

Minerals and Waste Joint Plan

# Habitats Regulations Assessment Likely Significant Effects Report

To Accompany Issues and Options Consultation February 2014



City of York Council

North York Moors National Park Authority North Yorkshire County Council

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### 1. Introduction

#### 1.1 Purpose of the Minerals and Waste Joint Plan Habitats Regulations Assessment

North Yorkshire County Council (NYCC), the City of York Council (CYC) and the North York Moors National Park Authority (NYMNPA) are working together to produce a Minerals and Waste Joint Plan (MWJP). The purpose of this report is to record and present the findings of a Habitats Regulations Assessment (HRA) screening exercise undertaken on that MWJP at Issues and Options Consultation stage. This HRA screening assessment has been carried out to meet the requirements of the 'Conservation of Habitats and Species Regulations, 2010' and provides the competent authorities (in this case NYCC, CYC and NYMNPA) with the information required to establish whether emerging policies are compliant with the Regulations. It also gives an early indication of whether a full Appropriate Assessment is likely to be necessary if certain options are pursued.

This report should be seen as the first step in a process of checking the MWJP accords with the Habitats Regulations. Future reports will examine the likely significant effects of more detailed policies and proposed minerals and waste sites on internationally protected wildlife sites.

#### 1.2 Requirement to Undertake Habitats Regulations Assessment

#### The Habitats Directive

The United Kingdom is subject to Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora, which is often referred to as the Habitats Directive. The principal aim of the Directive is to promote biodiversity *'by requiring Member States to take measures to maintain or restore natural habitats and wild species listed in the Annexes to the Directive at a favourable conservation status'* (JNCC, 2012a)<sup>1</sup>. Amongst the measures the Directive requires to achieve this is the creation of *'a coherent European ecological network of special areas of conservation'*. This network also includes Special Protection Areas (SPAs) for birds, designated under Directive 79/409/EEC ('The Birds Directive') and is termed the Natura 2000 Network.

Article 6(3) of the Directive puts in place requirements on certain plans and projects:

'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'. (European Commission, 1992)<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup><u>http://jncc.defra.gov.uk/page-1374</u>

<sup>&</sup>lt;sup>2</sup>European Commission, 1992. Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

<sup>[</sup>http://eur-ex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0043:EN:HTML] (accessed 07/02/2014).

#### The Conservation of Habitats and Species Regulations, 2010 (As Amended)

The Habitats Directive was transposed into UK law in 1994 as the Conservation (Natural Habitats &c) Regulations, 1994. These Regulations were amended on a number of occasions in the years following 1994 and in 2010 the Government chose to consolidate the various amendments to the Regulations via 'the Conservation of Habitats and Species Regulations, 2010'. Paragraph 61 sets out the requirements for the undertaking of appropriate assessment where a plan '*is likely to have a significant effect on a European Site or a European Offshore Marine Site (either alone or in combination with other plans or projects)*'.

The Regulations also provide clarity on what is meant by 'European Site' under Regulation 8. This includes both terrestrial and marine Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Sites of Community Importance (SCIs)<sup>3</sup> potential SACs (pSACs) and potential SPAs (pSPAs).

The Conservation of Habitats and Species (Amendment) Regulations 2012 update the 2010 Regulations. While this legislation makes significant changes to the implementation of the Birds Directive in the UK, including a requirement for competent authorities to avoid pollution or deterioration of bird habitat wherever it may occur<sup>4</sup>, the protocols for undertaking Appropriate Assessment, at least in terms of the MWJP, remain the same.

#### 1.3 Minerals and Waste Joint Plan

As planning authorities for minerals and waste in each of their areas, NYCC, CYC and the NYMNPA have a responsibility to take decisions on planning applications for these types of development. The three Authorities also have a duty to produce planning policies within a Local Plan to help take those decisions.

NYCC, CYC and the NYMNPA are currently working together to prepare a Minerals and Waste Joint Plan (MWJP) which will be prepared under the provisions of the Town and Country Planning (Local Planning) Regulations 2012<sup>5</sup>. The MWJP, informed by evidence and consultation, will contain the spatial framework for future minerals and waste development across the three authorities and present land use policies and allocations for future minerals and waste development.

The MWJP is currently at the Issues and Options Consultation stage of preparation which ensures that all of the key issues related to drawing up new policies for minerals and waste are presented, along with realistic options for addressing these. It should be noted that the various policy options presented in the MWJP Issues and Options Consultation and assessed in this report are not intended to represent actual draft policies, rather they are intended to

<sup>&</sup>lt;sup>3</sup> SCIs are sites that have been adopted by the European Commission but are not yet formally designated by the European Commission.

<sup>&</sup>lt;sup>4</sup> This requirement will be addressed, where it exists outside of the Natura 2000 / Ramsar network, in the accompanying Sustainability Appraisal to the MWJP.

<sup>&</sup>lt;sup>5</sup> These Regulations build upon the broader system for producing plans set out in the 2004 Planning and Compulsory Purchase Act. For instance, the arrangements for Development Plan Documents are amended and those DPDs are renamed as Local Plans.

give an indication of the potential scope and purpose of future policies to deal with issues identified. Table 1 below shows the key stages in the production of the MWJP.

Stage in plan preparation	Purpose
First Consultation (undertaken in Summer	To obtain views on the issues the Plan
2013)	should address
Issues and Options	To present, for consultation, the issues, draft
	vision and objectives and possible options
	for policies to address the issues
Preferred Options	To present draft policies for consultation
Publication	To publish the Plan for final comments
Submission and Examination	Independent examination and production of
	Inspector's report
Adoption	Final Plan adopted by the three authorities

Table 1: Key Stages in the Production of the MWJP

A draft vision and objectives have been developed in order to give direction to the policies of the MWJP. The draft vision and 12 related objectives which have been proposed as a means of taking the vision forward are underpinned by the following interconnected priorities:

- Delivering sustainable waste management;
- Achieving the efficient use of minerals resources;
- Optimising the spatial distribution of minerals and waste development; and
- Protecting and enhancing the environment and supporting communities and businesses.

The full draft vision and objectives can be viewed in the MWJP Issues and Options Consultation report available at <a href="http://www.northyorks.gov.uk/mwconsult">www.northyorks.gov.uk/mwconsult</a>.

A series of option groups which each contain between 1 and 6 individual options are presented in the MWJP Issues and Options Consultation, and are grouped into chapters as follows:

- Minerals;
- Provision of Waste Management Capacity and Infrastructure;
- Transport and Other Infrastructure; and
- Development Management.

A full list of option groups and individual options has been included in Appendix 3 of this report.

A Sustainability Appraisal (SA), incorporating the requirements of Strategic Environmental Assessment (SEA), is also being undertaken in relation to the MWJP and the Sustainability Appraisal Update Report relating to the Issues and Options consultation can be viewed at <u>www.northyorks.gov.uk/mwconsult</u>. However, as outlined above, there is also a requirement under European and UK legislation to undertake a Habitats Regulations Assessment on the

plan. While SEA is an iterative process that seeks to improve the environmental performance of a plan and reduce or mitigate for any deleterious environmental effects, Habitats Regulations Assessment is a test of the effect of the plan on the integrity of European Nature Conservation Sites (referred to from this point on as 'European sites')<sup>6</sup>. In this sense the objective of the Habitats Regulations Assessment process undertaken in this report is to test whether the MWJP is likely to have a significant effect on European Nature Conservation Sites either alone or in combination with other plans or projects and, if so, can that effect be reduced to levels that are below a significant level. This report also describes any avoidance measures or mitigation that could be pursued at an early stage and states whether an appropriate assessment<sup>7</sup> under the Regulations is likely to be necessary. However, as the production of the MWJP is at an early stage, additional assessment will be required as policies are further defined.

<sup>&</sup>lt;sup>6</sup> In this report European Nature Conservation Sites, namely Special Protection Areas and Special Areas of Conservation, are considered alongside international Ramsar Wetland Sites, consistent with UK Government Policy.

<sup>&</sup>lt;sup>7</sup> See section 2 of this report for an explanation of appropriate assessment.

### 2. Habitats Regulations Assessment Methodology

#### 2.1 European Sites

As previously stated, plans such as the MWJP, must be considered for their likely significant effects (alone or in combination with other plans and projects) on European Sites. The Conservation of Habitats and Species Regulations, 2010 (as amended) establishes what is meant by a 'European Site' under Regulation 8. This includes both terrestrial and marine Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Sites of Community Importance (SCIs)<sup>8</sup>, potential SACs (pSACs) and potential SPAs (pSPAs). These are described below:

<u>Special Protection Areas (SPAs)</u> are 'strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species<sup>9</sup>.

<u>Special Areas of Conservation (SACs)</u> are 'strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annex 1 and II of the Directive (as amended)<sup>10</sup>.

Potential SACs (pSACs) and potential SPAs (pSPAs) are sites that have been approved by Government and are currently in the process of being classified<sup>11</sup>.

#### Consideration of Ramsar Sites and Other Sites

Unlike European sites, Ramsar sites are sites of international, rather than just European, importance, designated for wetlands. In practice, in the UK most Ramsar sites also receive protection as Special Protection Areas. However, paragraph 118 of the Government's National Planning Policy Framework gives Ramsar sites and proposed Ramsar sites the same protection as European sites. The NPPF also states that pSACs, pSPAs and 'sites identified, or required *as compensatory measures for adverse effects on European sites*' should be given the same protection as European sites. To address this requirement of planning policy all Ramsar sites, where they lie within the Plan Area or 15km buffer zone (see Section 3.2), will be considered alongside European sites, terrestrial or marine, in this assessment.

 <sup>&</sup>lt;sup>8</sup> SCIs are sites that have been adopted by the European Commission but are not yet formally designated by the European Commission.
 <sup>9</sup> JNCC, undated. Special Protection Areas (Available at: <u>http://jncc.defra.gov.uk/page-162</u> [Accessed]

<sup>&</sup>lt;sup>9</sup> JNCC, undated. Special Protection Areas (Available at: <u>http://jncc.defra.gov.uk/page-162</u> [Accessed 07/02/2014]).

<sup>&</sup>lt;sup>10</sup> JNCC, undated. Special Areas of Conservation (Available at: <u>http://jncc.defra.gov.uk/page-23</u> [Accessed 07/02/2014]).

<sup>&</sup>lt;sup>11</sup> JNCC, undated. Special Protection Areas (Available at: <u>http://jncc.defra.gov.uk/page-162</u> [Accessed 07/02/2014]).

At the time of writing there are a number of Ramsar sites within 15km of the study area (see Figure 4), and an additional pSPA and pSAC have also been identified (see Section 3.2 and Appendix 2 for further details).

As previously mentioned, for reasons of brevity, when this report refers to European sites, Ramsar sites are included in that definition.

### 2.2 A Staged Approach to Appropriate Assessment: Habitats Regulations Assessment

The Habitats Regulations refer to the undertaking of 'appropriate assessment' in relation to plans and projects. However, in practice many organisations have addressed the requirement to undertake appropriate assessment via a series of steps. For instance, it is necessary to first determine the extent to which plans require appropriate assessment before the assessment can practicably proceed, and to do this it is necessary to assess whether significant effects on European sites are likely and to establish what the 'appropriate assessment' itself should focus on. Following this an appropriate assessment report may be drafted that considers the effects of the plan on the integrity of European sites. In some cases, where no alternative solutions can be found, it will be necessary to undertake further work to identity the extent to which a plan should proceed because of imperative reasons of overriding public interest.

Since the 'appropriate assessment' proper is a discreet stage of a potentially multi-staged process, to avoid confusion the process as a whole is usually referred to as Habitats Regulations Assessment.

The methodology for undertaking this assessment has been based largely on 'The Habitats Regulations Assessment of Local Development Documents Revised Draft Guidance for Natural England' (Tyldesley, 2009) although reference has been made to other sources of guidance where appropriate.

In this assessment we have divided the full Habitats Regulations Assessment process, including Appropriate Assessment, into 4 key stages, as illustrated in Table 2, below. This report documents the undertaking of Stages 1 and 2 of this Habitats Regulations Assessment Process. As this assessment of Likely Significant Effects relates to options rather than policies, it will be necessary to revisit this at the Preferred Options stage when it will be possible to assess detailed policies, using the conclusions of this Screening Assessment as a starting point. It may also be that new options or combinations of existing options become the Preferred Options. This assessment will also help to inform the selection of Preferred Options. The tasks below to be undertaken at Preferred Options stage will also need to be revisited at Publication stage to take account of any changes made to the Plan between these two stages.

Stago 1	Regulations Associational Registration	Prograss
Pre Screening	A Identify whether the plan is subject to Habitate	Undertaken
and Scoping	<ul> <li>A. Identify whether the plan is subject to Habitats Regulations Assessment.</li> <li>B. Identify international sites in and around the plan area.</li> <li>C. Identify the conservation objectives and threats to site integrity of European sites.</li> <li>D. Establish the methodology for undertaking the Assessment.</li> </ul>	in this Likely Significant Effects report.
Stage 2		
Screening for likely significant effect	<ul> <li>A. Identify potential effects on European sites and the possible way in which this might affect conservation objectives.</li> <li>B. Examine other plans and programmes that could contribute to 'in combination' effects.</li> <li>C. Make a high level assessment of whether significant effects can be ruled out by making adaptations or adjustments to the plan.</li> <li>If no effects are likely – report no significant effects.</li> <li>If effects are judged likely or any uncertainty exists – the precautionary principle applies - proceed to Stage 3.</li> </ul>	Undertaken in this Likely Significant Effects report. This will need to be revisited at Preferred Options stage as detailed policies are drafted and revisited at
		Publication stage.
Stage 3		
Assessment under Regulation 61 of the Habitat Regulations, 2010: Appropriate Assessment	Consider how the elements of the plan identified as potentially having likely significant effects 'in combination' with other plans and programmes will cause direct and indirect effects on the integrity of European sites in light of their conservation objectives (the 'Appropriate Assessment'). Consider how any effects on the integrity of a site could be avoided by changes to the plan and the consideration of alternatives.	I his will be undertaken at Preferred Options stage where necessary and revisited at Publication stage.
	and mechanisms). Report outcomes of Appropriate Assessment including mitigation measures, consult with Natural England, the Environment Agency and wider (public) stakeholders as necessary.	

Table 2: Habitats Regulations Assessment: Key Stages

	<ul> <li>If plan will not have an adverse effect on the integrity of European sites alone or in combination with other sites (theAEol<sup>12</sup> decision) proceed without further reference to Habitat Regulations.</li> <li>If effects or any uncertainty remains following the consideration of alternatives and development of mitigation measures, proceed to Stage 4.</li> </ul>	
Stage 4		
Procedures	If impacts remain, a plan or programme can only	Where
where adverse	proceed provided a series of 'sequential tests'	necessary,
effect on	(Habitat Directive's article 6 (4) derogation	this will be
integrity of	requirements) are satisfied. These are:	initiated once
international		preferred
site remains	Test 1: There must be no feasible alternative	options are
	solutions to the plan or project which are less	known and
(Derogations) <sup>13</sup>	damaging to European Sites;	prior to the
		Publication
	Test 2: There must be 'imperative reasons of	Stage.
	overriding public interest' (IROPI) for the plan or	
	project to proceed;	
	Test 3: All necessary compensatory measures must	
	be secured to ensure that the overall coherence of	
	the network of European Sites is protected.	

#### 2.3 Source – Pathway – Receptor Approach

A 'source-pathway-receptor' approach is often used in environmental risk management. It is a way of developing a conceptual understanding of how environmental harm can occur and this approach will be followed in this screening assessment in order to establish whether significant effects will occur or are likely. The broad principles of this approach are described below.

#### Source-Pathway-Receptor

It stands to reason that if environmental or any other form of hazard is to occur it must come from somewhere. For instance a water pollution incident wouldn't occur unless there is some source or causal agent for that pollution (e.g. agricultural run off or an industrial facility). This is the **source**.

<sup>&</sup>lt;sup>12</sup> 'The AEoI decision' is used in Defra's draft guidance (The Habitats and Wild Birds Directives in England and its Seas: Core Guidance for Developers, Regulators and Land/Marine Managers, 2012. Defra, London) and refers to deciding whether or not the Plan will result in 'adverse effects on integrity'.

<sup>&</sup>lt;sup>13</sup> A derogation is a provision that often features in EU legislation that allows part or all of a legal measure to be applied differently or not at all. In the case of the Habitats Directive, the satisfaction of the three tests outlined in Table 1 enable plans or projects to be adopted in spite of a likely effect on European Sites.

Environmental hazards would not present any problems unless there were a <u>receptor</u>, or a place that would be vulnerable to damage, that would be damaged when exposed to whatever hazard originates from the source. So an already sterile water body would be unlikely to be significantly affected by a pollution incident, whereas a freshwater ecosystem that relies on high water quality may be significantly affected by water pollution. However, there may also be secondary environmental effects if the water body drains to a location which is sensitive to pollution.

If, however, a sump or interceptor collected the pollution before it entered the water body receptor then significant effects on any ecosystem would be unlikely to occur. This is because there is no **<u>pathway</u>** by which the hazard (pollution) can reach the receptor (the freshwater ecosystem).

Where the European sites are considered vulnerable to certain impacts those impacts can only be considered possible where there is a source for that impact and a pathway to the receptor (the European site or species associated with it).

Section 3 of this report focuses on the identification of receptors and the extent that they are vulnerable to external impacts, while Section 5 assesses the likelihood of significant effects to those receptors arising from the source (the MWJP). In this way it will be possible to consider whether options in the MWJP have the potential to be sources of potential impacts and whether a pathway exists between these potential impacts and European sites.

### 3. European Sites Scoped into this Assessment and Considerations in Relation to Integrity

#### 3.1 Area of Study

The Plan Area of the MWJP is shown in Figure 1 and covers the planning authority areas of North Yorkshire, the City of York and the North York Moors National Park.



Figure 1: Minerals and Waste Joint Plan Area

The European sites to be considered in this assessment, together with Ramsar Sites are shown in Figures 2, 3 and 4 below.

Because impacts from minerals and waste activity have the potential to occur beyond the Plan Area boundary, provided there is a pathway between the source of impacts and a European / Ramsar Site, a 15km buffer has been applied to the outer boundary of the Plan Area and the European / Ramsar Sites within that buffer are also considered. However, it should be noted that for certain impacts, longer range pathways may exist. These will be investigated on a case by case basis.

#### 3.2 European and Ramsar Sites

Figures 2 to 4 and Tables 3 to 5 List SACs, SPAs and Ramsar sites considered in this assessment.



Figure 2: Special Areas of Conservation within the Plan Area and a 15 km buffer

	Sites partly or wholly	Sites partly or wholly within
Designation	within Plan Area	15km buffer
SAC	Arnecliff & Park Hole	
	Woods	Calf Hill and Cragg Woods
	Beast Cliff - Whitby	Craven Limestone Complex
	Ellers Wood and Sand	
	Dale	Hatfield Moor
	Fen Bog	Helbeck and Swindale Woods
	Flamborough Head	Humber Estuary
	Kirk Deighton	Ingleborough Complex
	Lower Derwent Valley	Moor House - Upper Teesdale
	North Pennine Dales	
	Meadows	Morecambe Bay
	North Pennine Moors	Morecambe Bay Pavements
	North York Moors	Ox Close
	River Derwent	River Eden
	Skipwith Common	Thorne Moor
	South Pennine Moors	
	Strensall Common	

able 5. Special Aleas of Conservation within the Flan Alea and a 15km build	Fable 3: Special Areas of Conservation within the Plan Area an
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#### Figure 3: Special Protection Areas within the Plan Area and a 15 km buffer

Designation	Sites partly or wholly within Plan Area	Sites partly or wholly within 15km buffer
<u>SPA</u>	Flamborough Head & Bempton Cliffs	Bowland Fells
	Lower Derwent Valley	Humber Estuary
	North Pennine Moors	Leighton Moss
	North York Moors	Morecambe Bay
	South Pennine Moors –	Teesmouth and Cleveland Coast
	(Phase 2)	
		Thorne and Hatfield Moors

Table 4: Special Protection Areas within the Plan Area and a 15km buffer



Figure 4: Ramsar sites within the Plan Area and a 15 km buffer

	Sites partly or wholly	Sites partly or wholly within 15km
Designation	within Plan Area	buffer
RAMSAR	Lower Derwent Valley	Humber Estuary
		Leighton Moss
		Malham Tarn
		Morecambe Bay
		Teesmouth and Cleveland Coast

Table 5: Ran	nsar sites	within the	Plan Area	and a	15km	buffer

At the time of writing an additional pSPA and a pSAC have been identified. The pSPA (to be known as 'Flamborough and Filey Coast') encompasses the whole of the already designated Flamborough Head & Bempton Cliffs SPA, but includes additional land (and a marine extension out to 2km from the existing SPA) so that the site would comprise a north area and south area<sup>14</sup>. Similarly it is proposed that the landward boundary of the existing Flamborough Head SAC be modified to ensure that the features of the SAC remain within the site into the future. Appendix 3 of this report includes further information regarding these sites and their features of interest. While conservation objectives are not yet available, the sites will be considered in this assessment and the outcomes of consultation currently taking place on the scientific basis of the pSPA and pSAC will continue to be monitored.

<sup>&</sup>lt;sup>14</sup> <u>http://www.naturalengland.org.uk/ourwork/conservation/designations/spa/flamborough-fileypspaconsultation.aspx</u> [Accessed 31/01/2014].

#### 3.3 Identifying the Conservation Objectives and Threats to the Integrity of European / Ramsar Sites

Appendix 1 of this Likely Significant Effects report for the MWJP lists the European / Ramsar sites contained within the area of study, alongside their conservation objectives and identifies some key threats to the integrity of these sites.

In tables A 1.1, A 1.2 and A 1.3 in Appendix 1, alongside the name of each site within the Plan Area and the 15km buffer, are the qualifying features of those sites. These qualifying features show the species or habitats that are recorded at the site which make it worthy of designation as a European or Ramsar site.

The third column in the table shows conservation objectives associated with that site. Conservation objectives are broad objectives that define the key aims of the designated status (SPA / SAC / Ramsar) of a site. While additional conservation objectives may exist to support other designations (such as Site of Special Scientific Interest) at the site the conservation objectives that are listed are those pertaining to sites' European / international status.

The final column displays 'key threats to site integrity'. The 'key threats to site integrity column' is a summary of information provided in the 'vulnerabilities' section of the Joint Nature Conservation Committee's Standard Data Forms for the each site as well as other data gathered from, for example 'Operations Likely Damage' lists and other Habitats Regulations Assessments<sup>15</sup>. This provides a summary of the processes that may cause damage to a site and prevent conservation objectives being achieved.

While many threats to site integrity listed in Appendix 1 are linked to a likely category of source of impacts – for instance inappropriate grazing or housing development – it is important for this assessment to consider that threats to integrity may also result from other operations that may not be listed. For instance, if inappropriate grazing levels may lead to colonisation of a grassland by scrub, causing loss of habitat, other unforeseen operations could cause a similar effect (for example deliberate planting of trees).

Using this information it is possible to begin to identify the sorts of impacts for which each individual site could be a potential receptor. So if a site is vulnerable to hydrological change, for example, it could be inferred that emerging minerals and waste policies that have the potential to affect the hydrology of a site could be a potential source for an impact to occur. However, whether or not that impact can occur will depend on whether a pathway exists over which the source of hydrological change can project significant impacts to a European Site vulnerable to hydrological change (the receptor) (see Section 2.3 for a description of the 'source –pathway- receptor approach used in this assessment).

<sup>&</sup>lt;sup>15</sup> These include: Yorkshire and Humber Assembly, 2006. Appropriate Assessment of the Draft Regional Spatial Strategy for Yorkshire and the Humber, Land Use Consultants.

# 4. Screening Assessment in Combination with other Plans and Projects

#### 4.1 Potential Sources of Impacts from the MWJP

Tyldesley, 2009<sup>16</sup> describes some of the ways in which impacts on European sites may arise at the strategic plan making stage, as summarised in Table 6 below.

Category of Impact that may	How Such Impacts Might Occur
Arise from a Strategic Change	
Types of change	Theoretically a specific type of change might be
	proposed in a plan that might in itself have a
	significant effect on one or more European sites
	regardless of the quantum of change or the location
	of that change.
Quantity of change	In some cases a significant effect may occur as a
	result of the quantum of change that is likely to occur
	due to a specific objective/policy.
Location of change	There may be a strategic need to focus development
	in a specific area. Where a plan contains policies or
	proposals that that steer an amount or type of
	development that could be potentially damaging onto
	or adjacent to a European Site, a direct impact may
	occur. A plan may also indirectly affect a European
	Site, where it steers development towards an area
	that has connectivity to the site (e.g. hydrological
	connectivity) or where a plan may lead to the
	generation of other indirect effects (e.g. disturbance
	due to increased vehicle movements).
Blocking of other proposals or	Future alternative approaches may be blocked by
approaches	policies in a plan. For instance a non-damaging
	policy approach may no longer be an option if the
	plan commits an area to a specific approach that
	may in the longer term be damaging.
Justifying damaging development	Inclusion within a plan may give justification to
	interventions that would have otherwise been
	considered on their merits alone. This may form part
	of a case to justify 'imperative reasons of overriding
	public interest' that would allow the minerals or waste
	development to go ahead under various regulatory

Table 0 . Possible ways in which a Fian could result in significant impacts upon a European Site	Table 6 <sup>17</sup> : Po	ossible ways	in which a Plan	could result in significar	<u>nt impacts upon a E</u>	uropean Site
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Tyldesley, D. 2009. The Habitats Regulations Assessment of Local Development Documents Revised Draft Guidance for Natural England. Natural England, Sheffield. <sup>17</sup> Categories of impact and source material for the mechanisms by which effects may occur are adapted from

<sup>&</sup>lt;sup>17</sup> Categories of impact and source material for the mechanisms by which effects may occur are adapted from text in Tyldesley. D (2009) The Habitats Regulations Assessment of Local Development Documents Revised Draft Guidance for Natural England. Natural England, Sheffield.

	controls, whereas were a project considered in its own right a different case may need to be made. It is therefore important to ensure that only interventions that are consistent with the Habitats Regulations' requirements are included in the MW/IP
Combined / cumulative effects	While on their own the policies or proposals of a plan may not be likely to have significant effects, certain policies or proposals may work in combination with other plans and projects in such a way that a significant effect may occur.

