Moors Integrated Management Strategy and Conservation Action Programme.
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	This extensive area is largely open to the public.

<b>Site Name</b>	<b>Peak District Moors (South Pennine Moors Phase 1)</b>
<b>Status</b>	<b>Special Protection Area</b>
<b>Details of primary habitats for which site is designated</b>	N/A
<b>Details of primary species for which site is designated</b>	<p><b>ARTICLE 4.1 QUALIFICATION (79/409/EEC)</b>  During the breeding season the area regularly supports:</p> <ul style="list-style-type: none"> <li>• Short-eared Owl <i>Asio flammeus</i> - at least 2.2% of the GB breeding population Count, as at 1990 and 1998</li> <li>• Merlin <i>Falco columbarius</i> - at least 2.3% of the GB breeding population Count as at 1990 and 1998</li> <li>• Golden Plover <i>Pluvialis apricaria</i> - (North-western Europe - breeding) at least 1.9% of the GB breeding population Count, as at 1990 and 1998</li> </ul>
<b>Other Qualifying Habitats/ Species</b>	Parts of the SPA are also designated as the South Pennine Moors SAC
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), Treweek Environmental Consultants & Environ, March 2009)
<b>Main habitats within site which support the Primary Qualifying Features</b>	<p>The site features the following habitat classes:  Inland water bodies (1%), Bogs, Marshes, Water fringed vegetation, Fens (35%), Heath, Scrub, Maquis and garrigue, Phygrana (40%), Dry grassland (16%), Humid grassland, Mesophile grassland (6%), Broadleaved deciduous woodland (1%), Inland rocks, Scree, Sands, Permanent snow and ice (1%).</p> <p>It is also worth noting that the site has been identified as a possible SAC for habitats such as blanket bog and there will be a need to balance the management of the different interests across the whole site</p>
<b>Condition assessment</b>	A condition assessment has been undertaken for the Dark Peak SSSI, which falls within the site. The majority of this SSSI has been assessed as Unfavourable Recovering.
<b>A summary of the Management Plan for the site (where one is in place)</b>	Grazing pressure is generally being lowered and appropriate burning encouraged by two separate ESAs which encourage and support habitat restoration.
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	Approximately two thirds of the moorlands are open to the public.

<b>Site Name</b>	<b>Bees Nest and Green Clay Pits SAC</b>
<b>Status</b>	<b>Special Areas of Conservation</b>
<b>Details of primary habitats for which site is designated</b>	N/A
<b>Details of primary species for which site is designated</b>	<p><b>Annex II species that are a primary reason for selection of this site:</b>  <b>1166 Great crested newt <i>Triturus cristatus</i></b>  The site encompasses a series of silica sand pits supporting a complex mosaic of acidic and calcareous grassland, with small areas of heathland communities. There are also areas of open water, flushes and communities of disturbed ground. Great crested newts <i>Triturus cristatus</i> occur in a number of ponds on site, which vary in size, profile and vegetation cover</p>
<b>Other Qualifying Habitats/ Species</b>	<p><b>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:</b></p> <ul style="list-style-type: none"> <li>• 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia)</li> </ul>
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), Treweek Environmental Consultants & Environ, March 2009)
<b>Condition assessment</b>	The condition of the SSSI (which covers the same extent as the SAC) has been assessed to be favourable/unfavourable recovering.
<b>A summary of the Management Plan for the site (where one is in place)</b>	The land is currently grazed by a tenant who is in English Nature's Wildlife Enhancement Scheme. There are currently problems with the grazing management, which is affecting the quality of the grassland. The ponds require maintenance and enhancement management for the newts. English Nature will be taking action on this in the short-term.
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	The site is not open to the public.

<b>Site Name</b>	<b>Gang Mine</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Details of primary habitats for which site is designated</b>	<p><b>Annex I habitats that are a primary reason for selection of this site</b>  <b>6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i></b>  Gang Mine is an example of Calaminarian grasslands in an anthropogenic context in northern England. Natural limestone outcrops supporting species typical of calaminarian grasslands are rare and small, with a very impoverished flora. This site is included to provide an example of the habitat type on sedimentary rocks; it has colonised the large area of mine workings and spoil heaps on limestone. These are notable for the wide variations in slope, aspect and soil toxicity. Floristically the site contains the richest anthropogenic Calaminarian grasslands in the UK, with abundant spring sandwort <i>Minuartia verna</i> and alpine penny-cress <i>Thlaspi caerulescens</i>. Other species of grassland vegetation present include early-purple orchid <i>Orchis mascula</i> and dyer's greenweed <i>Genista tinctoria</i>. Many of these species are likely to be distinct genotypes adapted to soils rich in heavy metals.</p>
<b>Details of primary species for which site is designated</b>	N/A
<b>Other Qualifying Habitats/ Species</b>	N/A
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), Treweek Environmental Consultants & Environ, March 2009)
<b>Condition assessment</b>	The condition of the SSSI (which covers the same extent as the SAC) has been largely assessed to be Favourable, with the remaining area assessed as Unfavourable Recovering.
<b>A summary of the Management Plan for the site (where one is in place)</b>	<p>Approximately one-fifth of Gang Mine is currently ungrazed. If this continues, the accumulation of plant litter will result in detrimental successional change, although temporary cessation of grazing will allow the development of the unusual lichen-rich sub-community. This area has recently been purchased by Derbyshire Wildlife Trust and will be developed as a nature reserve with funding under English Nature's Reserves Enhancement Scheme. The remaining area is currently well-grazed, being managed under the MAFF Countryside Stewardship Scheme, and is under no immediate threat.</p> <p>Site management will be assisted if appropriate by the White Peak Wildlife Enhancement Scheme which was launched in early 1996.</p>
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	The site is traversed by public rights of way.

<b>Site Name</b>	<b>Hatfield Moor</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Details of primary habitats for which site is designated</b>	<p><b>Annex I habitats that are a primary reason for selection of this site</b></p> <p><b>7120 Degraded raised bogs still capable of natural regeneration</b></p> <p>Hatfield Moors is a remnant of the once-extensive bog and fen peatlands within the Humberhead Levels, and is still the second-largest area of extant lowland raised bog peat in England. Moraines of sand occur beneath the peat, the largest of which forms Lindholme Island, in the centre of the bog. Little, if any, original bog surface has survived the massive extraction of peat over the last few decades. Peat-cutting has now ceased, and the bog is being restored over its remaining minimum average depth of 0.5 m of peat.</p> <p>5.1.2</p>
<b>Details of primary species for which site is designated</b>	N/A
<b>Other Qualifying Habitats/ Species</b>	N/A
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), Treweek Environmental Consultants & Environ, March 2009)
<b>Condition assessment</b>	The condition of the SSSI (which covers the same extent as the SAC) has been largely assessed to be unfavourable recovering. Although, some small areas of the site have been assessed as being unfavourable no change/unfavourable declining.
<b>A summary of the Management Plan for the site (where one is in place)</b>	The majority of the site is currently under the ownership of Derbyshire Wildlife Trust who are developing it as a nature reserve. The remaining area is well grazed and is under the Countryside Stewardship Scheme.
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	The site is designated as an NNR and is publically accessible.

<b>Site Name</b>	<b>Thorne Moor</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Details of primary habitats for which site is designated</b>	<p><b>Annex I habitats that are a primary reason for selection of this site</b></p> <p><b>7120 Degraded raised bogs still capable of natural regeneration</b></p> <p>Thorne Moor is England's largest area of raised bog, lying a few kilometres from the smaller Hatfield Moors, both within the former floodplain of the rivers feeding the Humber estuary (Humberhead Levels), and includes the sub-components Goole Moors and Crowle Moors. Although recent management has increased the proportion of 7110 active raised bog at Thorne Moors, the inclusion of Goole Moors, where peat-extraction has now ceased, means that the site is still predominantly degraded raised bog. The restored secondary surface is rich in species of 7110 Active raised bogs with bog-mosses <i>Sphagnum spp.</i>, cottongrasses <i>Eriophorum angustifolium</i> and <i>E. vaginatum</i>, heather <i>Calluna vulgaris</i>, cross-leaved heath <i>Erica tetralix</i>, round-leaved sundew <i>Drosera rotundifolia</i>, cranberry <i>Vaccinium oxycoccos</i> and bog-rosemary <i>Andromeda polifolia</i>.</p>
<b>Details of primary species for which site is designated</b>	N/A
<b>Other Qualifying Habitats/ Species</b>	N/A
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition.
<b>Condition assessment</b>	The condition of the SSSI (which covers the same extent as the SAC) has been largely assessed to be unfavourable recovering. Although, some small areas of the site have been assessed as being unfavourable no change/unfavourable declining.
<b>A summary of the Management Plan for the site (where one is in place)</b>	<p>Much of the site has been successfully restored to active bog through maintenance of water levels, though a large area is classed as degraded because restoration to its previous habitat is still in early stages. Peat-cutting (now very limited (approx. 15 ha), and which will be addressed via the review of planning consents), water abstraction from the underlying aquifer (consented by the EA), and surrounding agricultural drainage (addressable through Water Level Management Plans) affect the ability to successfully restore the degraded bog.</p> <p>Scrub invasion following drainage and peat-cutting is addressed via the Site Management Statements, NNR management and WES agreements.</p>
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	The site is designated as an NNR and is publically accessible.

