

Minerals and Waste Joint Plan



Sustainability Appraisal Scoping Report to accompany the Minerals and Waste Joint Plan October 2016

Non-Technical Summary

The Minerals and Waste Joint Plan

North Yorkshire County Council (NYCC), the City of York Council (CYC) and the North York Moors National Park Authority (NYMNP) are working together to prepare a Minerals and Waste Joint Plan. Each authority has a responsibility to produce a long-term plan which contains land use policies including minerals and waste development, up to the year 2030. Together, the three authorities will plan minerals and waste development for the area covered by these three planning authorities up to 2030. The Yorkshire Dales National Park Authority are in the process of preparing their own Local Plan which will include minerals and waste policies.

Sustainable Development

There are many definitions of sustainable development. However, in this Sustainability Appraisal Scoping Report we have used a definition put forward by the World Commission on Environment and Development in 1987. This describes sustainable development as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. So, sustainable development is about ensuring that the environment, society and the economy continue to function well now, and into the future.

What is a Sustainability Appraisal?

Sustainability Appraisal (SA) is a tool to help to assess and improve the social, economic and environmental performance of plans. It tests policies and plans against a number of objectives and goes on to suggest changes to the plan and its policies to make them more sustainable.

Scoping Report

This scoping report sets out the context for the Sustainability Appraisal of the Minerals and Waste Joint Plan. This is essential in order to create a series of sustainability questions or objectives against which all policy options will be tested.

The scoping report examines all relevant international, national, regional and local plans and policies which need to be taken into consideration when developing minerals and waste land use policies for the Plan Area. The scoping report also reviews local information about the social, economic and environmental circumstances in the Plan Area. From this review a series of ‘sustainability appraisal objectives’ has been identified. These sustainability appraisal objectives will then be used in the later stages of the sustainability appraisal process to measure the proposed policy options contribution to, or detraction from, sustainable development.

The Sustainability Appraisal objectives to be used when assessing the Minerals and Waste Joint Plan are listed, below:

1. Protect and enhance biodiversity and geodiversity and improve habitat connectivity.

2. Enhance or maintain water quality and improve efficiency of water use.
3. Reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation.
4. Protect and improve air quality.
5. Use soil and land efficiently and safeguard or enhance their quality.
6. Reduce the causes of climate change.
7. Respond and adapt to the effects of climate change.
8. Minimise the use of resources and encourage their re-use and safeguarding.
9. Minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable.
10. Conserve and enhance the historic environment, heritage assets and their settings.
11. Protect and enhance the quality and character of landscapes and townscapes.
12. Achieve sustainable economic growth and create and support jobs.
13. Maintain and enhance the viability and vitality of local communities.
14. Provide opportunities to enable recreation, leisure and learning.
15. Protect and improve the wellbeing, health and safety of local communities.
16. Minimise flood risk and reduce the impact of flooding.
17. Address the needs of a changing population in a sustainable and inclusive manner.

Consultation

A wide ranging consultation on the Scoping Report took place in May and June 2013, alongside the First Consultation on the Joint Plan, and respondents included the three bodies that legislation on Sustainability Appraisal states must be consulted, namely English Heritage, the Environment Agency and Natural England. As part of this consultation two workshops were held with key stakeholders to discuss in more detail the proposed Sustainability Appraisal objectives. An account of how the consultation responses and feedback at the workshops has informed the final Scoping Report is contained in the SA Scoping Report Consultation Outcomes Report which can be viewed at www.northyorks.gov.uk/mwsustainability.

Contact details

Website: www.northyorks.gov.uk/mwsustainability

Address: Minerals and Waste Joint Plan, Planning Services, North Yorkshire County Council, County Hall, Northallerton, North Yorkshire, DL7 8BR.

Email: mwjointplan@northyorks.gov.uk

This Sustainability Appraisal Scoping Report has been published in three volumes. This report is Volume I. The Sustainability Appraisal Baseline is available in Volume II and the appendices (excluding the Sustainability Appraisal Baseline) are available in Volume III.

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1 Introduction

The extraction and processing of minerals and the management of waste are issues with significant environmental, social and economic impacts. Planning policies can play a fundamental role in considering key questions about future minerals and waste development, such as: *where* should future waste development be directed, *when* should future development take place, *what* sort of development should take place and *how* should it be implemented?

North Yorkshire County Council, the City of York Council and the North York Moors National Park Authority have agreed to work together to prepare a Minerals and Waste Joint Plan (the 'Joint Plan'). This plan, to 2030, takes forward recent work on minerals and waste planning issues and evidence undertaken by the three authorities. The Joint Plan 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 Joint Plan will be prepared under the provisions of the Town and Country Planning (Local Planning) Regulations 2012¹. These Regulations set out the procedures for producing Local Plans, which include a requirement to undertake Sustainability Appraisal (SA). The preparation of the Joint Plan must also be in accordance with the requirements of European Directive 2001/42/EC (known as the Strategic Environmental Assessment, or SEA Directive). The SA methodology proposed in this Scoping Report will, in accordance with Government guidance², meet the requirements of SA and SEA through one appraisal.

Sustainability Appraisal is a systematic process of appraisal which can help shape the Joint Plan. It can help deliver sustainable development through the plan by scrutinising options for their sustainability implications. Thus the Government stresses the importance of SA in the National Planning Policy Framework by stating:

'A sustainability appraisal which meets the requirements of the European Directive on strategic environmental assessment should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors'.³

This Scoping Report fulfils the requirements of the first stage of the SA process. It sets out the social, economic and environmental context and SA objectives by which the Joint Plan will be appraised. As such it represents the methodology for further work on the SA.

The structure of this Scoping Report broadly follows the steps set out in Stage A of the Government's guidance⁴. Section 2 of this report gives a brief overview of where the Minerals and Waste Joint Plan fits into the three authorities' Development Plans. Section 3 of this report describes the context for SA and SEA

¹ 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.

² Department for Communities and Local Government, 2012. National Planning Policy Framework. DCLG, London [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf].

³ Department for Communities and Local Government, 2012. National Planning Policy Framework. DCLG, London [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf].

⁴ Department for Communities and Local Government, 2009. CLG Plan Making Manual: Sustainability Appraisal. [URL: <http://www.pas.gov.uk/pas/core/page.do?pageId=152450>].

while Section 4 provides information on the Plans, Policies, Programmes, Strategies and Initiatives (PPPSIs) that have been reviewed as part of the evidence gathering exercise.

Section 5 details the social, economic and environmental situation in York, North Yorkshire and the North York Moors National Park (the baseline). The draft SA Objectives and SA Framework are presented in Section 6.

Information on the next steps for the assessment is set out in Section 7.

The Scoping Report is presented in 4 volumes . Volume I is the main report (this document), Volume II is the baseline information, Volume III is the remainder of the appendices and Volume IIII is the Consultation Outcomes Report.

The Scoping Report was subject to public consultation in May / June 2013. All responses received have been considered in producing this Final Scoping Report and a summary of responses and how they have been addressed is presented in the Consultation Outcomes Report (Volume 4 of the Scoping Report documents).

2 Planning Context of the Minerals and Waste Joint Plan

As a minerals and waste planning authority, North Yorkshire County Council has a statutory duty to prepare planning policies for minerals and waste development for those parts of the county that lie outside the Yorkshire Dales and North York Moors National Parks. Within this area the District and Borough Councils produce planning policies for all other types of development. The National Park Authority and the City of York Council each have a responsibility for preparation of planning policies covering all types of development including minerals and waste development. However, agreement has recently been reached between North Yorkshire County Council, the City of York Council and the North York Moors National Park Authority to produce a joint minerals and waste strategic plan. The current status of the City of York and the North York Moors National Park's Local Plans (which will sit alongside the Minerals and Waste Joint Plan), are detailed below. Under previous regulations and guidance authorities would produce an overarching Core Strategy with a number of other documents relating to site allocations and development management. More recently, the focus has moved to the preparation of Local Plans which contain both strategic and development management policies and site allocations.

York has an emerging Local Plan that will form the development plan for York over the 15 year period from 2015-2030. It includes a vision for the future development of the city and a spatial strategy and covers both strategic policies and allocations, alongside detailed development management policies. Preferred Options consultation took place in summer 2013 and following consideration of the comments received the Plan will be revised prior to 'publication' which will be followed by submission to the Secretary of State for examination before being adopted.

The North York Moors National Park Authority adopted a Core Strategy and Development Policies in 2008. This is a comprehensive suite of both strategic and development management planning policies covering all areas of planning including minerals and waste. Apart from the minerals and waste policies contained in the Core Strategy and Development Policies, all planning policies will remain in place following the adoption of the Minerals and Waste Joint Plan. The Authority is currently working on two other plans relating to Helmsley and to Whitby Business Park.

3 Sustainable Development and Sustainability Appraisal

3.1 Sustainable Development

Sustainable development is focused on living within environmental limits, whilst providing a better quality of life through social wellbeing and economic prosperity for the current population and for generations in the future. Whilst many definitions now exist for sustainable development, the most widely used one was defined by the World Commission on Environment and Development in 1987⁵. This defines sustainability as ***'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'***

The concept of sustainable development can be easily understood by the 'Russian doll' model of sustainability shown below, in Figure 1. This illustrates that while the economy functions to meet the needs of society, they are both dependent on, and a subset of, the wider natural environment. In reality, the natural environment is the foundation for all of our social, cultural and economic way of life as resources from the environment are used to power our economy and social wellbeing is often achieved through economic prosperity.

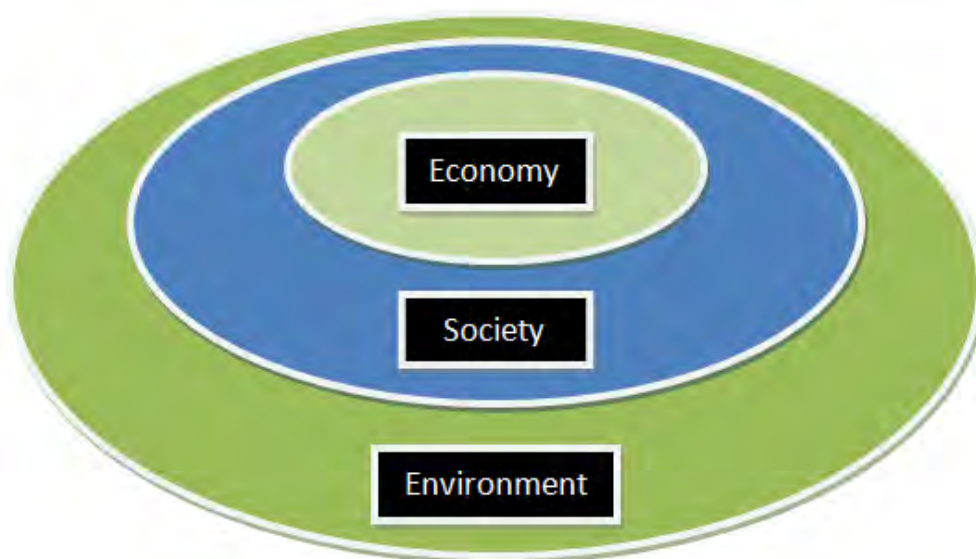


Figure 1 - The 'Russian doll' model of sustainable development⁶.