## 4.2 In Combination Impacts: Consideration of other Plans and Projects that may Affect European / Ramsar sites in combination with the MWJP

The Habitats Directive requires that all significant effects of plans and projects, whether they are alone or in combination with other plans and projects, be assessed in view of European sites conservation objectives. This means that, even where an effect of the plan is deemed not to be significant on its own, it could be significant when added to the effects of one or more other plans and projects.

By the same token, it is important that in combination assessment remains a manageable exercise. Therefore the focus of in combination assessment in this HRA will be on relevant plans that direct future growth or that seek to manage mineral resources and waste as these plans are considered to be the key sources of potential impacts. During the HRA assessment of individual sites or areas, consideration will be given to potential in combination effects with any specific relevant projects (e.g. major planning applications) where necessary.

All of the development plans in the Plan Area and surrounding authorities have been reviewed to give a picture of anticipated levels of development during the plan period. Many of the plans that have been reviewed during in combination assessment have been subject to Habitats Regulations Assessments. These HRA documents can be useful in ascertaining the extent to which those plans are expected to impact on European sites.

Table 7 shows the plans that will be considered for in combination impact in this assessment.

Name of Plan	Plan Type	Plan Status	Geographical Scope				
Richmondshire Local Plan:	Land Use Plan	Under	Richmondshire District				
Core Strategy		Preparation					
Scarborough Borough	Land Use Plan	Under	Scarborough Borough				
Council Local Plan		Preparation					
Hambleton Core Strategy,	Land Use Plan	Adopted	Hambleton District				
Allocations DPD and							
Development Policies DPD							

Table 7: Plans considered 'in combination' where relevant

Selby Core Strategy and Selby Site Allocations Development Plan DPD	Land Use Plan	Core Strategy (adopted), Site Allocations DPD (under preparation)	Selby District
Ryedale Local Plan	Land Use Plan	Adopted	Ryedale District
Harrogate District Core Strategy and Sites and Policies DPD	Land Use Plan	Core Strategy (adopted), Sites and Policies DPD (under preparation)	Harrogate District
Craven Core Strategy	Land Use Plan	Under Preparation	Craven District
North York Moors National Park Core Strategy and Development Policies DPD (note minerals and waste policies will be replaced by the MWJP)	Land Use Plan	Adopted	North York Moors National Park
York Local Plan	Land Use Plan	Under Preparation	City of York Council
County Durham Plan	Land Use Plan including Minerals and Waste	Under Preparation	Durham County Council
Stockton on Tees Core Strategy	Land Use Plan	Adopted	Stockton on Tees
The Tees Valley Minerals and Waste DPD's	Minerals and Waste Plan	Adopted	Five local authority areas of Darlington, Hartlepool, Middlesbrough, Redcar and Cleveland and Stockton-on Tees
East Riding Local Plan	Land Use Plan	Under Preparation	East Riding of Yorkshire
Joint Waste Local Plan (Hull and the East Riding)	Waste Plan	Under Preparation	Hull and the East Riding
Joint Minerals Local Plan (Hull and the East Riding)	Minerals Plan	Under Preparation	Hull and the East Riding
Leeds Core Strategy and Site Allocations DPD	Land Use Plan	Under Preparation	Leeds Unitary Authority
Leeds Natural Resources and Waste Local Plan	Minerals and Waste Plan	Adopted	Leeds Unitary Authority
City of Bradford Metropolitan District Council Local Plan	Land Use Plan	Under Preparation	City of Bradford Metropolitan District

Ribble Valley Core Strategy	Land Use Plan	Under	Ribble Valley Borough
		Preparation	Council Area
Lancaster Local Plan	Land Use Plan	Under	Lancaster District Council
		Preparation	Area
Joint Lancashire Minerals	Minerals and	Adopted	Lancashire County
and Waste Local Plan	Waste Plan		Council, Blackburn with
			Darwen Borough Council
			and Blackpool Council
			Areas
Darlington Local Plan	Land Use Plan	Core Strategy	Darlington Borough
		Adopted	Council Area
Middlesbrough Core	Land Use Plan	Adopted	Middlesbrough Council
Strategy			Area
Redcar and Cleveland	Land Use Plan	Under	Redcar and Cleveland
Local Plan		Preparation	Council Area
Doncaster Core Strategy	Land Use Plan	Core Strategy	Doncaster Council Area
and Sites and Policies DPD		(adopted),	
		Sites and	
		Policies DPD	
		(under	
		preparation)	
Pendle Borough Local Plan	Land Use Plan	Under	Pendle Council Area
		Preparation	
Barnsley, Doncaster and	Waste Plan	Adopted	Barnsley, Doncaster and
Rotherham Joint Waste			Rotherham Council Areas
Plan			
Wakefield Local	Land Use Plan	Core Strategy,	Wakefield Council Area
Development Framework		Development	
		Policies and	
		Waste	
		Document	
		(Adopted)	
Yorkshire Dales Local Plan	Land Use Plan	Under	Yorkshire Dales National
		Preparation	Park
North Yorkshire Local	Transport Plan	Adopted	North Yorkshire
Transport Plan 3			
City of York Local	Transport Plan	Adopted	City of York
Transport Plan 3			
Redcar and Cleveland	Transport Plan	Adopted	Part of National Park in
Local Transport Plan 2011			Redcar and Cleveland
- 2021			Borough

#### 5. Screening

#### 5.1 **Recording the Results of the Screening Assessment**

Having established the European Sites of relevance to this assessment and the plans and projects that should be considered in combination with the MWJP, all proposed plan options will be screened in order to establish whether they are likely to have a potentially significant effect on a European Site. The screening process will involve the categorisation of each plan option into one of four categories of potential effects established by Tyldesley (2009)<sup>18</sup>:

- A. Category A: No negative effect<sup>19</sup>: these are elements of the plan that would have no negative effect on any European Site. Those options that fall into Category A can be screened out and do not require any further assessment;
- B. Category B: No significant negative effect: these are elements of the plan that could have an effect, but the likelihood is there would be no significant negative effect on a European Site either alone or in combination with other plans or projects. This category of effects includes trivial and 'de minimus<sup>20</sup> impacts;
- C. Category C: Likely significant effect alone: these elements of the plan will require full appropriate assessment unless the plan can be modified in a way that reduces the effect to no significant negative effect or no negative effect;
- D. Category D: Likely to have a significant effect in combination: as with the above category, elements of the plan categorised in this way will be subject to appropriate assessment unless the effect made by the plan alone can be reduced to no significant negative effect or no negative effect.

In order to make the categorisation process more transparent and to provide justification as to whether Appropriate Assessment is likely to be necessary, Categories A, C and D are subdivided into specific reasons for allocation. These sub-categories are listed in Table 8 below.

Category	Sub- category	Reason
A – No	A1	Options that will not themselves lead to development e.g. because

#### Table 8<sup>21</sup> - Assessment Categories

<sup>&</sup>lt;sup>18</sup> Tvldeslev, D. (2009) The Habitats Regulations Assessment of Local Development Documents Revised Draft Guidance for Natural England, Natural England.

<sup>&</sup>lt;sup>19</sup> In the context of this assessment, 'negative' effects are deemed to be effects that would be likely to undermine the conservation objectives of a European site. <sup>20</sup> Insignificant, negligible or of minor importance

<sup>&</sup>lt;sup>21</sup>Assessment categories and text taken from Tyldesley (2009) with slight modifications which have specific relevance to the MWJP. It is likely that this framework of assessment categories will continue to evolve throughout the different stages of plan production and as a result of consultation responses: Tyldesley, D. (2009) The Habitats Regulations Assessment of Local Development Documents Revised Draft Guidance for Natural England, Natural England.

negative effect		they relate to design or other qualitative criteria for development, they are not a land use planning policy or contain a presumption against development.
	A2	Options / policies intended to protect the natural environment, including biodiversity.
	A3	Options / policies intended to conserve or enhance the natural, built or historic environment, where enhancement measures will not be likely to have any negative effect on a European Site.
	A4	Options / policies that positively or indirectly steer development away from European sites and associated sensitive areas, or relate to development that would take place away from European Sites.
	A5	Options / policies that would have no effect because no development could occur through the policy itself, the development being implemented through later policies in the same plan, which are more specific and therefore more appropriate to assess for their effects on European Sites and associated sensitive areas, or the development would be approved through another plan.
B – No	No sub-	
effect	categories	
C – Likely significant	C1	The option could <b>directly affect</b> a European site because it provides for, or steers, a quantity or type of development onto a European site, or adjacent to it.
effect alone	C2	The option could <b>indirectly affect</b> a European site e.g. because it provides for, or steers, a quantity or type of development that may be very close to it, or ecologically, hydrologically or physically connected to it or it may increase disturbance as a result of increased recreational pressures.
	C3	Proposals for a <b>magnitude of development</b> that, no matter where it was located, the development would be likely to have a significant effect on a European site.
	C4	An option that makes provision for a quantity / type of development (and may indicate one or more broad locations e.g. a particular part of the plan area), but the effects are uncertain because the detailed location of the development is to be selected following <b>consideration</b> <b>of options in a later Plan or a later stage of the MWJP</b> <b>production</b> . The consideration of options in the later stages of plan production will assess potential effects on European Sites, but because the development could possibly affect a European site a significant effect cannot be ruled out on the basis of objective information
	C5	Options for developments or infrastructure projects that could <b>block</b> options or alternatives for the provision of other development or projects in the future, which will be required in the public interest, that may lead to adverse effects on European sites, which would otherwise be avoided (e.g. a development allocation that may eliminate a possible alternative route for a new pipeline).
	C6	Options, policies or proposals which <b>depend on how the policies</b> <b>etc. are implemented</b> in due course, for example, through the development management process. There is a theoretical possibility that if implemented in one or more particular ways, the proposal could possibly have a significant effect on a European site.
	C7	Any other options that would be <b>vulnerable to failure</b> under the Habitats Regulations at project assessment stage; to include them in the plan would be regarded by the EC as 'faulty planning'.
	C8	Any other proposal that may have an adverse effect on a European site, which might try to pass the tests of the Habitats Regulations at

		project assessment stage by arguing that the <b>plan provides the</b> <b>imperative reasons</b> of overriding public interest to justify its consent despite a negative assessment.
D – Likely D1 significant effects in		The option, policy or proposal alone would not be likely to have significant effects but if its effects are combined with the effects of other policies or proposals <b>provided for or coordinated by</b> the Plan (internally) the <b>cumulative</b> effects would be likely to be significant.
combination	D2	Options, policies or proposals that alone would not be likely to have significant effects but if their effects are <b>combined with the effects of other plans or projects</b> , and possibly the effects of other developments provided for in the Plan as well, the combined effects would be likely to be significant. This could include displacement effects.
	D3	Options that are, or could be, part of a <b>programme or</b> <b>sequence of development</b> delivered over a period, where the implementation of the early stages would not have a significant effect on European sites, but which would dictate the nature, scale, duration, location, timing of the whole project, the later stages of which could have an adverse effect on such sites.

Table 9 below shows the results of this screening exercise for the MWJP options. It is not necessary to carry out appropriate assessment at the Issues and Options stage and therefore the purpose of the exercise is to highlight whether appropriate assessment may be necessary should a particular option be carried forward to Preferred Options stage. Where it is suggested that a significant effect could be avoided through the use of caveats<sup>22</sup> this will be taken into account when drafting the detail of the policies at Preferred Options stage.

In order to help support delivery of the MWJP it will be necessary to identify specific areas or sites where minerals and waste development will be acceptable. Potentially suitable sites / areas have not been considered in the HRA screening process at this stage as the identification of potential sites is an ongoing process (see Site Identification and Assessment Methodology and Scope document available at

<u>www.northyorks.gov.uk/mwconsult</u> for further details). Once the site identification process is complete (step 1 of the Site Identification and Assessment Methodology), all potentially suitable sites / areas will be subject to detailed assessment (steps 2, 3 and 4 of the Site Identification and Assessment Methodology). A HRA screening assessment of individual sites will be carried out at this stage in plan production and will feed into the detailed site assessment process.

<sup>&</sup>lt;sup>22</sup> Caveats could be applied in a number of different ways, for example, specific wording within a policy or an overarching policy or text in the Plan referring to the protection of European Sites. The feasibility and appropriateness of incorporating caveats within the Plan and the most appropriate method for doing so will be considered and developed throughout the Plan preparation process

#### Table 9: Screening of MWJP Options

Note: All European sites within the Plan Area and a 15km buffer have been considered in this screening assessment. Further information regarding these European Sites, their features of interest and key threats to site integrity is included in Appendix 1 of this report.

Option Group	Option (See Appendix 3 for	Assessment Category	Can the Element be Changed at Screening Stage	Is it likely that an Appropriate
	full option wording)		to Avoid Likely Significant Effect (LSE)	Assessment (AA) will be required?
Minerals				
Broad Geographical Approach to Supply of Aggregates	Option 1	C4/C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
(id01)	Option 2	C4/C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Locational Approach to New Sources of Supply of	Option 1	C4/C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Aggregates (id02)	Option 2	C4/C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 3	C4/C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Calculating Sand and Gravel Provision (id03)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	A5	n/a	No
	Option 4	A5	n/a	No
	Option 5	A5 <sup>23</sup>	n/a	No
	Option 6	A5	n/a	No
Overall Distribution of Sand and Gravel Provision (id04)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	A5	n/a	No
	Option 4	A5	n/a	No
Landbanks for Sand and Gravel (id05)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	В	n/a	No
Safeguarding Sand and Gravel (id06)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	A5	n/a	No
	Option 4	A5	n/a	No
	Option 5	A5	n/a	No
Provision of Crushed Rock (id07)	Option 1	A6	n/a	No
	Option 2	A4	n/a	No
	Option 3	A4	n/a	No
Maintenance of Landbanks for Crushed Rock (id08)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 4	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Safeguarding Crushed Rock (id09)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	A5	n/a	No
	Option 4	A5	n/a	No
Concreting Sand and Gravel Delivery (id10)	Option 1	C4	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 2	C4	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 3	C4	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Building Sand Delivery (id11)	Option 1	C4	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)

<sup>&</sup>lt;sup>23</sup> This category was awarded on the basis that the option only relates to the calculation of provision. Although the option factors in the import of 1 million tonnes of marine sand and gravel, which may or may not come from an area designated as a European Site, it is considered that the extraction of marine sand and gravel is regulated by the Marine Management Organisation and is outside of the scope of this Plan.

full option wording) to Avoid Likely Significant Effect (LSE)	· · · ·
	will be required?
Option 2 C4 Yes (If caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Magnesian Limestone Delivery (id12)Option 1C4Yes (If caveat is applied, otherwise AA required)No (providing that a required)	caveat is applied)
Option 2 C4 Yes (If caveat is applied, otherwise AA required) No (providing that a g	caveat is applied)
Unallocated Extensions to Existing Aggregates Quarries       Option 1       A4       n/a       No	
(id13) Option 2 A4 n/a No	
Option 3 A6 n/a No	
Supply of Alternatives to Land Won Primary Aggregates Option 1 C6 Yes (If caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
(id14) Option 2 C6 Yes (If caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Continuity of Supply of Silica Sand (id15) Option 1 C1 No Yes	
Option 2 C6 Yes (If caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Option 3 A2 n/a No	
Safeguarding Silica Sand (id16)       Option 1       A5       n/a       No	
Option 2 A5 n/a No	
Option 3 A5 n/a No	
Option 4 A5 n/a No	
Continuity of Supply of Clay (id17)Option 1C6Yes (If caveat is applied, otherwise AA required)No (providing that a required)	caveat is applied)
Option 2 C4 Yes (If caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Option 3 C4 Yes (If caveat is applied, otherwise AA required) No (providing that a caveat is applied) otherwise AA required)	caveat is applied)
Incidental Working of Clay in Association with Other Option 1 A5 No	
Minerals (id18)Option 2Bn/aNo	
Safeguarding Clay (id19)     Option 1     A5     n/a     No	
Option 2 A5 n/a No	
Option 3 A5 n/a No	
Option 4 A5 n/a No	
Continuity of Supply of Building Stone (id20) Option 1 A4 No	
Option 2 C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Option 3 C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Use of Building Stone (id21) Option 1 A1 n/a No	
Option 2 A1 n/a No	
Option 3 A1 n/a No	
Option 4 A1 n/a No	
Safeguarding Building Stone (id22)       Option 1       A5       n/a       No	
Option 2 A5 n/a No	
Option 3 A5 n/a No	
Option 4 A5 n/a No	
Overall Spatial Options for Oil and Gas (id23) Option 1 C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Option 2 C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Option 3 C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Co-ordination of Gas Extraction and Processing (id24) Option 1 C4/C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Option 2 C4/C6 Yes (if caveat is applied, otherwise AA required) No (providing that a required)	caveat is applied)
Gas Developments (Exploration and Appraisal) (id25) Option 1 C4/C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Gas Developments (production and Processing) (id26) Option 1 C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Option 2 C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Coal Mine Methane (id27)     Option 1     A4     n/a	
Option 2 C6 Yes (If caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Coal Bed Methane, Underground Coal Gasification, Shale Option 1 C6 Yes (if caveat is applied, otherwise AA required) No (providing that a	caveat is applied)
Gas and Carbon and Gas Storage (id28)Option 2C6Yes (if caveat is applied, otherwise AA required)No (providing that a case)	caveat is applied)

#### Likely Significant Effects Report

Option Group	Option (See Appendix 3 for full option wording)	Assessment Category	Can the Element be Changed at Screening Stage to Avoid Likely Significant Effect (LSE)	Is it likely that an Appropriate Assessment (AA) will be required?
	Option 3	C6	Yes (depending on the definition of 'sensitive areas' and 'designations')	No (provided European sites are included in definition of 'sensitive areas' and 'designations')
Continuity of Supply of Deep Coal (id29)	Option 1	В	n/a	No
	Option 2	A1	n/a	No
Shallow Coal (id30)	Option 1	A1	n/a	No
	Option 2	C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Safeguarding Shallow Coal (id31)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	A5	n/a	No
Safeguarding Deep Coal (id32)	Option1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	A5	n/a	No
	Option 4	A5	n/a	No
	Option 5	A5	n/a	No
Disposal of Colliery Spoil (id33)	Option 1	A4	n/a	No
	Option 2	C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Potash Supply (id34)	Option 1	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 2	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 3	A4	n/a	No
	Option 4	A4	n/a	No
Safeguarding Potash (id35)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
Supply of Gypsum (id36)	Option 1	C4	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 2	A5	n/a	No
	Option 3	C4	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 4	A5	n/a	No
Safeguarding Gypsum (id37)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
Safeguarding Deep Mineral Resources (id38)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
Supply of Vein Minerals (id39)	Option 1	C6	Yes (If criterion is added protecting European Sites)	No (providing that criterion is added protecting European Sites)
	Option 2	A2	n/a	No
Safeguarding Vein Minerals (id40)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
Borrow Pits (id41)	Option 1	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 2	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
		•	·	
Provision of Waste Management Capacity and Infrastru	ucture			
Overall Approach to the Waste Hierarchy (id42)	Option 1	A1	n/a	No
	Option 2	A1	n/a	No
	Option 3	A1	n/a	No
Strategic Role of the Plan Area in Management of Waste	Option 1	A5	n/a	No
(id43)	Option 2	A5	n/a	No
	Option 3	A5	n/a	No
Meeting Waste Management Capacity Requirements –	Option 1	C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
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Option Group	Option (See Appendix 3 for full option wording)	Assessment Category	Can the Element be Changed at Screening Stage to Avoid Likely Significant Effect (LSE)	Is it likely that an Appropriate Assessment (AA) will be required?
Local Authority Collected Waste (id44)	Option 2	C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Meeting Waste Management Capacity Requirements –	Option 1	C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Commercial and Industrial Waste (Including Hazardous C&I Waste) (id45)	Option 2	C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Meeting Waste Management Capacity Requirements –	Option 1	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Construction, Demolition and Excavation Waste (Including Hazardous CD&E Waste) (id46)	Option 2	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Managing Agricultural Waste (id47)	Option 1	C4/C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 2	C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Managing Low Level (Non-Nuclear) Radioactive Waste	Option 1	C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
(IQ48)	Option 2	C4/C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Managing Waste Water (Sewage Sludge) (id49)	Option 1	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 2	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Managing Power Station Ash (id50)	Option 1	A1	n/a	No
Overall Locational Principles for Provision of New Waste	Option 1	C4/C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Capacity (id51)	Option 2	C4/C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 3	C4/C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 4	C6	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Waste Site Identification Principles (id52)	Option 1	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 2	C6	Yes (depending on the definition of 'environmental constraints')	No (depending on the definition of 'environmental constraints')
Waste Management Facility Safeguarding (id53)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
Transport and Other Infrastructure				
Transport Infrastructure (id54)	Option 1	C4	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 2	C4	Yes (If caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Transport Infrastructure and Safeguarding (id55)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	A5	n/a	No
Locations for Ancillary Minerals Infrastructure (id56)	Option 1	A4	n/a	No
	Option 2	A2	n/a	No
	Option 3	A4	n/a	No
	Option 4	A2	n/a	No
Minerals Ancillary Infrastructure Safeguarding (id57)	Option 1	A5	n/a	No
	Option 2	A5	n/a	No
	Option 3	A5	n/a	No
	Option 4	A5	n/a	No
Development Management				
Presumption in Favour of Sustainable Minerals and	Option 1	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Waste Development (id58)	Option 2	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
	Option 3	C6	Yes (if caveat is applied, otherwise AA required)	No (providing that a caveat is applied)
Local Amenity and Cumulative Impacts (id59)	Option 1	A1	n/a	No
	Option 2	A1	n/a	No
Transport of Minerals and Waste and Associated Traffic	Option 1	A5	n/a	No
Impacts (id60)	Option 2	A5	n/a	No
	Option 3	A3	n/a	No
L		1	I	

#### Likely Significant Effects Report

Option Group	Option (See Appendix 3 for full option wording)	Assessment Category	Can the Element be Changed at Screening Stage to Avoid Likely Significant Effect (LSE)	Is it likely that an Appropriate Assessment (AA) will be required?
North York Moors National Park and the AONBs (id61)	Option 1	A4	n/a	No
	Option 2	A4	n/a	No
	Option 3	A1	n/a	No
Minerals and Waste Development in the Greenbelt (id62)	Option 1	A3	n/a	No
	Option 2	A3	n/a	No
	Option 3	A3	n/a	No
Landscape (id63)	Option 1	A2	n/a	No
	Option 2	A5	n/a	No
Biodiversity and Geodiversity (id64)	Option 1	A2	n/a	No
	Option 2	A2	n/a	No
	Option 3	A1	n/a	No
	Option 4	A1	n/a	No
Historic Environment (id65)	Option 1	A3	n/a	No
	Option 2	A3	n/a	No
	Option 3	A3	n/a	No
Water Environment (id66)	Option 1	A1/A5	n/a	No
	Option 2	A2/A3	n/a	No
Strategic Approach to Reclamation and Afteruse (id67)	Option 1	A3	n/a	No
	Option 2	A3	n/a	No
Sustainable Design, Construction and Operation of	Option 1	A1	n/a	No
Development (id68)	Option 2	A1	n/a	No
Other Key Criteria for Minerals and Waste Development	Option 1	A1	n/a	No
(id69)	Option 2	A1	n/a	No
Developments Proposed Within Mineral Safeguarding	Option 1	A5	n/a	No
Areas (id70)	Option 2	A1	n/a	No
	Option 3	A5	n/a	No
	Option 4	A5	n/a	No
Consideration of Applications in Mineral Consultation Areas (id71)	Option 1	A1	n/a	No
Coal Mining Legacy (id72)	Option 1	A1	n/a	No
	Option 2	A1/A5	n/a	No
	Option 3	A1/A5	n/a	No

#### 6. Conclusions of the Screening Assessment

This initial HRA screening assessment indicates that the majority of options presented in the MWJP Issues and Options consultation document are likely to have no negative effect or no significant effect on a European Site (categories A and B) and are therefore unlikely to require Appropriate Assessment.

A number of options were identified as having the potential to have a significant effect alone (category C), however in many cases this was due to the level of uncertainty associated with the strategic options at this stage (i.e. the exact location of the development or the management process by which the development will be implemented are unknown-Assessment categories C4 and C6). In such cases, it is anticipated that significant effects could be avoided through the use of caveats, which could take the form of a criterion or wording within a policy or supporting text or a separate overarching policy ensuring that European Sites are protected. With the addition of such a caveat to these options, it is unlikely that Appropriate Assessment will be required.

Only one option (Option 1 of Continuity of Supply of Silica Sand (id15)) is considered likely to require Appropriate Assessment, as it would steer development to an area directly adjacent to a European Site and it is considered possible that development could lead to a significant effect.