<b>Site Name</b>	<b>Thorne and Hatfield Moors</b>
<b>Status</b>	<b>Special Protection Area</b>
<b>Details of primary habitats for which site is designated</b>	N/A
<b>Details of primary species for which site is designated</b>	<b>ARTICLE 4.1 QUALIFICATION (79/409/EEC)</b> During the breeding season the area regularly supports: European Nightjar <i>Caprimulgus europaeus</i> - 1.9% of the GB breeding population. 5 count peak mean 1993, 1995-1998
<b>Other Qualifying Habitats/ Species</b>	N/A
<b>Conservation objectives</b>	To maintain the designated interest feature(s) in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), Treweek Environmental Consultants & Environ, March 2009)
<b>Main habitats within site which support the Primary Qualifying Features</b>	Mosaic of open spaces, also designated as Thorne Moor SAC and Hatfield Moor SAC. These include Inland water bodies (10%), Bogs, Marshes, water fringed vegetation, Fens (28%), Heath, Scrub, Maquis and garrigue, Phygrana (21%), Broadleaved deciduous woodland (14%), Coniferous woodland (1%), Other land (including towns, villages, roads, waste places, mines, industrial sites) (26%)
<b>Condition assessment</b>	The condition of the SSSIs (which cover the same extent as the SPA) have largely been assessed to be unfavourable recovering. Although, some small areas of the site have been assed as being unfavourable no change/unfavourable declining.
<b>A summary of the Management Plan for the site (where one is in place)</b>	Lack of management is being addressed by a programme of scrub clearance work to create a mosaic of open spaces. The National Nature Reserve Management Plan, which relates to the site, incorporates information regarding the requirements and previous site usage by nightjars, thus ensuring that both the interests of the raised mire system and the nightjar are addressed.
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	The site is designated as an NNR and is publically accessible.

<b>Site Name</b>	<b>Humber Estuary</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Details of primary habitats for which site is designated</b>	<p><b>Annex I habitats that are a primary reason for selection of this site</b></p> <p><b>1130 Estuaries</b>  The Humber is the second-largest coastal plain estuary in the UK, and the largest coastal plain estuary on the east coast of Britain. It is a muddy, macro-tidal estuary, fed by the Rivers Ouse, Trent and Hull, Ancholme and Graveney. Suspended sediment concentrations are high, and are derived from a variety of sources, including marine sediments and eroding boulder clay along the Holderness coast. This is the northernmost of the English east coast estuaries whose structure and function is intimately linked with soft eroding shorelines. Habitats within the Humber Estuary include 1330 Atlantic salt meadows and a range of sand dune types in the outer estuary, together with subtidal sandbanks (H1110 Sandbanks which are slightly covered by sea water all the time), extensive intertidal mudflats (H1140 Mudflats and sandflats not covered by seawater at low tide), glasswort beds (H1310 Salicornia and other annuals colonising mud and sand), and 1150 coastal lagoons. As salinity declines upstream, reedbeds and brackish saltmarsh communities fringe the estuary. These are best-represented at the confluence of the Rivers Ouse and Trent at Blacktoft Sands. Upstream from the Humber Bridge, the navigation channel undergoes major shifts from north to south banks, for reasons that have yet to be fully explained. This section of the estuary is also noteworthy for extensive mud and sand bars, which in places form semi-permanent islands. Significant fish species include 1099 river lamprey <i>Lampetra fluviatilis</i> and 1095 sea lamprey <i>Petromyzon marinus</i> which breed in the River Derwent, a tributary of the River Ouse.</p> <p><b>1140 Mudflats and sandflats not covered by seawater at low tide</b>  the Humber Estuary includes extensive intertidal mudflats and sandflats not covered by seawater at low tide. Upstream from the Humber Bridge, extensive mud and sand bars in places form semi-permanent islands.</p>
<b>Details of primary species for which site is designated</b>	N/A
<b>Other Qualifying Habitats/ Species</b>	<p><b>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</b></p> <ul style="list-style-type: none"> <li>• 1110 Sandbanks which are slightly covered by sea water all the time</li> <li>• 1150 Coastal lagoons * Priority feature</li> <li>• 1310 Salicornia and other annuals colonising mud and sand</li> <li>• 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)</li> <li>• 2110 Embryonic shifting dunes</li> <li>• 2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (`white dunes`)</li> <li>• 2130 Fixed dunes with herbaceous vegetation (`grey dunes`) * Priority feature</li> <li>• 2160 Dunes with <i>Hippophae rhamnoides</i></li> </ul> <p><b>Annex II species present as a qualifying feature, but not a primary reason for site selection</b></p> <ul style="list-style-type: none"> <li>• 1095 Sea lamprey <i>Petromyzon marinus</i></li> <li>• 1099 River lamprey <i>Lampetra fluviatilis</i></li> <li>• 1364 Grey seal <i>Halichoerus grypus</i></li> </ul>

<b>Site Name</b>	<b>Humber Estuary</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), Treweek Environmental Consultants & Environ, March 2009)
<b>Condition assessment</b>	The condition of the SSSI (which covers the same extent as the SAC) has largely been assessed to be unfavourable recovering. Although, some small areas of the site have been assessed as being unfavourable no change/unfavourable declining. A small area of the SSSI has been assessed as favourable.
<b>A summary of the Management Plan for the site (where one is in place)</b>	Coastal squeeze is being addressed through the development and implementation of the Humber Flood Risk Management Strategy. All proposals for flood defence, development, dredging, abstractions and discharges which require consent from any statutory body, and land use plans which may have impacts upon the site are subject to assessment under the Conservation (Natural Habitats, &c.) Regulations 1994 (the "Habitats Regulations"). Diffuse pollution will be addressed through a range of measures including implementation of the Waste Water Framework Directive and Catchment Sensitive Farming initiatives. Other issues are addressed via a range of measures including regulation of on-site land management activities and implementation of the Humber Management Scheme, developed by all relevant statutory bodies to assist in the delivery of their duties under the Habitats Regulations.
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	The Estuary is largely accessible to the public.

<b>Site Name</b>	<b>River Mease</b>
<b>Status</b>	<b>Special Area of Conservation</b>
<b>Details of primary habitats for which site is designated</b>	N/A
<b>Details of primary species for which site is designated</b>	<p><b>Annex II species that are a primary reason for selection of this site</b></p> <p><b>1149 Spined loach <i>Cobitis taenia</i></b>  The River Mease is a good example of a riverine population of spined loach <i>Cobitis taenia</i>. It is a small tributary of the River Trent and has retained a reasonable degree of channel diversity compared to other similar rivers containing spined loach populations. It has extensive beds of submerged plants along much of its length which, together with its relatively sandy sediments (as opposed to cohesive mud) provides good habitat opportunities for the species.</p> <p><b>1163 Bullhead <i>Cottus gobio</i></b>  The Mease is an example of bullhead <i>Cottus gobio</i> populations in the rivers of central England. Bed sediments are generally not as coarse as other sites selected for the species, reflecting the nature of many rivers in this geographical area, but are suitable in patches due to the river's retained sinuosity. The patchy cover from submerged macrophytes is also important for the species.</p>
<b>Other Qualifying Habitats/ Species</b>	<p><b>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site</b></p> <ul style="list-style-type: none"> <li>• 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation</li> </ul> <p><b>Annex II species present as a qualifying feature, but not a primary reason for site selection</b></p> <ul style="list-style-type: none"> <li>• 1092 White-clawed (or Atlantic stream) crayfish <i>Austropotamobius pallipes</i></li> <li>• 1355 Otter <i>Lutra lutra</i></li> </ul>
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), TrewEEK Environmental Consultants & Environ, March 2009)
<b>Condition assessment</b>	The condition of the SSSI (which covers a similar extent as the SAC) has been assessed to be entirely unfavourable no change.
<b>A summary of the Management Plan for the site (where one is in place)</b>	None found
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	The River Mease is easily accessible to public and features many public rights of way.