In 2005 the UK Government published a national sustainable development strategy to 2020 called 'Securing the Future'. Despite a change in government since its publication, the strategic guidance in the Strategy remains in place⁷. The strategy has five guiding principles for achieving sustainable development. These are set out in Figure 2, below.

⁵ World Commission on Environment and Development. 1987. Our Common Future. United Nations [URL: <http://www.un-documents.net/wced-ocf.htm>] (accessed on 08/04/13).

⁶ Adapted from World Wildlife Fund, 2002. Ecological Footprints: A Guide for Local Authorities [URL: gdr.org/uem/footprints/wwf-ecologicalfootprints.pdf]

⁷ This was confirmed in an e-mail to the authors of this report by Defra's Sustainable Development Unit, dated 12/03/2013.

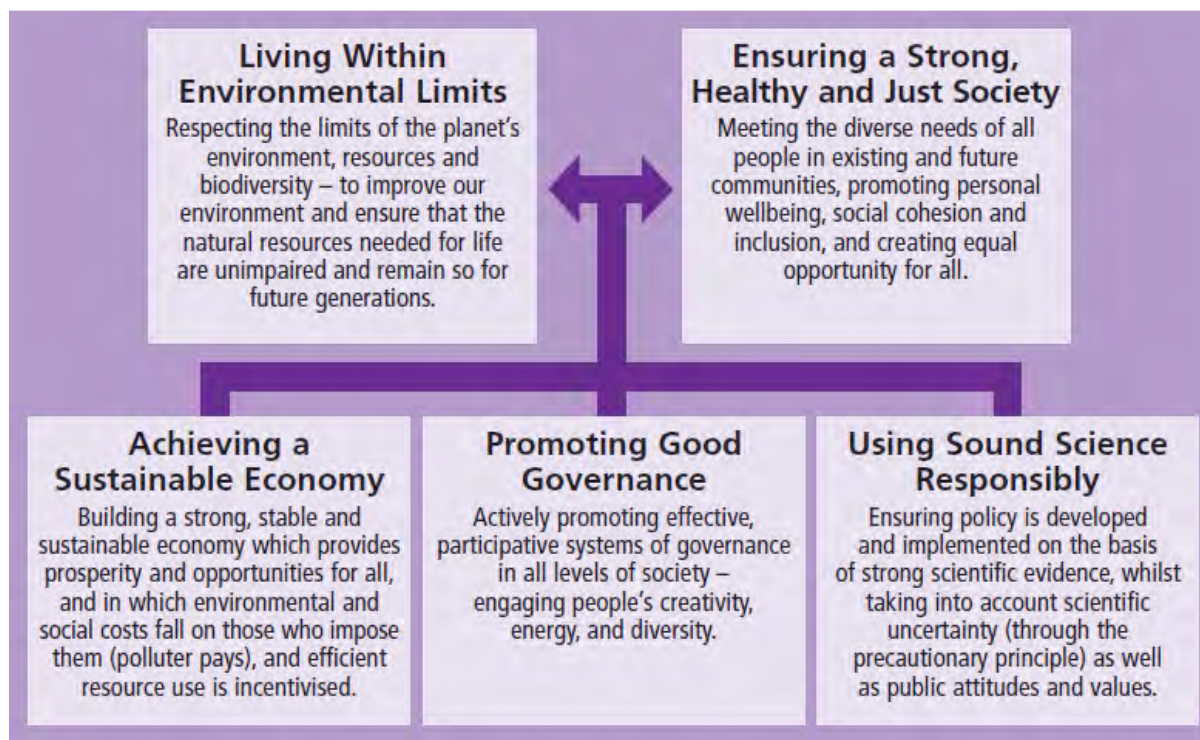


Figure 2 – The guiding principles of the UK Sustainable Development Strategy (Source: HM Government).

The establishment of these principles has created a new goal for sustainable development in the UK, which is: *'to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life for future generations'*⁸.

In relation to policies, the UK Sustainable Development Strategy states that for a policy to be sustainable it must respect all five guiding principles. However, it is acknowledged that some policies, while underpinned by all five, will place more emphasis on certain principles than others.

The UK Coalition Government's guidance on sustainable development (Mainstreaming Sustainable Development⁹) refreshes the Government's sustainable development vision to reflect the aims of the current administration: stimulating economic growth, tackling the deficit, maximising wellbeing and protecting the environment. The headline paragraph of the vision re-affirms the government's commitment to sustainable development:

'The Coalition Government is committed to sustainable development. This means making the necessary decisions to realise our vision of strong economic growth and tackling the deficit, maximising wellbeing and protecting our environment, without negatively impacting on the ability of future generations to do the same. These are difficult times and tough decisions need to be made. This Government believes in going beyond

⁸ Defra, 2011. Mainstreaming Sustainable Development: The Government's Vision and What this Means in Practice [URL: <http://sd.defra.gov.uk/documents/mainstreaming-sustainable-development.pdf>] (accessed on 08/04/13).

⁹ Defra, 2011. Mainstreaming Sustainable Development: The Government's Vision and What this Means in Practice [URL: <http://sd.defra.gov.uk/documents/mainstreaming-sustainable-development.pdf>] (accessed on 08/04/13).

the short term with eyes fixed firmly on long term horizon shift in relation to our economy, our society and the environment’.

In March 2012 the Government introduced a National Planning Policy Framework (NPPF) for England. This states that *‘the purpose of the planning system is to contribute to the achievement of sustainable development’*. It states that there are three dimensions to sustainable development: economic, social and environmental. The NPPF describes these dimensions as follows:

- An economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;
- A social role – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community’s needs and support its health, social and cultural well-being; and
- An environmental role – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

The concept of sustainable development in National Parks is defined through the National Parks’ Circular¹⁰ which states *‘Sustainable development is about ensuring a better quality of life for everyone, both now and for generations to come. Within the Parks, conserving and enhancing the landscape, biodiversity, cultural heritage, dark skies and natural resources, and promoting public understanding and enjoyment of these should lie at the very heart of developing a strong economy and thriving local communities.’*

3.2 Sustainability Appraisal

Sustainable development is embedded within the planning system. As noted above, the Government’s National Planning Policy Framework states that the purpose of the planning system is to contribute to the achievement of sustainable development. While the National Planning Policy Framework replaces most of the previous planning policy statements, Planning Policy Statement 10 (PPS10) ‘Planning for Sustainable Waste Management’ remains temporarily in place, to be used in conjunction with the NPPF until the publication of updated national waste planning policy¹¹. Both the NPPF and PPS10 require that sustainability will be at the heart of the Minerals and Waste Joint Plan.

In order to ensure that new plans and strategies contribute towards sustainable development, section 180(5) of the Planning Act 2008 requires all development plan documents (DPDs) to be subject to a sustainability

¹⁰ English National Parks and the Broads – UK Government Vision and Circular (Defra, 2010).

¹¹ Paragraph 5 of the NPPF states ‘This Framework does not contain specific waste policies, since national waste planning policy will be published as part of the National Waste Management Plan for England. However, local authorities preparing waste plans and taking decisions on waste applications should have regard to policies in this Framework so far as relevant’.

appraisal (SA) throughout their production¹². SA is a systematic process used to assess the extent to which an emerging plan or strategy will help to achieve relevant social, environmental and economic objectives. The SA performs a key role in providing a sound evidence base for the plan and demonstrating to decision makers and the public that the likely significant sustainability effects of the plan have been considered.

The approach taken in this SA is based on the guidance published by the Local Government Association/Planning Advisory Service in 'Successful Plan-Making: Advice for Practitioners'¹³, draft National Planning Practice Guidance on Strategic Environmental Assessment and Sustainability Appraisal¹⁴, Sustainability Appraisal Advice Note¹⁵ and the Practical Guide to the SEA Directive¹⁶. The former replaces the plan making manual and the 2010 PAS Guidance replaced the 2005 government guidance on 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents'. However, occasional references to earlier guidance are made where this represents good practice. Taken together, this guidance sets out the key steps that should be undertaken in a sustainability appraisal that incorporates Strategic Environmental Assessment. The Government has also recently published draft guidance on SA and SEA as part of its on-line (beta version) suite of planning guidance which will accompany the NPPF. This is available at <http://planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/what-is-a-sustainability-appraisal-and-how-does-it-relate-to-strategic-environmental-assessment/>.

Table 1 shows key tasks derived from the Practical Guide to the Strategic Environmental Assessment Directive, with the terminology adjusted so that it is consistent with Sustainability Appraisal.

¹² The requirement for SA was first outlined in section 180(5) of the Planning and Compulsory Purchase Act 2004, which stated that all local development documents should be subject to sustainability appraisal.

¹³ Published in 2013 and available at pas.gov.uk/plan-making/-/journal_content/56/332612/4077700/ARTICLE

¹⁴ Available at planningguidance.planningportal.gov.uk/. Accessed on 18.09.2013.

¹⁵ Sustainability Appraisal Advice Note (Planning Advisory Service, 2010)

¹⁶ DCLG, Scottish Executive, Welsh Assembly Government and Department for the Environment Northern Ireland, 2005. A Practical Guide to the Strategic Environmental Assessment Directive, DCLG (formerly ODPM), London [URL: gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf] (accessed on 08/04/13).

Table 1 - Summary of Sustainability Appraisal tasks as outlined by the DCLG Plan Making Manual/Practical Guide to the SEA Directive (text in bold shows key consultation points).

Stage A: Setting the objectives and developing the baseline (Scoping)
A1: Identifying relevant policies, plans and programmes
A2: Collecting baseline information
A3: Identifying the sustainability issues and the appraisal objectives
A4: Considering options and alternatives ¹⁷
A5: Consulting on the scope of the Sustainability Appraisal
Stage B: Developing and refining options and assessing effects
B1: Testing the plan objectives against the Sustainability Appraisal objectives
B2: Develop and refine the strategic options for the plan
B3: Predict and appraise the significant effects of the options, including alternatives ¹⁸
B4: Evaluate the effects of the plan, including alternatives
B5: Consider ways of mitigating adverse effects and maximising beneficial impacts
B6: Propose measures to monitor the significant effects of implementing the plan
Stage C: Preparing the Sustainability Appraisal Report
C1: Preparing the Sustainability Appraisal report
Stage D: Publication and Submission of the Plan: Sustainability Appraisal
D1: Consulting on the draft plan and the Sustainability Appraisal
D2: Assessing significant changes and making decisions ¹⁹
D3: The Sustainability Appraisal at submission stage
Stage E: Examination of the Plan
E1: Examination and adoption
E2: Monitoring of significant effects
E3: Responding to adverse effects ²⁰

The relationship between the production of a Local Plan/DPD (such as the Minerals and Waste Joint Plan) and the SA process is shown in figure 3 below:

¹⁷ This step is not included in the on-line 'beta version' suite of National Planning Practice Guidance

¹⁸ This step is not included in the on-line 'beta version' suite of National Planning Practice Guidance

¹⁹ This incorporates two tasks mentioned in the Practical Guide: 'assessing significant changes' and 'making decisions and providing information'.