As highlighted earlier in this report, it is not necessary to carry out Appropriate Assessment at the Issues and Options stage and therefore the purpose of the exercise is to highlight whether Appropriate Assessment may be necessary should a particular option be carried forward to the Preferred Options stage. It will be necessary to revisit the HRA screening assessment at the Preferred Options stage when it will be possible to assess detailed policies, using the conclusions of this Screening Assessment as a starting point. The conclusions of this HRA screening process will help to inform the selection of the MWJP Preferred Options and where it is suggested that a significant effect could be avoided through the use of caveats this will be taken into account when drafting the detail of the policies at Preferred Options stage.

As stated in Section 5, Sites and Areas have not yet been assessed. As the preferred location of Sites and Areas will be specified at the Preferred Options Stage, it will be possible to identify the pathways between these Sites and Areas and European Sites. While this assessment of options has identified only one option that would be likely to require appropriate assessment, and a number of others that through appropriate policy wording or links to other overarching policies could avoid likely significant effects, this does not totally remove the possibility that Sites or Areas may be considered that could exhibit significant effects. Although the likelihood that they will ultimately be considered acceptable may be greatly reduced by a Habitats Regulations compliant policy approach, it will still be necessary to assess these Sites and Areas for their location specific effects. This assessment will, like the further screening of preferred policy options, take place at the Preferred Options stage.

#### Appendix 1 - Key Threats to Site Integrity at European Sites<sup>24</sup>

#### Table A 1.1 Special Areas of Conservation

Name of Site	Qualifying features	Conservation Objectives	Key Threats to Site Integrity
	(features in bold denote priority natural habitats or species subject to special provisions in the Habitats Directive) <sup>25</sup>	(Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features).	
Arnecliff and Park Hole Woods SAC	Annex II species that are a primary reason for selection: Killarney fern <i>Trichomanes speciosum</i> Annex I habitats present as a qualifying feature, but not a primary reason for selection: Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; Western acidic oak woodland	<ul> <li>With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:</li> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species:</li> </ul>	<ul> <li>Specimen collecting;</li> <li>Physical loss of habitat from woodland under and over management (e.g. removal and smothering, fragmentation of habitat);</li> </ul>

<sup>&</sup>lt;sup>24</sup> Information regarding European Sites established from the Joint Nature Conservation Committee's Standard Data Forms for the each site as well as other data gathered from, for example 'Operations Likely Damage' lists and other Habitats Regulations Assessments such as Yorkshire and Humber Assembly, 2006. Appropriate Assessment of the Draft Regional Spatial Strategy for Yorkshire and the Humber, Land Use Consultants. Other sources are stated where relevant.

<sup>&</sup>lt;sup>25</sup> Of particular note, is Article 6(4) of the Directive, which states *"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 a 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 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. The Article is transposed via 62 (2) of the 2010 Regulations.* 

		<ul> <li>The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>The populations of qualifying species;</li> <li>The distribution of qualifying species within the site</li> </ul>	<ul> <li>Pollution (e.g. from iron workings);</li> <li>Changes in thermal regime;</li> <li>Physical damage to habitat;</li> <li>Increase in pH of underlying soils</li> </ul>
Beast Cliff – Whitby (Robin Hood's Bay) SAC	Annex I habitats that are a primary reason for selection: -Vegetated sea cliffs of the Atlantic and Baltic coasts	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: -The extent and distribution of qualifying natural habitats and habitats of qualifying species;; -The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species;	<ul> <li>Changes in agricultural management (or other operations) leading to impacts such as changes in fertility or agri- chemical contamination, physical loss of habitat (for instance from under or overgrazing) or physical damage to habitat (e.g. from trampling);</li> <li>Changes in coastal defences which affect natural erosion processes;</li> <li>Recreational disturbance (leading to physical damage including erosion, habitat fragmentation or fire).</li> </ul>
Calf Hill and Cragg Woods SAC	Annex I habitats that are a primary reason for selection of this site -Old sessile oak woods with <i>llex</i> and <i>Blechnum</i> in the British Isles; Western acidic oak woodland Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site -Alluvial forests with <i>Alnus</i> <i>glutinosa</i> and <i>Fraxinus</i> excelsior ( <i>Alno-Padion, Alnion incanae,</i> <i>Salicion albae</i> ); alder woodland on floodplains.	<ul> <li>-The distribution of qualifying species within the site</li> <li>With regard to the natural habitats and / or species for which the site has been designated (see</li> <li>Qualifying features); subject to natural change, to maintain or restore:</li> <li>-The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>-The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>-The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>-The populations of qualifying species;</li> <li>-The distribution of qualifying species within the site.</li> </ul>	<ul> <li>-Longer term need to control sheep grazing from adjacent fell (though limited grazing is beneficial);</li> <li>-Site needs small scale selective thinning;</li> <li>-Increase in pH may affect species composition</li> <li>-Significant change in flooding regime / water table (may cause drying out and changes in species composition).</li> </ul>

Craven Limestone	Annex I habitats that are a primary	With regard to the natural habitats and / or species	-Intensive grazing may cause physical
Complex SAC	reason for selection:	for which the site has been designated (see	loss or damage to habitat;
	-Hard oligo-mesotrophic waters with	Qualifying features); subject to natural change, to	-Operations such as quarrying which
	benthic vegetation of <i>Chara</i> spp.;	maintain or restore:	can cause physical loss and damage to
	Calcium-rich nutrient poor lakes, lochs		habitat (such as through sedimentation,
	and pools	-The extent and distribution of qualifying natural	effects) bydrological change and
	-Semi-natural dry grasslands and	habitats and habitats of qualifying species;;	changes in the thermal regime or
	scrubland facies: on calcareous	-The structure and function (including typical	turbidity;
	substrates (Festuco-Brometalia); Dry	species) of qualifying natural habitats and habits of	-Drainage can cause hydrological
	grasslands and scrublands on chalk or	qualifying species;	change leading to drying and
	limestone	-The supporting processes on which qualifying	fragmentation of habitat;
	-Molinia meadows on calcareous,	natural habitats and habitats of qualifying species	processes can cause nutrient
	peaty or clayey-silt-laden soils	rely;	enrichment of the habitat:
	(Molinion caeruleae); Purple moor-	-The populations of qualifying species;	-Recreational disturbance can cause
	grass meadows	-The distribution of qualifying species within the site.	erosion, habitat fragmentation and
	-Active raised bogs		accidental fires;
	-Petrifying springs with tufa		-Specimen collecting (leading to
	formation (Cratoneurion); hard-		-Atmospheric pollution (nutrient
	water springs depositing lime		enrichment)
	-Alkaline fens; Calcium rich		,
	springwater-fed fens		
	-Limestone pavements		
	Annex II species that are a primary		
	reason for selection:		
	-White-clawed (or Atlantic stream)		
	crayfish Austropotamobius pallipes		
	-Bullhead Cottus gobio		
	-Lady`s-slipper orchid Cypripedium		
	calceolus		
	Annex I habitats present as a		
	qualifying feature, but not a primary		
	reason for selection:		
	-Calaminarian grasslands of the		
	Violetalia calaminariae; Grasslands on		

	soils rich in heavy metals		
	-Tilio-Acerion forests of slopes.		
	screes and ravines; Mixed		
	woodland on base-rich soils		
	associated with rocky slopes		
Eller's Wood and Sand Dale SAC	Annex II species that are a primary reason for selection: -Geyer's whorl snail Vertigo geyeri Annex I habitats present as a qualifying feature, but not a primary reason for selection: -Petrifying springs with tufa formation ( <i>Cratoneurion</i> ); Hard water springs depositing lime	<ul> <li>With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:</li> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>The supporting processes on which qualifying species rely;</li> <li>The populations of qualifying species;</li> <li>The distribution of qualifying species within the site.</li> </ul>	<ul> <li>Intensive grazing or other operations leading to physical loss of habitat and physical damage due to erosion;</li> <li>Scrub invasion;</li> <li>Changes in drainage leading to hydrological changes to water level and flow rate, as well as drying and fragmentation</li> </ul>
Fen Bog SAC	Annex I habitats that are a primary reason for selection: -Transition mires and quaking bogs; Very wet mires often identified by an unstable 'quaking' surface	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: -The extent and distribution of qualifying natural habitats and habitats of qualifying species;; -The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site.	-Drainage or other operations leading to hydrological change, and physical loss and damage to habitat (through drying and consequential habitat fragmentation); -Removal of grazing may lead to physical loss of habitat through smothering, and scrub habitat and may also lower the water table; -Any process, such as bracken spraying and agricultural runoff, which may lead to toxic contamination of the habitat; -Upgrading of nearby rail infrastructure is an example of an operation which may lead to physical loss of habitat (through removal and smothering), damage (i.e. through siltation, fragmentation and barrier effects) and changes in turbidity of water;

			-Peat cutting may also damage the site leading to physical damage (through sedimentation and erosion) and changes in turbidity and pH
Flamborough Head SAC	<ul> <li>Annex I habitats that are a primary reason for selection: <ul> <li>Reefs</li> <li>Vegetated sea cliffs of the Atlantic and Baltic coasts</li> <li>Submerged or partially submerged sea caves</li> </ul> </li> </ul>	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: -The extent and distribution of qualifying natural habitats and habitats of qualifying species;; -The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site.	-Fishing or other activities (including recreational diving) leading to physical damage such as erosion and fragmentation of submerged habitats; -Industrial (or any other) discharge leading to raised pollution levels, including acidification of terrestrial habitat from atmospheric deposition and changes in the submerged habitat as a result of sedimentation, changes in turbidity, salinity and changes to the thermal regime); -Changes in agricultural management causing toxic contamination, physical loss (through removal by overgrazing, smothering by under-grazing), physical damage through trampling and nutrient enrichment of the terrestrial habitat; -Changes in coastal defences preventing natural erosion; -Recreational disturbance leading to erosion and fragmentation, accidental fires and reduced bird breeding productivity
Hatfield Moor SAC	<ul> <li>Annex I habitats that are a primary reason for selection of this site</li> <li>Degraded raised bogs still capable of natural regeneration</li> </ul>	<ul> <li>With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:</li> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> </ul>	<ul> <li>Peat cutting (leading to physical loss of habitat);</li> <li>Water abstraction and agricultural drainage leading to hydrological change (water level and flow rate), physical loss and damage (drying and fragmentation of habitat);</li> <li>Scrub invasion leading to physical loss of habitat;</li> <li>Sand and gravel extraction in adjacent sites leading to physical loss of habitat (i.e. through removal and smothering) and hydrological change (water level</li> </ul>

		-The populations of qualifying species; -The distribution of qualifying species within the site.	and flow rate); -Recreational disturbance leading to physical damage (erosion and fragmentation, accidental fires).
			-Pollution deposition leading to changes in nutrient status
Helbeck and Swindale Woods SAC	Annex I habitats that are a primary reason for selection of this site • <i>Tilio-Acerion</i> forests of slopes, screes and ravines; Mixed woodland on base- rich soils associated with rocky slopes	<ul> <li>With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:</li> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>The supporting processes on which qualifying natural habitats and habitats of qualifying species;</li> <li>The populations of qualifying species;</li> <li>The populations of qualifying species;</li> <li>The distribution of qualifying species;</li> </ul>	-Overgrazing by livestock, or other operations, leading to physical loss (removal), and physical damage (e.g. erosion, habitat fragmentation, and non-toxic contamination through nutrient enrichment)
Humber Estuary	Annex I habitats that are a primary	With regard to the natural habitats and / or species	<ul> <li>Coastal development including</li> </ul>
SAC	reason for selection:	for which the site has been designated (see	housing, industrial and commercial
	Estuaries	Qualifying features); subject to natural change, to	development causing loss and
	<ul> <li>Mudflats and sandflats not</li> </ul>	maintain or restore:	pollution of habitat (including
	tide	-The extent and distribution of gualifying natural	sedimentation, etc.), impacts on
	lide	habitats and habitats of qualifying species;;	integrity of breeding and wintering
	Annex I habitats present as a	-The structure and function (including typical	population of birds via disturbance
	qualifying feature, but not a primary	species) of qualifying natural habitats and habits of	(noise, trampling);
	reason for selection:	qualifying species;	- Dredging for navigation or aggregates
	<ul> <li>Sandbanks which are slightly</li> </ul>	- The supporting processes on which qualifying species	may also have an important detrimental
	covered by sea water all the	rely:	the sediment, and sediment supply and
	Coastal lagoons	-The populations of qualifying species;	transport;
	Salicornia and other annuals	-The distribution of qualifying species within the site	<ul> <li>Flood defence causing loss and degradation of habitat, fragmentation,</li> </ul>

	<ul> <li>colonising mud and sand; Glasswort and other annuals colonising mud and sand</li> <li>Atlantic salt meadows (<i>Glauco-Puccinellietalia</i> maritimae)</li> <li>Embryonic shifting dunes</li> <li>Shifting dunes along the shoreline with Ammophila arenaria ('white dunes`); shifting dunes with marram</li> <li>Fixed dunes with herbaceous vegetation ('grey dunes`); Dune grassland</li> <li>Dunes with Hippophae rhamnoides; Dunes with sea buckthorn</li> <li>Annex II species present as a qualifying feature, but not a primary reason for selection:</li> <li>Sea lamprey Petromyzon marinus</li> <li>River lamprey Lampetra fluviatilis</li> <li>Grey seal Halichoerus grypus</li> </ul>		barrier effects, changes in hydrology (flow rate and water level), coastal squeeze <sup>26</sup> ; - Sewage discharge (domestic and industrial) and agricultural runoff causing eutrophication, sedimentation changes in turbidity and pH, salinity, indirect effects of reduced water quality on food resources. Upstream pollution may cause a barrier to fish migration; - Recreational pressure causing impacts on integrity of breeding and wintering population via disturbance (noise, trampling, presence) Lack of reedbed management causing scrub encroachment;
Ingleborough Complex SAC	<ul> <li>Annex I habitats that are a primary reason for selection:         <ul> <li>Juniperus communis formations on heaths or calcareous grasslands; Juniper on heaths or calcareous grasslands</li> <li>Alkaline fens; Calcium-rich</li> </ul> </li> </ul>	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: -The extent and distribution of qualifying natural habitats and habitats of qualifying species; -The structure and function (including typical	-Intensive livestock grazing or any operation causing physical loss (removal), physical damage (erosion), nutrient enrichment, or pollution (e.g. though sheep dip) of habitat; -Rabbit grazing causing physical loss (removal), physical damage (erosion), and nutrient enrichment;

<sup>&</sup>lt;sup>26</sup> Coastal squeeze is cited as 'the biggest threat to the remaining saltmarsh in the Humber Estuary' by the Humber Management Scheme (see: Humber Management Scheme, undated. Humber Estuary European Marine Site [URL: <u>http://www.humberems.co.uk/humber/features.php</u>]. It is caused by a defence forming a barrier to landward migration of habitats while water levels rise and cause increasing increasing loss of area on the seaward side
	<ul> <li>Calcareous rocky slopes with chasmophytic vegetation; Plants in crevices in base-rich rocks</li> <li>Limestone pavements</li> </ul>	qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site	loss (removal and smothering of habitat) and hydrological change (including changes to water level and flow rate); -Recreational disturbance causing physical damage (erosion and
	<ul> <li>Annex I habitats present as a qualifying feature, but not a primary reason for selection: <ul> <li>Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>); Dry grasslands and scrublands on chalk or limestone;</li> <li>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>); Purple moorgrass meadows</li> <li>Blanket bogs</li> <li>Petrifying springs with tufa formation (<i>Cratoneurion</i>); Hard-water springs depositing lime</li> <li><i>Tilio-Acerion</i> forests of slopes, screes and ravines; Mixed woodland on baserrich soils associated with rocky slopes</li> </ul> </li> </ul>		fragmentation, accidental fires); -*Atmospheric pollution (nutrient enrichment)
Kirk Deighton SAC	Annex I habitats that are a primary reason for selection: • <i>Triturus cristus</i> ; Great crested newt	<ul> <li>With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:</li> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species;</li> <li>The supporting processes on which qualifying</li> </ul>	<ul> <li>-Heavy livestock poaching causing physical damage (erosion, habitat fragmentation, siltation);</li> <li>-Introduction of predatory fish causing biological disturbance;</li> <li>- Agricultural, transport and industrial runoff/discharge affecting water quality or causing nutrient enrichment, or causing physical damage (siltation, fragmentation of habitat);</li> <li>-Water abstraction causing physical</li> </ul>

		natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site	damage (through fragmentation of habitat) and hydrological change to water level and flow rate; -Atmospheric pollution and deposition (e.g. from transport)
Lower Derwent Valley SAC	<ul> <li>Annex I habitats that are a primary reason for selection: <ul> <li>Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)</li> </ul> </li> <li>Annex I habitats present as a qualifying feature, but not a primary reason for selection: <ul> <li>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae); Alder woodland on floodplains</li> </ul> </li> <li>Annex II species present as a qualifying feature, but not a primary reason for selection: <ul> <li>Otter Lutra lutra</li> </ul> </li> </ul>	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: -The extent and distribution of qualifying natural habitats and habitats of qualifying species;; -The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site	<ul> <li>(e.g. from transport)</li> <li>Coal mining or other extractive industry causing physical loss of habitat (removal and smothering) or hydrological change (water level and flow rate);</li> <li>Flood management and tidal barrage causing hydrological change (water level and flow rate) and physical damage (barrier effects and habitat fragmentation);</li> <li>Domestic and industrial sewage outflow causing phosphorous enrichment;</li> <li>Intensive agriculture causing physical loss of habitat, physical damage (through erosion, habitat fragmentation or siltation from agricultural runoff), toxic contamination of groundwater (e.g. from sheep dipping) or non-toxic contamination (nutrient enrichment);</li> <li>Process industry causing impacts such as acidification from sulphur deposition;</li> <li>Alteration of channel structure (canalisation, artificial barriers, etc.) causing physical loss and damage to habitat (through removal of and damage to riverside woodlands, barrier effects and habitat fragmentation) and hydrological change (water level and flow rate);</li> <li>Water abstraction causing hydrological change (water level and flow rate) or physical damage (drying</li> </ul>
			fragmentation);

			<ul> <li>Waste management (such as landfill) causing physical loss of habitat (including removal and smothering of habitat) or hydrological changes to water level and flow rate;</li> <li>Housing, inappropriate access and other development leading to recreational pressure, causing physical damage (erosion and fragmentation, accidental fires) or disturbance of nesting and/or over-wintering birds</li> </ul>
Moor House – Upper Teesdale - SAC	<ul> <li>Annex I habitats that are a primary reason for selection of this site: <ul> <li>Hard oligo-mesotrophic waters with benthic vegetation of Chara spp; Calcium-rich nutrient-poor lakes, lochs and pools</li> <li>Alpine and Boreal heaths; Alpine and subalpine heaths</li> <li>Juniperus communis formations on heaths or calcareous grasslands; Juniper on heaths or calcareous grasslands</li> <li>Calaminarian grasslands of the Violetalia calaminariae; Grasslands on soils rich in heavy metals</li> <li>Siliceous alpine and boreal grasslands;</li> <li>Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>); Dry grasslands and scrublands on chalk or limestone</li> </ul> </li> </ul>	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: -The extent and distribution of qualifying natural habitats and habitats of qualifying species;; -The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site	-Overgrazing causing physical loss and physical damage to habitat (through erosion, habitat fragmentation and nutrient enrichment); -Drainage of bogs causing physical loss of habitat; -Poor muirburn management causing physical loss and damage (e.g. fragmentation) to habitat; -Reservoir construction leading to microclimatic shifts; -Recreational disturbance causing physical damage (erosion and fragmentation); -Operations causing hydrological change

silt-laden soils ( <i>Molinion</i> <i>caeruleae</i> ); Purple moor-grass meadows	
<ul> <li>Hydrophilous tall herb tringe communities of plains and of the montane to alpine levels</li> <li>Mountain hay meadows</li> </ul>	
Blanket bogs	
<ul> <li>Petrifying springs with tufa formation (<i>Cratoneurion</i>); Hard-water springs depositing lime</li> </ul>	
Alkaline fens; Base rich fens	
Alpine pioneer formations     of the Caricion bicoloris-     atrofuscae; High altitude     plant communities     associated with areas of	
water seepage	
Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani); Acidic scree	
Calcareous and calcshist     screes of the montane to     alpine levels ( <i>Thlaspietea</i> rotundifoli): Base rich scree	
Calcareous rocky slopes with chasmophytic vegetation; Plants in crevices in base-rich rocks	
Siliceous rocky slopes with chasmophytic vegetation; Plants in crevices on acid rocks	
Annex II species that are a primary reason for selection of this site:	
Round-mouthed whorl snail	

	Vertigo genesii Marsh saxifrage Saxifraga hirculus Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: European dry heaths		
Morecambe Bay SAC	<ul> <li>Limestone pavements</li> <li>Annex I habitats that are a primary reason for selection of this site:         <ul> <li>Estuaries</li> <li>Mudflats and sandflats not covered by seawater at low tide; intertidal mudflats and sandbanks</li> <li>Large shallow inlets and bays</li> <li>Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves</li> <li>Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand</li> <li>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</li> <li>Shifting dunes along the shoreline with Ammophila arenaria ('white dunes'); Shifting dunes with merbaceous vegetation ('grey dunes'); Dune grassland</li> <li>Humid dune slacks</li> </ul> </li> </ul>	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: - The extent and distribution of qualifying natural habitats and habitats of qualifying species;; - The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; - The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; - The populations of qualifying species; - The distribution of qualifying species within the site	-Coastal protection and flood defence may prevent natural erosion, or cause loss and degradation of habitat, fragmentation, barrier effects, or changes in hydrology; -Fishing may cause physical damage to submerged habitat (e.g. erosion, fragmentation); -Quarrying may cause physical loss of habitat, physical damage (sedimentation, erosion, fragmentation, barrier effects), hydrological change (water level),and changes in thermal regime and turbidity; -Gas exploration may lead to physical damage to habitat; -Recreational disturbance may cause physical damage (erosion and fragmentation) to habitat. -*Operations causing water pollution
	reason for selection of this site:		

	<ul> <li>Great crested newt <i>Triturus</i> cristatus</li> <li>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:         <ul> <li>Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks</li> <li>Coastal lagoons</li> <li>Reefs</li> <li>Embryonic shifting dunes</li> <li>Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>); coastal dune heathland</li> <li>Dunes with <i>Salix repens</i> ssp. argentea (<i>Salicion arenariae</i>); Dunes with creeping willow</li> </ul> </li> </ul>		
Morecambe Bay Pavements SAC	<ul> <li>Annex I habitats that are a primary reason for selection of this site:         <ul> <li>Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.; Calcium-rich nutrient-poor lakes, lochs and pools</li> <li>Juniperus communis formations on heaths or calcareous grasslands</li> <li>Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>); Dry grasslands and scrublands on chalk or limestone</li> <li>Limestone pavements</li> <li>Tilio-Acerion forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with</li> </ul> </li> </ul>	<ul> <li>With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:</li> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>The supporting processes on which qualifying species rely;</li> <li>The populations of qualifying species;</li> <li>The distribution of qualifying species within the site</li> </ul>	<ul> <li>-Agricultural management (e.g. overgrazing) causing physical loss (removal) or physical damage (erosion, habitat fragmentation, nutrient enrichment to habitat; under-grazing may also cause physical loss of habitat as a result of scrub encroachment and smothering;</li> <li>-Poor woodland management causing physical loss of habitat through removal and smothering and physical damage or fragmentation to habitat.</li> <li>-Nutrient enrichment of waterbodies</li> <li>-Operations causing hydrological change</li> </ul>

	<ul> <li>rocky slopes</li> <li><i>Taxus baccata</i> woods of the British Isles; Yew-dominated woodland</li> <li>Annex II species that are a primary reason for selection of this site: <ul> <li>Narrow-mouthed whorl snail Vertigo angustior</li> </ul> </li> <li>Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: <ul> <li>European dry heaths</li> <li>Calcareous fens with <i>Cladium</i> mariscus and species of the <i>Caricion davallianae</i>; Calcium- rich fen dominated by great fen sedge (saw sedge)</li> <li>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; Western acidic oak woodland</li> </ul> </li> </ul>		
North Pennine Dales Meadows SAC	<ul> <li>Annex I habitats that are a primary reason for selection: <ul> <li>Mountain hay meadows</li> </ul> </li> <li>Annex I habitats present as a qualifying feature, but not a primary reason for selection: <ul> <li>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae); Purple moor-grass meadows</li> </ul> </li> </ul>	<ul> <li>With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:</li> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>The supporting processes on which qualifying species rely;</li> <li>The populations of qualifying species;</li> <li>The distribution of qualifying species;</li> </ul>	Intensive agricultural management on or adjacent to site (particularly use of agrochemicals where they can drift on to sites) leading to physical loss of habitat, physical damage (through erosion, habitat fragmentation, and siltation from and nutrient enrichment from agricultural runoff.
North Pennine Moors SAC	Annex I habitats that are a primary reason for selection:	With regard to the natural habitats and / or species for which the site has been designated (see	-Intensive grazing causing physical loss (removal), physical damage (erosion,

<ul> <li>European dry heaths</li> <li>Juniperus communis formations on heaths or calcareous grasslands; Juniper on heaths or calcareous grasslands</li> <li>Blanket bogs</li> <li>Petrifying springs with tufa formation (<i>Cratoneurion</i>); Hard-water springs depositing lime</li> <li>Siliceous rocky slopes with chasmophytic vegetation; Plants in crevices on acid rocks</li> <li>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles; Western acidic oak woodland</li> <li>Annex I habitats present as a qualifying feature, but not a primary reason for selection:         <ul> <li>Northern Atlantic wet heaths with <i>Erica tetralix;</i> Wet heathland with cross-leaved heath</li> <li>Calaminarian grasslands of the <i>Violetalia calaminariae;</i> Grasslands on soils rich in heavy metals</li> <li>Siliceous alpine and boreal grasslands; Montane acid grasslands</li> <li>Semi-natural dry grasslands and scrubland facies: on calcareous substrates</li> </ul> </li> </ul>	Qualitying features); subject to natural change, to maintain or restore: - The extent and distribution of qualifying natural habitats and habitats of qualifying species;; - The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; - The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; - The populations of qualifying species; - The distribution of qualifying species within the site	habitat fragmentation) and nutrient enrichment -Agrochemicals (sheep dip) causing toxic contamination of groundwater; -Agricultural / other operations affecting drainage. This could lead to hydrological change (water level and flow rate) and physical loss and damage to habitat through drying and fragmentation; -Poor muirburn management causing physical loss (removal), damage (habitat fragmentation); -Process industry and waste management (e.g. landfill) / other operations causing acid and nitrogen deposition or physical loss of habitat <sup>27</sup> ; -Woodland management causing physical loss (removal and smothering) and physical damage (fragmentation) to habitat; -Recreational disturbance causing physical damage (erosion and fragmentation, accidental fires).