<b>Site Name</b>	<b>Humber Estuary</b>
<b>Status</b>	<b>Special Protection Area</b>
<b>Details of primary habitats for which site is designated</b>	N/A
<b>Details of primary species for which site is designated</b>	<p><b>ARTICLE 4.1 QUALIFICATION (79/409/EEC)</b>  <b>During the breeding season the area regularly supports:</b>  <i>Botaurus stellaris</i> (Europe - breeding) 10.5% of the population in Great Britain 2000-2002  <i>Circus aeruginosus</i> 6.3% of the population in Great Britain 1998-2002  <i>Recurvirostra avosetta</i> (Western Europe/Western Mediterranean - breeding) 8.6% of the population in Great Britain 1998-2002  <i>Sterna albifrons</i> (Eastern Atlantic - breeding) 2.1% of the population in Great Britain 1998-2002  <b>Over winter the area regularly supports:</b>  <i>Botaurus stellaris</i> (Europe - breeding) 4% of the population in Great Britain 1998/9 to 2002/3  <i>Circus cyaneus</i> 1.1% of the population in Great Britain 1997/8 to 2001/2  <i>Limosa lapponica</i> (Western Palearctic - wintering) 4.4% of the population in Great Britain 1996/7 to 2000/1  <i>Pluvialis apricaria</i> (North-western Europe - breeding) 12.3% of the population in Great Britain 1996/7 to 2000/1  <i>Recurvirostra avosetta</i> (Western Europe/Western Mediterranean - breeding) 1.7% of the population in Great Britain 1996/7 to 2000/1  <b>On passage the area regularly supports:</b>  <i>Philomachus pugnax</i> (Western Africa - wintering) 1.4% of the population in Great Britain 1996-2000</p> <p><b>ARTICLE 4.2 QUALIFICATION (79/409/EEC)</b>  <b>Over winter the area regularly supports:</b>  <i>Calidris alpina alpina</i> (Northern Siberia/Europe/Western Africa) 1.7% of the population 1996/7 to 2000/1  <i>Calidris canutus</i> (North-eastern Canada/Greenland/Iceland/North-western Europe) 6.3% of the population 1996/7 to 2000/1  <i>Limosa limosa islandica</i> (Iceland - breeding) 3.2% of the population 1996/7 to 2000/1  <i>Tadorna tadorna</i> (North-western Europe) 1.5% of the population 1996/7 to 2000/1  <i>Tringa totanus</i> (Eastern Atlantic - wintering) 3.6% of the population 1996/7 to 2000/1  <b>On passage the area regularly supports:</b>  <i>Calidris alpina alpina</i> (Northern Siberia/Europe/Western Africa) 1.5% of the population 1996-2000  <i>Calidris canutus</i> (North-eastern Canada/Greenland/Iceland/North-western Europe) 4.1% of the population 1996-2000  <i>Limosa limosa islandica</i> (Iceland - breeding) 2.6% of the population 1996-2000  <i>Tringa totanus</i> (Eastern Atlantic - wintering) 5.7% of the population 1996-2000</p> <p><b>ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS</b>  <b>In the non-breeding season the area regularly supports:</b>  153934 waterfowl (5 year peak mean 1996/7 to 2000/1) Including: <i>Anas crecca</i> , <i>Anas penelope</i> , <i>Anas platyrhynchos</i> , <i>Arenaria interpres</i> , <i>Aythya ferina</i> , <i>Aythya marila</i> , <i>Botaurus stellaris</i> , <i>Branta bernicla bernicla</i> , <i>Bucephala clangula</i> , <i>Calidris alba</i> , <i>Calidris alpina alpina</i> , <i>Calidris canutus</i> , <i>Charadrius hiaticula</i> , <i>Haematopus ostralegus</i> , <i>Limosa lapponica</i> , <i>Limosa limosa islandica</i> ,</p>

<b>Site Name</b>	<b>Humber Estuary</b>
<b>Status</b>	<b>Special Protection Area</b>
	<i>Numenius arquata</i> , <i>Numenius phaeopus</i> , <i>Philomachus pugnax</i> , <i>Pluvialis apricaria</i> , <i>Pluvialis squatarola</i> , <i>Recurvirostra avosetta</i> , <i>Tadorna tadorna</i> , <i>Tringa nebularia</i> , <i>Tringa totanus</i> , <i>Vanellus vanellus</i>
<b>Other Qualifying Habitats/ Species</b>	N/A
<b>Conservation objectives</b>	To maintain the designated interest feature in favorable condition. (taken from the Habitats Regulations Assessment of the East Midlands Regions Plan (RSS), Treweek Environmental Consultants & Environ, March 2009)
<b>Main habitats within site which support the Primary Qualifying Features</b>	The habitat classes within the SPA include Tidal rivers, Estuaries. Mud flats. Sand flats. Lagoons (including saltwork basins) (93.6%), Salt marshes, Salt pastures, Salt steppes (4.6%), Coastal sand dunes, Sand beaches, Machair (0.8%), Inland water bodies (standing water, running water) (0.6%), Bogs, Marshes, Water fringed vegetation, Fens (0.3%).  The Humber Estuary is also designated as an SAC for its habitats.
<b>Condition assessment</b>	The condition of the SSSI (which covers the same extent as the SAC) has largely been assessed to be unfavourable recovering. Although, some small areas of the site have been assessed as being unfavourable no change/unfavourable declining. A small area of the SSSI has been assessed as favourable.
<b>A summary of the Management Plan for the site (where one is in place)</b>	Coastal squeeze is being addressed through the development and implementation of the Humber Flood Risk Management Strategy. All proposals for flood defence, development, dredging, abstractions and discharges which require consent from any statutory body, and land use plans which may have impacts upon the site are subject to assessment under the Conservation (Natural Habitats, &c.) Regulations 1994 (the "Habitats Regulations"). Diffuse pollution will be addressed through a range of measures including implementation of the Waste Water Framework Directive and Catchment Sensitive Farming initiatives. Other issues are addressed via a range of measures including regulation of on-site land management activities and implementation of the Humber Management Scheme, developed by all relevant statutory bodies to assist in the delivery of their duties under the Habitats Regulations.
<b>Information on whether or not the site is currently open to the public and whether or not any visitor survey data exists</b>	The SPA is largely open to the public and is utilised for recreational activities.

## Appendix B Review of Air Quality information for European sites

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
Birklands & Bilaugh SAC	Old Acidophilous Oak Woodlands	10-15	33.88	Livestock production, Road Transport, non-agricultural ammonia sources, 'Other' (Although uncertainty over what 'other' includes)	Loss of epiphytic lichens & bryophytes, decreased mycorrhiza (symbiotic relationship between fungus and plant roots), changes in ground vegetation	APIS indicates the site is also sensitive to an increase in acid deposition and that current levels are in exceedence of the relevant critical loads.	Leaching may lead to toxic effects to plants, may cause decline in tree vitality, changes in ground flora and lower plants
Peak District Dales SAC	Dry Grasslands (a Primary Habitat for designation)	15-25	33.74	Livestock production including IPPC installations (Accounts for nearly half of all N deposition), Imported emissions, 'Other', N.B. Traffic only small contribution - <7%)	Increase in tall grasses, decline in diversity, N leaching, mineralization	Also sensitive to acidity. Not currently exceeding	Leaching may lead to decrease in soil base saturation, potential toxicity to plants and mychorrhiza, direct effect on lower plants
	Tilio-Acerion Forest of slopes, screes, ravines	15-20	59.5	Similar to above.	Changes in ground vegetation	Noted to be sensitive to acidity but generally falls well within the relevant	Leaching may lead to toxic effects to plants, may cause decline in tree

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
						acidity critical load range	vitality, changes in ground flora composition and direct effect on lower plants
	Calcerous & Calcshist screes of montane to Alpine levels – N.B. Whilst only a qualifying feature & not a priority habitat noted specifically due to low critical load. However, believe occupies <2% of the SAC	5-15	33.74	Similar to above	Decline in lichens, bryophytes and evergreen shrubs	Noted to be sensitive to acidity but generally falls well within the relevant acidity critical load range	Lichen may be sensitive to acidic inputs. Leaching may lead to toxic effects to plants, may cause changes in ground flora composition and direct effect on lower plants
	Other – A number of other important habitats are also present at this location but in smaller quantities	Critical loads for remaining habitats broadly in keeping with those summarised above	33.74 for majority of areas within the SAC	Similar to above	Various	Generally similar to above	Various

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
South Penine Moors SAC	European Dry Heaths (Primary Habitat)	10.-20	26.88	Nearly a third from Livestock production, a quarter from imported emissions and a third from 'other'. Transport accounts for less than 10%	Impacts: Transition from heather to grass dominance, decline in lichens, changes in plant biochemistry, increased sensitivity to abiotic stress.	Noted to be sensitive to acidity but generally falls well within the relevant acidity critical load range, although close to upper range	Leaching may lead to decrease in soil base saturation, potential toxicity to plants and mychorrhiza, direct effect on lower plants
	Blanket Bogs (Primary Habitat)	5-10	26.88	Nearly a third from Livestock production, a quarter from imported emissions and a third from 'other'. Transport accounts for less than 10%	Increase in vascular plants, altered growth and specie composition	APIS indicates the site is also sensitive to an increase in acid deposition and that current levels are in exceedence of the relevant critical loads.	Leaching may lead to decrease in soil base saturation, potential toxicity to plants and mychorrhiza, direct effect on lower plants
	Old Sessile Oak Woods (a Primary Habitat)	10-15	49.3	As above	Decline in mycorrhiza, lichens, bryophytes and changes in ground vegetation	Noted to be sensitive to acidity but generally falls well within the relevant acidity critical load range, although close to upper range	As above

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
Peak District Moors (South Pennine moors Phase 1) SPA	Noted that there are several animal species who are dependent on the habitats present (i.e. broadly in keeping with those identified above for the SAC) and are therefore also considered to be sensitive to nitrogen	The various critical loads provided for the broad supporting habitats for each specie identified are broadly in keeping with the ranges provided for the South Pennine Moors SAC above, although critical loads are also noted for Wet Heaths (10-	Typically 27.3	Broadly similar to above.	Various. Ultimately, may affect food supply for animal species present	Majority of broad habitats noted to be sensitive to acid deposition.	As above.