²⁰ The Practical Guide includes a step on responding to adverse effects under Stage E. While not mentioned in the Plan Making Manual, remedial action is required under Article 10 of the SEA Directive.

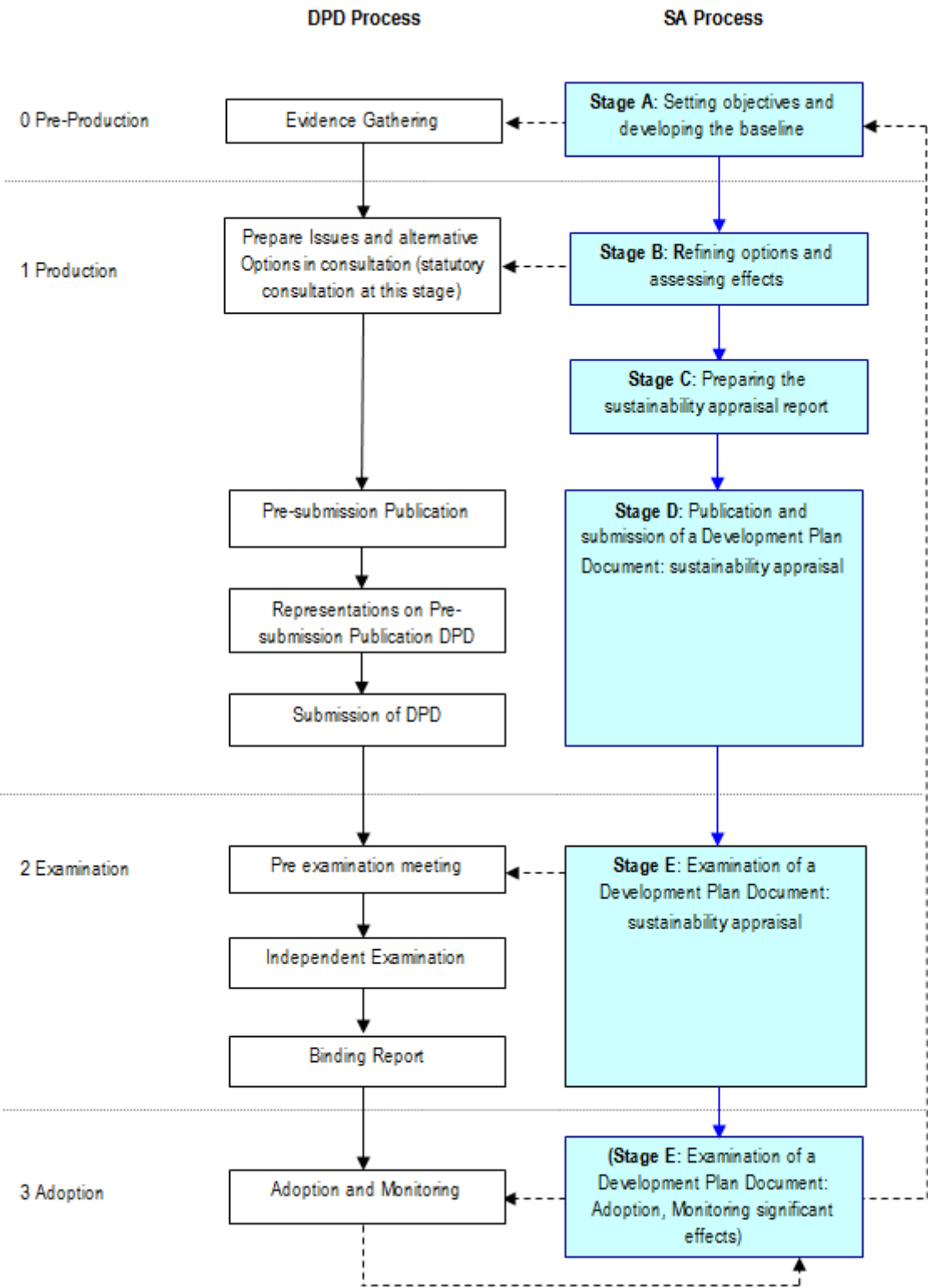


Figure 3 - The DPD and SA Preparation Process. Adapted from ODPM, 2005. Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents.

This Scoping Report represents Stage A of the SA process. The purpose of the Scoping Report is to identify the key sustainability issues for North Yorkshire and establish the criteria (including the SA objectives), and baseline data that will be used in subsequent stages of the SA process to predict and evaluate the impact of the Joint Plan. The approach taken to meeting the five key tasks involved in the completion of Stage A is summarised below and dealt with in more detail in subsequent sections of this report. This approach is in line with guidance from the Department for Communities and Local Government and Planning Advisory Service, as stated earlier in this section.

- **Stage A1: Identifying relevant policies plans and programmes - Plans, Policies, Programmes, Strategies and Initiatives (PPPSI) Review** – This involves an extensive review of international, national, regional, county and district PPPSI to identify the key sustainability issues of relevance to the plan (see section 4 and Appendix 2 for more details).
- **Stage A2: Collecting baseline information - Establishing the current state of Plan Area** – The baseline has been collated through a comprehensive search of documents and liaison with a number of stakeholders. All data has been referenced and the most recent available data used. Where possible, trend data and national and regional comparators have been used to aid interpretation of the data (see section 5 and Volume 2 for more details).
- **Stage A3: Identifying the sustainability issues and the appraisal objectives - Key issues and opportunities** – The baseline data and the PPPSI Review have been used to determine the key issues and problems for North Yorkshire. This has been presented in this report on a joint basis with Stage A2.

SA objectives have been developed to provide an appropriate appraisal framework for the Minerals and Waste Joint Plan. The objectives seek to address the key issues and opportunities identified at stage A3. Objectives will be tested against each other to ensure compatibility. The SA objectives will be used to provide a basis for assessment of the Minerals and Waste Joint Plan (undertaken in Stages B and C) (see section 6 and Appendix 1). Indicators to monitor the SA objectives are also proposed in the Sustainability Appraisal Framework.

- **Stage A4: Considering options and alternatives** –The SEA Directive requires coverage of reasonable alternatives. For this assessment the reasonable alternatives will be the different alternatives (options) presented during Minerals and Waste Joint Plan drafting. The SA is being carried out in parallel with the Joint Plan and will play a key role in helping to generate and refine options that can be considered reasonable alternatives. In line with the principle of ‘frontloading’, the SA will work with plan authors to ensure that, as options are considered, the SA seeks to identify adverse effects early on. More detail about the SA’s approach to considering alternatives is included in Section 7.

The on line National Planning Practice Guidance also recommends developing and refining options in stage B of the sustainability process. This will be documented in later Sustainability Appraisal reports.

- **Stage A5: Consulting on the scope of the SA** – Consultation on the Scoping Report must last for a minimum period of five weeks. The Scoping Report was in fact consulted on for 6 weeks, to coincide with the Joint Plan First Consultation.

3.3 Strategic Environmental Assessment (SEA)

In parallel with the requirement to undertake an SA of the Joint Minerals and Waste Plan, the European Directive 2001/42/EC ‘on the assessment of the effects of certain plans and programmes on the environment’ (also referred to as the Strategic Environmental Assessment or SEA Directive), which is transposed into United Kingdom law by the Environmental Assessment of Plans and Programmes Regulations 2004 (or SEA Regulations), introduced a statutory requirement to conduct an environmental assessment of certain plans. The Regulations apply to UK plans and programmes that meet certain criteria. The Minerals and Waste Joint Plan meets the relevant criteria as it is a plan which is:

– “...prepared by an authority for adoption, through a legislative procedure by Parliament or Government; and, in either case²¹;

– required by legislative, regulatory or administrative provisions²²; and

– is prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use²³; and

– sets the framework for future development consent of projects listed in Annex I or II to Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment...” (DCLG, 2005)^{24,25}

SEA is a systematic process for undertaking an environmental assessment of proposed policies, plans or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision making. The Directive defines ‘environmental assessment’ as a procedure comprising:

- preparing an environmental report on the likely significant effects of the draft plan;
- carrying out consultation on the draft plan and the accompanying environmental report;
- taking into account the environmental report and the results of consultation in decision-making; and
- providing information when the plan is adopted and showing how the results of the SEA have been taken into account.

²¹ The Environmental Assessment of Plans and Programmes Regulations 2004, Regulation 2 – (1) – b.

²² The Environmental Assessment of Plans and Programmes Regulations 2004, Regulation 2 – (1) – c.

²³ The Environmental Assessment of Plans and Programmes Regulations 2004, Regulation 5 – (2) – a.

²⁴ The Environmental Assessment of Plans and Programmes Regulations 2004, Regulation 5 – (2) – b.

²⁵ CLG, Scottish Executive, Welsh Assembly Government and Department for the Environment Northern Ireland, 2005. A Practical Guide to the Strategic Environmental Assessment Directive, DCLG (formerly ODPM), London [URL: gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf] (accessed on 08/04/13).

While SA and SEA are distinct processes, many of their requirements overlap. Paragraph 165 of the National Planning Policy Framework confirms that sustainability appraisal should encompass Strategic Environmental Assessment and states:

“A sustainability appraisal which meets the requirements of the European Directive on strategic environmental assessment should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors”²⁶.

Following this guidance this assessment pursues an integrated approach to SA and SEA, so that the SA process also meets the requirements of the SEA Directive and Regulations. This involves extending the breadth of (predominantly environmental) issues required to be considered under SEA to cover the full range of aspects (including social and economic) for sustainability. It is however specified that the SA Report must clearly show that the SEA Directive’s requirements have been met. This will be achieved through sign-posting the places in the SA report where the information required by the Directive is provided²⁷. Table 2 sets out how the SEA requirements have been met in this Scoping Report.

Table 2 – Environmental report requirements.

Stages in the SEA Process²⁸	
SEA information required	Where information is to be provided
(a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;	Section 1: Introduction. Section 4: Plans, Policies, Programmes, Strategies and Initiatives Review. Appendix 2: Synergies with other Plans, Policies, Programmes, Strategies and Initiatives.
(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	Section 5: Baseline Information and Key Sustainability Issues. Volume 2: Baseline Information.
(c) the environmental characteristics of areas likely to be significantly affected;	Section 5: Baseline Information and Key Sustainability Issues. Volume 2: Baseline Information.
(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental	Section 5: Baseline Information and Key Sustainability Issues. Volume 2: Baseline Information.