<sup>&</sup>lt;sup>27</sup> See UKREATE (UK Research on Eutrophication and Acidification of Terrestrial Ecosystems) / Defra, undated. The Impacts of Acid and Nitrogen deposition on: Blanket and Raised Bogs [URL: <u>http://ukreate.defra.gov.uk/PDFs/Leaflets/Bogs.pdf</u>]

	<ul> <li>(Festuco-Brometalia); Dry grasslands and scrublands on chalk or limestone</li> <li>Alkaline fens; Calcium-rich springwater-fed fens</li> <li>Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani); Acidic scree</li> <li>Calcareous rocky slopes with chasmophytic vegetation; Plants in crevices in base-rich rocks</li> </ul> Annex II species present as a qualifying feature, but not a primary reason for selection: <ul> <li>Marsh saxifrage Saxifraga hirculus</li> </ul>		
North York Moors SAC	<ul> <li>Annex I habitats that are a primary reason for selection: <ul> <li>Northern Atlantic wet heaths with <i>Erica tetralix</i>; Wet heathland with cross-leaved heath</li> <li>European dry heaths</li> </ul> </li> <li>Annex I habitats present as a qualifying feature, but not a primary reason for selection: <ul> <li>Blanket bogs</li> </ul> </li> </ul>	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: -The extent and distribution of qualifying natural habitats and habitats of qualifying species;; -The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site	-Agricultural management (e.g. overgrazing) causing physical loss of habitat, physical damage (erosion, habitat fragmentation and nutrient enrichment of habitat; under-grazing may also cause physical loss (through scrub encroachment and smothering); - Operations affecting hydrology may lead to hydrological change (water level and flow rate), physical loss and damage (drying and fragmentation); -Recreational pressure causing physical damage to habitat (erosion and fragmentation, accidental fires); - Process industry and waste management causing acid or nitrogen deposition or physical loss of habitat:
Ox Close SAC	Annex I habitats that are a primary reason for selection: • Calaminarian grasslands of the	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to	-Rabbit grazing is a threat, causing physical loss (removal), physical damage (erosion) and nutrient
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	Grasslands on soils rich in heavy metals Annex I habitats present as a qualifying feature, but not a primary reason for selection: • Semi-natural dry grasslands and scrubland facies: on calcareous substrates ( <i>Festuco-Brometalia</i> ); Dry grasslands on chalk or limestone • <i>Tilio-Acerion</i> forests of slopes, screes and ravines; Mixed woodland on base- rich roils associated with rocky slopes	<ul> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species;</li> <li>The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;</li> <li>The populations of qualifying species;</li> <li>The distribution of qualifying species within the site</li> </ul>	-Overgrazing by livestock - Physical loss or physical damage to habitat (through erosion, habitat fragmentation, and nutrient enrichment); -Housing / other development may cause physical loss (removal and smothering) or physical damage (siltation, habitat fragmentation, barrier effects) to habitat; -Recreation – causing erosion -Operations causing nutrient enrichment (e.g. through deposition of N <sup>2829</sup> )
River Derwent SAC	<ul> <li>Annex II species that are a primary reason for selection: <ul> <li>River lamprey Lampetra fluviatilis</li> </ul> </li> <li>Annex I habitats present as a qualifying feature, but not a primary reason for selection: <ul> <li>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation; Rivers with floating vegetation often dominated by water-crowfoot</li> </ul> </li> </ul>	<ul> <li>With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:</li> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>The supporting processes on which qualifying natural habitats and habitats of qualifying species;</li> <li>The supporting processes on which qualifying species rely;</li> <li>The populations of qualifying species;</li> <li>The distribution of qualifying species within the site</li> </ul>	<ul> <li>-Flood management can cause hydrological change (water level and flow rate), physical damage (barrier effects and habitat fragmentation);</li> <li>-Sewage can cause habitat loss (smothering), eutrophication, (leading to changes in species composition);</li> <li>-Siltation (agricultural runoff) can cause physical damage (barrier effects, habitat fragmentation), physical loss (smothering);</li> <li>-Agricultural and industrial outflow (incl. sheep dip) can cause toxic contamination of water, eutrophication, physical loss or damage (barrier effects);</li> </ul>

<sup>&</sup>lt;sup>28</sup> For impact of N on calcareous grasslands see, for example, Leake, J.R, 2006. Grassland Soil and Vegetation Response Following Nitrogen Saturation at Wardlaw Hay-Cop in UKEATE, 2006. Terrestrial Umbrella Annual Report [URL: <u>http://ukreate.defra.gov.uk/publications/reports/Annual\_report\_2006.htm</u>]

<sup>&</sup>lt;sup>29</sup> Note that acid deposition is not recorded for base rich habitats such as listed here – See APIS, undated. Acid Deposition: Calcareous Grassland [URL:

http://www.apis.ac.uk/node/923]: "Acidifying deposition is generally agreed to have little effect of calcareous grasslands since the calcareous soil provides ample neutralising capacity"

	<ul> <li>Annex II species present as a qualifying feature, but not a primary reason for selection: <ul> <li>Sea lamprey Petromyzon marinus</li> <li>Bullhead Cottus gobio</li> <li>Otter Lutra lutra</li> </ul> </li> </ul>		<ul> <li>Alteration of channel structure can lead to hydrological change (flow rate), physical loss and damage (erosion of silt beds);</li> <li>Artificial barriers (e.g. flood defences) causing physical damage (barrier effects, habitat fragmentation) to the site;</li> <li>Water abstraction may lead to hydrological change (water level and flow rate);</li> <li>Waste management may cause physical loss of habitat through removal and smothering, nutrient deposition, acidification, and hydrological change (water level and flow rate)</li> </ul>
River Eden SAC	<ul> <li>Annex I habitats that are a primary reason for selection of this site</li> <li>Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea;</i> Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels</li> <li>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation; Rivers with floating vegetation often dominated by water-crowfoot</li> <li>Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae); Alder woodland on floodplains</li> </ul>	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: -The extent and distribution of qualifying natural habitats and habitats of qualifying species;; -The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site	-Agricultural, transport and industrial runoff/discharge may affect water quality via nutrient enrichment, or cause physical damage (siltation) or toxic contamination of groundwater; -Inappropriate woodland management may lead to physical loss (removal and smothering) or physical damage (fragmentation).

	<ul> <li>reason for selection of this site</li> <li>White-clawed (or Atlantic stream) crayfish Austropotamobius pallipes</li> <li>Sea lamprey Petromyzon marinus</li> <li>Lampetra planeri</li> <li>River lamprey Lampetra fluviatilis</li> <li>Atlantic salmon Salmo salar</li> <li>Bullhead Cottus gobio</li> <li>Otter Lutra lutra</li> </ul>		
Skipwith Common SAC	<ul> <li>Annex I habitats that are a primary reason for selection:</li> <li>Northern Atlantic wet heaths with Erica tetralix; Wet heathland with cross-leaved heath</li> <li>European dry heaths</li> </ul>	<ul> <li>With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:</li> <li>The extent and distribution of qualifying natural habitats and habitats of qualifying species;;</li> <li>The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;</li> <li>The supporting processes on which qualifying species rely;</li> <li>The populations of qualifying species;</li> <li>The distribution of qualifying species;</li> </ul>	-Scrub invasion leading to physical loss of habitat via smothering by scrub encroachment; -Deep coal mining causing physical loss of habitat (removal and smothering) and hydrological change (water level and flow rate); -Recreational pressure leading to physical damage (erosion and fragmentation, accidental fires) -Operations likely to increase N or acid deposition to site (nutrient enrichment, change of soil pH) <sup>30</sup>
South Pennine	Annex I habitats that are a primary	With regard to the natural habitats and / or species	-Recreational pressure causing
Moors	reason for selection:	for which the site has been designated (see	physical damage (trampling, erosion
	European dry heaths	Qualitying teatures); subject to natural change, to	and tragmentation, accidental fires);
	Blanket bogs	maintain or restore:	-Overgrazing by sneep causing
	Old sessile oak woods with liex     and Blochnum in the British	-The extent and distribution of qualifying natural	damage (erosion habitat
	and Blechnum in the British	-The extent and distribution of qualifying natural	damage (erosion, habitat

<sup>&</sup>lt;sup>30</sup> JNCC Report No. 426 provides a good overview of the sensitivity of lowland heathland communities to air pollution: "*Heathland communities are very sensitive to acid deposition. The organo-mineral soils and stress tolerant vegetation mean they are sensitive to both acidification and eutrophication.....in the UK experimental N additions at a level just above the critical load for N have shown changes in productivity, litter production, N cycling and Lichens in lowland heath... but little evidence of grass invasion was seen unless disturbance accompanied N treatment" Stevens, C.J. et al, 2009. JNCC Report No. 426: Detecting and attributing air pollution impacts during SSSI condition assessment. JNCC, Peterborough [URL: <u>http://jncc.defra.gov.uk/pdf/JNCC426web.pdf</u>]* 

	Isles Annex I habitats present as a qualifying feature, but not a primary reason for selection:      Northern Atlantic wet heaths with <i>Erica tetralix</i> ; wet heathland with cross-leaved heath     Transition mires and quaking bogs; very wet mires often identifiable by an unstable 'quaking surface'	habitats and habitats of qualifying species;; -The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site	fragmentation) and nutrient enrichment; - Poor muirburn management on grouse moors causing physical loss (removal), damage (habitat fragmentation), accidental fires; - Drainage may lead to hydrological change (water level and flow rate), physical loss and damage (drying and fragmentation); - Process and transport industry may lead to atmospheric toxic and non-toxic pollution and deposition; - Fly-tipping can cause physical loss of habitat (smothering), biological damage (introduction of invasive species), nutrient enrichment and possible contamination of land
Strensall Common SAC	<ul> <li>Annex I habitats that are a primary reason for selection of this site</li> <li>Northern Atlantic wet heaths with <i>Erica tetralix;</i> Wet heathland with cross-leaved heath;</li> <li>European dry heaths</li> </ul>	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore: -The extent and distribution of qualifying natural habitats and habitats of qualifying species;; -The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; -The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; -The populations of qualifying species; -The distribution of qualifying species within the site	<ul> <li>Poor muirburn management entailing physical loss of habitat, damage (through habitat fragmentation) and accidental fire spread;</li> <li>Lack of scrub management causing physical loss (smothering by scrub encroachment);</li> <li>Overgrazing by sheep causing physical loss (removal), physical damage (erosion, habitat fragmentation) and nutrient enrichment;</li> <li>Recreational pressure causing physical damage (erosion and fragmentation, accidental fires);</li> <li>Toxic effects on habitats by herbicides (e.g. from nearby golf course);</li> <li>Operations likely to increase N or acid deposition to site (nutrient enrichment, change of soil pH)</li> </ul>
Thorne Moor SAC	<ul> <li>Annex I habitats that are a primary reason for selection of this site</li> <li>Degraded raised bogs still capable of natural regeneration</li> </ul>	With regard to the natural habitats and / or species for which the site has been designated (see Qualifying features); subject to natural change, to maintain or restore:	-Peat cutting leading to physical damage to habitat and hydrological change (groundwater level and flow rate); -Water abstraction / drainage /

	The extent and distribution of qualifying natural nabitats and habitats of qualifying species;; The structure and function (including typical species) of qualifying natural habitats and habits of qualifying species; The supporting processes on which qualifying natural habitats and habitats of qualifying species rely; The populations of qualifying species; The distribution of qualifying species within the site	processes affecting hydrology – leading to hydrological change (groundwater level and flow rate); -Lack of scrub management – leading to physical loss (smothering by scrub encroachment) -Recreational pressure – leading to physical damage (erosion and fragmentation, accidental fires) and disturbance (noise, trampling, presence); -Operations likely to increase N or acid deposition to site (nutrient enrichment, change of soil pH) <sup>31</sup>
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## Table A 1.2 Special Protection Areas

Name of Site	Qualifying features	Conservation Objectives	Key Threats to Site Integrity
		(Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features).	
Bowland Fells SPA	<ul> <li>Annex 1 birds and regularly occurring migratory birds not listed on Annex 1</li> <li><i>Circus cyaneus</i> –Hen harrier - supports 1.3% of the GB breeding population</li> <li><i>Falco columbarius</i> – Merlin - supports 1.5% of the GB</li> </ul>	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore: -The extent and distribution of the habitats of the	-Sheep grazing is seen as threat that could lead to physical loss of habitat (removal), and physical damage (trampling); -Poor muirburn management leading to physical loss of habitat, and damage (such as habitat fragmentation);

<sup>&</sup>lt;sup>31</sup> As 'ombotrophic' (wholly rain fed) ecosystems lowland raised bogs rely on atmospheric sources of nutrients. This makes them sensitive to increased N deposition which leads to eutrophication. Acid deposition can also result in changes to species composition, particularly declines in species groups such as Sphagnum. (JNCC, 2009)

	breeding population • Larus fuscus – Lesser black- backed gull - 7.6% of breeding population Article 4.1 qualification • Circus cyaneus; • Falco columbarius Article 4.2 qualification • Larus fuscus	<ul> <li>qualifying features;</li> <li>The structure and function of the habitats of the qualifying features;</li> <li>The supporting processes on which the habitats of the qualifying features rely;</li> <li>The populations of the qualifying features;</li> <li>The distribution of the qualifying features within the site.</li> </ul>	<ul> <li>Drainage could lead to hydrological change (water level and flow rate), physical loss and damage (drying and fragmentation);</li> <li>Specimen collecting may lead to biological disturbance (selective extraction of species)</li> </ul>
Flamborough Head & Bempton Cliffs SPA	<ul> <li>Annex I birds and regularly occurring migratory birds not listed on Annex 1:         <ul> <li><i>Rissa tridactyla</i> – Black legged Kittiwake - supports 2.6% of the breeding population during the breeding season</li> </ul> </li> <li>Article 4.1 qualification         <ul> <li><i>Rissa tridactyla</i></li> </ul> </li> </ul>	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore: -The extent and distribution of the habitats of the qualifying features; -The structure and function of the habitats of the qualifying features; -The supporting processes on which the habitats of the qualifying features rely; -The populations of the qualifying features; -The distribution of the qualifying features within the site.	-Fishing may result in physical damage (erosion, fragmentation of the submerged habitat); -Industrial discharge may lead to toxic contamination as well as sedimentation, changes in turbidity, changes in salinity, or changes in the thermal regime; -Recreational disturbance may lead to physical damage (erosion and fragmentation, accidental fires) as well as reduced bird breeding productivity.
Humber Flats, Marshes and Coast SPA	<ul> <li>Annex I birds and regularly occurring migratory birds not listed on Annex 1: <ul> <li>Anas crecca; Eurasian Teal</li> <li>Anas penelope; Eurasian Wigeon</li> <li>Anas platyrhynchos; Mallard</li> <li>Arenaria interpres; Ruddy turnstone</li> <li>Aythya marila; Greater scaup</li> <li>Botaurus stellaris; Great bittern</li> <li>Branta bernicla bernicla; Dark- bellied brent goose</li> <li>Bucephala clangula; Common</li> </ul></li></ul>	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore: -The extent and distribution of the habitats of the qualifying features; -The structure and function of the habitats of the qualifying features; -The supporting processes on which the habitats of the qualifying features rely;	-Coastal development such as housing, commercial, and industrial development may lead to physical loss of habitat; -Flood defence could lead to loss and degradation of habitat, fragmentation, barrier effects (including coastal squeeze), changes in hydrology (flow rate and water level); -Sewage discharge (domestic and industrial) could lead to eutrophication, sedimentation, changes in turbidity and pH, salinity, indirect effects of reduced water quality on food resources;

aoldeneve	-The populations of the qualifying features:	-Recreation pressure may lead to
Calidris alba: Sanderling	-The distribution of the qualifying features within the	impacts on integrity of breeding and
Calidris alpina alpine: Dunlin	site.	wintering population via disturbance
Calidris capita aprile, Dullin		(noise, trampling, presence)
Charadrius histicula: Common		- Hvdrological changes (such as
ringed ployer		increased abstraction causing reduced
Circus perouginosus: Western		freshwater input):
Marsh-barrier		Lack of reedbed management causing
Circus cyaneus: Hen barrier		scrub encroachment.
Haematonus ostralegus:		
Furasian ovstercatcher		
<ul> <li>Limosa Japponica: Bar-tailed</li> </ul>		
andwit		
I imosa limosa islandica: Black-		
tailed godwit		
Numenius arguata: Eurasian		
curlew		
Numenius phaeopus; Whimbrel		
Philomachus pugnax; Ruff		
Pluvialis apricaria: Golden		
plover		
Pluvialis squatarola; Grey		
plover		
Recurvirostra avosetta; Pied		
avocet		
<ul> <li>Sterna albifrons; Little tern</li> </ul>		
Tadorna tadorna; Common		
shelduck		
<ul> <li>Tringa nebularia; Common</li> </ul>		
greenshank		
Tringa tetanus; Common		
redshank		
Vanellus vanellus: Northern		
lapwing		
Article 4.1 qualification		
-Breeding season		
Botaurus stallaris: Creat Bittorn		
Dotaurus stellaris, Great Billetti     Circus peruginosus: Eurosion		
marsh harrier		
maisirnamer	1	

	-		
	<ul> <li>Recurvirostra avosatta; Pied avocet</li> <li>Sterna albifrons; Little tern</li> <li>Wintering</li> <li>Botaurus stellaris; Great Bittern</li> <li>Circus aeruginosus; Eurasian marsh harrier</li> <li>Limosa lapponica; Bar –tailed godwit</li> <li>Pluvialis apricaria; European</li> </ul>		
	<ul> <li>Recurvirostra avosetta; Pied avocet</li> <li>On passage</li> <li>Philomachus pugnax; Ruff</li> </ul>		
	Article 4.2 qualification -Wintering • Calidris alpina alpina; Dunlin • Calidris canutus; Red knot		
	<ul> <li>Limosa limosa islandica; Black- tailed godiwit</li> <li>Tadorna tadorna; Common shelduck</li> <li>Tringa totanus; Common</li> </ul>		
	redshank -On passage • Calidris alpina alpina; Dunlin		
	<ul> <li>Calidris canutus; Red knot</li> <li>Limosa limosa islandica; Black- tailed godwit</li> <li>Tringa totanus; Common</li> </ul>		
	redshank -An internationally important assemblage of birds 153934 waterfowl		
Leighton Moss SPA	Annex I birds and regularly occurring migratory birds not listed on Annex 1: • Botaurus stellaris; Great bittern • Circus aeruginosus; Eurasian	With regard to the individual species and/or assemblage of species for which the site has been classified;	-Contamination may occur due to eutrophication by agrochemicals or through saline incursion -Changes in water levels (including

	marsh harrier Article 4.1 qualification • Botaurus stellaris; Great bittern • Circus aeruginosus; Eurasian marsh harrier	Subject to natural change, to maintain or restore: -The extent and distribution of the habitats of the qualifying features; -The structure and function of the habitats of the qualifying features; -The supporting processes on which the habitats of the qualifying features rely; -The populations of the qualifying features; -The distribution of the qualifying features within the site.	through groundwater extraction) may cause changes in hydrology (flow rate and water levels). Stability during breeding season is particularly important; -Lack of scrub control may lead to physical loss (smothering) of habitat and changes in hydrology -Dead leaf litter accumulation may cause habitat loss due to drying out of reed beds -Recreational disturbance leading to noise, trampling and disturbance.
Lower Derwent Valley SPA	<ul> <li>Annex I birds and regularly occurring migratory birds not listed on Annex 1: <ul> <li>Anas clypeata; Northern shoveler</li> <li>Anas crecca; Eurasian teal</li> <li>Anas penelope; Eurasian wigeon</li> <li>Bewick's swan (Cygnus columbianus bewickii) - regularly supports 0.7% of the GB population</li> <li>Ruff (Philomachus pugnax) - supports 19% of the GB population</li> <li>Golden plover (Pluvialis apricaria) - regularly supports at least 2.4% of the GB breeding population</li> </ul> </li> <li>Article 4.1 qualification <ul> <li>Winter</li> <li>Cygnus columbianus bewickii; Bewick's swan</li> <li>Philomachus pugnax; Ruff</li> <li>Pluvialis apricaria; European golden plover</li> </ul> </li> </ul>	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore: -The extent and distribution of the habitats of the qualifying features; -The structure and function of the habitats of the qualifying features; -The supporting processes on which the habitats of the qualifying features rely; -The populations of the qualifying features; -The distribution of the qualifying features within the site.	-Dead leaf litter accumulation may cause habitat loss due to drying out of reed bed; -Coal or other extraction industry may cause physical loss of habitat (removal and smothering) or hydrological change (water level and flow rate); -Flood management and tidal barrage may exhibit effects such as hydrological change (water level and flow rate), physical damage (barrier effects and habitat fragmentation); -Domestic and industrial sewage outflow may lead to non-toxic contamination (phosphorous enrichment); -Intensive agriculture may lead to physical damage (erosion, habitat fragmentation, siltation of waterbodies from agricultural runoff), contamination of groundwater (e.g. from sheep dipping) and nutrient enrichment; -Process industry may cause acidification of wetlands from sulphur deposition; -Alteration of channel structure (canalisation, artificial barriers, etc.)

	<ul> <li>Breeding <ul> <li>Anas clypeata; Northern shoveler</li> </ul> </li> <li>Wintering <ul> <li>Anas crecca; Eurasian teal</li> <li>Anas Penelope; Eurasian wigeon</li> </ul> </li> <li>Article 4.2 qualification <ul> <li>40616 waterfowl, including:</li> <li>Cygnus columbianus bewickii</li> <li>Anas Penelope</li> <li>Anas crecca</li> <li>Pluvialis apricaria</li> <li>Philomachus pugnax</li> </ul> </li> </ul>		may lead to physical loss and damage (removal of and damage to riverside woodlands, barrier effects and habitat fragmentation), or hydrological change (water level and flow rate); -Water abstraction could cause hydrological change (water level and flow rate) or physical damage (drying and habitat fragmentation); -Waste management (e.g. landfill) may lead to physical loss (removal and smothering), nutrient deposition and acidification, hydrological change (water level and flow rate); -Housing development, inappropriate access and other development could cause recreation pressure leading to physical damage (erosion and fragmentation, accidental fires) and disturbance of nesting and/or over- wintering birds, as well as physical loss of habitat.
Morecambe Bay SPA	<ul> <li>Annex I birds and regularly occurring migratory birds not listed on Annex 1: <ul> <li>Anas acuta; Northern pintail</li> <li>Anser brachyrhynchus; Pinkfooted goose</li> <li>Arenaria interpres; Ruddy turnstone</li> <li>Calidris alpina alpina; Dunlin</li> <li>Calidris canutus; Red knot</li> <li>Charadrius hiaticula; Ringed plover</li> <li>Haematopus ostrageous;</li> </ul> </li> </ul>	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore: -The extent and distribution of the habitats of the qualifying features; -The structure and function of the habitats of the qualifying features; -The supporting processes on which the habitats of the qualifying features rely; -The populations of the qualifying features:	-Land claim for agriculture would lead to physical loss of habitat (removal); -Intensive agriculture leading to physical loss of habitat (removal), physical damage (erosion, habitat fragmentation, siltation from agricultural runoff), toxic contamination of groundwater (sheep dipping), and nutrient enrichment; -Intensive grazing may cause physical loss of habitat (removal), physical damage (trampling); -Coastal protection and flood defence leading to prevention of natural erosion.