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
		20) and softwater Lakes (5-10)					
Bees Nest & Green Clay Pits Sac	Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia)	15-25	30.10	Almost half of N deposition is from Livestock production (all sources), also imported emissions, ammonia from non-agricultural sources, road transport, other	Increase in tall grasses, decline in diversity, increased mineralization, N leaching; surface acidification.	APIS indicates the site is also sensitive to an increase in acid deposition .	Leaching may lead to decrease in soil base saturation, potential toxicity to plants and mychorrhiza, direct effect on lower plants
	Also noted for Great Crested Newt, although no information provided on sensitivity of the specie or it's habitat to N as this will be dependent on site specific factors	-	-	-	-	-	-
Gang Mine SAC	Calaminarian Grasslands (of the Violetalia calaminariae)	15-25	27.72	Predominantly from Livestock production, imported emissions,	Increase in tall grasses, decline in diversity, N leaching, increased	Noted to be sensitive to acidity but generally falls well within the relevant	Leaching may lead to decrease in soil base saturation, potential

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
				ammonia from non-agricultural sources and road transport	mineralization	acidity critical load range, although close to upper range	toxicity to plants and mychorrhiza, direct effect on lower plants
Hatfield Moor SAC	Degraded raised bogs (capable of regeneration)	5-10	16.24	Relatively evenly split between livestock production, Imported emissions, ammonia from non-agricultural sources, Road transport, 'other'.	Increase in vascular plants, altered growth and species composition of bryophytes, increased N in peat and peat water	APIS indicates the site is also sensitive to an increase in acid deposition and that current levels are in exceedence of the relevant critical loads.	As above
Thorne Moor SAC	Degraded raised bogs (capable of regeneration)	5-10	15.82	Livestock production, Imported emissions, ammonia from non-agricultural sources, Road transport, 'other'.	Increase in vascular plants, altered growth and species composition of bryophytes, increased N in peat and peat water	APIS indicates the site is also sensitive to an increase in acid deposition and that current levels are in exceedence of the relevant critical loads.	As above
Humber Estuary SAC	Estuaries (primary habitat)	20-30	15.68	Mainly livestock production, Imported emissions, 'other', and to a lesser extent other	Exceedences could cause an increase late successional species, increase productivity	Not noted to be sensitive to acidity.	N/A

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
				transport (i.e. not road), and ammonia	increase in dominance of graminoids. However, APIS data indicates not currently exceeding thresholds.		
	Mudflats and sandflats (not covered by seawater at low tide) (primary habitat)	Noted as sensitive but no comparable critical load available	15.68	Livestock production, imported emissions, ammonia from non-agricultural sources, 'other', road transport, other transport (e.g. shipping/aircraft)	N/A	Not noted to be sensitive to acidity.	N/A
	Embryonic Shifting Dunes (a priority habitat)	20-30	13.86	Livestock production, imported emissions, ammonia from non-agricultural sources, 'other', road transport, other transport (e.g. shipping/aircraft)	Can cause an increase late successional species, increase productivity increase in dominance of graminoids. However, APIS data indicates not currently exceeding thresholds.	Not noted to be sensitive to acidity.	N/A
	Fixed Dunes with herbaceous vegetation (a	8-10 (acid Type)	15.68	Livestock production, imported emissions,	Increase tall grasses, decrease prostrate plants,	APIS indicates the site is also sensitive to an	Leaching may lead to decrease in soil base

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
	priority habitat)			ammonia from non-agricultural sources, 'other', road transport, other transport (e.g. shipping/aircraft)	increased N leaching, soil acidification, loss of typical lichen species	increase in acid deposition but current levels within relevant critical loads.	saturation, potential toxicity to plants and mychorrhiza, direct effect on lower plants
Humber Estuary SPA	Noted that there are several animal species who are dependent on the habitats present (i.e. broadly in keeping with those identified above for the SAC) and are therefore also considered to be sensitive to nitrogen	The various critical loads provided for the broad supporting habitats for each specie identified are broadly in keeping with the ranges provided for the SAC above (i.e. predominantly 20-30 with	Typically 15.68	Livestock production, imported emissions, ammonia from non-agricultural sources, 'other', road transport, other transport (e.g. shipping/aircraft)	Various. For the most part APIS indicates the total N deposition rate is below the relevant critical loads	For the most part not noted to be sensitive to acidity.	N/A

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
		the exception of habitats for Hen Harrier (10-20) and Little Tern (8-10)))					
Thorne & Hatfield Moors SPA	Noted for European nightjar. Whilst broad habitat (coniferous woodland) is considered sensitive to N, the nightjar is not noted to be sensitive to N impacts on the habitat	5-15 (for coniferous woodland)	30.1	Road transport, livestock production, ammonia from fertiliser and non-agricultural, imported emissions, 'other'			
River Mease SAC	Water Courses of plain to montane levels	Noted as sensitive but no comparable critical load available	12.6	Road transport, Imported emissions, 'other', Livestock production, other transport	No data available	Noted as sensitive to acidity. No comparable critical load.	Increase Al3+ conc associated with freshwater acidification, impact on invertebrate populations, toxicity to fish.
	Noted that there are also several animal species	As above	As Above	As above	No data available	As above. Mainly from Imported emissions,	As Above

Natura Site	Key/Predominant Habitat	Nitrogen Deposition				Acidity	
		Relevant Critical Load (Kg N/Ha/Yr)	APIS Total Deposition Rate (Kg N/Ha/Yr)	Key Sources of Nitrogen*	Sensitivity and Potential Effects of Increased Deposition/Exceedences of Threshold	Notes	Key Effects of Exceedence
	present who are dependent on the habitat present and are therefore also considered to be sensitive to nitrogen					Power stations,	

## Appendix C Potential Effects on the Prospective SPA

<b>APPENDIX B: Potential Effects on the prospective SPA</b>		
Potential Effect	Nightjar	Woodlark
<b>Construction Phase</b>		
a) Degradation of adjacent semi-natural habitats by water pollution	<p>Adherence to the requirements of the Environment Agency should help avoid such incidents occurring and manage them if they do. It is assumed that sites would have emergency procedures in place.</p> <p>Nightjar nesting is not associated with water related or dependent habitat or habitats otherwise particularly sensitive to water pollution.</p> <p>Such an incident would not affect Nightjar indirectly through their food supply as such a managed incident would not have a significant or widespread effect on the invertebrates that are the food source for this species.</p> <p>The significance of any effect would depend on the proximity of the incident to nesting sites. Any effect would be localised and temporary.</p>	<p>Adherence to the requirements of the Environment Agency should help avoid such incidents occurring and manage them if they do.</p> <p>It is assumed that sites would have emergency procedures in place.</p> <p>Woodlark nesting is not associated with water related or dependent habitat or habitats otherwise particularly sensitive to water pollution. During the breeding season they feed on invertebrates picked off the ground and off low vegetation and have a strong dependence on bare ground to forage.</p> <p>Such an incident would not affect Woodlark food supply provided it was managed and did not have a widespread effect on the invertebrates that are the food source for this species.</p>
b) Disturbance by noise	<p>The local planning authority can set conditions on the maximum acceptable noise level.</p> <p>The effect of noise, above an identified threshold, would be to mask the territorial song of Nightjar, if the threshold were exceeded over the habitat that is regularly used by territorial Nightjar then this may disrupt territory establishment and hence reduce the chance of successful nesting.</p> <p>As these acceptable noise levels are typically based on residential locations and could be in excess of the threshold for the 'masking' of bird calls by noise then temporary adverse effects on breeding birds could be predicted if those exceedances occur during the breeding season and the relevant species occur within the zone over which the exceedance is predicted to occur.</p> <p>The effect from the construction phase that may have impacts on breeding birds results from any continuous noise that might 'mask' the communication between birds. A threshold noise level of 55dB LAeq. has been identified as significant in this context.</p> <p>The effect of noise, above an identified threshold, would be to mask the territorial calls of Nightjar. If the threshold were exceeded over</p>	<p>The local planning authority can set conditions on the maximum acceptable noise level.</p> <p>The effect of noise, above an identified threshold, would be to mask the territorial song of Woodlark. If the threshold were exceeded over habitat that is regularly used by territorial Woodlark then this may disrupt territory establishment and hence reduce the chance of successful nesting.</p> <p>A threshold noise level of 55dB LAeq. has been identified as significant in this context<sup>12</sup>. Avoiding the breeding season or limiting the duration of operations during the breeding season, including to the afternoons when song activity is reduced in Woodlark, would avoid the effect of such construction noise impacts. If this was not practicable then there would be potential for significant potential effects.</p> <p>There is also potential for impacts on contact calls between parent and chick which are important for the successful rearing of chicks, and are usually very quiet. Contact calls also occur in daylight for both species.</p> <p>Impacts relating to noise would have to be determined through project level Appropriate Assessment.</p>

<sup>12</sup> Brumm, H. (2004). The impact of environmental noise on song amplitude in a territorial bird. *Journal of Animal Ecology* 73: 434-440