²⁶ CLG, 2012. National Planning Policy Framework. Department for Communities and Local Government, London [<http://www.communities.gov.uk/documents/planningandbuilding/pdf/2116950.pdf>] (accessed on 10/04/2013).

²⁷ As recommended by the CLG Plan Making Manual.

²⁸ As listed in Annex 1 of the SEA Directive (Directive 2001/42/EC).

importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	
(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;	Section 4: Plans, Policies, Programmes, Strategies and Initiatives Review. Appendix 2: Synergies with other Plans, Policies, Programmes, Strategies and Initiatives.
(f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	This will be covered in subsequent sustainability appraisal reports.
(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	This will be covered in subsequent sustainability appraisal reports.
(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	This will be covered in subsequent sustainability appraisal reports.
(i) a description of the measures envisaged concerning monitoring in accordance with Article 10;	This will be covered in subsequent sustainability appraisal reports.
(j) a non-technical summary of the information provided under the above headings.	This will be covered in subsequent sustainability appraisal reports.

3.4 Supporting Evidence for Sustainability Appraisal

As outlined above, the SA of the Joint Minerals and Waste Plan will fully incorporate the requirements for SEA. In addition, and in line with best practice, the SA process is supported by additional assessments, including:

- Site Assessment Methodology;
- Habitats Regulations Assessment (HRA); and
- Strategic Flood Risk Assessment (SFRA).

Sites and Areas Assessment Methodology

The Joint Plan will include policies to guide and inform development. However, the National Planning Policy Framework also requires that Local Plans should allocate sites to promote development and flexible use of land. Specifically in relation to planning for aggregate minerals, the NPPF states Minerals Planning Authorities should make provision for aggregates in the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate. With regard to waste, national waste planning policy indicates that Waste Planning Authorities should identify sites and areas suitable for new and enhanced waste management facilities.

In general terms 'Site Allocations' are considered to be specific sites with a clearly defined boundary where development is likely to be acceptable in principle. 'Preferred Areas' are subject to a lesser degree of precision with regard to the definition of the actual site which may be suitable for development. Areas of search are broader areas intended to direct developers to areas where suitable sites may be located and where support in principle, subject to identification of a suitable site, is likely to be provided by the planning authority.

While the SA Framework presented in this report is considered appropriate for assessing policies in the plan, work is underway to refine aspects of the approach taken in this SA to enable a greater degree of resolution to be applied to possible Site Allocations and Preferred Areas. Further testing of the approach will also determine if a similar approach can be applied to broader Areas of Search.

The [methodology](#) to be applied to Site and Area Assessment was consulted on in August and September 2013 and again from February 2014.

Habitats Regulations Assessment

Alongside this SA a screening exercise for 'appropriate assessment' will be undertaken in line with the requirements of the EU Habitats Directive, as transposed by the Conservation of Habitats and Species Regulations, 2010 (the Habitats Regulations). This legislation requires that appropriate assessment needs to be undertaken for any plan or project which:

- Either alone or in combination with other plans or projects would be likely to have a significant effect on a site designated as part of the Natura 2000²⁹ network;
- Is not directly connected with the management of the site for nature conservation.

²⁹ A network of European nature conservation sites that is made up of terrestrial and marine Special Areas of Conservation and Special Protection Areas. For the purposes of the assessment Ramsar sites will also be considered.

Whilst Sustainability Appraisal and Habitats Regulations Assessment (HRA) are two separate processes and should be reported upon separately there are a number of linkages between the two processes. These include:

- Evidence gathering for HRA can feed into the evidence that informs SA;
- Mitigation and alternatives proposed by HRA can help shape the mitigation measures proposed by the SA and vice versa.
- SA can ensure that wider interest features of Natura 2000 sites that are not within the scope of HRA (such as setting, or the interest features of overlapping designations (e.g. SSSI)) are also considered.
- Initial work on the scope of the Habitats Regulations Assessment and screening of the options has taken place and is presented in the Habitats Regulations Assessment Screening Assessment which will be consulted on as part of the Issues and Options consultation.

At the time of writing a [Habitats Regulations Assessment Report](#) has been produced for all the policies and sites in the Joint Plan.

Strategic Flood Risk Assessment

Strategic Flood Risk Assessment (SFRA) will also inform the SA process. The role of SFRA is defined within a technical guidance document that accompanies the National Planning Policy Framework (NPPF). This requires that a 'sequential approach' to flood risk is taken.

SFRA is an assessment of the risk posed by flooding from a range of sources to a range of locations in a defined geographical area. It provides the necessary information to undertake a sequential approach to the location of development in relation to flooding. All minerals and waste sites must satisfy the Sequential Test in relation to flooding. This requires that new developments are steered towards areas with the lowest probability of flooding, with Flood Zone 1 being considered ahead of Flood Zone 2, and Flood Zone 3 where sites in Flood Zone 2 are not available. Depending on the vulnerability of development to flooding it may also be necessary to apply the 'Exception Test'³⁰ to justify the locating of a site in a certain Flood Zone.

At the time of writing a [Strategic Flood Risk Assessment](#) has been produced for the sites in the Joint Plan.

In addition to the above appraisals, the draft SA objectives will be subject to two additional checks: Rural Proofing and Ecosystem Services Assessment. Section 6 of this report provides further details of the Rural Proofing Assessment, and Appendix 3 documents the Ecosystem Services Assessment.

³⁰ The Exception Test is a 3 part test that sets out to demonstrate wider sustainability benefits of development, consideration of previously developed land and the safety of development.

4 Plans, Policies, Programmes, Strategies and Initiatives Review

In order to define the scope of the SA it is necessary to develop an understanding of the wide range of plans, policies, programmes, strategies and initiatives (PPPSIs) that are of relevance to the Minerals and Waste Joint Plan. Accordingly, the scoping stage (stage A) of this SA process involves a review of other PPPSIs relevant to minerals and waste development within the plan area. This task considers PPPSIs at all levels from international and European, national, regional and local, thereby ensuring that all established economic, social and environmental protection objectives are considered in the preparation of the Joint Plan.

Requirements of the SEA Directive:

The Environmental Report shall include information on the “relationship [of the plan or programme] with other relevant plans and programmes” (Annex I(a)).

4.1 Undertaking the PPPSI Review

To fulfil requirement (e) in Annex I of the SEA Directive³¹, any PPPSIs considered to be relevant to the Joint Plan have been reviewed to identify its main purpose, any environmental or sustainability objectives and targets it may contain, and how the Joint Plan SA will ensure that these objectives are taken into account in the preparation of the plan.

The list of assorted plans and programmes with relevance to the Joint Plan is extensive. Tables 3 and 4 below list the PPPSIs that have been analysed as part of this scoping process. The full review is presented in Appendix 2. In some cases national and international/European plans and policies have been excluded where their objectives have been transposed into regional or local documents.

It should be noted that several significant PPPSI documents may be published during the production of the Plan. The list of PPPSIs forms part of the baseline to this Sustainability Appraisal and as such will be continually updated.

³¹ Annex 1(e) of the SEA Directive requires information on “the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation”.

Table 3- Relevant international, European and national plans, policies, programmes, strategies and initiatives.