Eurasian ovstercatcher	-The distribution of the qualifying features within the	loss and degradation of habitat.
Eurasian oystercatcher <i>Limosa lapponica</i> ; Bar-tailed godwit <i>Numenius arquata</i> ; Eurasian curlew <i>Pluvialis squatarola</i> ; Grey plover <i>Sterna sandvicensis</i> ; Sandwich tern <i>Tadorna tadorna</i> ; Common shelduck <i>Tringa totanus</i> ; Common redshank Article 4.1 qualification <i>-Breeding</i> <i>Sterna sandvicensis</i> ; Sandwich tern <i>-Wintering</i> <i>Anas acuta</i> ; Northern pintail <i>Anser brachyrhynchus</i> ; Pink- footed goose <i>Arenaria interpres</i> ; Ruddy turnstone <i>Calidris alpina alpina</i> ; Dunlin <i>Calidris canutus</i> ; Red knot <i>Haematopus ostragegus</i> ; Eurasian oystercatcher <i>Limosa lapponica</i> ; Bar-tailed godwit <i>Numenius arquata</i> ; Eurasian curlew	-The distribution of the qualifying features within the site.	loss and degradation of habitat, fragmentation, barrier effects, changes in hydrology (flow rate and water level); -Fishing may cause physical damage (erosion, fragmentation); -Quarrying may lead to physical loss of habitat (removal), physical damage (sedimentation, erosion, fragmentation, barrier effects), hydrological change (water level), and changes in thermal regime and turbidity; -Gas exploration may lead to physical damage; -Recreational disturbance may lead to physical damage (erosion and fragmentation)
<ul> <li>Linasian oystercatcher</li> <li>Limosa lapponica; Bar-tailed godwit</li> <li>Numenius arquata; Eurasian curlew</li> <li>Pluvialis squatarola; Grey plover</li> <li>Tadorna tadorna; Common</li> </ul>		
shelduck • <i>Tringa totanus</i> ; Common redshank		

	<ul> <li>On passage <ul> <li>Charadrius hiaticula; Ringed plover</li> </ul> </li> <li>Article 4.2 qualification <ul> <li>61858 seabirds (breeding), including sterna sandvicensis</li> <li>210668 waterfowl (wintering)</li> </ul> </li> </ul>		
North Pennine Moors SPA	<ul> <li>Annex I birds and regularly occurring migratory birds not listed on Annex 1:</li> <li><i>Circus cyaneus</i> – Hen Harrier - regularly supports 2.2% of the GB breeding population</li> <li><i>Falco columbarius</i> – Merlin - regularly supports 10.5% of the GB breeding population</li> <li><i>Falco peregrinus</i> – Peregrine falcon - regularly supports 1.3% of the GB breeding population</li> <li><i>Falco peregrinus</i> – Peregrine falcon - regularly supports 1.3% of the GB breeding population</li> <li><i>Pluvialis apricaria</i> – European golden plover - regularly supports at least 6.2% of the GB breeding population</li> <li>Article 4.1 qualification:</li> <li>Breeding</li> <li><i>Circus cyaneus</i>; Hen harrier</li> <li><i>Falco peregrinus</i>; Peregrine falcon</li> <li><i>Pluvialis apricaria</i>; European golden plover</li> </ul>	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore: -The extent and distribution of the habitats of the qualifying features; -The structure and function of the habitats of the qualifying features; -The supporting processes on which the habitats of the qualifying features rely; -The populations of the qualifying features; -The distribution of the qualifying features within the site.	<ul> <li>Intensive grazing causing physical loss of habitat (removal), physical damage (erosion, habitat fragmentation) and nutrient enrichment;</li> <li>Agrochemicals (sheep dip) causing toxic contamination of groundwater;</li> <li>Agricultural drainage causing hydrological change (water level and flow rate), physical loss and damage (drying and fragmentation);</li> <li>Poor muirburn management leading to physical loss (removal), damage (habitat fragmentation);</li> <li>Process industry causing acid and nitrogen deposition;</li> <li>Waste management (landfill) causing acid and nitrogen deposition, changes in hydrology;</li> <li>Woodland management may lead to physical loss of habitat (removal and smothering) or physical damage (fragmentation);</li> <li>Recreational disturbance may lead to physical damage (erosion and fragmentation, accidental fires); disturbance of nesting birds.</li> </ul>

	<ul> <li>Additional Qualifying features identified by the 2001 UK SPA review<sup>32</sup>:</li> <li><i>Calidris alpina alpina</i>; Dunlin</li> <li><i>Numenius arquata</i>; Eurasian curlew</li> </ul>		-Loss / improvement of in bye (enclosed) land
North York Moors SPA	<ul> <li>Annex I birds and regularly occurring migratory birds not listed on Annex 1: <ul> <li>Falco columbarius; Merlin</li> <li>Pluvalius apricaria; European golden plover</li> </ul> </li> <li>Article 4.1 qualification <ul> <li>Breeding</li> <li>Falco columbarius; Merlin</li> <li>Pluvalius apricaria; European golden plover</li> </ul> </li> </ul>	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore: -The extent and distribution of the habitats of the qualifying features; -The structure and function of the habitats of the qualifying features; -The supporting processes on which the habitats of the qualifying features rely; -The populations of the qualifying features; -The distribution of the qualifying features within the site.	<ul> <li>-Agricultural management (e.g. overgrazing) causing physical loss of habitat (removal), physical damage (erosion, habitat fragmentation, and non-toxic contamination (nutrient enrichment); and under-grazing leading to physical loss (smothering, scrub encroachment), this includes improvement of in bye land;</li> <li>-Poor muirburn management may lead to physical loss of habitat (removal) and damage to habitats (e.g. through habitat fragmentation);</li> <li>-Agricultural drainage could cause hydrological change (water level and flow rate), physical loss and damage (drying and fragmentation);</li> <li>-Recreational pressure could cause physical damage (erosion and fragmentation, accidental fires) and disturbance of nesting birds;</li> <li>-Illegal persecution of raptors may cause loss of species, reduced breeding success</li> </ul>
South Pennine Moors Phase 2 SPA	Annex I birds and regularly occurring migratory birds not listed on Annex 1: • Asio flammeus – Short-eared owl - regularly supports at least 0.3% of the GB breeding	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore:	<ul> <li>-Recreational pressure leading to physical damage (trampling, erosion and fragmentation, accidental fires);</li> <li>-Overgrazing by sheep causing physical loss of habitat (removal), physical</li> </ul>
	<ul> <li>population</li> <li>Falco columbarius – Merlin - regularly supports at least 2.2% of the GB breeding population</li> </ul>	-The extent and distribution of the habitats of the qualifying features; -The structure and function of the habitats of the	damage (erosion, habitat fragmentation), and nutrient enrichment; -Poor muirburn management on grouse moors - physical loss of habitat

<sup>32</sup> Additional qualifying features were added to some SPAs following a review by JNCC published in 2001

<ul> <li>Pluvialis apricaria – Europea golden plover - regularly supports 1.3% of the GB breeding population</li> <li>Article 4.1 qualification -Breeding         <ul> <li>Asio flammeus; Short-eared</li> <li>Falco columbarius; Merlin</li> <li>Pluvalius apricaria; Europea golden plover</li> </ul> </li> </ul>	n qualifying features; -The supporting processes on which the habitats of the qualifying features rely; -The populations of the qualifying features; -The distribution of the qualifying features within the site. owl	(removal), damage (habitat fragmentation), accidental fires; -Agricultural drainage may cause hydrological change (water level and flow rate), physical loss and damage (drying and fragmentation) -Loss / improvement of in bye (enclosed) land
Article 4.2 qualification -An internationally important assemble of birds including (breeding): • Actitis hypoleucos; Comme sandpiper • Calidris alpina schinzill; Du • Corduelis flavirostris; Twite • Gallinago gallinago; Comme snipe • Numenius arquata; Eurasia curlew • Oenathe oenanthe; Norther wheatear • Saxicola rubertra; Whinchar • Tringa totanus; Commone redshank • Turdus torquatus; Ring Ou • Vanellus vanellus; Northerme Lapwing	age on nlin on in rn t zel	
<ul> <li>Additional qualifying features identifie the 2001 UK SPA Review:</li> <li>Falco peregrinus; Peregrine falcon (breeding)</li> <li>Asio Flammeus; Short-eare owl (breeding)</li> <li>Calidris alpina schinzii; Dun</li> </ul>	d by d lin	

	(breeding)		
Teesmouth & Cleveland Coast SPA	<ul> <li>Annex I birds and regularly occurring migratory birds not listed on Annex 1: <ul> <li>Sterna albifrons –Little tern - regularly supports 1.7% of the GB breeding population</li> <li>Sterna sandvicensis –Sandwich tern - regularly supports 6.8% of the GB breeding population</li> </ul> </li> <li>Article 4.1 qualification <ul> <li>Breeding</li> <li>Sterna albifrons; Little tern</li> </ul> </li> <li>On passage <ul> <li>Sterna sandvicensis; Sandwich tern</li> </ul> </li> <li>Article 4.2 qualification <ul> <li>Wintering:</li> <li>Calidris cantutus; Red knot</li> </ul> </li> <li>On passage: <ul> <li>Tringa totanus; Common redshank</li> </ul> </li> <li>Over winter the area regularly supports 12312 <ul> <li>waterfowl including Calidris canutus</li> </ul> </li> <li>Additional Qualifying features Identified by the 2001 UK SPA Review: <ul> <li>Charadrius hiaticula; Ringed plover (Non breeding)</li> </ul> </li> </ul>	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore: -The extent and distribution of the habitats of the qualifying features; -The structure and function of the habitats of the qualifying features; -The supporting processes on which the habitats of the qualifying features rely; -The populations of the qualifying features; -The distribution of the qualifying features within the site.	<ul> <li>Process industry causing depletion of oxygen in the water, reductions in species, habitat loss;</li> <li>Flood management leading to hydrological change (water level and flow rate), physical damage (barrier effects and habitat fragmentation);</li> <li>Alteration of channel structure causing hydrological change (flow rate) and physical loss and damage (erosion of silt beds);</li> <li>Scrub invasion causing physical loss (smothering by scrub encroachment);</li> <li>Recreational pressure leading to physical damage (trampling, erosion and fragmentation), impacts on breeding birds due to disturbance (noise, trampling, presence);</li> <li>Bait gathering resulting in loss of species, reduced breeding success.</li> </ul>
Thorne and Hatfield Moors SPA	Annex I birds and regularly occurring migratory birds not listed on Annex 1: • Caprimulgus europaeus; European nightjar	With regard to the individual species and/or assemblage of species for which the site has been classified; Subject to natural change, to maintain or restore:	-Peat cutting leading to physical damage (loss), hydrological change (groundwater level and flow rate); - Water abstraction causing hydrological change (groundwater level and flow

Article 4.1 qualification -Breeding • <i>Caprimulgus europaeus;</i> European nightjar	<ul> <li>The extent and distribution of the habitats of the qualifying features;</li> <li>The structure and function of the habitats of the qualifying features;</li> <li>The supporting processes on which the habitats of the qualifying features rely;</li> <li>The populations of the qualifying features;</li> <li>The distribution of the qualifying features within the site.</li> </ul>	rate); - Lack of scrub management resulting in physical loss (smothering by scrub encroachment); - Recreational pressure leading to physical damage (erosion and fragmentation, accidental fires) and disturbance (noise, trampling, presence).
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#### Table A 1.3 Ramsar Sites

Name of Site	Qualifying features	Conservation Objectives	Key Threats to Site Integrity
Humber Estuary	The site qualifies under:	For most Ramsar sites interest features are covered	-Coastal development (housing,
Ramsar		by the conservation objectives for the SAC, Special	commercial, industry) leading to loss
	Ramsar criterion 1: The site is a	Protection Area or Site of Special Scientific Interest	and degradation of habitat, (toxic and
	representative example of a near-natural	as appropriate. However, in 2003 English Nature	non-toxic contamination, erosion,
	estuary with the following component	published specific advice <sup>33</sup> on conservation	fragmentation, sedimentation, etc.)
	habitats: dune systems and humid dune	objectives for Ramsar criteria <sup>34</sup> at the site. These	impacts on integrity of breeding and
	slacks, estuarine waters, intertidal mud	are:	wintering population via disturbance
	and sand flats, saltmarshes, and coastal		(noise, trampling, presence);
	brackish/saline lagoons.	Criteria 3: Subject to natural change, maintain the	-Flood defence leading to loss and
		wetland hosting a breeding colony of grey seals in	degradation of habitat, fragmentation,
	Ramsar criterion 3: The Humber	favourable condition, in particular:	barrier effects and coastal squeeze,
	Estuary Ramsar site supports a breeding		changes in hydrology (flow rate and
	colony of grey seals Halichoerus grypus	-Intertidal mudflats and sandflats	water level);
	at Donna Nook. It is the second largest		-Sewage discharge (domestic and
	grey seal colony in England and the	Criteria 5: Subject to natural change, maintain the	industrial) and pollution from fertiliser
	furthest south regular breeding site on	wetland regularly supporting 20,000 or more	ingress resulting in eutrophication,
	the east coast. The dune slacks at	waterfowl in favourable condition, in particular:	sedimentation changes in turbidity and
	Saltfleetby-Theddlethorpe on the		pH, salinity, indirect effects of reduced
	southern extremity of the Ramsar site are	-Intertidal mudflats and sandflats;	water quality on food resources.

 <sup>&</sup>lt;sup>33</sup> English Nature, 2003. The Humber Estuary European Marine Site: English Nature's advice given under Regulation 33 (2) of the Conservation (Natural Habitats &c.)
 Regulations 1994: Interim Advice, April 2003 [URL: <u>http://humberems.co.uk/downloads/English%20Natures%20Reg%2033%20Advice.pdf</u>]
 <sup>34</sup> At the time of publication the Humber Estuary qualified under criteria 2, 3, 5 and 6.

Name of Site	Qualifying features	Conservation Objectives	Key Threats to Site Integrity
	the most north-easterly breeding site in	-Saltmarsh communities;	Upstream pollution may cause a barrier
	Great Britain of the natterjack toad Bufo	-Tidal reedbeds	to fish migration;
	calamita.	-Coastal lagoons	-Recreation pressure causing impacts
			on integrity of breeding and wintering
	Ramsar criterion 5: Assemblages of	Criteria 6: Subject to natural change, maintain the	population via disturbance (noise,
	international importance – 153,934	wetland regularly supporting 1 percent or more of	trampling, presence);
	waterfowl, non breeding season.	the individuals in a population of one species or	Hydrological changes (such as
		sub-species of waterfowl in favourable condition, in	increased abstraction causing reduced
	Ramsar criterion 6: species /	particular:	freshwater input);
	populations at levels of international		Lack of reedbed management causing
	importance:	-Intertidal mudflats and sandflats;	scrub encroachment.
	- Pluvialis apricaria altifrons (on passage:	-Saltmarsh communities;	
	2.2% of population)	- lidal reedbeds	
	- Calloris canutus Islandica (on passage:	-Coastal lagoons	
	4.1 %); Calidria alpina alpina (an passaga) 1.5		
	70), Limosa limosa islandisa (an nassaga:		
	-Linosa linosa islandica (on passage.		
	-Tringa totanus brittanica (on passage:		
	5 7%)		
	-Tadorna tadorna (wintering: 1.5%)		
	-Pluvialis apricaria altifrons		
	(wintering: 3.8% of population)		
	-Calidris canutus islandica (wintering:		
	6.3%):		
	- Calidris alpine alpina (wintering: 1.7%);		
	- Limosa limosa islandica (wintering:		
	3.2%);		
	- Limosa lapponica lapponica (wintering:		
	2.3%);		
	- Tringa totanus brittanica (wintering:		
	3.6%).		
	Bamaar aritarian & The Humber		
	Estuary acts as an important migration		
	coute for both river lamprey Lampetra		
	fluviatilisand sea lamprey Detromuzon		
	marinus between coastal waters and their		
	spawning areas		
	<ul> <li>waterfowl, non breeding season.</li> <li>Ramsar criterion 6: species / populations at levels of international importance: <ul> <li>Pluvialis apricaria altifrons (on passage:</li> <li>2.2% of population)</li> <li>Calidris canutus islandica (on passage:</li> <li>4.1%);</li> <li>Calidris alpine alpine (on passage: 1.5%);</li> <li>Limosa limosa islandica (on passage:</li> <li>2.6%);</li> <li>Tringa totanus brittanica (on passage:</li> <li>5.7%)</li> <li>Tadorna tadorna (wintering: 1.5%)</li> <li>-Pluvialis apricaria altifrons (wintering:3.8% of population)</li> <li>Calidris canutus islandica (wintering:</li> <li>6.3%);</li> <li>Calidris alpine alpina (wintering:</li> <li>1.7%);</li> <li>Limosa limosa islandica (wintering:</li> <li>3.2%);</li> <li>Tringa totanus brittanica (wintering:</li> <li>3.2%);</li> <li>Tringa totanus brittanica (wintering:</li> <li>3.6%).</li> </ul> </li> <li>Ramsar criterion 8: The Humber Estuary acts as an important migration route for both river lamprey Lampetra fluviatilisand sea lamprey Petromyzon marinus between coastal waters and their spawning areas.</li> </ul>	<ul> <li>the individuals in a population of one species or sub-species of waterfowl in favourable condition, in particular:</li> <li>-Intertidal mudflats and sandflats;</li> <li>-Saltmarsh communities;</li> <li>-Tidal reedbeds</li> <li>-Coastal lagoons</li> </ul>	Hydrological changes (such as increased abstraction causing reduce freshwater input); Lack of reedbed management causin scrub encroachment.

Name of Site	Qualifying features	Conservation Objectives	Key Threats to Site Integrity
Leighton Moss Ramsar	The site qualifies under:	No specific Ramsar conservation objectives have been published for this site. This Ramsar site's	- Sedimentation/siltation resulting in increased turbidity and loss of aquatic
	<ul> <li>Ramsar criterion 1: the site is an example of a large reedbed habitat characteristic of the biogeographical region. The site is particularly important for breeding populations of great bittern <i>Botaurus stellaris</i>, Eurasian marsh harrier <i>Circus aeruginosus</i> and bearded tit <i>Panurus biarmicus</i>.</li> <li>Ramsar criterion 3: The site supports a range of breeding birds (great bittern <i>Botaurus stellaris</i>, Eurasian marsh harrier <i>Circus aeruginosus</i> and bearded tit <i>Panurus biarmicus</i>.</li> <li>Ramsar criterion 3: The site supports a range of breeding birds (great bittern <i>Botaurus stellaris</i>, Eurasian marsh harrier <i>Circus aeruginosus</i> and bearded tit <i>Panurus biarmicus</i>) and also nationally important numbers of northern shoveler <i>Anas clypeata</i> and water rail <i>Rallus aquaticus</i>.</li> </ul>	interest features are covered by the conservation objectives for the Sites of Special Scientific Interest as appropriate.	flora and subsequently decreased quality of bittern habitat. - Pollution (pesticides/agricultural runoff) - slurry from adjacent dairy farm and inorganic compounds from other agricultural sources. - Contamination may occur due to eutrophication by agrochemicals or through saline incursion -Changes in water levels (including through groundwater extraction) may cause changes in hydrology (flow rate and water levels). Stability during breeding season is particularly important; -Lack of scrub control may lead to physical loss (smothering) of habitat and changes in hydrology -Dead leaf litter accumulation may cause habitat loss due to drying out of reed beds -Recreational disturbance leading to
Lower Derwent	The site qualifies under:	No specific Ramsar conservation objectives have	noise, trampling and disturbance. -Coal or other mineral extraction
Valley Ramsar	<b>Ramsar criterion 1</b> : The site represents one of the most important examples of traditionally managed species-rich alluvial flood meadow habitat remaining in the UK. The river and flood meadows play a substantial role in the hydrological and	been published for this site. This Ramsar site's interest features are covered by the conservation objectives for the SAC, Special Protection Area or Sites of Special Scientific Interest as appropriate.	causing physical loss (removal and smothering), hydrological change (water level and flow rate); -Flood management and tidal barrage leading to hydrological change (water level and flow rate), physical damage (barrier effects and habitat
	ecological functioning of the Humber Basin.		fragmentation); - Domestic and industrial sewage

Name of Site	Qualifying features	Conservation Objectives	Key Threats to Site Integrity
			outflow causing nutrient / phosphorous
	Ramsar criterion 2: The site has a rich		enrichment;
	assemblage of wetland invertebrates		<ul> <li>Intensive agriculture leading to</li> </ul>
	including 16 species of dragonfly and		physical loss of habitat (removal),
	damselfly, 15 British Red Data Book		physical damage (erosion, habitat
	wetland invertebrates as well as a		fragmentation, siltation from agricultural
	leafhopper, Cicadula ornate for which		runoff), toxic contamination of
	Lower Derwent Valley is the only known		groundwater (sheep dipping), and non-
	site in Great Britain		toxic contamination (nutrient
			enrichment);
	Ramsar criterion 4: The site qualifies as		- Process industry causing non-toxic
	a staging post for passage birds in		contamination (acidification from
	spring. Of particular note are the		sulphur deposition);
	nationally important numbers of Ruff,		- Alteration of channel structure
	Philomachus pugnax and Whimbrel,		(canalisation, artificial barriers, etc.)
	Numenius phaeopus.		leading to physical loss and damage
			(removal of and damage to riverside
	Ramsar criterion 5: Assemblages of		woodlands, barrier effects and habitat
	international importance – 31942		fragmentation), hydrological change
	waterfowl - species with peak counts in		(water level and flow rate);
	winter.		-Water abstraction resulting in
			hydrological change (water level and
	Ramsar criterion 6: species /		flow rate), physical damage (drying and
	populations at levels of international		habitat fragmentation);
	importance:		- Waste management (including landfill)
	-Anas Penelope (2% of GB population);		causing physical loss of habitat
	-Anas crecca (1% of the population);		(removal and smothering), nutrient
			deposition and acidification and
			hydrological change (water level and
			flow rate);
			<ul> <li>Housing, inappropriate access and</li> </ul>
			other development leading to
			recreational pressure may lead to
			physical damage (erosion and
			fragmentation, accidental fires);
			disturbance of nesting and/or over-
			wintering birds.
Malham Tarn	The site qualifies under:	No specific Ramsar conservation objectives have	- Process industry leading to
Ramsar		been published for this site. This Ramsar site's	acidification of habitat from sulphur
	<b>Ramsar criterion 1</b> : Contains the highest	interest features are covered by the conservation	deposition;

Name of Site	Qualifying features	Conservation Objectives	Key Threats to Site Integrity
	marl lake in Britain, along with acidophilous bog, calcareous fen and soligenous mire. <b>Ramsar criterion 2</b> : Supports the nationally rare alpine bartisia <i>Bartsia</i> <i>alpina</i> and narrow small reed <i>Calamagrostis</i> <i>stricta</i> and seven nationally scarce species. Supports five listed British Red Data Book invertebrates including the caddis fly <i>Agrypnia</i> <i>crassicornis</i>	objectives for the Sites of Special Scientific Interest as appropriate.	<ul> <li>Agricultural drainage causing hydrological change (water level and flow rate);</li> <li>Recreational pressure may cause physical damage (erosion and fragmentation);</li> <li>Quarrying could cause physical loss of habitat (removal), physical damage (sedimentation, erosion, fragmentation, barrier effects), hydrological change (water level), and changes in thermal regime and turbidity;</li> <li>Agricultural and industrial runoff in catchment could lead to non-toxic contamination (nutrient enrichment).</li> </ul>
Morecambe Bay Ramsar	The site qualifies under: <b>Ramsar criteria 4</b> : The site is a staging area for migratory waterfowl including internationally important numbers of passage ringed plover <i>Charadrius</i> <i>hiaticula</i> . <b>Ramsar criterion 5</b> : Assemblages of international importance – 223709 waterfowl – species with peak counts in winter. <b>Ramsar criterion 6</b> : species / populations at levels of international importance: Regularly supported during breeding season: <i>-Larus fuscus graellsii</i> (13.3% of the breeding population) <i>-Larus argentatus argentatus</i> (2.8% of the breeding population) <i>-Sterna sandvicensis sandvicensis</i> (2.8% of GB population)	No specific Ramsar conservation objectives have been published for this site. This Ramsar site's interest features are covered by the conservation objectives for the SAC, Special Protection Area or Sites of Special Scientific Interest as appropriate.	<ul> <li>contamination (nutrient enrichment).</li> <li>-Land claim for agriculture may lead to physical loss (removal) of habitat;</li> <li>-Intensive agriculture could cause physical loss of habitat (removal), physical damage (erosion, habitat fragmentation, siltation from agricultural runoff), toxic contamination of groundwater (sheep dipping), and nutrient enrichment of habitats;</li> <li>-Intensive grazing leading to physical loss of habitat and physical damage (trampling);</li> <li>Coastal protection and flood defence may have the effect of preventing natural erosion, and / or causing loss and degradation of habitat, fragmentation, barrier effects and changes in hydrology (flow rate and water level);</li> <li>-Fishing may lead to physical damage to habitat (erosion, fragmentation);</li> <li>-Quarrying may cause physical loss of habitat, physical damage (sedimentation, erosion, fragmentation, barrier effects), hydrological change</li> </ul>

Name of Site	Qualifying features	Conservation Objectives	Key Threats to Site Integrity
	Species with peak counts in spring / autumn: -Phalacrocorax carbo carbo (4.2 % of the GB population; -Tadorna tadorna (2.3% of the population) -Anas acuta (6.2 % of the population -Somateria mollisima mollisima (7.7 % of the GB population) -Haematopus ostralegus ostralegus (6.5% of the GB population) -Charadrius hiaticula (1.4% of the population) -Pluvalius squatarola (3.1% of GB population) -Calidris alba (3.4% of the GB population) -Numenius arquata arquata (4.7% of the population) -Tringa totanus totanus (3.5% of the population) -Arenaria interpres interpres (1.4% of the population) -Larus fuscus graellsii (7.6% of the population)		(water level), or changes in thermal regime and turbidity; -Gas exploration may result in physical damage to habitat; -Recreational disturbance may lead to physical damage (erosion and fragmentation)
	Species with peak counts in winter: -Podiceps cristatus cristatus (1.3% of the population) -Anser brachyrhynchus (1.5% of the population) -Anas Penelope (1.5% of the GB population) -Bucephala clangula clangula ( 1.1% of the GB population) -Mergus serrator (3.3% of the GB population) -Pluvailis apricaria apricaria (1.6% of the GB population) -Vanellus vanellus (1% of the GB		

Name of Site	Qualifying features	Conservation Objectives	Key Threats to Site Integrity
	population) - <i>Calidris canutus islandica</i> (14.7% of the population) - <i>Calidris alpina alpina</i> (1.9% of the population) - <i>Limosa lapponica lapponica</i> (3.8 % of the population)		
Teesmouth & Cleveland Coast Ramsar	The site qualifies under Ramsar criterion 5: Assemblages of international importance - 9528 waterfowl – species with peak counts in winter. Ramsar criterion 6 – species occurring at levels of international importance: Species with peak counts in spring / autumn <i>Calidris canutus islandica</i> (0.9% of the GB population) Species with peak counts in winder <i>Calidris canutus islandica</i> (0.9% of the GB population)	No specific Ramsar conservation objectives have been published for this site. This Ramsar site's interest features are covered by the conservation objectives for the SAC, Special Protection Area or Sites of Special Scientific Interest as appropriate.	<ul> <li>-Process industry could cause depletion of oxygen / eutrophication in the water, reductions in species, habitat loss;</li> <li>-Flood management may cause hydrological change (water level and flow rate) or physical damage (barrier effects and habitat fragmentation);</li> <li>- Alteration of channel structure could lead to hydrological change (flow rate), physical loss and damage (erosion of silt beds);</li> <li>- Scrub invasion may result in physical loss of habitat (i.e. smothering by scrub encroachment);</li> <li>-Recreational pressure could cause physical damage to habitat (trampling, erosion and fragmentation), impacts on integrity of breeding and via disturbance (noise, trampling, presence);</li> <li>-Bait gathering leading to loss of species, reduced breeding success</li> </ul>

# Appendix 2: Flamborough and Filey Coast pSPA and Flamborough Head pSAC

#### Flamborough and Filey Coast pSPA -

The northern part of the pSPA boundary stretches from the southern end of Cayton Bay to the northern stretch of Filey Bay, and includes a large off shore component. The southern part of the site begins in the southern part of Filey Bay and curves around Flamborough Head to Sewerby. Overview maps of the northern and southern areas of the pSPA can be viewed at:

Northern Area: http://www.naturalengland.org.uk/Images/FH-FC-north\_tcm6-37226.pdf

Southern Area: http://www.naturalengland.org.uk/Images/FH-FC-south\_tcm6-37227.pdf

Feature	Population
Black-legged kittiwake	44,250 pairs; 89,041 breeding adults (2008-2011)
Northern gannet	8,469 pairs, 16,938 breeding adults (2008 – 2012)
Common guillemot	41,607 pairs; 83214 breeding adults (2008 – 2011)
Razorbill	10,570 pairs; 21,140 breeding adults(2008 – 2011)
Seabird assemblage of international importance	<ul> <li>215,750 individual seabirds (2008-2012) including the following named components: black-legged kittiwake, northern gannet, common guillemot, razorbill and also northern fulmar.</li> <li>Atlantic puffin, herring gull, European shag and great cormorant are also part of the seabird assemblage.</li> </ul>

The following interest features are recorded for the site.