<b>APPENDIX B: Potential Effects on the prospective SPA</b>		
Potential Effect	Nightjar	Woodlark
	<p>habitat that is regularly used by territorial Nightjar then this may disrupt territory establishment and hence reduce the chance of successful nesting.</p> <p>Nightjar call between the hours of ~20.30 and 06.00 in late spring and late summer and for a shorter period in the height of summer so provided there was no noise during this period there should be no significant effect. However this would need to be confirmed through project level Appropriate Assessment.</p> <p>There is also potential for impacts on contact calls between parent and chick which are important for the successful rearing of chicks, and are usually very quiet. Contact calls also occur in daylight for both species as well as at night for Night Jar</p> <p>Impacts relating to noise would have to be determined through project level Appropriate Assessment.</p>	
c) Disturbance by light pollution	<p>Lighting is typically used during the construction phase to allow normal working hours during shorter winter days.</p> <p>Nightjar is a summer visitor, occurring in the UK between May and early September. It feeds during the hours of darkness, with the greatest level of feeding activity from dusk to midnight. Early or late in the breeding season Nightjar would not emerge to feed until ~20.30hrs, emerging later in the height of summer.</p> <p>The effect of lighting in the construction phase on Nightjar would either be to deter them from feeding across lit areas or to reduce the availability of flying insect food in lit areas.</p> <p>Limiting external lighting for construction and limiting the operating hours for the construction phase could help avoid lightspill onto habitats used by Nightjar at the time of year and time of night when Nightjar will be using those habitats. However the potential for harm would need to be confirmed through project level Appropriate Assessment.</p>	<p>Wood Lark are active in winter, feeding and roosting in moulting flocks, when they are particularly vulnerable to a range of factors. It cannot be ruled out that artificial light might affect them during this period, particularly if it encourages predation when they are lacking in well developed flight feathers etc.</p> <p>If properly assessed, it may be possible to prevent impacts through directional lighting etc. but this is subject to detailed specific assessment.</p>
d) Disturbance by human	<p>Potential effects under this category are associated with moving around and potentially accessing adjoining heathland during the</p>	<p>Potential effects under this category are associated with moving around and potentially accessing adjoining heathland during the construction phase.</p>

<b>APPENDIX B: Potential Effects on the prospective SPA</b>		
Potential Effect	Nightjar	Woodlark
activity	<p>construction phase. The potential for such effects would depend on the proximity of the development to the site and/or supporting habitats.</p> <p>The potential for such effects would depend on the location of the site entrance relative to the European site and the effectiveness of security fencing. The provision of suitable welfare facilities on the site would also mean that construction workers do not need to move off the site to eat and presumably this could be conditioned if necessary.</p> <p>Nightjar have been shown to be sensitive to disturbance by people walking across their nesting grounds, especially when accompanied by dogs that are not under close control or on a lead, and this leads to reduced nest density and breeding success</p> <p>The potential for effects would therefore depend on the proximity of any development to potential nesting sites.</p> <p>This would need to be established through project level AA.</p>	<p>The potential for such effects would depend on the proximity of the development to the site and/or supporting habitats.</p> <p>The potential for such effects would depend on the location of the site entrance relative to the European site and the effectiveness of security fencing. The provision of suitable welfare facilities on the site would also mean that construction workers do not need to move off the site to eat and presumably this could be conditioned if necessary.</p> <p>Woodlark have been shown to be sensitive to disturbance by people walking across their nesting grounds, especially when accompanied by dogs that are not under close control or on a lead. This disturbance deters male birds from establishing territories and reduces the density of breeding Woodlark.</p> <p>The potential for effects would therefore depend on the proximity of any development to potential nesting sites.</p> <p>This would need to be established through project level AA.</p>
e) Disturbance by construction vehicle movements	<p>Nightjar might flush from the nest by the movement of a vehicle (a person on foot will not flush an incubating or brooding Nightjar until within a few metres).</p> <p>There is potential for disturbance when Nightjar are roosting, nesting and protecting their young.</p> <p>Impacts relating to disturbance would have to be determined through project level Appropriate Assessment.</p>	<p>The peak periods of vehicle movement to and from a construction site will probably not coincide with those hours in the spring and summer when Woodlark are most actively foraging to feed chicks or the males defending their territories. The maximum intensity of these activities occurs in the first few hours after dawn.</p> <p>There is potential for disturbance when Woodlark are roosting, nesting and protecting their young.</p> <p>Impacts relating to disturbance would have to be determined through project level Appropriate Assessment.</p>
<b>Operational Phase</b>		
a) Direct land-take within or adjacent to the prospective SPA	<p>This could result in the loss of habitat for Nightjar within or adjacent to the prospective SPA.</p> <p>There is potential for losses to be mitigated by provision of replacement habitat but this would need to be confirmed through project level AA.</p>	<p>This could result in the loss of habitat for Woodlark within or adjacent to the prospective SPA.</p> <p>There is potential for losses to be mitigated by provision of replacement habitat but this would need to be confirmed through project level AA.</p>

**APPENDIX B: Potential Effects on the prospective SPA**

Potential Effect	Nightjar	Woodlark
<p>b) Degradation of adjacent semi-natural habitats by air pollution</p>	<p>For the population of Nightjar in the area to be affected there would need to be significant effects on vegetation that led to consequential changes that had an effect on the species. This could be through accelerating the growth of vegetation generally or by favouring the growth of particular species over others to make the area unsuitable as nesting habitat. It could be through more indirect effects resulting from changes in vegetation growth or the balance between plant species that resulted in the habitat producing fewer of the invertebrates that are prey for these birds.</p> <p>For industrial processes, the current guidance that is used when assessing point source emissions is the IPPC H1 Guidance for the Environmental Assessment and Appraisal of BAT (available to download from <a href="http://www.environment-agency.gov.uk/business/topics/pollution/37231.aspx">http://www.environment-agency.gov.uk/business/topics/pollution/37231.aspx</a>). Not all industrial processes/emissions will require assessment. A simple screening tool is provided with the guidance to determine which pollutants emitted from a process are released in significant amounts and which are not. For those pollutants which are emitted in significant amounts, detailed modelling may be required if the process is located near to sensitive receptors/locations of relevant exposure. The H1 document indicates that designated sites (including European sites) which are located within 10 km of the pollutant source should be considered as a sensitive receptor within an assessment. For major emitters (large power stations, refineries, or iron and steelworks) this distance increases to 15km.</p> <p>The potential for effects associated with point source emissions would therefore need to be assessed through project level AA.</p>	<p>For the population of Woodlark in the area to be affected there would need to be significant effects on vegetation that led to consequential changes that had an effect on the species. This could be through accelerating the growth of vegetation generally or by favouring the growth of particular species over others to make the area unsuitable as nesting habitat. It could be through more indirect effects resulting from changes in vegetation growth or the balance between plant species that resulted in the habitat producing fewer of the invertebrates that are prey for these birds.</p> <p>For industrial processes, the current guidance that is used when assessing point source emissions is the IPPC H1 Guidance for the Environmental Assessment and Appraisal of BAT (available to download from <a href="http://www.environment-agency.gov.uk/business/topics/pollution/37231.aspx">http://www.environment-agency.gov.uk/business/topics/pollution/37231.aspx</a>). Not all industrial processes/emissions will require assessment. A simple screening tool is provided with the guidance to determine which pollutants emitted from a process are released in significant amounts and which are not. For those pollutants which are emitted in significant amounts, detailed modelling may be required if the process is located near to sensitive receptors/locations of relevant exposure. The H1 document indicates that designated sites (including European sites) which are located within 10 km of the pollutant source should be considered as a sensitive receptor within an assessment. For major emitters (large power stations, refineries, or iron and steelworks) this distance increases to 15km.</p> <p>The potential for effects associated with point source emissions would therefore need to be assessed through project level AA.</p>
<p>c) Degradation of adjacent semi-natural habitats by water pollution</p>	<p>Potential avoidance/mitigation measures include bunding of any liquid tanks and the storage of all materials to the requirements of Environment Agency guidance.</p> <p>Drainage and washdown water could be recycled on site and any excess be treated in a dedicated water treatment plant prior to release to the sewer system to the conditions set by an effluent discharge consent</p> <p>Rainwater could be directed to the surface water</p>	<p>Woodlark nesting is not associated with water related or dependent habitat or habitats otherwise particularly sensitive to water pollution. During the breeding season they feed on invertebrates picked off the ground and off low vegetation and have a strong dependence on bare ground to forage.</p> <p>The impact of any incident would depend on the proximity of nesting or foraging birds and would need to be assessed through project level AA.</p>