International & European	Bern Convention on the Conservation of European Wildlife & Natural Habitats (1979)	Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979, amended 1985, 1988)	EU Birds Directive (2009)	RAMSAR Convention on Wetlands of International Importance (1971)	UN Convention on Biological Diversity (1992)	EU Directive on the Conservation of Natural Habitats of Wild Flora & Fauna (1992)	EU Biodiversity Strategy to 2020 (2011)	EU Floods Directive (2007/60/EC)	EU Nitrates Directive (1991)	EU Directive on the Protection of Groundwater (2006)	EU Urban Waste Water Directive (1991)	EU Water Bathing Directive (2006)	EU Floods Directive (2007)
	EU Water Framework Directive (2000)	Marine Strategy Framework Directive (2008)	Directive on Ambient Air Quality & Cleaner Air for Europe (2008)	United Nations Framework Convention on Climate Change Paris Accord: COP21 (2015)	UN Framework Convention on Climate Change Copenhagen Accord (2010)	Integrated Pollution Prevention & Control Directive (2008)	EU Seventh Environmental Action Programme (2002)	European Strategic Environmental Assessment Directive (2001)	EU Environmental Impact Assessment Directive (2011)	Environmental Noise Directive (2002)	Aarhus Convention (1998)	EU Convention on the Protection of Archaeological Heritage (1972)	UNESCO World Heritage Convention (1972)
	EU Landscape Convention (Florence Convention) (2004)	EU Directive on the Incineration of Waste (2000)	EU Mining Waste Directive (2006)	EU Landfill Directive (1999)	EU Waste Framework Directive (2008)	EU Directive on the Energy Performance of Buildings (2002)	EU Renewables Directive (2009)	EU Transport White Paper (2011)	Rio+20 'Future we Want' (2012)	United Nations 2030 Agenda for Sustainable Development (Sustainable Development Goals) (2015)	European Sustainable Development Strategy (ESDS) – European Commission (2006)	Closing the Loop: An EU Action Plan for the Circular Economy (2015)	
National	The Wetland Vision for England (Environment Agency, 2008)	The UK Post-2010 Biodiversity Framework, 2012)	England Biodiversity Strategy Climate Change Adaptation Principles (Defra, 2008)	Climate Change & Biodiversity Adaptation (Natural England, 2009)	DEFRA Countryside Stewardship, (2015)	Natural Environment & Rural Communities Act (2006)	UKNEA National Ecosystem Assessment (2011)	Conservation of Habitats & Species Regulations (2010)	Wildlife & Countryside Act (1981)	Government Forestry & Woodlands Policy Statement (Defra, 2013)	Biodiversity 2020 (Defra, 2011)	The Natural Choice – Securing the Value of Nature (Defra, 2011)	Safeguarding our Soils (Defra, 2011)
	Groundwater Protection: Policy & Practice (Environment Agency, 2012)	Flood & Water Management Act (2010)	Marine & Coastal Access Act (2009)	HM Government UK Marine Policy Statement (2011)	Water Environment Regulations (2003)	HM Government Air Quality Standard Regulations (2010)	The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007, 2011)	Climate Change Risk Assessment (Defra, 2012)	Climate Change Adaptation by Design (Town & Country Planning Association, 2007)	HM Government Carbon Budget Order (2009)	The Carbon Plan (DECC, 2011)	Climate Change Act (2008)	National Adaptation Programme (Defra, 2013)
	Planning for Climate Change (Town & Country Planning Association, 2012)	Control of Pollution Act (1974)	Model Procedures for the Management of Contaminated Land (Defra/Environment Agency, 2004)	HM Government Environmental Permitting Regulations (2010, amended 2012)	HM Government Environment Act (1995)	HM Government Environmental Protection Act (1990)	Red Tape Challenge – Environment Theme Proposals (Defra, 2012)	Geological Conservation Review (JNCC, 1977 onwards)	Local Growth White Paper (BIS, 2010)	Rural Statement (Defra, 2012)	Guide to Rural Proofing: National Guidelines (DEFRA, 2013)	By all Reasonable Means: Inclusive Access to the Outdoor for Disabled People (Countryside Agency, 2005)	Countryside & Rights of Way Act (2000)
	Healthy Lives, Healthy People: Strategy for Public Health in England (Dept. of Health, 2010)	NHS Heatwave Plan for England (2012)	Mental Wellbeing Impact Assessment (New Economics Foundation, 2011)	Ancient Monuments & Archaeological Areas Act (1979)	Heritage Protection for the 21 st Century (DCMS, 2007)	National Planning Practice Guidance (2014)	UK Government's Statement on the Historic Environment for England (2010)	National Planning Policy Framework (DCLG, 2012)	Technical Guidance on the National Planning Policy Framework (DCLG, 2012)	Localism Act (2011)	Planning and Compulsory Purchase Act (2004)	Planning Act (2008)	Town and Country Planning (Local Planning) Regulations (England) (2012)
	Government Review of Waste Policy in England (Defra, 2011)	The Waste Regulations (2011, amended 2012)	The Hazardous Waste Regulations (2005, amended 2009)	Energy from Waste: a guide to the debate (DEFRA, 2011)	Waste Strategy for England (2007)	Agricultural Waste Regulations (2006)	Anaerobic Digestion strategy and Action Plan (Defra, 2011)	Strategy for the Management of Solid LLRW from the Non-Nuclear Industry (DECC, 2010)	HM Government UK Low Carbon Transition Plan (2009)	The renewable Energy Roadmap Update (DECC, 2012)	UK Bioenergy Strategy (DECC, 2012)	Microgeneration Strategy (DECC, 2011)	Energy Bill, (DECC, 2012)
	Strategy for Sustainable Construction (BERR, 2008)	Civil Engineering Environmental Quality Assessment Award Scheme	Building Research Establishment Assessment Method	World Class Places: The Government's Strategy for Improving Quality of Places (2009)	Creating Growth, Cutting Carbon, Making Sustainable Transport Happen (DfT, 2011)	Low Carbon Transport: A Greener Future (DfT, 2009)	Low Emissions Strategies: Using the Planning System to Reduce Transport Emissions (Defra, 2010)	Expanding and Improving the Rail Network (DfT, 2012)	National and Regional Guidelines for Aggregates Provision in England 2005-2020 (DCLG, 2009)	Guidance on the Managed Aggregate Supply System (DCLG, 2012)	Managing Aggregates Supply in England (BGS, 2008)	The Future of Food and Farming: Challenges and Choices for Global Sustainability (GOS, 2011)	Agricultural Land Classification: Protecting the Best and Most Versatile Agricultural Land (Natural England, 2012)
	Uplands Policy Review (Defra, 2011)	UK Sustainable Development Strategy (ODPM, 2005)	Mainstreaming Sustainable Development (Defra, 2011)	English National Parks & the Broads (Defra, 2010)	Draft Waste Management Plan for England	Waste Prevention Programme for England (2013)	North Yorkshire and York Local Nature Partnership Strategy (2013)	Draft East Inshore and east Offshore Marine Plan (2013)	Economic and Inward Investment Plan (2013)	National Standards for sustainable drainage systems (DEFRA, 2011)	UK Geodiversity Action Plan: A framework for enhancing the importance and role of geodiversity	National Planning Policy for Waste, 2014	Waste Management Plan for England (DEFRA, 2013)

	DEFRA, Quality Action Plan: Proposals to promote high quality recycling of dry recyclates (2013)	A Strategy for Hazardous Waste Management in England (DEFRA, 2010)	Waste Prevention Programme for England (Defra, 2013)										
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Table 4 – Relevant regional, sub-regional and local plans, policies, programmes, strategies and initiatives.

Regional/Sub-Regional	A Regional Forestry Strategy for the North East of England (Forestry Commission, 2005)	Regional Biodiversity Strategy for Yorkshire & Humber (Y&H Biodiversity Forum, 2009)	North Yorkshire and York Local Nature Partnership Strategy – (2014)	Water Resources Management Plan (Yorkshire Water, 2009)	Regional Catchment Abstraction Management Strategies (Environment Agency, various dates)	Regional Catchment Flood Management Plans (Environment Agency, various dates)	Regional River Basin Management Plans (Environment Agency, 2015)	River Tyne to Flamborough Head Shoreline Management Plan (North East Coastal Authorities Group, 2007)	Climate Change Plan for Yorkshire & Humber (Yorkshire & Humber Climate Change Partnership, 2009)	Climate Change Action Plan for the North East (Sustaine, 2008)	Tees Valley Climate Change Strategy (Tees Valley Climate Change Partnership, undated)	Environmental Limits in Yorkshire & Humber (YHEF, 2007)	National Character Area Profiles (Natural England, 2012)
	Tees Valley Green Infrastructure Strategy (Tees Valley Joint Strategy Unit, 2008)	Leeds City Region Green Infrastructure Strategy, (LCR LEP, 2010)	Tees Valley Geodiversity Action Plan (tees Valley Wildlife Trust, 2011)	Leeds City Region Local Enterprise Partnership Strategic Economic Plan (2016)	Tees Valley Unlimited Business Plan (Tees Valley Unlimited, 2011)	Economic and Inward Investment Plan (York, North Yorkshire and East Riding Local Enterprise Partnership, 2013)	Leeds City Region Employment & Skills Strategy (2010)	Economic Impact of Heritage in Yorkshire & Humber (YHEF, 2010)	Historic Environment Strategy for Yorkshire & the Humber Region (YHHEF, 2008)	North Yorkshire & Cleveland Heritage Coast Management Plan (2015 - 2020)	Culture Strategy, York and North Yorkshire Cultural Partnership (Yorkshire & Humber Regional Assembly, 2003)	Yorkshire & Humber Regional Waste Strategy (Yorkshire & Humber Regional Assembly, 2003)	Low Carbon & Renewable Energy Capacity in Yorkshire & Humber Final Report (LGYH, 2011)
	Yorkshire and Humber Waste Position Statement 2016 (Yorkshire and Humber Waste Planning Authorities, 2016)												
Local	Biodiversity Audit & Action Plan (CYC, 2013)	District/Borough Biodiversity Action Plans (various dates)	North York Moors Biodiversity Action Plan (NYM National Park Authority, 2008)	Local Strategic Flood Risk Assessment (various dates)	Ouse Flood Risk Management Strategy (Environment Agency, 2010)	Green Streets: The Neighbourhood Carbon Footprint of York (CYC, 2009)	York Low Emission Strategy (CYC, 2012)	Climate Change Strategy & Action Plan for York (CYC, 2010)	Adapting to Climate Change in the North York Moors National Park (NYM National Park Authority, 2011)	Delivering on Climate Change (NYCC Climate Change Strategy, 2009)	Contaminated Land Strategy (CYC, adopted 2001, revised 2010)	Your Dales Rock: Local Geodiversity Action Plan (NY Geodiversity Partnership, 2006)	Reaching Further: York's Economic Strategy (CYC, 2012)
	Rights of Way Improvement Plan for North Yorkshire (NYCC, 2007)	Rights of Way Improvement Plan for Redcar & Cleveland Borough Council (2007)	City of York Rights of Way Improvement Plan (draft)	Healthier Lives: NHS North Yorkshire & York's Strategic Plan (2010)	North Yorkshire Joint Strategic Health Needs Assessment (NYCC, 2012)	North Yorkshire Joint Health & Wellbeing Strategy (NYCC, undated)	Local Open Space, Sport & Recreation Assessments (various dates)	Community Safety Plan, Safer York Partnership (CYC, undated)	North Yorkshire Police and Crime Plan (2013 -16)	Fountains Abbey & Studley Royal World Heritage Site Management Plan (National Trust & English Heritage, 2009)	York Greenbelt Appraisal 2003 and Technical Paper (CYC, 2011)	Local Landscape Character Assessments and Appraisals (various dates)	ACONB Management Plans (various dates)
	City of York Local Plan (ongoing)	Local Development Frameworks / Local Plans and neighbouring Local Plans (various dates)	Yorkshire & Humber Plan: Regional Spatial Strategy retained greenbelt policies (DCLG, 2008)	A Municipal Waste Management Strategy for City of York & North Yorkshire (Y & NY Waste partnership, 2006)	Tees Valley Joint Waste Management Strategy (Tees Valley Local Authorities, 2008)	York Renewable Energy Strategic Viability Study (AEA, 2010)	Redcar & Cleveland Local Transport Plan (Redcar & Cleveland Borough Council, 2011)	North Yorkshire Local Transport Plan 4 (NYCC, 2016)	City of York Local Transport Plan 3 (CYC, 2011)	North Yorkshire Gypsy & Traveller Accommodation Assessment (North Yorkshire Strategic Housing Partnership, 2008)	York & North Yorkshire Strategic Housing Market Assessment (North Yorkshire Strategic Housing Partnership, 2011)	North Yorkshire Local Investment Plan (North Yorkshire Strategic Housing Partnership, 2011)	North Yorkshire Housing Strategy & Action Plan (NYCC, 2010)
	Craven Sustainable Community Strategy (Craven Local Strategic Partnership, 2007)	Richmondshire 2021 Sustainable Community Strategy (Richmondshire Local Strategic Partnership, undated)	Harrogate District Sustainable Community Strategy (Harrogate District Strategic Partnership, revise November 2008)	Selby District Local Strategic Partnership Sustainable Community Strategy (Selby District Local Strategic Partnership, 2010)	Imagine Ryedale (Ryedale Strategic Partnership, 2003)	A Community Plan for Hambleton (Hambleton District Council, 2006)	Redcar & Cleveland's Sustainable Community Strategy Redcar & Cleveland Partnership, 2008)	Sustainable Community Strategy for the Borough of Scarborough (NY Coast Community Partnership, 2010)	York – Sustainable Community Strategy (2008)	Council Plan (NYCC, 2012)	York City Vision & Community Strategy (CYC, 2011)	North Yorkshire Community Plan (NYSP, 2011)	North Yorkshire, York and Lower Tees Valley Historic Landscape Characterisation

	North York Moors National Park Management Plan (NYM National Park Authority, 2012)	Recreation & Access Strategy for the North York Moors National Park (NYM National Park Authority, 2008)	Corporate Fairness & Inclusion Strategy & Single Corporate Equality Scheme (CYC, 2010)	Visit York Strategic Plan (Visit York, 2008)	The Education Plan (CYC, 2005)	Children's and Young People's Plan (CYC & YorOK Children's Trust, 2016 - 20)	North Yorkshire Children & Young People's Plan (NYCC & NY Children's Trust, 2014 -17)							
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4.2 Key Messages from the PPPSI Review

Here, a list of key messages that have been drawn from the PPPSI review are presented. These messages, along with the environmental baseline of the SA, play a part in helping define the SA objectives.