Source: <u>http://www.naturalengland.org.uk/Images/Flamborough-citation\_tcm6-37217.pdf</u> [Accessed 31/01/2014]

#### Key threats to Site Integrity

These are considered to be broadly similar to the existing Flamborough Head and Bempton Cliffs SPA:

-Fishing may result in physical damage (erosion, fragmentation of the submerged habitat);

-Industrial discharge may lead to toxic contamination as well as sedimentation, changes in turbidity, changes in salinity, or changes in the thermal regime;

-Recreational disturbance may lead to physical damage (erosion and fragmentation, accidental fires) as well as reduced bird breeding productivity.

### Flamborough Head pSAC

Similarly to the pSPA, it is proposed that the landward boundary of the existing Flamborough Head SAC be modified to ensure that the features of the SAC remain within the site into the future. No additional interest features are proposed. The site boundary for the Flamborough Head pSAC can be viewed at: <u>http://www.naturalengland.org.uk/Images/FH-overview\_tcm6-37247.pdf</u>.

# Appendix 3: Minerals and Waste Joint Plan – Full List of Options (Issues and Options Stage)

<b>Options: Broa</b>	ad geographical approach to supply of aggregates id01	
Option 1	This approach could seek to ensure that requirements for new aggregates supply from the Joint Plan area would be met only from those parts of the area outside the North York Moors National Park, AONBs and the City of York area.	
or		
Option 2	In addition to aggregates supply from the NYCC area, this approach could seek to deliver an element of total sand and gravel supply requirements from the City of York area by encouraging working of sand and gravel (including building sand) in appropriate locations.	

Options: Loca	ational approach to new sources of supply of aggregates id02	
Option 1	This option could seek to establish the principle that new sources of supply of aggregates are provided as close as practicable to the main external markets, including Tees Valley and County Durham areas, and West and South Yorkshire, as well as, for sites expected to serve mainly internal markets, the main population centres of York, Harrogate and Scarborough.	
or		
Option 2	This option would seek to ensure that new sources of supply of aggregates are provided in proximity to the A1 to help provide flexibility in supply.	
or		
Option 3	This option would not seek to direct new sources of supply to specific areas in proximity to markets but would consider the whole area of potential resources as being suitable in principle for the identification of new sites or areas, subject to testing against other relevant criteria and constraints.	

<b>Options: Cald</b>	culating Sand and Gravel Provision id03	
Option 1	This option would involve projecting forward 10 year annual average sales over the period to 2030 to provide an indication of the overall scale of provision required, after allowing for the level of reserves already with planning permission. Based on the position at the end of 2011 this would result in a need for an additional 27.5mt of sand and gravel over the Plan period.	
or		
Option 2	This option would calculate provision of sand and gravel by basing future requirements on an assumed annual average requirement higher than that generated by taking an annual average of 10 years sales at the time of plan preparation. This option would include an assumption of an additional 7mt over the plan period (calculated based on the mid-point between the sub-regional apportionment figures contained in the former RSS of 2.63mtpa and provision based on pre-recession levels of 2.7mtpa). Based on the position at the end of 2011 this would result in a need for an additional 34.5mt of sand and gravel over the plan period.	
or		
Option 3	This option would calculate future provision by projecting forward 10 year annual sales and incorporating an additional contingency of 10% over the	

	full plan period. Based on the position at the end of 2011 this would result in
	a need for an additional 31.9mt of sand and gravel over the plan period.
	or
Option 4	This option would calculate future provision by projecting forward 10 year average sales with the addition of a review of sand and gravel sales at the end of 2019. In the event that sales of sand and gravel recover to a level such that short term average sales (as measured over a three year averaging period for the years 2017, 2018 and 2019) exceed the 10 year average sales figure used to define provision at the time of plan preparation by an amount exceeding 10%, then additional provision can be made in line with that referred to in Option 3 above, i.e. provision of an additional 10% leading to a total provision of 31.9mt over the plan period.
	or
Option 5	This option would involve projecting forward 10 years annual sales but factoring in an assumed reduction of 1mt in land-won supply, which would be offset by increased imports of marine aggregate. Based on the position at the end of 2011 this would result in a need for an additional 26.5mt of sand and gravel over the plan period.
	or
Option 6	This option would involve projecting forward 10 year annual sales but factoring in a larger assumed reduction in the overall requirement to take account of the potential for other alternative sources of supply to also serve markets currently met by exports from North Yorkshire. An assumed reduction in overall provision of 250,000tpa over the period 2020-2030 could be applied, resulting in a reduction of 2.5mt in overall provision. Based on the position at the end of 2011 this would result in a need for an additional 25mt of sand and gravel over the plan period.

Options: Overall distribution of sand and gravel provision id04		
Option 1	This option could make future provision for sand and gravel on the baseparate provision for the southwards and northwards distribution are (concreting sand and gravel) and for building sand, at a ratio of 50:45	asis of eas 5:5.
	or	
Option 2	This option could make future provision for sand and gravel on the baseparate provision for the southwards and northwards distribution are with an increased emphasis on provision for the southwards distribut area. This could assume provision based on a ratio of 55:40:5 south : northwards : building sand.	asis of eas ion wards
	or	
Option 3	This option could make future provision for sand and gravel on the baseparate provision for the southwards and northwards distribution are with increased emphasis on provision for the northwards distribution. This could assume provision on the basis of a ratio of 45:50:5 southwards is building sand.	asis of eas area. vards :
Or		
Option 4	This option could make provision for concreting sand and gravel on the basis of a single subdivision, combining provision across the northward and southwards distribution areas, with overall provision of concreting sand and gravel: building sand at a ratio of 95:5.	he Irds g

Options: Landbanks for sand and gravel id05		
Option 1	Provide for separate 7 year landbanks for concreting sand and gravel for both the southwards and northwards distribution areas and for building sand.	
or		
Option 2	Provide for a 7 year landbank for concreting sand and gravel over the	
	whole Joint Plan area and a separate 7 year landbank for building sand.	
and		
Option 3	This option would support the principle of time extensions at existing sand and gravel quarries where necessary to allow full extraction of permitted reserves.	

Options: Safeguarding sand and gravel id06	
Option 1	This option could safeguard all known sand and gravel resources with a 250m buffer zone to help prevent sterilisation from proximal development.
	or
Option 2	This option could safeguard all known sand and gravel resources with a 100m buffer zone to help prevent sterilisation from proximal development.
or	
Option 3	This option would only safeguard sand and gravel resources outside urban areas and National Park and AONB designations.
and	
Option 4	This option could operate in parallel with other options and would only safeguard sand and gravel resource areas with an identified tonnage of 0.75mt or more.
and	
Option 5	This option could operate in parallel with other options and would safeguard any additional resources (not identified in the current evidence base) where put forward for allocation as sites or preferred areas and where supported by adequate information to justify the presence of a viable resource.

Options: Provision of crushed rock id07			
Option 1	This option could identify future provision for crushed rock utilising the most recent 10 year average sales figures available at the time of production of the Joint Plan (i.e. total provision of 66.5mt). This option would not result in any requirement to release further reserves of crushed rock.		
	or		
Option 2	This option could identify future provision for crushed rock utilising the most recent 10 year average sales figures available at the time of production of the Joint Plan, but with the identification of separate provision for Magnesian limestone at a level equivalent to 50% of the theoretical shortfall of Magnesian limestone (i.e. provision of an additional 8mt).		
or			
Option 3	This option would operate in parallel with options promoting the increased use of secondary and recycled materials as alternatives to primary aggregate (see subsequent section on Secondary and Recycled Aggregates) by assuming a reduced overall requirement for crushed rock (equivalent to a reduction of 0.1mtpa over the period 2015-2030), such that the overall crushed rock requirement for the plan is reduced by 1.5mt to a		
total of 65mt.			
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<b>Options: Main</b>	ntenance of landbanks for crushed rock id08		
Option 1	Provide for maintenance of a single 10 year landbank of crushed rock over the plan period and support the principle of time extensions at individual sites where necessary to allow full extraction of permitted reserves.		
	or		
Option 2 Provide for the maintenance of a separate 10 year landbank for Magnesian limestone and other crushed rock reserves over the plan period and support the principle of time extensions at individual sites where necessary to allow full extraction of permitted reserves.			
	and		
Option 3	This option could operate in association with either Option 1 or 2 above and would seek to ensure that landbanks of crushed rock are maintained within those parts of the plan area outside the National Park and AONBs.		
	and		
Option 4	This option could operate in association with either Option 1 or 2 above and would rely on national policy and development management policies in the Joint Plan to ensure that landbanks of crushed rock are maintained within those parts of the plan area outside the National Park and AONBs. The NPPF requires landbanks for non-energy minerals to be maintained outside of National Parks, AONBs, World Heritage Sites, Scheduled Monuments and Conservation Areas as far as is practical.		

<b>Options: Safe</b>	eguarding crushed rock id09
Option 1	This option could safeguard all known crushed rock resources with a 500m
	buffer zone.
	or
Option 2	This option could safeguard all known crushed rock resources, with a 200m
	buffer zone.
	and/or
Option 3	This option would only safeguard crushed rock resources outside urban
	areas and National Park and AONB designations.
and	
Ontion 4	This option could operate in parallel with other options and would safeguard
Option 4	any additional resources proposed in site allocations and preferred areas
	where supported by adequate resource information.

<b>Options: Con</b>	creting sand and gravel delivery id1	0
Option 1	This option could seek to deliver Joint Plan requirements for concreting sand and gravel through the identification of specific site allocations where possible, with preferred areas and areas of search identified as alternative only if necessary.	) IS
or		
Option 2	This option could seek to deliver Joint Plan requirements for concreting sand and gravel through the identification of specific site allocations only for large scale sites (e.g. sites with greater than 5mt total reserve and planned output of 0.25mtpa or greater), with remaining provision being provided	or d

	through preferred areas or areas of search.	
or		
Option 3	This option could rely on identification of areas of search to meet Joint Plan requirements. Areas could be selected from within the overall sand and gravel resource blocks identified in the BGS sand and gravel assessment report 2011.	

<b>Options: Build</b>	ding sand delivery id11	
Option 1	This option could seek to deliver Joint Plan requirements for building sand through the identification of specific site allocations, should any suitable sites come forward, and via criteria supporting new sites and extensions to existing sites where necessary, in line with environmental and amenity objectives of the Joint Plan.	
or		
Option 2	This option could seek to deliver Joint Plan requirements for building sand through the identification of Areas of Search.	

Options: Mag	nesian limestone delivery id	d12
Option 1	This option could seek to deliver any Joint Plan requirements for Magne limestone through the identification of specific site allocations, and via criteria supporting new sites and extensions to existing sites where necessary, in line with environmental and amenity objectives of the Plan	esian n.
or		
Option 2	This option could seek to deliver Joint Plan requirements for Magnesiar limestone through the identification of preferred areas or areas of search	า :h.

<b>Options: Una</b>	Ilocated extensions to existing aggregates quarries	id13
Option 1	This option would support the principle of extensions to existing quarries where the proposed extension area has not been allocated in the Joint F subject to it being demonstrated that the development would be consisted with the overall aggregates supply strategy in the Plan, or meet another demonstrable need for aggregate consistent with Joint Plan objectives, would not significantly undermine the potential for a greater total proport of supply to come from alternatives to primary aggregate, and that the s be extended is not located within the National Park <sup>35</sup> or an AONB.	s, Plan, ent tion ite to
	or	
Option 2	This option would only support the principle of extensions, where the proposed extension area has not been allocated in the Plan, where the reserves are necessary in order to maintain the landbank of permitted reserves above the minimum required by national and local policy and the site to be extended is not located within the National Park or an AONB.	he
or		
Option 3	This option would not support the principle of development on unallocate sites, including proposals for the extension of existing sites.	ed

<sup>&</sup>lt;sup>35</sup> Note that there are not currently any aggregates quarries within the National Park

<b>Options: Suppl</b>	y of alternatives to land won primary aggregates id14
Option 1	This option would seek to encourage the maximum use of secondary materials through one or more supporting measures which could include:
	• Supporting the principle of development of new infrastructure, such as ancillary manufacturing facilities of appropriate scale utilising secondary aggregate as the primary raw material, at sites where secondary aggregates are produced.
	• Supporting the principal of limited re-working of secondary aggregate materials already deposited in current or former disposal facilities, where consistent with environmental and amenity objectives of the Joint Plan. These would principally include ash disposal sites and current and former colliery spoil disposal facilities. This could also include supporting the principle of an upward revision to the current annual tonnage export limit for secondary aggregate from the Gale Common ash disposal facility.
	<ul> <li>Supporting the use of secondary aggregate materials as part of a broader policy approach to the sustainable use of materials in the design and construction of development.</li> </ul>
	and/or
	This approach could promote the use (including the potential for increased use) of recycled aggregate though a range of measures including:
	<ul> <li>Supporting the use of recycled aggregate materials as part of a broader policy approach to the sustainable use of materials in the design and construction of development.</li> </ul>
	<ul> <li>Encouraging the maximum recovery of recycled aggregate during demolition activity.</li> </ul>
Option 2	<ul> <li>Encouraging the separation of materials with potential for use as recycled aggregate during waste management processes.</li> </ul>
	<ul> <li>Encouraging the use of existing minerals extraction sites as locations for the reception, processing and onward sale of recycled aggregate during their period of operation.</li> </ul>
	<ul> <li>Making adequate provision for any new facilities needed for the management of construction and demolition waste identified through any waste needs assessment undertaken during preparation of the Joint Plan.</li> </ul>

<b>Options: Cont</b>	inuity of supply of silica sand	id15
Option 1	This option would support the principle of continued production at the Blubberhouses and Burythorpe sites, including the principle of lateral extensions and/or deepening of those sites where necessary, if need help provide a 10 year landbank at the Burythorpe site and 15 years Blubberhouses site.	e Il ded to at the
or		
Option 2	This option would support the principle of continued production at the Burythorpe site only, including the principle of lateral extensions and deepening where necessary in order to help provide a 10 year landb	e or bank.

	or
Option 3	This option would not express support in principle for continued supply of silica sand but would identify a range of criteria to be applied to any proposals which come forward for development of silica sand resources. Criteria could include a need for adequate demonstration of the quantity and quality of the resource, and, in the case of any proposals for the working of silica sand within the Nidderdale AONB, a requirement to demonstrate that the proposals are in the public interest and, where international nature conservation designations may be affected, the satisfactory outcome of an Appropriate Assessment under the Habitats Regulations.

<b>Options: Safe</b>	guarding silica sand id16	
Option 1	This option would safeguard all known silica sand resources, with a 500m buffer zone to help ensure maximum protection of the resource from proximal sterilisation.	
	or	
Option 2	This option would safeguard all known silica sand resources, without a buffer zone given the absence of expectation of significant additional working of silica sand beyond current permission boundaries during the plan period.	
	or	
Option 3	This option would only safeguard silica sand resources outside AONB and international nature conservation designations as working in these areas are less likely to be acceptable in principle.	
and/or		
Option 4	This option could operate in parallel with other options and would safeguard any additional resources of silica sand (not identified in current minerals resource evidence) proposed in site allocations and preferred areas, where supported by adequate resource information.	

<b>Options: Cont</b>	inuity of supply of clay id17	
Option 1	This option would support the principle of continued production at the Alne and Hemingbrough sites and seek to make specific provision, through allocation of sites or preferred areas, for the working of further reserves of clay as extensions to Hemingbrough and Alne clay pits, in order to help provide a 25 year landbank at each of these sites. It could also seek to identify resources at Escrick as being suitable in principle to meet longer term requirements for clay to serve the Plasmor blockworks. Alternatively, where suitable specific sites or areas could not be identified, this option would seek to identify Areas of Search for clay sites in proximity to existing locations where clay is utilised (at Alne brickworks and Great Heck).	
	and/or	
Option 2	This option would support the principle of development of new reserves of clay (either as extensions to existing sites or as new greenfield sites) where there is a demonstrable need to release further reserves in order to maintain continuity of supply to existing or any new manufacturing facilities in the Plan area.	
and		
Option 3	In addition this option could support the principle of development of new	

sources of clay for other uses (i.e. uses which are not directly related to
supporting existing or new manufacturing facilities in the Plan area) where
it can be demonstrated that there is a need for the mineral and the
requirement could not reasonably be met by secondary or recycled
materials.

<b>Options: Incid</b>	ental working of clay in association with other minerals id18	
Option 1	This option would support the incidental working of clay in association with production of other minerals, where the incidental extraction of clay would help secure the most sustainable use of resources and would not prejudice the overall environmental or amenity impacts of the primary working or the subsequent reclamation and afteruse of the site.	
or		
Option 2	This option would not expressly support the incidental working of clay in association with production of other minerals.	

<b>Options: Safe</b>	guarding clay id19	
Option 1	This option would safeguard all known clay resources, with a 250m buffer zone to help ensure maximum protection of the resource from proximal sterilisation.	
	or	
Option 2	This option would safeguard all known clay resources, without a buffer zone given the large geographical scale of the resource relative to the current and expected future extent of working.	
	or	
Option 3	This option would only safeguard clay resources outside urban areas and National Park and AONB designations as working in these areas are less likely to be proposed or acceptable.	
and		
Option 4	This option would operate in parallel with other options and would safeguard any additional resources of clay (not identified in current minerals resource evidence) proposed in site allocations and preferred areas, where supported by adequate resource information.	

<b>Options: Conti</b>	Options: Continuity of supply of building stone id20	
Option 1	Support the principle of continued production, including extensions to workings, at existing permitted building stone sites.	
	or	
Option 2	Support the principle of development of resources of building stone at new sites (including former building stone quarries without planning permission as well as extensions to existing sites.	
	or	
Option 3	This option would not express support in principle for continued supply of building stone but would identify a range of criteria to be applied to any proposals which come forward for development of building stone resources. In addition to the general criteria included in the Development Management policies, indicative criteria for building stone development could include adequate demonstration of the nature, quality and quantity o resource, the market to be served and the availability of stone at alternativ sites.	

Options: Use	of building stone id21	
Option 1	This option would support applications for extraction of building stone from within the National Park and AONBs only where the stone would be used within the designated area it is extracted from, unless for repair of important designated or undesignated structures elsewhere which rely on this stone. Elsewhere in the Joint Plan area there would be no restriction placed on the use of the stone extracted.	
	or	
Option 2	This option would support applications for extraction of building stone from within the Joint Plan area for use only within the Joint Plan area, unless for repair of important designated or undesignated structures elsewhere which rely on this stone. Stone extracted in the National Parks and AONBs would only be used within the designated area from which it is extracted.	
	or	
Option 3	No restrictions to be placed on the use of building stone – planning applications would be considered against national policy, other building stone policies in the Joint Plan and any relevant Development Management policies only. The NPPF does not place any restrictions on the use of building stone but does require planning authorities to consider how to meet any demand for small-scale extraction of building stone at, or close to, relic quarries needed for the repair of heritage assets, taking account of the need to protect designated sites.	
and		
Option 4	Alongside any of options 1, 2 or 3, this option would support the limited extraction of stone for use in building projects on the same site, acknowledging that in some instances this may in fact be Permitted Development and not require planning permission.	

<b>Options: Safe</b>	juarding building stone id22	
Option 1	Safeguard all known resources with potential for use as building stone.	
	or	
Option 2	Safeguard all the scarcer resources with potential for use as building stone.	
and/or		
Option 3	Safeguard both active and known important former building stone quarries.	
and		
Option 4	This option would operate in parallel with the other options and would safeguard any additional resources of building stone (not identified in current BGS minerals resource information) proposed in site allocations and preferred areas, where supported by adequate resource information.	

<b>Options: Overal</b>	I spatial options for Oil and Gas	id23
Option 1	Aim to direct all gas developments (including production an to locations outside of the National Park and AONBs, where alternatives to these locations exist.	d processing) e viable
or		
Option 2	Support the principle of gas developments (including produ- processing) across the whole of the Joint Plan area provide the National Park and AONBs, and in locations which may i	ction and d that, within impact on the

	townscape and setting of the historic City of York, particularly high standards of siting, design and mitigation are applied.	
or		
Option 3	Support the principle of exploration, appraisal and production of gas across the whole of the Joint Plan area, but aim to direct the siting of any processing or electricity generating facilities to locations outside National Parks and AONBs, where viable alternatives to these locations exist.	

Options: Co or	Options: Co ordination of gas extraction and processing id24	
Option 1	Support a co-ordinated approach to gas extraction and processing supporting, where viable, the preferential use and/or adaptation of permitted processing infrastructure for the processing of any new and, in relation to any development of new gas resources not acc existing processing infrastructure, support co-ordination between operators and encourage the development of shared processing infrastructure where this would help reduce overall environmental	g through f existing gas finds essible to licence impacts.
or		
Option 2	Do not express specific support for a co-ordinated approach to gate extraction and processing.	as

<b>Options: Gas</b>	developments (exploration and appraisal) id	d25
Option 1	This option would support development for the purposes of exploration a appraisal for gas (where such development would be consistent with oth strategic policies in the Plan) where the site has been selected to minim any adverse impacts on the environment, amenity and on transport considerations resulting from the exploration and appraisal activity, so fa practicable taking into account the geological target being explored or appraised, and subject to particularly high standards of siting, design an mitigation where any development is proposed within or in close proximit the National Park or AONBs and in locations which may impact on the townscape and setting of the historic City of York.	and her ise ar as id ity to

Options: Gas of	developments (production and processing)	id26
Option 1	This option would support the development of new gas production a processing facilities (where such development would be consistent v other strategic policies in the Plan including any policy seeking the or ordinated use of gas processing infrastructure) where the site has be selected to minimise any adverse impacts on the environment, amen public safety and on transport considerations. Preference would give preference to the siting of any significant new processing facilities on brownfield, industrial or employment land particularly locations wher opportunities for use of combined heat and power can be utilised. Transportation of gas from locations of production to any remote processing facilities would be expected to be via underground pipeli the routing of pipelines selected to have the least environmental or a impact. Particularly high standards of siting, design and mitigation would be required where any development is proposed within or in close prox	nd with co- een nity and e n e any ne, with amenity imity to

	the National Park or AONBs and in locations which may impact on the townscape and setting of the historic City of York.	
or		
Option 2	This option would be the same as Option 1 but would also support gas production and processing on greenfield sites and at locations away from existing industrial and employment land.	