<b>APPENDIX B: Potential Effects on the prospective SPA</b>		
Potential Effect	Nightjar	Woodlark
	<p>drainage system, via separators/interceptors in the case of roads and parking areas, for subsequent discharge into infiltration ponds on the site.</p> <p>Nightjar nesting is not associated with water related or dependent habitat or habitats otherwise particularly sensitive to water pollution.</p> <p>Studies of Nightjar nesting in Clipstone Forest have shown that they forage along the interface between the planted deciduous fringe of conifer plantations and the open rides. These studies have shown that they do not use water related habitats for foraging.</p> <p>The potential impact of any incident would depend on the proximity of nesting or foraging birds and would need to be assessed through project level AA.</p>	
d) Disturbance by noise	<p>The effect of noise, above an identified threshold, would be to mask the territorial calls of Nightjar. If the threshold were exceeded over habitat that is regularly used by territorial Nightjar then this may disrupt territory establishment and hence reduce the chance of successful nesting.</p> <p>A threshold noise level of 55dB LAeq. has been identified as significant in this context.</p> <p>There is also potential for impacts on contact calls between parent and chick which are important for the successful rearing of chicks, and are usually very quiet. Contact calls also occur in daylight for both species as well as at night for Night Jar</p> <p>Impacts relating to noise would have to be determined through project level Appropriate Assessment.</p>	<p>The effect of noise, above an identified threshold, would be to mask the territorial singing of Woodlark. If the threshold were exceeded over habitat that is regularly used by territorial Woodlark then this may disrupt territory establishment and hence reduce the chance of successful nesting.</p> <p>A threshold noise level of 55dB LAeq. has been identified as significant in this context.</p> <p>There is also potential for impacts on contact calls between parent and chick which are important for the successful rearing of chicks, and are usually very quiet. Contact calls also occur in daylight for both species.</p> <p>Impacts relating to noise would have to be determined through project level Appropriate Assessment.</p>
e) Disturbance by light pollution	<p>The level of illumination equivalent to that of a full moon – 1 Lux – could be used as the target level not to be exceeded in the design of the detailed lighting scheme for the land outside of the boundary of any proposals and where that land is habitat with potential to be used by breeding Nightjar.</p> <p>The effect of lighting on Nightjar would either be to deter them from feeding across lit areas or to reduce the availability of flying insect food in lit areas.</p>	<p>Wood Lark are active in winter, feeding and roosting in moulting flocks, when they are particularly vulnerable to a range of factors. It cannot be ruled out that artificial light might affect them during this period, particularly if it encourages predation when they are lacking in well developed flight feathers etc.</p> <p>If properly assessed, it may be possible to prevent impacts through directional lighting etc. but this is subject to detailed specific assessment.</p>

<b>APPENDIX B: Potential Effects on the prospective SPA</b>		
Potential Effect	Nightjar	Woodlark
	Limiting external lighting associated with operation could help avoid lightspill onto habitats used by Nightjar at the time of year and time of night when Nightjar will be using those habitats. However the potential for harm would need to be confirmed through project level Appropriate Assessment.	
f) Disturbance by human activity	<p>Nightjar have been shown to be sensitive to disturbance by people walking across their nesting grounds, especially when accompanied by dogs that are not under close control or on a lead, and this leads to reduced nest density and breeding success.</p> <p>The potential for effects would therefore depend on the proximity of any development to potential nesting sites.</p> <p>This would need to be established through project level AA.</p>	<p>Woodlark have been shown to be sensitive to disturbance by people walking across their nesting grounds, especially when accompanied by dogs that are not under close control or on a lead. This disturbance deters male birds from establishing territories and reduces the density of breeding Woodlark.</p> <p>The potential for effects would therefore depend on the proximity of any development to potential nesting sites.</p> <p>This would need to be established through project level AA.</p>
g) Disturbance by operational and staff vehicle movements;	<p>Nightjar might flush from the nest by the movement of a vehicle (a person on foot will not flush an incubating or brooding Nightjar until within a few metres).</p> <p>There is potential for disturbance when Nightjar are roosting, nesting and protecting their young.</p> <p>Impacts relating to disturbance would have to be determined through project level Appropriate Assessment.</p>	<p>The peak periods of vehicle movement to and from a site will probably not coincide with those hours in the spring and summer when Woodlark are most actively foraging to feed chicks or the males defending their territories. The maximum intensity of these activities occurs in the first few hours after dawn.</p> <p>There is potential for disturbance when Woodlark are roosting, nesting and protecting their young.</p> <p>Impacts relating to disturbance would have to be determined through project level Appropriate Assessment.</p>
h) Building mass	Waste facilities, which may comprise large, permanent structures in the landscape, may affect European Protected bird species through their presence as a built mass which can interfere with breeding and foraging activity.	Waste facilities, which may comprise large, permanent structures in the landscape, may affect European Protected bird species through their presence as a built mass which can interfere with breeding and foraging activity.

## Appendix D Screening of Policies

### Key to Table One

- Category A1: The policy will not itself lead to development e.g. because it relates to design or other qualitative criteria for development;
- Category A2: The policy is intended to protect the natural environment;
- Category A3: The policy is intended to conserve or enhance the natural, built or historic environment;
- Category A4: The policy would positively steer development away from European sites and associated sensitive areas;
- Category A5: The policy would have no effect because no development could occur through the policy itself, the development being implemented through later policies in the same plan or another plan, which are more specific and therefore more appropriate to assess for their effects on European Sites and associated sensitive areas.
- Category B – no significant effect;
- Category C – likely significant effect alone; and
- Category D – Likely significant effects in combination.

Element Screened	Description	Initial Screening Comments and Recommendations	Categorisation Following Detailed Consideration of Issues and Taking into Account Recommended Changes
Strategic Objectives			
SO1 Strengthen our economy	Section 6.4 onwards states that these objectives will be met through the implementation of specific policies – WCS1,WCS2, WCS3, WCS4, WCS5,WCS6, WCS8 and WCS14.	This strategic objective is judged to fall under category A5	A5
SO2 Care for our environment	Section 6.4 onwards states that these objectives will be met through the implementation of specific policies – WSC3, WCS4, WCS5, WCS6, WCS12 and saved policies in the adopted Waste Local Plan.	This strategic objective is judged to fall under category A5	A5
SO3 Community well-being	Section 6.4 onwards states that these objectives will be met through the implementation of specific policies – WSC3, WCS4 and WCS10.	This strategic objective is judged to fall under category A5	A5
SO4 Energy and climate	Section 6.4 onwards states that these objectives will be met through the implementation of specific policies – WCS1,WCS2, WCS3, WCS4, WCS10, and WCS13.	This strategic objective is judged to fall under category A5	A5
SO5 Sustainable transport	Section 6.4 onwards states that these objectives will be met through the implementation of specific policies – WCS3, WCS4 and WCS10.	This strategic objective is judged to fall under category A5	A5
SO6 Meet our future needs	Section 6.4 onwards states that these objectives will be met through the implementation of specific policies – WCS2, WCS9 and WCS11.	This strategic objective is judged to fall under category A5	A5
SO7 High quality design and	Section 6.4 onwards states that these objectives will be met	This strategic objective is	A5

Element Screened	Description	Initial Screening Comments and Recommendations	Categorisation Following Detailed Consideration of Issues and Taking into Account Recommended Changes
operation	through the implementation of specific policies – WCS12, saved policies in the adopted Waste Local Plan and WCS14.	judged to fall under category A5	
Waste Core Strategy Policy			
Policy WCS SD Presumption in favour of sustainable development	This policy relates to the council approving planning applications, unless material considerations indicate otherwise and also where adverse impacts of granting permission would significantly and demonstrably outweigh the benefits.	Development would have to accord with the policies contained within the Waste Core Strategy and the NPPF, which includes protection of European sites. This policy is judged to fall under category A5. In addition in paragraph 119 of the NPPF, it is stated that the presumption in favour of sustainable development does not apply where development requiring appropriate assessment under the Birds or Habitats Directive is being considered, planned or determined.	A5

Element Screened	Description	Initial Screening Comments and Recommendations	Categorisation Following Detailed Consideration of Issues and Taking into Account Recommended Changes
Policy WCS 1 Waste awareness, prevention and re-use	This policy relates to cooperation between councils to ensure new development is designed and constructed to minimise waste.	This policy is judged to fall under category A1.	A1
Policy WCS 2 Future waste management provision	This policy relates to criteria for the provision of future waste management facilities.	This policy is judged to fall under A5	A5
Policy WCS 3 Broad locations for waste management facilities	This policy relates to the locations for all sizes of waste management facilities.	The policy directs development to existing settlements and could therefore be seen as falling within category A4. It is also judged to fall under category A5 as it sets out criteria for the location of facilities.	A4/A5
Policy WCS 4 Disposal sites for non-hazardous and inert waste	This policy relates to the preferences for locations of additional landfill capacity.	The policy is judged to fall under category A5 as it is a criteria based policy.	A5
Policy WCS 5 Power station ash	This policy relates to the recycling/storage of power station ash.	The policy directs development to existing facilities and could therefore be seen as falling within category A4. It is	A4/A5

Element Screened	Description	Initial Screening Comments and Recommendations	Categorisation Following Detailed Consideration of Issues and Taking into Account Recommended Changes
		also judged to fall under category A5 as it is a criteria based policy.	
Policy WCS 6 General site criteria	This policy relates to the general location of waste management facilities and includes the caveat 'subject to there being no unacceptable environmental impacts. This is judged to fall under category A2/A3.	This is judged to fall under category A2/A3/A5.	A2/A3/A5
Policy WCS 7 Extensions to existing waste management facilities	This policy supports extensions to existing facilities where they reduce existing environmental impacts.	This policy is judged to fall under category A2/A3/A5.	A2/A3/A5
Policy WCS 8 New and emerging technologies	This policy relates to the support of new or emerging technologies.	The policy is judged to fall under category A5 as it is a statement of intent.	A5
Policy WCS 9 Safeguarding waste management sites	This policy relates to safeguarding waste management sites that are already authorised or have permission. Also those sites/areas of search identifies in the Site Allocations Document. This policy is judged to fall under category A5.	This is judged to fall under Category A5. Potential effects need to be assessed as specific proposals and sites are considered.	A5
Policy WCS 10 Sustainable transport	This policy relates to alternative forms of transport – other than road. It is stated that proposals should seek to integrate this. This policy is judged to fall under category A1.	This policy is judged to fall under category A1. Transportation by water	A1