Table 5 – Key messages from the PPPSI review.

Key messages that the Joint Minerals and Waste Strategic Plan should seek to address	Main Sources
<p>Protect and enhance biodiversity, including sites of nature conservation importance designated at a European, national and local level and protected species. Avoid fragmentation of priority habitats and seek to enhance the permeability of land cover for species movement at a landscape scale. Halt the loss of biodiversity and create better habitat networks. Deliver a net-gain in biodiversity.</p> <p>Recognise and enhance the natural capital provided by natural, semi natural and managed habitats and ecosystems to maintain flows of ecosystem services.</p>	<p>Ramsar Convention, UN Convention on Biological Diversity, Bern Convention on the conservation of European Wildlife and Natural Habitats, Bonn Convention on the Conservation of Migratory Species and Wild Animals, EU Sixth Environmental Action Plan, European Sustainable Development Strategy, EU Habitats Directive (92/43/EEC) and EU Birds Directive (2009/147/EC), Rio + 20 'Future we Want', Wetlands Vision for England, Biodiversity Indicators in your Pocket, Natural Environment and Rural Communities Act 2006, National Ecosystem Assessment, Conservation of Habitats and Species Regulations 2010, Wildlife and Countryside Act 1981, The Natural Choice: Securing the Value of Nature, Biodiversity 2020, England Biodiversity Strategy Climate Change Adaptation Principles, National Parks Circular, NPPF, Mainstreaming Sustainable Development – the Government's Vision and What this Means in Practice, UK Post-2010 Biodiversity Framework, Climate Change and Biodiversity Adaptation, Yorkshire and Humber Regional Biodiversity Strategy, Yorkshire and Humber Biodiversity Delivery Plan, Community Plan for North Yorkshire, BAPs, Local Development Frameworks/Local Plans, North York Moors National Park management Plan.</p>
<p>Protect and enhance historic and archaeological features to conserve cultural heritage and maximise the economic impact of heritage. Engage people in assets of historical and architectural interest, including world heritage sites, listed buildings, conservation areas, archaeologically important locations and historically important landscapes.</p>	<p>EU Convention for the Protection of the Archaeological Heritage of Europe (Granada Convention, Valetta Convention), UNESCO World Heritage Site Convention, European Landscape Convention (Florence Convention), Heritage Protection for the 21st Century, Ancient Monuments and Archaeological Areas Act 1979, NPPF, PPS5 Practical Guide, National Parks Circular, Statement of the Historic Environment for England, Fountains Abbey and Studley Royal World Heritage Site Management Plan, Economic Impact of Heritage in Yorkshire and Humber, Historic Environment Strategy for Yorkshire and Humber, North Yorkshire and Cleveland Heritage Coast Management Plan, York Heritage Topics Paper, Local</p>

	Development Frameworks/Local Plans, North York Moors National Park Management Plan.
Conserve and improve local environmental quality, townscapes and landscapes, including national parks and AONBs.	EU Landscape Convention, Climate Change and Biodiversity Adaptation: The Role of the Spatial Planning System, Natural Environment and Rural Communities Act 2006, National Parks Circular, English National Parks and the Broads, NPPF, PPS10, AONB Management Plans, National Character Area Profiles, Regional Forestry Framework, Regional Forestry Strategy for North East England, Tees Valley Green Infrastructure Strategy, Leeds City Region Green Infrastructure Strategy, Tees Valley Geodiversity Action Plan, Your Dales Rock, A Strategy for the North Yorkshire Countryside, Flamborough Head Management Plan, North Yorkshire and Cleveland Heritage Coast Management Plan, North Yorkshire Landscape Character Assessment, York and North Yorkshire Culture Strategy, North York Moors Landscape Character Assessment, York Landscape Appraisal, York Green Belt Policies, York Green Belt Appraisal, Local Development Frameworks/Local Plans, North York Moors National park Management Plan.
Reduce contribution to climate change and ensure people, the built and natural environments can adapt to the changing climate.	Kyoto Climate Change Protocol, UN Framework Convention on Climate Change Copenhagen Accord, Climate Change Act 2008, EU Sixth Environmental Action Programme, The Carbon Budget Order 2009, UK Low Carbon Transition Plan, The Carbon Plan, Planning for Climate Change – Guidance for Local Authorities, The Natural Choice: Securing the Value of Nature, Mainstreaming Sustainable Development – the Government’s Vision and What this Means in Practice, England Biodiversity Strategy Climate Change Adaptation Principles, Climate Change and Biodiversity Adaptation: The Role of the Spatial Planning System, Climate Change Risk Assessment, Climate Change Adaptation by Design, NHS Heatwave Plan for England, National Adaptation Programme, The Future of Food and Farming: Challenges and Choices for Global Sustainability, Low Carbon Transport: A Greener Future, regional and local climate change management and action plans, local and regional carbon and energy plans, regional and local waste strategies, Local Transport Plans, Community Plans and Strategies, Water Resource Management Plan, Local Development Frameworks/Local Plans, North York Moors National Park Management Plan.
Recognise the impact of flooding on new and existing development and also the	EU Floods Directive (2007/60/EC), EU Water Framework Directive (2000/60/EC), Flood and Water Management Act

<p>impact this development can have on exacerbating the risk of flooding elsewhere.</p>	<p>2010, River Tyne to Flamborough Head Shoreline Management Plan, FRMSs, CFMPs, Strategic Flood Risk Assessments, The North Yorkshire Community Plan, Local Development Frameworks/Local Plans, North York Moors National Park Management Plan.</p>
<p>Enhance waterways and wetlands and recognise the impact that flood and water management works and pollution may have on the chemical, geomorphological, hydrogeomorphological and ultimately, ecological status of waterways and wetlands.</p>	<p>Ramsar Convention, European Nitrates Directive (91/676/EEC), EU Groundwater Directive (2006/118/EC), EU Urban Waste Water Directive (91/271/EEC), EU Water Framework Directive (2000/60/EC), EU SEA Directive (2001/42/EC), Groundwater Protection: Policy and Practice, CAMSs, CFMPs, RBMPs, Local Development Frameworks/Local Plans, North York Moors National Park Management Plan.</p>
<p>Ensure development proposals do not result in unacceptable air, water or land pollution.</p>	<p>Proposal for a Directive Establishing a Framework for the Protection of Soil (2006/0086), EU Nitrates Directive (91/676/EEC), EU Groundwater Directive (2006/118/EC), EU Urban Waste Water Directive (91/271/EEC), EU Bathing Water Directive (2006/7/EC), Marine Strategy Framework Directive (2008/56/EC), EU Water Framework Directive (2000/60/EC), Directive on Ambient Air Quality and Cleaner Air for Europe (2008/50/EC), EU Integrated Pollution and Prevention and Control (IPPC) Directive (2008/1/EC), NPPF, Groundwater Protection: Policy and Practice, Environmental Permitting Regulations 2010, Control of Pollution Act 1974 and Amending Act, 1989, Environmental Protection Act, 1990, Environment Act 1995, The Air Quality Strategy for England, Scotland, Wales, and Northern Ireland, Model Procedures for the Management of Contaminated Land, Protecting our Water, Soil and Air – a code of good agricultural practice for farmers growers and land managers, Contaminated Land Strategy, Environmental Protection Unit, RBMPs, Local Development Frameworks/Local Plans.</p>
<p>Increase mobility through the encouragement of the use of more sustainable modes of transport, encourage the production and use of renewable energy for transport and seek to reduce the need to travel by car to reduce congestion and transport-related emissions.</p>	<p>EU Renewables Directive (2009/28/EC), EU Transport White Paper, NPPF, UK Bioenergy Strategy, Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen, Low Carbon Transport: A Greener Future, Expanding and Improving the Rail Network, Low Carbon Transport: A Greener Future, Low Emissions Strategies: Using the Planning System to Reduce Transport Emissions, regional climate change action plans, Local Transport Plans, Local Development Frameworks/Local Plans.</p>
<p>Promote the use of renewable energy/low carbon energy and encourage its incorporation within new</p>	<p>Kyoto Climate Change Protocol, UN Framework Convention on Climate Change Copenhagen Accord, EU Directive on the Energy Performance of Buildings</p>

development.	(2002/91/EC), Renewables Directive (2009/28/EC), EU Sustainable Development Strategy, NPPF, The Carbon Plan, Anaerobic Digestion Strategy, UK Low Carbon Transition Plan, UK Renewable Energy Roadmap, UK Bioenergy Strategy, Microgeneration Strategy, Energy Bill, Planning for Climate Change – Guidance for Local Authorities, regional/local climate change action plans, Low Carbon and Renewable Energy Capacity in Yorkshire and Humber, York Renewable Energy Strategic Viability Study, Local Development Frameworks/Local Plans, North York Moors National Park Management Plan.
Prioritise the development of previously developed land in preference to greenfield sites. Respect the purposes of the green belt.	NPPF, The Yorkshire and Humber Plan (retained green belt policies for York), York Greenbelt Appraisal 2003, Local Development Frameworks/Local Plans and Community Strategies.
Seek to safeguard and improve the health and wellbeing of communities and improve inclusive access to services, facilities and the countryside.	By all Reasonable Means: Inclusive access to the outdoors for disabled people, Countryside and Rights of Way Act (2000), Healthy Lives, Healthy People: Our Strategy for Public Health in England, NHS Heatwave Plan for England, NPPF, PPS10, Mental Wellbeing Impact Assessment: A Toolkit for Wellbeing, Health Joint Strategic Needs Assessment, Joint Health and Wellbeing Strategy, Rights of Way Improvement Plans, Healthier Lives: NHS Yorkshire and York's Strategic Plan, Open Space, Sport and Recreation Study, Community Safety Plan, Safer York Partnership, North Yorkshire Policing Plan, Community Plans and Strategies, Local Development Frameworks/Local Plans.
Provide an adequate and continuous supply of minerals to the economy.	Rio + 20 'Future we Want', NPPF, National and regional guidelines for aggregates provision in England, Guidance on Managed Aggregate Supply System, Local Aggregate Assessment,
Limit the impacts of minerals development on amenity.	Rio + 20 'Future we Want', NPPF, National and regional guidelines for aggregates provision in England, Guidance on Managed Aggregate Supply System, Agricultural Land Classification: Protecting the Best and Most Versatile Agricultural Land.
Promote employment, including a shift from public to private sector jobs and investment.	Local Growth White Paper, Defra Rural Statement, LEPs, local business plans, local employment and economic strategies, Local Development Frameworks/Local Plans.
Support a low carbon economy.	Rio + 20, EU Transport White Paper, European Sustainable Development Strategy, The Carbon Plan, Local Growth White Paper, UK Low Carbon Transition Plan, UK Renewable Energy Roadmap, UK Bioenergy Strategy, Microgeneration Strategy, Energy Bill, Strategy for Sustainable Construction, Creating Growth, Cutting