<b>Options: Coal</b>	Mine Methane id	127
Option 1	This option would support the ongoing extraction and utilisation of CM existing sites, including the utilisation of additional generating equipments	M at ent.
or		
Option 2	This option would support the extraction and utilisation of CMM at othe locations as well as existing sites, with a preference that any new plan equipment is located on brownfield, industrial or employment land and operational coal mining sites where practicable and where the choice location would enable the efficient utilisation of the energy produced.	∋r ıt and I of

Options: Coa	al Bed Methane, Underground Coal Gasification, Shale gas and id28		
Carbon and C	This option would support the principle of development of CBM, UCG and shale gas resources and the underground storage of carbon and gas subject, where relevant, to the other gas policies in the Joint Plan but would also in particular require robust assessment of, and the prevention of potential impacts on, a range of other matters including in relation to the integrity of geological or hydrogeological resources and processes (including groundwater and land stability), availability of water resources and local amenity and public safety issues. Transport of gas or carbon would be expected to be via pipeline, with the routing of pipelines selected to give rise to the least environmental or amenity impact. This option would involve a precautionary approach, with support to specific		
	proposals only being provided where a high level of assurance in relation to impacts and benefits, including community benefits, can be demonstrated. Particularly high standards of siting, design and mitigation would be required where any development is proposed within or in close proximity to the National Park or AONBs and in locations which may impact on the townscape and setting of the historic City of York.		
	or		
Option 2	This option would not express support in principle for the development of CBM, UCG and shale gas resources, or the underground storage of carbon or gas due to the uncertain nature of the impacts and risks involved within the Plan area. Any proposals which come forward would be considered against other relevant policies in the Plan and relevant national policy. The NPPF states that minerals planning authorities should encourage underground gas and carbon storage, taking into account the integrity and safety of such facilities, and should encourage extraction of Coal Mine Methane.		
and			
Option 3	This option would represent an extension to the precautionary principle in Option 1 by requiring applications for permission for the development of		

CBM, UCG and shale gas resources and the underground storage of carbon
and gas to demonstrate that the proposed site has been identified so as to
avoid sensitive locations and designations, including residential areas,
important environmental designations and other important assets which
require protection under the planning system.

<b>Options: Cont</b>	inuity of supply of deep coal id29	
Option 1	This option would support the principle of lateral extensions to the permitted underground working area for Kellingley Colliery, in locations accessible from the current colliery site, and would set out criteria against which proposals would be assessed. Criteria could include a requiremen for the mineral planning authority to be satisfied that the arrangements fo managing and mitigating the effects of subsidence and the disposal of mining waste materials arising from the development are acceptable.	t it r
	or	
Option 2	This option would not express support for the principle of further lateral extensions to the underground working area for Kellingley Colliery and would seek the maximum exploitation of the resource within the current permitted area.	

<b>Options: Shall</b>	ow coal id30	
Option 1	This option would not express specific support for the principle of shallow coal mining in the Joint Plan area (except where extraction would take place as part of an agreed programme of development to avoid sterilisation of shallow coal as a result of the implementation of other permitted surface development).	on ce
or		
Option 2	This option would support the principle of extraction of shallow coal where it would be consistent with the development management policies in the Plan.	Э

<b>Options: Safeg</b>	juarding shallow coal id31		
Option 1	This option would safeguard the whole of the known shallow coal resource, with a 500m buffer zone to help ensure maximum protection of the resource from proximal sterilisation. A buffer of 250m would be applied in the NYMNP.		
	or		
Option 2	This option would only safeguard the shallow coal resource without a buffer zone, given the absence of expectation of working of shallow coal during the plan period.		
or			
Option 3	This option would only safeguard shallow resources outside urban areas and National Park and AONB designations as working in these areas are less likely to be acceptable.		

<b>Options: Safe</b>	guarding deep coal id3	2
Option 1	This option would not support the safeguarding of deep coal resources.	
or		
Option 2	This option would safeguard the whole of the deep coal resource.	

or		
Option 3	This option would only safeguard deep coal resources within extant coal mining licence areas for Kellingley Colliery and within the Selby Coalfield.	
or		
Option 4	This option would only safeguard deep coal resources within the Kellingley Colliery licensed area.	
and		
Option 5	In association with any safeguarding of deep coal, this option would include an additional 700m buffer zone to help protect the resource from sterilisation through proximal development.	

Option 1	This option would support the principle of maximising the availability of disposal capacity at the existing Womersley spoil disposal site and the utilisation of any available capacity at the Gale Common ash disposal site.
	or
	This option would not express support for any further increase in capacity at the Womersley spoil disposal site, which has already been subject of recent proposals for the further raising of tipping levels, and would instead seek the utilisation of any available capacity at the Gale Common ash disposal site, as well as support the principle of development of a new disposal facility for the colliery if necessary, and would set out criteria against which any proposals for a new facility would be assessed.
Option 2	Criteria could include the requirement for proposals to utilise quarry voids or, if not possible, derelict or degraded land wherever possible; and, provide a detailed justification for proposals which, in exceptional circumstances, seek to utilise best and most versatile agricultural land. Proposals could also be required to provide satisfactory arrangements for transport of spoil from the colliery to point of disposal, with preference being given to options that would use alternatives to road transport, or road haulage routes which minimise any impacts on local communities.

Option 1	Support an indigenous supply of potash from one location only.		
	or		
Option 2	Support the principle of multiple sources of potash supply from within the Plan area.		
or			
Option 3	Support new locations for potash extraction outside of the North York Moors National Park only.		
or			
Option 4	Support extraction of potash from under the National Park as well as outside of the National Park but only support siting of surface infrastructure outside the National Park.		

Options: Safeguarding potash		id35
Option 1	Safeguard land above the area permitted for potash working only.	

Option 2	Safeguard land above all of the potash resource.

Options: Supp	oly of gypsum id36	
Option 1	This option would support the principle of the extraction of natural gypsum subject to suitable proposals coming forward and would set out a range of environmental criteria against which proposals would be assessed.	
	or	
Option 2	This option would not express support for the principle of working of natural gypsum.	
	and	
Option 3	This option would operate independently of Options 1 and 2 above and would support the principle of continued supply of desulphogypsum from power stations in the Joint Plan area.	
and		
Option 4	This option would operate independently of Options 1 and 2 above and would not express support for the principle of continued supply of desulphogypsum from power stations in the Joint Plan area.	

<b>Options: Safeg</b>	guarding gypsum	id37
Option 1	This option would safeguard gypsum based on the area covered by the extant permission for gypsum extraction in the Sherburn-in Elmet area	e
or		
Option 2	This option would not safeguard gypsum given the absence of expecta of significant additional working of natural gypsum during the plan period	ation od.

<b>Options: Safe</b>	eguarding deep mineral resources id38	
Option 1	This option would include a policy which would require the developer to demonstrate that there would not be significant conflict with other areas and forms of deep minerals extraction.	
or		
Option 2	This option would identify 'exclusion zones' around areas of existing deep mineral extraction which would prevent the extraction of other resources where there is the potential for or there are known to be effects on these current areas of extraction.	

<b>Options: Sup</b>	ply of vein minerals id39	
Option 1	This option would support the principle of the further development of resources of vein minerals in suitable locations and would identify criteria to be applied to the consideration of such applications, including the need to protect important habitats and wildlife, landscapes, heritage and tourism assets.	
or		
Option 2	This option would not indicate support in principle for the development of vein minerals but would identify criteria to be applied to the consideration of such applications. Criteria could include the need to protect important nature conservation, landscape and tourism assets.	

<b>Options: Safeg</b>	juarding vein minerals	id40
Option 1	This option would safeguard the area of extant dormant permissions vein minerals extraction.	for
or		
Option 2	This option would not seek to safeguard vein minerals in the absence sufficient information on the distribution of such resources, or comme interest in their exploitation.	e of ercial

<b>Options: Born</b>	ow pits id41
Option 1	<ul> <li>Support borrow pits where all the following criteria can be met:</li> <li>the site lies on, or immediately adjoins, the proposed construction scheme so that the mineral can be transported from the borrow pit to the point of use without transport on the public highway system;</li> <li>the site can be landscaped and appropriately restored to an agreed enduse without the use of imported material other than that generated on the adjoining construction scheme;</li> <li>the proposal meets all the criteria set out in other relevant Development</li> </ul>
	Management policies.
	or
Option 2	<ul> <li>Only support borrow pits where the mineral cannot reasonably be supplied by existing quarries or alternative secondary or recycled sources within the area; or, the supply from such existing sources would be seriously detrimental to the amenities of the area due to the scale, location or timing of the development requiring the mineral and subject to criteria including:</li> <li>the site being on, or immediately adjoining, the proposed construction scheme so that the mineral can be conveyed from the borrow pit to the point of use without transport on the public highway system;</li> <li>satisfactory landscaping and reclamation to an agreed end-use without the use of imported material other than that generated on the adjoining construction scheme;</li> <li>the proposal meeting all the criteria set out in other relevant development policies.</li> </ul>

<b>Options: Ove</b>	rall approach to the waste hierarchy id42
Option 1	<ul> <li>This option would help move waste up the waste hierarchy by:</li> <li>Supporting in principle proposals which enable the re-use, recycling and composting of waste and supporting the principle of recovery of waste where it can be demonstrated that it is not practicable to manage the waste further up the hierarchy.</li> <li>Supporting provision of new capacity for the landfill of biodegradeable waste only where it can be demonstrated that it is not practicable to manage the waste further up the hierarchy and there is insufficient landfill capacity in the area to meet identified needs. Incineration of waste without energy recovery would only be supported for the small scale incineration of specialised wastes arising in the area and where the scale of the development would mean that energy recovery is not viable.</li> <li>In relation to inert waste, landfill would only be supported where it would facilitate a high standard of quarry reclamation in accordance with agreed reclamation objectives, or the substantial improvement</li> </ul>

	of derelict or degraded land to a condition where it can be returned to agricultural productivity or other beneficial use.
	or
Option 2	<ul> <li>This option would be similar to Option 1 but would give stronger encouragement to dealing with waste further up the hierarchy by:</li> <li>Supporting in principle proposals which can demonstrate that the waste to be managed at the facility would be managed at the highest practicable level of the hierarchy appropriate to the type/s of waste to be dealt with.</li> <li>Supporting provision of new capacity for the landfill of biodegradeable waste only in exceptional circumstances where it can be demonstrated that it is the only practicable management option for the waste to be managed and there is insufficient capacity available within or outside the Plan area which could reasonably meet the need. Incineration of waste without energy recovery would only be supported for the small scale incineration of specialised wastes arising in the area and where the planning authority can be satisfied that the scale of the development would mean that energy recovery is not viable.</li> <li>In relation to inert waste, landfill would only be supported where it would facilitate a high standard of quarry reclamation in accordance with agreed reclamation objectives, or the substantial improvement of derelict or degraded land to a condition where it can be returned to agricultural productivity or other beneficial use</li> </ul>
	or
Option 3	This option would provide support in principle for proposals for a range of waste management methods where it can be demonstrated that the facility would help reduce reliance on landfill as a means of waste management. Support in principle would also be provided for new landfill of waste where it can be demonstrated that the proposal would meet a need for additional landfill capacity not identified at the time of preparation of the Plan, or it would facilitate a high standard of quarry reclamation in accordance with agreed reclamation objectives, or the substantial improvement of derelict or degraded land to a condition where it can be returned to agricultural productivity or other beneficial use.

<b>Options: Stra</b>	tegic role of the Plan area in the management of waste id4	43
Option 1	This option would seek to ensure that capacity is provided across the Pla area at a level sufficient to meet identified needs for waste arising in the area (i.e. a level that would allow net self-sufficiency to be achieved wher practicable) whilst allowing for current known levels of imports to continue. This would exclude more specialised management needs including capac for landfilling and/or treatment of hazardous waste and low level non-nucl radioactive waste and other specialised provision which can only be met a wider geographical basis.	n e city lear on
or		

Option 2	This option would acknowledge that significant export movements of waste already take place across the Plan area boundary and, for those waste streams or facility types for which a potential capacity gap has been identified, would assume that existing cross-border export movements would continue to operate in conjunction with existing and planned capacity in the area. Where necessary, this approach could also seek opportunities to use existing or planned capacity elsewhere in order to meet any additional un-met requirements. This option would assume that imports of waste into the area would continue broadly in line with recent levels.
	and
Option 3	This option would follow the same approach as for Option 1 or 2 but would in addition make an express commitment that the Plan would make provision for the management of waste arising within that part of the Yorkshire Dales National Park falling within NYCC (other than for local scale re-use and recycling facilities which it may be practicable to provide in the National Park area).

Options: Mee	ting waste management capacity requirements id44	4
Option 1	<ul> <li>This option would support provision of adequate capacity for, and promote community responsibility in, management of LACW through:</li> <li>Identifying the Allerton Park and Harewood Whin sites as strategic locations over the plan period for the management of LACW, includin supporting the principle of an extension of time for disposal of waste landfill in order to ensure utilisation of remaining capacity. In the cass of the Harewood Whin site any proposals for new capacity involving built development would need to be judged against any relevant national and local green belt policy.</li> <li>Supporting the delivery of additional transfer station capacity for LAC to serve the needs of the City of York, Selby and Ryedale districts an in addition, for Harrogate Borough if the Allerton Waste Recovery Pa permission is not implemented.</li> <li>Providing support in principle for proposals which would deliver increased capacity for the recycling, reprocessing and composting of LACW where this would reduce reliance on export of waste from the Plan area for recycling or reprocessing and subject to compliance wit locational and other relevant policies to be identified in the Plan.</li> <li>Supporting improvements to the Household Waste Recycling Centre network subject to compliance with locational and other relevant policies to be identified in the Plan.</li> </ul>	e via e W nd, ırk
	or	
Option 2	This option would represent a less targeted approach and would seek to provide more flexibility for the delivery of any new capacity required for managing LACW. This would be achieved by providing support in princip for the development of new capacity identified as necessary by the releva Waste Management Authorities. It would need to be demonstrated that a such capacity is consistent with relevant national policy as well as any relevant policies in the Plan relating to moving waste up the hierarchy and the strategic role of the Plan in the management of waste, as well as relevant locational and development control policies in the Plan.	ile int iny d

<b>Options: Mee</b>	ting waste management capacity requirements id	d45
Commercia	I and Industrial waste (including hazardous C&I waste)	
Option 1	<ul> <li>This option would support provision of adequate capacity for, and prom community responsibility in, management of C&amp;I waste through:</li> <li>Providing support in principle for proposals which would deliver increased capacity for the recycling and/or reprocessing and the treatment of C&amp;I waste where this would reduce reliance on expor waste from the Plan area for recycling or reprocessing and subject compliance with locational and other relevant policies to be identifit the Plan.</li> <li>Supporting the delivery of additional transfer station capacity for C waste where it can be demonstrated that additional provision woul contribute to the objective of dealing with waste in proximity to whe arises.</li> <li>Providing capacity for recovery of energy from C&amp;I waste through combination of spare capacity within the Allerton Waste Recovery facility if developed and supporting in principle the delivery of additional energy recovery capacity for suitable C&amp;I waste, where the plannin authority can be satisfied that the facility would be appropriately so to meet the needs for management of residual C&amp;I waste arising in area and it can be demonstrated that the waste to be recovered cabe practicably dealt with further up the waste hierarchy. The scale any additional capacity required will be dependent on implementat the AWRP facility, as well as assumptions made about waste grow but is unlikely to require provision of more than one additional facilit.</li> <li>No specific additional provision for landfill capacity for renaining v space at existing sites subject of time limited permissions.</li> <li>Landfill capacity for hazardous C&amp;I waste requiring landfill would be met through provision outside the Plan area.</li> </ul>	t of t to ed in &I d ere it a Park tional ng caled n the annot e of cion of vth lity. ous nciple roid
and		
Option 2	I his option would be the same as Option 1 but would, additionally, provisupport in principle for proposals for the management of C&I waste arist outside the area where it can be demonstrated that the development with be consistent with the locational and other relevant policies in the Plan additionally, for proposals for the recovery of waste, it can be demonstrated that the facility in the location proposed would represent the nearest appropriate installation for the waste to be dealt with.	vide sing ould and rated

Options: Mee	ting waste management capacity requirements id46
Constructio	on, Demolition and Excavation waste (including hazardous CD&E waste)
Option 1	<ul> <li>This option would support provision of adequate capacity for, and promote community responsibility in, management of CD&amp;E waste through:</li> <li>Providing support in principle for proposals which would deliver increased capacity for the recycling of CD&amp;E waste, with priority being given to facilities which would manage the construction and demolition element of CD&amp;E waste. An indicative additional target capacity for up to 300,000tpa could be delivered. Provision of new capacity for recycling of CD&amp;E waste would need to be consistent with locational and other relevant policies to be identified in the Plan.</li> </ul>

	<ul> <li>Supporting the delivery of additional transfer station capacity for C&amp;D waste where it can be demonstrated that additional provision would contribute to the objective of dealing with waste in proximity to where it arises</li> <li>Supporting additional landfill capacity for non-hazardous CD&amp;E waste where it can be demonstrated that the waste to be landfilled cannot practicably be dealt with further up the waste hierarchy and that there is insufficient permitted capacity in the Plan area or, in the case of inert waste, it would facilitate a high standard of quarry reclamation in accordance with agreed reclamation objectives, or the substantial improvement of derelict or degraded land to a condition where it can be returned to agricultural productivity or other beneficial use. Support would also be provided in principle for an extension of the time period for the utilisation of remaining void space at existing sites subject of time limited permissions.</li> <li>Landfill capacity for hazardous CD&amp;E waste requiring landfill would be met through provision outside the Plan area.</li> </ul>	
and		
Option 2	This option would be the same as Option 1 but would, additionally, provide support in principle for proposals for the import for landfill of inert CD&E waste arising outside the area where it can be demonstrated that the importation and deposit of the waste is needed to achieve mineral site reclamation in accordance with agreed objectives.	

Options: Man	aging Agricultural Waste id	d47
Option 1	This option would support self-sufficiency in capacity for management of waste, as well as the principle of managing waste near to where it arise supporting where practicable the on-farm management of agricultural w at the point of arising. Where waste can only be managed through mor specialised facilities or facilities which can only realistically be provided larger scale, then support would be provided in principle for the development of new infrastructure which would enable appropriate was from more than one holding to be managed and where it can be demonstrated that the facility is scaled primarily to deal with waste management needs arising in the Plan area. The locational principles f such development would need to be in accordance with the site location principles for waste development to be contained in the Plan.	of s, by aste e at a te or nal
and		
Option 2	This option would operate in combination with Option 1 and would also specific support in principle for the development of Anaerobic Digestion facilities for the management of agricultural waste, in line with national waste strategy.	give

<b>Options: Man</b>	aging Low Level (Non Nuclear) Radioactive Waste	id48
Option 1	This option would assume that needs for capacity for management of would be met outside the Plan area.	LLRW
or		

Option 2	This option would assume that capacity needs for management of LLRW are likely to be met outside the Plan area but would provide support in principle for development of specialist facilities in the Plan area where it can be demonstrated that the facility would enable LLRW arising in the area to be managed further up the hierarchy. The locational principles for such development would need to be in accordance with the site locational principles for waste development to be contained in the Plan.
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Options: Manag	Options: Managing Waste Water (Sewage Sludge) id49		
Option 1	This option would support the development of new infrastructure for the management of waste water, where such provision would be in line with requirements identified in asset management plans produced by waste water infrastructure providers active in the Plan area. Preference would given to the expansion of existing infrastructure in appropriate locations rather than the development of new facilities.	be	
and			
Option 2	The approach under this option would be the same as for Option 1 but support would also be provided in principle for the development of new sites in appropriate locations for management of waste water as well as the expansion of existing facilities.	for	

<b>Options: Manag</b>	ing Power Station Ash id	50
Option 1	In line with policy options relating to the supply of secondary aggregate this option would support the use of ash as an alternative to primary aggregate but, for ash which cannot be used in this way, would support its continued disposal in accordance with existing arrangements at the Gale Common, Barlow and Brotherton Ings ash disposal sites, which would be identified in the Plan as strategic sites to meet the disposal needs of power generation.	ite, ort e

<b>Options: Ove</b>	rall locational principles for provision of new waste capacity id51
Options: Ove	<ul> <li>rall locational principles for provision of new waste capacity id51</li> <li>This option would seek to ensure that sufficient waste management capacity is provided through a combination of: <ul> <li>Making best use of the existing facility network, for example by supporting provision of increased capacity at existing waste management facilities unless there would be unacceptable environmental or local amenity impacts.</li> <li>Supporting the provision of capacity at new sites (i.e. sites not currently in use for waste management purposes) where the facility would contribute to meeting needs identified in the Plan and the site meets any more detailed waste site identification criteria contained in the Plan</li> </ul> </li> </ul>
	(see subsequent options).
	or

	This option would seek to ensure that sufficient waste management capacity is provided through a combination of:
	<ul> <li>Making best use of the existing facility network for example by</li> </ul>
	supporting provision of increased capacity at existing waste
	management facilities unless there would be unacceptable
	environmental or local amenity impacts.
Option 2	<ul> <li>Supporting the provision of capacity at new sites where the facility would contribute to meeting needs identified in the Plan; the site is compatible with other waste site identification criteria in the Plan (see subsequent options); and the site is located as close as practicable to the source/s of waste to be dealt with. This could mean giving priority to locations for new smaller scale facilities serving District scale markets for waste which are within or near to main settlements in the area or, for facilities which are intended to serve the needs of waste arising mainly in rural areas, are well located with regard to the geographical area the facility is to serve.</li> <li>For facilities expected to play a wider strategic role (i.e. serving catchments covering a substantial part of the Plan area) these should be located where overall transportation impacts would be minimised taking into account the market area expected to be served by the</li> </ul>
	facility.
	Or This action would be a later that a fifth is a factor of the second se
Option 3	<ul> <li>I his option would seek to ensure that sufficient waste management capacity is provided through a combination of:</li> <li>Making best use of the existing facility network, for example by supporting provision of increased capacity at existing waste management facilities unless there would be unacceptable environmental or local amenity impacts.</li> </ul>
Option 0	<ul> <li>Supporting the provision of capacity at new sites where the facility</li> </ul>
	would contribute to meeting needs identified in the Plan; the site is
	(see subsequent options), and: giving priority to sites located within
	close proximity, preferably within 5km, to the major road network.
	and
Option 4	This option would operate alongside one of options 1 to 3 above and would limit provision of new waste management capacity to those parts of the Plan area outside the North York Moors National Park and AONBs unless the facility to be provided is designed and scaled specifically for meeting waste
	management needs arising in the designated area and can be provided without causing harm to the designated area.

<b>Options: Was</b>	te site identification principles id52		
Option 1	This option would support provision of waste management capacity at sites which meet the range of criteria identified in national waste policy.		
	or		
Option 2	<ul> <li>This option would set out more specific local principles for identification of sites based on a preference for:</li> <li>Siting facilities for the recycling, transfer and recovery of waste on suitable previously developed land, industrial and employment land, or at existing waste management sites, giving preference to sites where it can be demonstrated that co-locational benefits would arise taking into</li> </ul>		

1.4	
	<ul> <li>account existing or proposed uses and economic activities nearby. Where the facility is proposed to deal mainly with waste arising in rural areas then siting within redundant agricultural buildings or their curtilages would also be acceptable in principle under this option.</li> <li>Siting facilities involving the recovery of energy from waste at locations where the energy produced can be utilised efficiently. This would, for facilities with the potential to produce combined heat and power, include giving preference to sites where heat can be utilised.</li> <li>Siting facilities to support the re-use and recycling of CD&amp;E waste at the point of arising (for temporary facilities linked to the life of the associated construction project) and at active mineral workings where the main outputs of the process are to be sold alongside or blended with mineral produced at the site; as well as at the types of sites identified in Option 1 above where these are well related to the sources of arisings and/or markets for the end product.</li> <li>Siting facilities to provide additional waste water treatment capacity at existing waste water treatment works sites as a first priority. Where development of new capacity on greenfield land is necessary then</li> </ul>
	<ul> <li>Providing any additional capacity required for landfill of waste through preferring the infill of quarry voids for mineral site reclamation purposes as a first priority, giving preference to proposals where a need for infill has been identified as part of an agreed quarry reclamation scheme and where pollution control concerns can be mitigated to an acceptable level. Depositing of inert CD&amp;E waste for the improvement of derelict or degraded land would also be supported under this option where it can be demonstrated that the import of the waste is essential to bring the land back into beneficial use and the scale of the importation would not undermine the potential to manage waste further up the hierarchy.</li> </ul>
	In all cases the site would need to be suitable when considered in relation to physical, environmental, amenity and infrastructure constraints including existing and proposed neighbouring land uses, the capacity of transport infrastructure and any cumulative impact from previous waste disposal facilities, in line with national policy.

Options: Waste management facility safeguarding

id53

Option 1	This option would identify a limited number of strategically significant sites for specific safeguarding. This could include strategically important sites and facilities for recovery or disposal of residual waste such as the Allerton Park and Harewood Whin sites, as well as any allocations for strategically important facilities (such as those dealing with large volumes of waste or which would meet specialised waste management needs which cannot readily be met elsewhere). Other forms of development that may prejudice the operation of these facilities would not be supported without overriding justification. Other waste facilities and sites would be safeguarded through a development control policy requiring the presence of an existing waste site or facility to be taken into account in other development control decisions, with a presumption that other forms of development which may prejudice the waste use would not be acceptable in the absence of overriding justification.	
or		
Option 2	This option would rely on national policy to achieve the safeguarding of waste sites and facilities.	