Element Screened	Description	Initial Screening Comments and Recommendations	Categorisation Following Detailed Consideration of Issues and Taking into Account Recommended Changes
		would be subject to conformity with saved policies from the Waste Local Plan 2002.	
Policy WCS 11 Managing our own waste	This policy relates to waste management proposals for treating waste from outside the Nottingham and Nottinghamshire area. This policy relates to criteria for when this is acceptable and is judged to fall under category A1.	This policy relates to criteria for when treating waste from outside the plan area might be acceptable and is judged to fall under category A1	A1
Policy WCS 12 Protecting our environment	This policy relates to the protection of the environment.	The policy is judged to fall under category A3.	A3
Policy WCS 13 Managing Climate Change	This policy relates to the consideration of climate change as part of any new or extensions to waste management facilities.	This is judged to fall under category A3.	A3
Policy WCS 14 Design of waste management facilities	This policy relates to design criteria for waste management facilities	This is judged to fall under category A1.	A1

## Appendix E Screening Exercise for Potential for Significant In-Combination Effects

Plan or Programme	Subjected to HRA (Yes/No)	Key issues in HRA and sites considered	Potential for Significant In-Combination Effect with Nottinghamshire and Nottingham Waste Core Strategy?
Regional Spatial Strategy for the East Midlands – Proposed Changes	Yes	<p>Appropriate Assessment of the East Midlands RSS Proposed Changes, 2008</p> <p><a href="http://www.leics.gov.uk/was_41_-_em_appropriate_assessment_of_proposed_changes_report_appendices.pdf">http://www.leics.gov.uk/was_41_-_em_appropriate_assessment_of_proposed_changes_report_appendices.pdf</a></p> <p>Sites considered:</p> <ul style="list-style-type: none"> <li>• Baston Fen SAC</li> <li>• Bee's Nest and Green Clay Pits SAC</li> <li>• Birklands and Bilhaugh SAC</li> <li>• Gang Mine SAC</li> <li>• Grimsthorpe SAC</li> <li>• Humber Estuary SAC SPA Ramsar</li> <li>• Peak District Dales SAC</li> <li>• River Mease SAC</li> <li>• Saltfleetby-Theddlethorpe Dunes and Gibraltar Point SAC</li> <li>• Gibraltar Point SPA, Ramsar</li> <li>• South Pennine Moors SAC</li> <li>• South Pennine Moors (Phase II) SPA</li> </ul>	<p><b>No</b> – The HRA for the RSS proposed changes will not have an adverse effect on the integrity of the majority of European Sites for which possible significant adverse effects were identified in earlier stages of the assessment. However, it did identify residual concerns for which consultation may help to identify possible solutions. These are for the following sites: Birklands and Bilhaugh SAC, in relation to possible implications of development on fragmentation of supporting habitat, and River Mease SAC, for which general measures may not be sufficient to avoid adverse effects on the site in future due to impacts on water supply.</p> <p>The assessment found that for the following sites, some issues were identified which require more detailed consideration in the future and should be monitored through the Annual Monitoring Report, to confirm the effectiveness of mitigation or to strengthen the evidence base for future revisions of the RSS:</p> <ul style="list-style-type: none"> <li>• Water resources need to be confirmed to support development, including the Humber Estuary sites, Nene Washes SAC/SPA, the Wash SPA, Rutland Water SPA/Ramsar for which options for mitigation in future may be limited if pressure on water resources increases further.</li> </ul>

Plan or Programme	Subjected to HRA (Yes/No)	Key issues in HRA and sites considered	Potential for Significant In-Combination Effect with Nottinghamshire and Nottingham Waste Core Strategy?
		<ul style="list-style-type: none"> <li>• The Wash and North Norfolk Coast SAC</li> <li>• The Wash SPA, Ramsar</li> <li>• Barnack Hills and Holes SAC</li> <li>• Ensor's Pool SAC</li> <li>• Hatfield Moor SAC</li> <li>• Nene Washes SAC SPA</li> <li>• Orton Pit SAC</li> <li>• West Midlands Mosses SAC</li> <li>• Peak District Moors [South Pennine Moors Phase 1] SPA</li> <li>• Rutland Water SPA, Ramsar</li> <li>• Upper Nene Gravel Pits (potential SPA)</li> <li>• Thorne and Hatfield Moors SPA</li> <li>• Midlands Meres and Mosses Ramsar</li> </ul> <p>Issues considered:</p> <ul style="list-style-type: none"> <li>• Physical habitat loss or damage from development</li> <li>• Water abstraction</li> <li>• Tourism and recreation</li> <li>• Changes in water or air quality</li> <li>• Development of renewable energy</li> <li>• Mineral extraction</li> <li>• Waste management</li> <li>• Flood risk management</li> </ul>	<ul style="list-style-type: none"> <li>• Water quality change, the effectiveness of SUDs and the adequacy of water treatment infrastructure represent a risk for the River Mease SAC, the Nene Washes SAC/SPA/Ramsar, the Upper Nene Gravel Pits pSPA/pRamsar, the Humber Estuary Sites and the Wash SPA.</li> <li>• Monitoring of recreational disturbance in Birklands and Bilhaugh SAC, Peak District Dales SAC, the South Pennine Moor SAC, the South Pennine Moors Phases I and II SPA, Rutland Water SPA/Ramsar, Saltfleetby-Theddlethorpe Dunes, Gibraltar Point SAC/SPA and the Wash SPA/Ramsar.</li> <li>• Monitoring of cumulative effects of development on renewable energy and disturbance on the Wash SPA/Ramsar and Humber Estuary sites.</li> <li>• Supporting of habitats and protection from damage at Upper Nene Gravel Pits pSPA/pRamsar</li> </ul>

Plan or Programme	Subjected to HRA (Yes/No)	Key issues in HRA and sites considered	Potential for Significant In-Combination Effect with Nottinghamshire and Nottingham Waste Core Strategy?
		<ul style="list-style-type: none"> <li>Port development</li> </ul>	
Greater Nottingham Aligned Core Strategies	Yes	<p>Greater Nottingham Aligned Core Strategies: Option for Consultation February, 2010. Habitats Regulations Appraisal Screening Record <a href="http://www.nottinghamcity.gov.uk/CHttpHandler.ashx?id=22470&amp;p=0">http://www.nottinghamcity.gov.uk/CHttpHandler.ashx?id=22470&amp;p=0</a></p> <p>Sites considered:</p> <ul style="list-style-type: none"> <li>Sherwood Forest pSPA</li> <li>Birklands and Bilhaugh SAC</li> <li>Peak District Dales SAC</li> <li>South Pennine Moors SAC, SPA</li> <li>Rutland Water SPA, Ramsar</li> </ul> <p>Issues considered:</p> <ul style="list-style-type: none"> <li>Recreation effects: increased population in Greater Nottingham likely to increase visitors to sites.</li> <li>Effects of proximity to urban areas: vulnerability of habitats</li> <li>Effects on air quality: increased emissions</li> <li>Increased water abstraction</li> </ul>	<p><b>No</b> – The overall level of growth resulting from the core strategies would not be likely to have a significant effect on any European site, alone or in combination with other plans or projects. There would be potentially significant effects (recreation &amp; habitat pressure) on the prospective Sherwood Forest SPA. Two such effects could be avoided by modification to policies in the next iteration of the Aligned Core Strategies draft. Not possible to rule out the likelihood of a significant effect on the Park Forest part of the prospective Sherwood Forest SPA, as a result of increased Nitrogen deposition affecting habitats of birds. This may require an appropriate assessment before the ACS is adopted. Nottinghamshire County Council has subsequently produced a screening report on air quality (N deposition) and noise in relation to Top Wighay - as the HRA report flagged. In both cases, no likely significant effect was predicted, and Natural England has concurred with these conclusions.</p> <p>To ensure that there are no likely significant effects on the Birklands and Bilhaugh SAC the HRA relies on the assumption that the relocation of a visitor centre and improvement to habitats is undertaken. The HRA also identifies the potential for a likely significant effect as a result of policy 15 of the Delivery Strategy promoting enhancement of the Greenwood Community Forest which could attract higher numbers of visitors to the more sensitive parts of Sherwood Forest, including the prospective SPA. The HRA puts forward suggested policy wording.</p>

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Bassetlaw District Council – Core Strategy and Development Management Policies ‘Preferred Options’	Yes	<p>Bassetlaw District Council: Local Development Framework Habitat Regulations Assessment – Screening Report (May 2010)  <a href="http://www.bassetlaw.gov.uk/pdf/BDC%20HRA%20Screening%20Report%20(May%202010).pdf">http://www.bassetlaw.gov.uk/pdf/BDC%20HRA%20Screening%20Report%20(May%202010).pdf</a></p> <p>Sites considered:</p> <ul style="list-style-type: none"> <li>• Birklands and Bilhaugh SAC</li> <li>• Hatfield Moors SAC, SPA</li> <li>• Thorne Moors SAC, SPA</li> </ul> <p>Issues considered:</p> <ul style="list-style-type: none"> <li>• Water abstraction: Thorne and Hatfield rely on a high water table to maintain bog conditions</li> <li>• Air pollution: increase in Nitrogen deposition</li> <li>• Recreational pressure/disturbance: habitats being vulnerable and fragile to recreational pressure</li> <li>• Climate change</li> </ul>	<b>No</b> – It is considered that the assessment cannot demonstrate that the plan will have any adverse effects in the integrity of any European Sites listed, either alone or in-combination with other plans or projects.
Newark and Sherwood Allocations and Development		<p>Newark and Sherwood Allocations and Development Management Development Plan Document – Assessment under the Habitats Regulations (October 2011)  <a href="http://www.newark-">http://www.newark-</a></p>	<b>No</b> – The HRA for the DPD highlighted the need for assessments relation to potentially polluting development to consider the potential effects on European sites. If this is done, it can be reasonably concluded that there will be no likely significant effects alone or in combination with other plans. Need for Suitable