	Carbon: Making Sustainable Local Transport Happen, Low Carbon Transport: A Greener Future, Low Emissions Strategies, Expanding and Improving the Rail Network, UK Sustainable Development Strategy, Mainstreaming Sustainable Development, Sustainable Communities: A shared vision, a shared agenda. Natural Choice: Securing the Value of Nature, Planning for Climate Change – Guidance for Local Authorities, Local Development Frameworks/Local Plans.
Develop strong, attractive and thriving neighbourhoods and societies (The Big Society) and encourage public participation in the development of the local area.	Aarhus Convention, Local Growth White Paper, Localism Act, NPPF, Mainstreaming Sustainable Development, Local Development Frameworks/Local Plans.
Protect and enhance geological diversity.	NPPF, Geological Conservation Review, Geodiversity Action Plans, Landscape Character Assessments, North York Moors National Park Management Plan, North York Moors Core Strategy and Development Policies, Local Development Frameworks/Local Plans.
Ensure environmental limits are not breached.	Rio + 20 ‘Future we Want’, European Sustainable Development Strategy, Safeguarding our Soils, Water White Paper, Groundwater Protection (GP3), UK Marine Policy Statement, Protecting our Water, Soil and Air, Air Quality Standard Regulations, Air Quality Strategy for England, Scotland, Wales and Northern Ireland, Carbon Budget Order, Climate Change Act, Control of Pollution Act, Environmental Permitting Regulations, Environmental Protection Act, CAMSs, national/regional/local sustainable development strategies, regional/local climate change plans and strategies, Environmental Limits in Yorkshire and Humber: a Discussion Paper.
Ensure continued economic viability and access to services for rural areas.	Defra Rural Statement, Uplands Policy Review, Community Strategies and Plans, AONB Management Plans, North York Moors National Park Management Plan, Local Development Frameworks/Local Plans.
Recognise the importance of protecting the best and most versatile agricultural land and fertile soils.	NPPF, Proposal for a Directive Establishing a Framework for the Protection of Soil (2006/0086), Safeguarding our Soils, Protecting our Water, Soil and Air, Agricultural Land Classification: Protecting the Best and Most Versatile Agricultural Land, North York Moors National Park Management Plan, Local Development Frameworks/Local Plans.
Protect coastal landscapes and biodiversity.	NPPF, Marine Strategy Framework Directive (2008/56/EC), Marine and Coastal Access Act, UK Marine Policy Statement, Natural Choice: Securing the Value of Nature, North Yorkshire and Cleveland Heritage Coast

	Management Plan, North York Moors National Park Management Plan, Local Development Frameworks/Local Plans.
Protect open space for community benefit.	NPPF, Healthy Lives, Healthy People, Yorkshire and Humber Plan retained greenbelt policies, Leeds City Region Green Infrastructure Strategy, Tees Valley Green Infrastructure Strategy, NHS Heatwave Plan for England, Natural Choice: Securing the Value of Nature, North York Moors Core Strategy and development policies, North York Moors National Park Management Plan, Recreation and Access Strategy for the North York Moors National Park, Local Development Frameworks/Local Plans.
Ensure that waste is managed as high up the waste hierarchy as practicable.	EU Landfill Directive (99/31/EC), EU Waste Framework Directive (2008/98/EC), NPPF, PPS10, Waste Regulations 2012, Hazardous Waste Regulations 2009, Waste Strategy for England, Agricultural Waste Regulations, Government Review of Waste Policy in England 2011, Anaerobic Digestion Strategy and Action Plan, Strategy for the Management of Solid Low Level Radioactive Waste from the Non-Nuclear Industry, regional and local waste management strategies.
Ensure high quality design of built infrastructure.	EU Directive on Energy Performance of Buildings (2002/91/EC), Strategy for Sustainable Construction, Local Development Frameworks/Local Plans, BREEAM, CEEQUAL, World Class Places: The Government's Strategy for Improving the Quality of Places, Local Development Frameworks/Local Plans.
Apply life cycle thinking to the extraction of minerals and management of waste.	Government Review of Waste Policy in England 2011, Managing Aggregates Supply in England.
Contribute to the delivery of statutory National Park purposes and duty.	North York Moors National Park Management Plan, Recreation and Access Strategy for the North York Moors, North York Moors Core Strategy and Development Policies.

5 The Environmental, Social and Economic Baseline and Key Issues for Sustainability

One of the key requirements of the Sustainability Appraisal is to predict and monitor the effects of implementing a plan. In order to do this effectively it is necessary to have an understanding of the baseline position. This forms an important starting point for ascertaining the current and likely future state of the Plan Area as well as helping to identify the sustainability issues that the Joint Plan will try to address. Evidence produced as part of the production of the Plan itself contains more detail in relation to some of the topics considered in the baseline, particularly in relation to minerals and waste, and these can be viewed at www.northyorks.gov.uk/mwevidence.

Requirements of the SEA Directive:

The Environmental Report shall include information on “relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme’ and ‘the environmental characteristics of areas likely to be significantly affected’ and ‘any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC”. (Annex I (b), (c) and (d)).

Guidance provided by the Planning Advisory Service³² does make it clear that it is nevertheless important to ensure that the baseline is proportionate and relevant to the plan being prepared, and is not merely an account of all of the data available for the Plan Area. It has therefore been acknowledged that some baseline information that is relevant or even significant for a Local Plan covering a whole range of topics, may be less significant or even not relevant for a Minerals and Waste Plan.

The Planning Advisory Service guidance states that planning authorities can draw upon a range of available data including the latest available statistics, topic based studies and area profiles. As the Joint Plan Area is made up of three minerals and waste planning authorities, published data (most of which is produced for individual local authority areas) is not readily available for many topic areas covered by the baseline. Therefore, in many cases the baseline contains data which relates to an area which is not the Joint Plan area but is a ‘best fit’. This is explained in more detail in Volume 2.

In this Sustainability Appraisal we have recognised that the social, environmental and economic issues experienced by the City of York and the North York Moors National Park are often quite different from those issues experienced by the whole Plan area. For instance, the economy of a city environment such as York may be distinctly different from deep rural areas such as are found in the North York Moors National Park. Baseline documents for the City of York and for the North York Moors National Park have been produced separately to the production on this Scoping exercise but information contained within them has fed into the Plan Area baseline. The York and North York Moors baseline documents have been produced for wider purposes than minerals and waste planning; therefore some elements of the baseline may have varying degrees of relevance for the Joint Plan.

³² Sustainability Appraisal Advice Note (Planning Advisory Service, July 2010).

Readers interested solely in the National Park or in York may wish to consult the baseline documents for their respective areas. Elsewhere readers should consult the baseline data for the Plan Area as a whole, as shown in the diagram below.

Other sources of information for the Plan area baseline have included the Environmental and Demographic and Economic Evidence Papers which have been produced as part of the background evidence for the Joint Plan, and various published data sources such as data provided by the Office for National Statistics or the Environment Agency. The Evidence Papers produced as background documents for the Joint Plan contain much of the same information to the baseline, but is presented in a way that makes it relevant for developing the Plan. The baseline to this Sustainability Appraisal, on the other hand, is presented in a way which makes the data relevant for identifying sustainability issues. The sources of data contained in the baseline are referenced throughout the baseline.

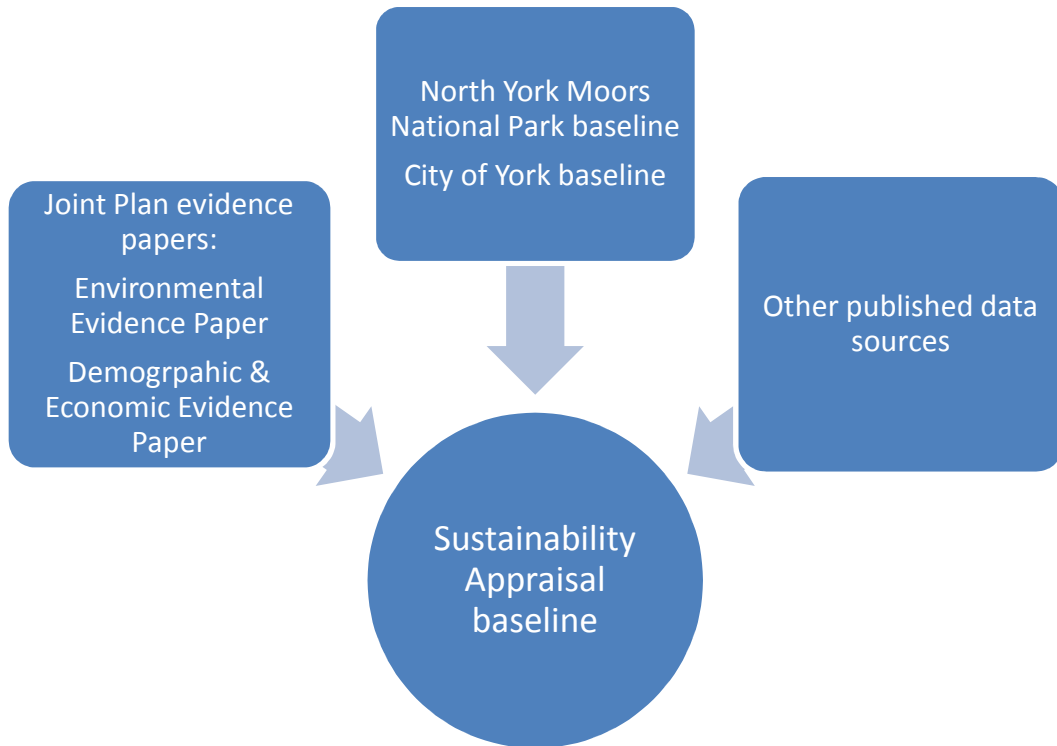


Figure 4 - Relationship between other sources of information and the Joint Plan Area baseline.

- **The baseline for the Plan Area as a whole is in Volume III of these reports and is available at: www.northyorks.gov.uk/mwsustainability**
- **The North York Moors baseline is available at – <http://www.northyorkmoors.org.uk/living-in/planning/advice/background-documents>**
- **The City of York Baseline is available at – www.york.gov.uk/NewLocalPlanforYork**
- **The Environmental Evidence Paper and Demographic and Economic Evidence Paper is available at www.northyorks.gov.uk/mwjointplan**

The topics covered by the baseline have been informed by the SEA topics (as contained in Annex I(f) of the SEA Directive). These are biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage and landscape. As the scope of Sustainability Appraisal is wider than Strategic Environmental Assessment additional topic areas have also been included, particularly in relation to social and economic factors.