Options: Transport infrastructure id54		id54
Option 1	This option would encourage the use of existing rail, water pipeline transport infrastructure, and also support the deve of new rail, water or pipeline facilities in appropriate locatio consistent with protection of local communities and the environment, for the transport of minerals and waste produ arising within the Plan area, as well as for any large scale export of minerals or waste to or from the area.	and elopment ons uced or import or
and		
Option 2	This option would be the same as Option 1 but would requ carbon implications of any proposal to also be considered.	ire the

<b>Options: Transp</b>	Options: Transport infrastructure safeguarding id55		
Option 1	This option would safeguard all known railheads, rail links and wh which have the potential for minerals transport against encroachin replacement development which would prevent the use of land for mineral transport purposes, unless the need for the alternative development would outweigh the benefits of retaining the facility suitable alternative for the displaced use can be found.	harfs ng or r or a	
	or		
Option 2	This option would only safeguard railheads, rail links to quarries a wharfs which are in active use for minerals transport against encr or replacement development which would prevent the use of the mineral transport purposes, unless the need for the alternative development would outweigh the benefits of retaining the facility suitable alternative for the displaced use can be found.	and coaching land for or a	
or			
Option 3	This option would consider each railhead, quarry rail-link and what assess its potential for minerals transport now and in the future, a those where a high degree of confidence in the potential for such	arfage to and only use can	

be demonstrated would be safeguarded.

Options: Locations for ancillary minerals infrastructure id56		
Option 1	<ul> <li>This option would support locating ancillary minerals infrastructure on active mineral extraction sites (including sites for the production of secondary aggregate) provided the following criteria are met:</li> <li>The ancillary minerals infrastructure produces a 'value added' product based mainly on the mineral extracted at the site</li> <li>The process or development does not create significant additional adverse impact on local communities, businesses or the environment</li> <li>The process or development does not significantly increase the overall amount of road transport to and from the site</li> <li>The development is linked to the overall life of extraction at the site, unless the location is appropriate to its retention in the longer term.</li> </ul>	
	or	
Option 2	This option would be the same as Option 1 except that support would only be provided where the 'host' site would be located outside the North York Moors National Park and AONBs. Ancillary infrastructure related to extraction sites in National Parks or AONBs would need to be located outside of these areas.	
	and/or	
Option 3	<ul> <li>This option would support the development of ancillary minerals infrastructure away from mineral extraction sites provided the following criteria are met:</li> <li>The site is located on industrial or employment land, previously developed land, or would be co-located with other compatible industrial or commercial development</li> <li>The site is located within or near to major settlements or other known market destination where the product will be used</li> <li>The site has good access to the transport network</li> <li>The development would not create significant adverse impact on local communities, businesses or the environment.</li> </ul>	
or		
Option 4	This option would be the same as Option 3 except that support would only be provided where the site would be located outside the North York Moors National Park and AONBs, with the exception of Whitby Business Park which already contains ancillary infrastructure.	

<b>Options: Minera</b>	Is ancillary infrastructure safeguarding	id57
Option 1	This option would safeguard all known sites for concrete batching, roadstone manufacture, other concrete products manufacture, and handling, processing and distribution of recycled and secondary aggregate against encroaching or replacement development which prevent the use of the land for ancillary aggregates purposes.	the would
or		
Option 2	This option would safeguard only stand-alone sites for concrete bat	ching,

	roadstone manufacture, other concrete products manufacture, and the handling, processing and distribution of recycled and secondary aggregate against encroaching or replacement development which would prevent the use of the land for ancillary aggregates purposes.	
Option 3	This option would consider each site for concrete batching, roadstone manufacture, other concrete products manufacture, and the handling, processing and distribution of recycled and secondary aggregate on an individual basis to assess its risk of being affected by new development, and those with greater potential to be impacted by encroaching or replacement development would be safeguarded.	
or		
Option 4	This option would safeguard all known sites for concrete batching, roadstone manufacture, other concrete products manufacture, and the handling, processing and distribution of recycled and secondary aggregate against encroaching or replacement development which would prevent the use of the land for ancillary aggregates purposes, unless a suitable alternative location for the displaced use is found or it is considered that the need for the alternative development outweighs the need to retain the infrastructure.	

Options: Presumption in favour of sustainable minerals and waste development id58		
Option 1	This option would use the wording of the model policy with a minor adjustment to replace the word 'council' with 'authority' to reflect it being a Joint Plan involving both Councils and a National Park Authority and to replace the reference to 'neighbourhood plans' with a reference to 'and other relevant documents which comprise the Development Plan'.	
	or	
Option 2	Develop a more specific phrasing based on the national presumption but which promotes not only working proactively with applicants, but also with other stakeholders including consultees and communities jointly, to find solutions to planning issues in line with the draft vision of the Joint Plan.	
	or	
Option 3	Use the model wording (under either Option 1 or 2 above) as a starting point but adapt it to specifically state that within the North York Moors National Park and the AONBs the starting point for any decisions will be ensuring that development is consistent with delivering sustainable development within the context of their statutory purposes. For major development in these areas, the starting point for consideration of applications would be the Major Development Test.	

Options: Local	amenity and cumulative impacts	id59
Option 1	Proposals will be supported where it can be demonstrated that unacceptable effects (including cumulative effects) on local amenity arise, including as a result of: noise, dust, vibration, odour and other emissions to air, vermin and I visual impact, the public rights of way network and access to open s Proposals will be expected as a first priority to prevent adverse impa through avoidance, with the use of robust mitigation measures where	will not itter, pace. acts e

	avoidance is not practicable.	
	and	
Option 2	In addition to the matters identified in Option 1, this option would specifically encourage applicants for new development to conduct early and meaningful engagement with local communities, in line with statements of community involvement, prior to submission of an application, and to reflect the outcome of those discussions in the design of proposals as far as practicable.	

Options: Transport of minerals and waste and associated traffic impacts id60		
Option 1	This option would give priority to proposals for minerals and waste development which would enable transport of minerals and waste via a sustainable (non-road) transport mode.	
	or	
Option 2	This option would not seek to give preferential consideration to proposals which would include non-road modes of transport but would require all proposals involving significant transport of minerals or waste by road to demonstrate that the development would, taking into account minerals resource constraints where relevant, be well located in relation to sources of arisings or markets and in relation to suitable road networks.	
	and	
Option 3	<ul> <li>This option could be used with either Option 1 or 2 above and would set out criteria to address the various potential impacts arising from unavoidable road transport of minerals and waste, including:</li> <li>Access arrangements appropriate to the volume &amp; nature of any road traffic generated</li> <li>Suitable arrangements for on-site vehicle manoeuvring, parking and loading/unloading</li> <li>Level of traffic within the capacity of the road network</li> <li>Mitigation of adverse traffic impacts where necessary by traffic controls, highway improvements and traffic routeing agreements</li> <li>The use of Green Travel Plans.</li> </ul> In all cases involving significant new traffic generation, a transport assessment would be required to demonstrate that opportunities for sustainable transport modes have been taken up and that safe and suitable access to the site can be achieved for all users of the site.	

Options: Nor	th York Moors National Park and the AONBs id6	1
Option 1	Include the Major Development Test, as worded in the NPPF (see above), and rely on generic Development Management policies for considering nor major development in the National Park and AONBs.	n-
or		
Option 2	Include the Major Development Test, as in Option 1, but also include a criteria based policy setting out the factors that should be considered for a development in the National Park and AONBs, including non-major development. For the National Park this could include specific consideration of impact upon the Park's special qualities, effects on providing opportunities for	ny

	understanding and enjoyment of the National Park, effects on tranquillity and effects on the image and brand of the Park and, more generally, the ability to achieve the aims of the National Park Management Plan.	
	For the AONBs this could include effects on the special qualities and on the ability to achieve the aims of the AONB Management Plans.	
	In relation to major development, this option would include detailed explanations around each of the strands of the Major Development Test to explain what considerations would be relevant in the case of minerals and waste developments.	
and		
Option 3	In association with either Option 1 or Option 2, for development outside of National Parks and AONBs this option would require consideration to be given to the effects on the setting of and views out of these protected areas. These considerations would also apply to the setting of and views out of the adjacent Yorkshire Dales National Park.	

Options: Min	erals and waste development in the Green Belt id62	
Option 1	Include a specific policy supporting waste development and minerals extraction and minerals ancillary development within the Green Belt unless is conflicts with the purposes of the Green Belt designation. This option would rely on national planning policy on minerals and waste development in the Green Belt. The NPPF defines minerals extraction as 'not inappropriate' in the Green Belt provided the openness of the Green Belt is maintained (para 90). Draft updated national waste planning policy proposes removing the current approach in PPS10 which requires planning authorities to give significant weight to the locational needs and wider environmental and economic benefits when considering waste proposals in the Green Belt, thereby not giving waste proposals any more weight than other proposals.	
	or	
Option 2	Allow a more flexible local approach to waste development proposals in the Green Belt subject to demonstration that the development would make a significant contribution to the provision of an appropriate overall network of facilities, enabling waste to be moved up the hierarchy and managed in proximity to arisings, and where particularly high standards of siting, design and mitigation of any impacts can be achieved. Under this option the approach for minerals would be the same as for Option 1.	
or		
Option 3	This option would represent an alternative to Option 2 by only providing a more flexible approach to waste development in the Green Belt where the development would be located at existing Green Belt waste management facilities within the Plan area, as well as being subject to the other criteria outlined in Option 2.	

Options: Lan	dscape id63
Option 1	This option would support proposals which demonstrate that unacceptable impact on the landscape would not arise, having regard to the nature and purpose of any statutory or non-statutory designations that apply, including the setting of these designations, and taking into account any mitigation

	measures. In ensuring there will be no unacceptable landscape impact
	consideration should be given to the wider landscape character and context
	of the site (including visual impact) in the design of the scheme and any
	mitigation measures proposed, including the need where relevant for
	planting and landscape proposals to take into account any impacts on the
	setting of local settlements and to be developed and implemented alongside
	measures to protect and where practicable enhance biodiversity,
	geodiversity, the historic environment and local amenity.
	or
	This option would not set out a specific local policy for protection and
	enhancement of the landscape and would rely on national policy in the
	NPPF, together with any other relevant policies in the development plan,
Option 2	including the 'Other key criteria' policy set out later in this chapter.
	Landscape policy in the NPPF states that the planning system should
	protect and enhance valued landscapes (para 109) and should give great
	weight to conserving landscape and scenic beauty in National Parks and
	AONBs (para 115).

Options: Biod	liversity and geodiversity	id64
Option 1	This option would not set out specific local policy for protection and enhancement of biodiversity and geodiversity and would rely on nation policy in the NPPF, together with any other relevant policies in the development plan. In summary, biodiversity policies in the NPPF state the planning system should minimise impacts on biodiversity and prov- net gains where possible, contributing to ecological networks (para 10 preserve, restore or re-create priority habitats, ecological networks an protect or recover priority species, prevent harm to geological conserv- assets (para 117) and only approve development where significant ha can be avoided, mitigated or as a last resort compensated for, avoid the of irreplaceable habitats, protect statutorily protected sites and encour- opportunities to incorporate biodiversity in and around developments (para118).	nal e that vide 99), d vation vation trm he loss rage
	or	
Option 2	This option would support proposals which demonstrate that unaccept impacts on biodiversity and geodiversity would not arise, having regart any statutory or non-statutory designations and/or legal protections the apply as well as any agreed local priority habitats, habitat networks ar species, looking to avoid and mitigate effects and, where this is not po- compensate for residual effects. Proposals should look to contribute towards the delivery of agreed biodiversity and geodiversity objectives including those set out in agreed Biodiversity or Geodiversity Action P or in line with agreed priorities of any relevant Local Nature Partnersh the aim of achieving net gains for biodiversity or geodiversity where fe	table rd to at ossible, s, lans, ip, with asible.
and		
Option 3	Where residual impacts occur which cannot be avoided or mitigated a provision of compensatory habitat within the site would not be feasible the need for the development overrides the need to protect the site, has or species, this option would support the principle of biodiversity offser relation to fully compensating for any losses and would require any gate be related to the planning authority area in which the loss occurred.	nd the and abitat tting in ains to
or		

Option 4	Where residual impacts occur which cannot be avoided or mitigation and the provision of compensatory habitat within the site would not be feasible and the need for the development overrides need to protect the site, habitat or species, this option would support the principle of biodiversity offsetting in relation to fully compensating for any losses and would not specify where the gains should take place.
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Options: Historic environment id65		5
Option 1	This option would not set out a specific local policy for conservation and enhancement of the historic environment and would rely on national polic in the NPPF, together with any other relevant policies in the developmen plan. In summary, NPPF policy on the historic environment relates to protecting and enhancing the significance of heritage assets – permissio should not be granted for proposals which would lead to substantial harn or loss of the significance of a designated asset unless public benefits outweigh this loss, and where harm is less than significant or relates to a non-designated asset this should be weighed against the benefits (paras 126 – 141).	cy t n
	or	
Option 2	This option would indicate that heritage assets will be conserved in line with the requirements of the NPPF (see Option 1) but would encourage proposals, where practicable, to deliver enhancements to the setting and/or secure improved access to and understanding of the asset for the longer term, linking into existing projects or initiatives where possible.	<b>;</b>
and		
Option 3	Under either option above, this option would seek to protect the setting of the City of York by supporting proposals which do not compromise the setting.	of

Options: Water environment id66		
Option 1	This option would not set out a specific local policy for the protection of the water environment and would rely on national policy in the NPPF, together with any other relevant policies in the development plan. In summary, water policies in the NPPF require that strategies should take account of water supply and demand (para. 94), permitted operations should not have unacceptable adverse impacts on water (para. 109) and new and existing development should not contribute to or be put at unacceptable risk from, or being adversely affected by unacceptable levels of water pollution.	
	or	
Option 2	<ul> <li>Proposals will be supported where it can be demonstrated, when considered against the following criteria, that unacceptable adverse (including cumulative) effects can be avoided or have been appropriately mitigated and, where possible, that the development would provide enhancements to the locality. Consideration would be given to:</li> <li>Impacts on water quality (surface or underground) and water supply and flows, including effects on Nitrate Vulnerable Zones and Groundwater Source Protection Zones</li> <li>Impact on and from ground and surface water flooding, following the principles of the sequential test in relation to flood risk</li> <li>Potential for the development to contribute to the provision of flood</li> </ul>	

alleviation or other climate change mitigation benefits related to the
water environment.

Options: Stra	tegic approach to reclamation and afteruse id67
Option 1	<ul> <li>This option would support reclamation and afteruse proposals across the whole of the Plan area which meet a number of general criteria and are carried out to a high standard and which, where relevant and particularly for larger scale workings, have demonstrably:</li> <li>Been brought forward in discussion with local communities and other relevant stakeholders and where practicable reflect the outcome of those discussions</li> <li>Taken into account the wider context of the development proposed, including the implications for the development of other significant permitted or proposed development in the area and the range of environmental and other assets and infrastructure that may be affected, including any important interactions between those assets and infrastructure</li> <li>Reflected the potential for the proposed reclamation and/or afteruse to give rise to positive and adverse impacts, including cumulative impacts, and have sought where practicable to maximise potential overall benefits and minimise overall adverse impacts</li> <li>Taken into account potential impacts on and from climate change factors</li> <li>Made best use of onsite materials for reclamation purposes and only rely on the need for importation of waste where essential to deliver an appropriate standard of reclamation</li> <li>Provided for the longer term implementation and management of the agreed form of reclamation and any relevant afteruse (this would not apply to reclamation for agriculture or forestry where a statutory 5 year maximum aftercare period applies).</li> </ul>
Option 2	<ul> <li>and</li> <li>In addition to the general criteria identified in Option 1, this option would seek to deliver a more targeted approach to minerals site reclamation and afteruse by supporting proposals which, where relevant, focus reclamation and/or afteruse proposals towards particular objectives including: <ul> <li>In areas of best and most versatile agricultural land, maximising the protection and enhancement of soils and maximising the extent of best and most versatile land to be provided following reclamation and aftercare of the site</li> <li>Where opportunities allow, particularly in proximity to the rivers Swale and Ure, providing additional flood storage capacity to help minimise flooding in downstream locations</li> <li>Within the National Park and AONBs, focus on enhancing the special qualities and/or providing opportunities for the enjoyment and understanding of those special qualities</li> <li>Within airfield safeguarding zones, particularly where reclamation for biodiversity is involved, ensuring that reclamation and afteruse proposals respect safeguarding constraints whilst maximising the potential reclamation and afteruse benefits delivered by the site</li> </ul> </li> </ul>

<ul> <li>of assets and their settings is sustained and where practicable enhanced and, also where practicable, that opportunities to facilitate enjoyment of the asset are provided</li> <li>Where the development is located within or adjacent to identified green infrastructure corridors, reflecting any locally agreed priorities for delivery of additional or enhanced green infrastructure and ecosystems services</li> </ul>
<ul> <li>In proximity to major settlements within and adjacent to the Plan area, and subject to local amenity considerations, providing enhanced opportunities for informal and formal access and recreation</li> <li>Delivering enhancements for biodiversity and improvements to habitat networks, based on contributing towards established objectives</li> <li>In delivering any of the above, proposals should be compatible with the surrounding landscape, providing enhancements where possible.</li> </ul>

Options: Sus	tainable design, construction and operation of development id68
Option 1	<ul> <li>This option would support proposals for minerals and waste development which demonstrate that, where relevant, appropriate measures have been incorporated in the design, construction and operation of the development and where relevant reclamation of the site, in relation to:</li> <li>Reduction or minimisation of greenhouse gas emissions, including mitigation measures where necessary, through incorporation of energy efficient siting, design and operational practices including those relating to bulk transport of materials</li> <li>Minimisation of waste generated by new minerals and waste development</li> <li>Generation and utilisation of renewable or low carbon energy in a manner appropriate to the character and location of the development</li> <li>Minimisation of waste consumption through incorporation of water efficiency measures, including the re-use of waste water originating from the development</li> <li>Incorporation of measures to minimise flood risk associated with the development including use of Sustainable Drainage Systems and permeable surfacing</li> <li>A requirement for the relevant built elements of significant new minerals and waste development to combined heat and power, the beneficial use of heat either on site or to serve other existing or proposed development in the vicinity of the site</li> <li>Implementation of planting comprising native species able to successfully adapt to climate change and where practicable incorporation of areas of new wildlife habitat that would help to improve habitat connectivity.</li> </ul>

and		
Option 2	<ul> <li>For minerals and waste development this option sets out criteria which would, where relevant, apply in addition to the criteria set out in Option 1, and which would also apply to proposals for new residential, commercial and industrial development, including development for which the District and Borough Councils in the NYCC part of the area are the planning authority. The additional criteria would seek to help deliver sustainable waste management and the sustainable use of minerals through:</li> <li>Implementation of measures to minimise waste generated during construction of the development, and implementation of measures to encourage or facilitate the re-use and recovery of any waste generated during construction of the development</li> <li>Incorporation of appropriate space to enable waste arising during use of the development to be sorted and stored prior to being collected for recycling or re-use</li> <li>Use of sustainable construction materials where practicable, including use of alternatives to primary land-won aggregate</li> <li>Re-use of existing buildings in preference to new build.</li> </ul>	

Options: Other key criteria for minerals and waste development id69		
Option 1	<ul> <li>Proposals will be supported where it can be demonstrated, when considered against the following criteria, that unacceptable adverse (including cumulative) effects can be avoided or have been appropriately mitigated and, where possible, that the development would provide enhancements to the locality. Consideration would be given to: <ul> <li>Impacts upon tranquillity and dark night skies</li> <li>Impacts relating to subsidence or land stability, and the ability for these to be addressed satisfactorily</li> <li>Impacts on air quality</li> <li>The visual impact arising from the design, scale and location of the development</li> <li>Impact on best and most versatile agricultural land and the protection of soil resources through the life of the development</li> <li>Effects on opportunities for leisure and recreation and on Public Rights of Way and open access land, including in the National Park impacts on opportunities for enjoyment and understanding of the special qualities of the National Park</li> <li>Public safety considerations</li> <li>Positive and negative impacts on the local economy.</li> </ul> </li> </ul>	
or		
Option 2	Under this option the Plan would not contain any reference to the criteria set out under Option 1 and the NPPF would be relied on for guidance on these issues.	

Options: Dev	elopments proposed within Mineral Safeguarding Areas	id70
Option 1	<ul> <li>This option would indicate that within Minerals Safeguarding Areas no minerals development will only be permitted in certain circumstances. could include where:</li> <li>It would not sterilise or prejudice future extraction, or</li> </ul>	n- This

	<ul> <li>The mineral will be extracted prior to development (without</li> </ul>
	unacceptable adverse impact on the environment or the amenity of
	local communities), or
	<ul> <li>The need for the non-mineral development can be demonstrated to</li> </ul>
	outweigh the need for the mineral, or
	<ul> <li>It can be demonstrated that the mineral in the location concerned is no</li> </ul>
	longer of any potential value as it does not represent an economically
	viable and therefore exploitable resource, or
	<ul> <li>The non-mineral development is of a temporary nature that does not</li> </ul>
	inhibit extraction within the timescale that the mineral is likely to be
	needed, or
	<ul> <li>It constitutes 'exempt development' (as defined below).</li> </ul>
	It could also include a requirement that such planning applications should be
	accompanied by an assessment of the effect of the proposed development
	on the safeguarded mineral resource(s) beneath or adjacent to it.
	and This option would adopt a list of application types that would be avained from
	This option would adopt a list of application types that would be exempt from
	consideration under the minerals Sareguarding Area policy. Possible
	<ul> <li>Infilling in towns and villages<sup>36</sup></li> </ul>
	<ul> <li>Householder applications within the curtilage of a property</li> </ul>
	<ul> <li>Advertisement applications</li> </ul>
	Reserved matters applications
	Applications for new or improved accesses
	<ul> <li>'Minor' extensions/alterations to existing uses/buildings which do not</li> </ul>
	fundamentally change the scale and character of the use/building
	'Temporary' development (for up to five years)
	Agricultural buildings adjacent to existing farmsteads
	<ul> <li>'Minor' works such as fences, bus shelters, gates, walls, accesses.</li> </ul>
	<ul> <li>Amendments to current permissions (with no additional land take</li> </ul>
Option 2	involved)
	Changes of use
	<ul> <li>Applications for development on land which is already allocated in</li> </ul>
	adopted local plans where the plan took account of the prevention of
	unnecessary mineral sterilisation and determined that prior extraction
	snouid not be considered when development applications in a mineral
	Saleguarding Area came forward
	Listed Building Consent and Applications for planning permission for relevant demolition in a Conservation Area.
	<ul> <li>Applications for work to trees or removal of bedgerows (unless</li> </ul>
	specifically requested)
	<ul> <li>Prior notifications for telecommunications forestry agriculture &amp;</li> </ul>
	demolition
	Certificates of Lawfulness of Existing Use of Development and
	Certificates of Lawfulness of Proposed Use or Development.
	and
	In areas identified as underground coal or potash Minerals Safeguarding
Option 3	Areas, applicants proposing the following types of development would be
	required to consider the potential impacts on the proposed development

<sup>&</sup>lt;sup>36</sup> Infilling development is defined here as development which fills a restricted gap in the continuity of existing buildings where the site has existing buildings adjoining on at least two sides.

	arising from extraction of the safeguarded resources, as well as the potential
	for the surface development to sterilise the underlying resource:
	Large institutional and public buildings
	<ul> <li>Major industrial buildings including those with sensitive processes and</li> </ul>
	precision equipment vulnerable to ground movement
	Major retail complexes
	<ul> <li>Non-residential high rise buildings (3 storeys plus)</li> </ul>
	<ul> <li>Strategic gas, oil, naphtha and petrol pipelines</li> </ul>
	<ul> <li>Vulnerable parts of main highways and motorway networks (e.g.</li> </ul>
	viaducts, large bridges, service stations and interchanges)
	Security sensitive structures
	Strategic water pumping stations, waterworks, reservoirs, sewage
	works and pumping stations
	Ecclesiastical property
	Power stations and
	Wind turbines.
or	
	As an alternative to Option 3 in respect of underground coal safeguarding
Option 4	areas this option would not set out a specific approach to consultation for
	non-mineral development which is sensitive to mining subsidence, relying
	instead on the advice of the Coal Authority as a statutory consultee.

Options: Con	sideration of applications in Mineral Consultation Areas	id71
Option 1	Where safeguarding of a particular minerals resource is identified in the Plan, this option would define the whole of that area (to the extent that in within NYCC) as a Minerals Consultation Area, where District/Borough Councils would be required to consult the County Council in respect of a non-exempt proposals.	t falls any

Options: Coal mining legacy id72	
Option 1	This option would seek to ensure that coal mining legacy issues are taken into account during assessment of development proposals which are proposed in development high risk areas identified by the Coal Authority, including those proposals falling within the responsibility of the District and Borough Councils within the Plan area. Applicants in such areas and for the relevant forms of development identified by the Coal Authority <sup>37</sup> would be required to provide information on land stability issues and where necessary incorporate suitable mitigation measures to address them.
or	
Option 2	This option would not set out a specific policy relating to coal mining legacy issues but would refer to, and rely on, national policy in the NPPF and the advice published by the Coal Authority. The NPPF does not set out any specific policy relating to development in areas of former coal mining but does require that development is not put at unacceptable risk from land instability (para 109).
Or	
Option 3	The consideration of the legacy of coal mining would be left to be included

<sup>&</sup>lt;sup>37</sup> http://coal.decc.gov.uk/en/coal/cms/services/planning/strategy/

within the local plans of the relevant District Councils given that the
relevant developments being proposed are most likely to be determined by
those councils.