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Management Development Plan Document		<p><a href="http://sherwooddc.gov.uk/media/newarkandsherwood/imagesandfiles/planningpolicy/pdfs/allocationsdevelopmentmanagementoptionsreport/optionsreport/Habitat%20Regulations%20Assessment.pdf">sherwooddc.gov.uk/media/newarkandsherwood/imagesandfiles/planningpolicy/pdfs/allocationsdevelopmentmanagementoptionsreport/optionsreport/Habitat%20Regulations%20Assessment.pdf</a></p> <p>Sites considered:</p> <ul style="list-style-type: none"> <li>• Birklands and Bilhaugh SAC</li> </ul> <p>Issues considered:</p> <ul style="list-style-type: none"> <li>• Air quality in relation to traffic and industry – poor quality is an existing problem at the SAC</li> <li>• Recreational pressure: increase in resident numbers through housing numbers</li> <li>• Water abstraction: site vulnerable to stress if groundwater levels are significantly impacted</li> </ul>	Accessible Natural Green Space (SANGS) also raised in relation to Birklands and Bilhaugh SAC.
River Trent Catchment Flood Management Plan (2010)	Yes	<p>Habitat Regulations Assessment (2010)</p> <p>Sites considered:</p> <ul style="list-style-type: none"> <li>• Bees Nest and Green Clay Pits (SAC)</li> <li>• Birklands and Bilhaugh (SAC)</li> <li>• Cannock Chase (SAC)</li> <li>• Cannock Extension Canal (SAC)</li> <li>• Ensor's Pool (SAC)</li> <li>• Fens Pool (SAC)</li> </ul>	<p><b>No.</b> It is considered that the assessment cannot demonstrate that the plan will have any adverse effects in the integrity of any European Sites listed, either alone or in-combination with other plans or projects.</p> <p>For 8 sites (Hatfield Moor, Humber Estuary, Mottey Meadows, Pasturefields Saltmarsh, River Mease, Thorne and Hatfield, Thorne Moor and West Midlands Mosses) the Catchment Flood Management Plan (CFMP) could result in a range of unspecified land management and flood risk management actions and alterations to existing maintenance regimes that could affect a number of the</p>

Plan or Programme	Subjected to HRA (Yes/No)	Key issues in HRA and sites considered	Potential for Significant In-Combination Effect with Nottinghamshire and Nottingham Waste Core Strategy?
		<ul style="list-style-type: none"> <li>• Gang Mine (SAC)</li> <li>• Hatfield Moor (SAC)</li> <li>• Humber Estuary (SPA, Ramsar and SAC)</li> <li>• Midlands Meres and Mosses (Ramsar)</li> <li>• Motte Meadows (SAC)</li> <li>• Pasturefield Salt Marsh (SAC)</li> <li>• Peak District Dales (SAC)</li> <li>• Peak District Moors (SPA)</li> <li>• River Mease (SAC)</li> <li>• South Pennine Moors (SAC)</li> <li>• Thorne and Hatfield Moors (SPA)</li> <li>• Thorne Moors (SAC)</li> <li>• West Midland Mosses (SAC)</li> </ul> <p>Issues considered:</p> <ul style="list-style-type: none"> <li>• Habitat loss / physical damage / disturbance</li> <li>• Changes in flood inundation / frequency</li> <li>• Changes in physical regime</li> <li>• Turbidity / siltation</li> <li>• Changes in storage capacity</li> <li>• Changes to water quality</li> <li>• Disturbance</li> <li>• Changes to groundwater levels</li> </ul>	<p>sites. Appropriate Assessments have been carried out. These assessments found that the following conditions and restrictions would avoid adverse effects on the integrity of the site:</p> <ul style="list-style-type: none"> <li>• Implementation of sustainable land management (avoidance measures)</li> <li>• Review the implications of the selected CFMP policy on designated sites to ensure the current status is maintained or improved where appropriate.</li> <li>• Identify opportunities to maximise the use and benefits of sustainable drainage.</li> <li>• Identify potential sites for Biodiversity Action Plan habitat creation.</li> <li>• Carry out a study to Identify locations for rehabilitation of heavily modified watercourses and determine the likely feasibility.</li> <li>• Appropriate design of any watercourse modification at project level i.e. the implementation of the avoidance measure.</li> <li>• In addition, actions set out in the CFMP for this policy unit which will support a sustainable approach to land management include a study to Identify locations for rehabilitation of heavily modified watercourses and feasibility of doing this.</li> </ul>

Plan or Programme	Subjected to HRA (Yes/No)	Key issues in HRA and sites considered	Potential for Significant In-Combination Effect with Nottinghamshire and Nottingham Waste Core Strategy?
		<ul style="list-style-type: none"> <li>• Land use change</li> <li>• Habitat / community simplification</li> <li>• Watercourse modification</li> </ul>	
Nottinghamshire Local Transport Plan	Yes	<p>Habitats Regulations Assessment – Screening Report (2011)  <a href="http://www.nottinghamshire.gov.uk/ltp/habitatsregsassesreport.pdf">http://www.nottinghamshire.gov.uk/ltp/habitatsregsassesreport.pdf</a></p> <p>Sites considered:</p> <ul style="list-style-type: none"> <li>• Birklands and Bilhaugh SAC</li> <li>• Sherwood Forest pSPA</li> </ul> <p>Issues considered:</p> <ul style="list-style-type: none"> <li>• Air quality – effects of Ammonia and Nitrogen oxides.</li> <li>• Road transport exhaust emissions</li> <li>• Disturbance – noise, lighting</li> </ul>	<p><b>No</b> – The policies and strategies within the LTP do not give rise to direct or in-combination effects. Therefore, an appropriate assessment is not required on the basis that it is unlikely to lead to significant effects on European sites.</p> <p>It is important that Nottinghamshire County Council ensure that the new public Transport Interchange at Worksop is assessed so that it does not give rise to significant effects on the European Sites.</p> <p>The LTP3 should include a commitment to protect the environment as an overriding priority. In addition, it should demonstrate coherent linkages with other documents within the LDF so that it can be placed in the context of environmental protection policies. It should also avoid deteriorations in air quality within 200m of Birklands and Bilhaugh SAC and deteriorations of air, noise and light pollution within 200m of the potential Sherwood Forest SPA.</p> <p>The LTP3 includes objectives on the above:</p> <ul style="list-style-type: none"> <li>- Reduce transport's impact on the environment</li> <li>- Adapt to climate change and the development of a low-carbon transport system.</li> <li>- Tackle congestion</li> </ul>

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			<p>- Improve levels of health and activity by encouraging active travel</p> <p>However, the plan does not provide a statement which specifically looks to protect the environment as an over-riding priority. The plan does consider other transport authorities and partnership working.</p>
Severn Trent Water Resource Management Plan (2010)	Yes	<p>Sites considered within the HRA:</p> <ul style="list-style-type: none"> <li>• Berwyn SPA</li> <li>• South Clwyg Mountains SAC</li> <li>• River Wye SAC</li> <li>• Severn Estuary SPA, cSAC</li> <li>• River Dee SPA, SAC, Ramsar</li> <li>• Cannock Chase SAC</li> <li>• West Midland Mosses SAC, Ramsar</li> <li>• Pasturefields Salt Marsh SAC</li> <li>• River Mease SAC</li> <li>• Walmore Common SPA</li> <li>• Humber Estuary SPA, cSAC, Ramsar</li> <li>• Mersey Estuary SPA</li> <li>• Thorne and Hatfield Moors SPA</li> </ul> <p>Issues Considered</p> <ul style="list-style-type: none"> <li>• Over abstraction]</li> <li>• Groundwater levels</li> <li>• Pressure on Aquifers</li> </ul>	<p><b>No</b> – Assessment identified that it is unlikely that there will be any significant impact on European Sites. However all schemes within the WRMP that were identified as having potential effects will be subject to further screening at project level. Any scheme that could have an adverse impact on the integrity of a European site will not be in accordance with the objectives of the management plan and therefore will not be taken forward.</p>

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Ashfield Core Strategy	Yes	HRA Not yet prepared – March 2012	Need to reconsider when the next iteration of the Waste Core Strategy HRA is undertaken, provided document is available.
Mansfield Core Strategy	Yes	HRA Screening report underway – March 2012	See comment above
Derbyshire Waste Core Strategy	Yes	HRA currently being prepared – March 2012	See comment above
Lincolnshire Core Strategy	Yes	HRA not yet underway – March 2012	See comment above