Where gaps in data exist these have been identified within the baseline. As the baseline should continually evolve and be updated, it may be that these gaps can be filled during the course of plan production. Where gaps in data exist an explanation has been included to this effect and a description of the situation as is currently understood has been included.

The Plan Area baseline assessment is contained in Volume 2.

The key sustainability issues arising out of the baseline are summarised in Table 6. This contains the key sustainability issues for the Plan area along with any additional location specific issues for the City of York and the North York Moors National Park.

Overall, the baseline review reveals that a large part of the Joint Plan Area is designated for the quality of its landscape and/or the importance of its wildlife and there are a large number of important historic assets. The area is diverse, ranging from large swathes of protected landscape to densely populated urban areas. Much of the area is either at risk from flooding or is important in controlling floodwaters. There are generally higher proportions of older people and lower proportions of younger people living in the Plan area when compared to regional and national averages. Levels of deprivation are low and unemployment is relatively low, whilst educational attainment is comparatively high.

Table 6: Key sustainability issues arising out of baseline data review

The Plan Area	York	North York Moors
Biodiversity, Flora, Fauna, Geodiversity, Landscape and Cultural Heritage Issues		
<ul style="list-style-type: none"> ➤ Large number of nationally designated wildlife sites and significant areas of internationally designated wildlife sites ➤ Outside of these areas there are large numbers and a wide distribution of locally important Sites of Importance for Nature Conservation and UK BAP priority habitats ➤ Much of the farmland is covered by some form of agri-environment scheme ➤ Despite this many habitats in this area are fragmented and isolated ➤ Outside of the National Park, woodland is generally found in small fragments ➤ Invasive species are an increasing threat to native wildlife ➤ Although large parts of this area are relatively low lying, variation in geology, soils, topography and historical factors have helped create a range of distinctive and valued landscapes ➤ The North York Moors National Park makes up a large part of the Plan area and a significant portion of the Plan area lies within Areas of 	<ul style="list-style-type: none"> ➤ Whilst open space in York includes approximately 480 hectares of parks and open space it is not distributed in a uniform manner across the city and therefore some areas are deficient in certain types of open space ➤ Quality of large parks and gardens in York is good with 5 designated as Green Flag Award status ➤ York has an abundance of important site for nature conservation at international, national, regional and local levels; ➤ The city's nature conservation sites support a diverse range of flora and fauna ➤ Initiatives are on-going to support nature conservation / open space around the city to make a more environmentally friendly and healthy city ➤ York's landscape is a primary feature of York's historic character and setting ➤ There are specific elements of the landscape that need to be preserved in order to appreciate the whole of York's context ➤ Views from and to the landscape and built environment features are an important feature of York's character 	<ul style="list-style-type: none"> ➤ Entire area is a protected nationally for its natural beauty, wildlife and cultural heritage ➤ Large areas of nationally and internationally protected wildlife sites ➤ Small number of RIGS sites but geology part of the Park's established special qualities ➤ Relatively large areas of woodland and ancient woodland, and largest concentration of Plantation on Ancient Woodland Sites (PAWS) in northern England ➤ Entire coastline is Heritage Coast ➤ Relatively very tranquil ➤ Over half of the area of the Park, and most of the moorland, is covered by agri-environment schemes ➤ Many habitats could be better connected ➤ Large number of Listed Buildings and the number of buildings at risk has significantly declined during recent years ➤ Contains a third of all of the Scheduled Monuments in the region, plus thousands more archaeological sites and features. Around a third of the Scheduled Monuments are at

<p>Outstanding Natural Beauty or Heritage Coasts</p> <ul style="list-style-type: none"> ➤ Green belts limit development in parts of the south of this area ➤ While the county of North Yorkshire as a whole is one of the most tranquil in England, outside of the national parks and AONBs tranquillity levels often fall due to transport corridors or when near to settlements ➤ Key ecosystem services include regulating water flow, food provision and cultural services such as the provision of a sense of history ➤ The Plan Area is rich in historic assets ➤ Whilst most designated assets in the area are not 'at risk' a large proportion of the designated historic assets identified as being at risk in the region are in North Yorkshire. ➤ The Plan Area has a wealth of geological interest 	<ul style="list-style-type: none"> ➤ Historic character and setting is an integral part of the city's past and future ➤ The attractive and unique historic environment contributes to/influences the economy, social and environmental functioning of the city of York ➤ Appreciating the value of heritage assets is key to preservation and enhancement as well understanding any future impacts ➤ Consideration needs to be given to the key views and assets which are identified to have a positive experience for the city 	<p>risk</p>
<p>Air, Water, Soil, Climate Change and Material Asset Issues</p>		
<ul style="list-style-type: none"> ➤ Long stretches of river catchments can be found in this area, all of which ultimately drain to the Humber Estuary, with the exception of the Esk and Tees ➤ Significant floodplains form around large parts of these rivers, becoming more significant as they travel east 	<ul style="list-style-type: none"> ➤ Climate change will have an impact in York at a variety of levels ➤ Targeted campaigns can work including those aimed at design and sustainability as well as lifestyle changes ➤ York has reduced its overall consumption of energy resources over the past few years and this trend is likely 	<ul style="list-style-type: none"> ➤ Water quality is mostly moderate, however some water bodies categorised as poor with only a few good ➤ Upland areas are important for storing water and reducing flood risk for areas outside of the Park downstream

<ul style="list-style-type: none"> ➤ River Basin Management Plans set demanding targets for water quality across many water bodies: there are still significant numbers of water bodies at poor or bad status ➤ Important groundwater resources are protected by Groundwater Source Protection Zones. ➤ Flooding is already a problem in lower lying areas. However, climate change is likely to increase the risk of surface water and river flooding ➤ Much of the Plan Area is made up of high quality farmland, though there are significant areas of poorer agricultural soils particularly in uplands ➤ Air quality is mainly an issue for a few very local urban areas, however some important upland habitats are being affected by deposition of air pollutants ➤ Harrogate has the highest total emissions of CO2, followed by York and Selby, though across the Plan area total emissions are falling ➤ Per capita emissions of CO2 are highest in the more rural parts of the North Yorkshire and York, although are also falling ➤ Climate change is likely to have a range impacts on the Plan area including increased flooding, damage to infrastructure and effects on food 	<p>to continue</p> <ul style="list-style-type: none"> ➤ A key consumer of resources is transport ➤ External factors such as the weather is likely to continue to impact on consumption ➤ The Council is committed to resource and carbon reduction through energy efficiency ➤ Water resources are not likely to have a significant effect on York as the household consumption has been built into Yorkshire water's model. Water efficiency however is still required ➤ The amount of waste produced in York is reducing whilst the levels of recycling and composting has increased in line with a decrease in landfill ➤ York's air quality continues to get worse in the city centre. A combination of measures is needed in order to tackle improvement of air quality, including a modal shift in transport and moving to low emission technologies with supporting infrastructure. York's ambition is to become the first low emission city ➤ York has a history of flooding which needs to be taken into consideration in the planning for the future of the city. ➤ Flooding is still likely and will affect people and businesses in York ➤ There is a need to minimise future flood risk arising from the impacts of climate 	<ul style="list-style-type: none"> ➤ Flooding within the Park is not a widespread issue ➤ Soils are not of high agricultural quality ➤ Air quality is generally good although some upland habitats being affected by deposition of air pollutants ➤ Contains the UK's only potash mine; ➤ High per capita CO2 emissions. Per capita domestic CO2 emissions are higher than England average but lower than Yorkshire and Humber ➤ Most waste is managed outside of the Park, although there are a few small recycling 'bring' facilities and one household waste recycling centre
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<p>production</p> <ul style="list-style-type: none"> ➤ The area has economically important areas of minerals, including aggregates and industrial minerals such as crushed rock, sand and gravel and silica sand; energy minerals such as deep mined coal; and non-aggregate building stone ➤ Most deposits of household waste in North Yorkshire and York are still sent to landfill sites, though the percentage of household waste recycled, reused and composted has risen in recent years, with North Yorkshire as a whole recycling more than the national average; ➤ There is significant variation between district levels of recycling ➤ North Yorkshire’s waste management sites take proportionally more landfill waste deposits than the region as a whole, and England. ➤ Energy consumption is generally higher than average 	<p>change</p> <ul style="list-style-type: none"> ➤ Water quality is generally good though there are areas of poorer water quality ➤ There are contaminated land sites across the city which would require remediation should it be taken forward for development ➤ There are crossovers between land contamination with natural resources and people’s health and well-being ➤ Agricultural land in York is predominantly of good quality and therefore valuable for farming 	
Population and Human Health Issues		
<ul style="list-style-type: none"> ➤ There are many sparsely populated parishes and most settlements are relatively small. However York is a significant city of 198,000 in the heart of the Plan area; ➤ The largest settlements outside of York are Harrogate and Scarborough, 	<ul style="list-style-type: none"> ➤ York’s population and household numbers is projected to increase ➤ York has a high need for housing which it needs to addressed ➤ Housing delivery has decreased ➤ There is a need to plan for a mix and type of accommodation to suit all 	<ul style="list-style-type: none"> ➤ The Park is sparsely populated and the settlements are small, the largest being Helmsley with a population of less than 3,000 ➤ There is a higher than average proportion of older people and a lower than average proportion of

<p>both with populations over 50,000. Most people, however, live outside of larger settlements</p> <ul style="list-style-type: none"> ➤ Population of North Yorkshire and York as a whole is increasing and is expected to continue to rise, but at a lower rate than the region as a whole; ➤ North Yorkshire as a whole has a higher proportion of older people than the region and nationally. However a younger population profile can be found in York. In the future older people will form a larger proportion of the population; ➤ Most districts and the City of York receive a net inflow of new residents, though there is a net outflow in Craven; Harrogate and Richmondshire receive the most new residents; ➤ Life expectancy is increasing in all Districts in North Yorkshire, but there are significant geographical variations in both male and female life expectancy within the county; ➤ Scarborough is the only district in the North Yorkshire and York with lower male and female life expectancy than England as a whole; ➤ Scarborough has the highest rates of mortality from cancer and circulatory diseases ➤ The Plan Area provides many 	<p>household types</p> <ul style="list-style-type: none"> ➤ The general health of citizens in York is good ➤ The main priorities to address are obesity, particularly in children, alcohol and physical activity ➤ A major barrier to housing is the disparity between the cost of housing and how much people earn as well as access to funding such as mortgages ➤ The provision of other types of homes for the elderly, including nursing homes, residential care homes and warden assisted living as well as support services will also need to be developed to take care of the current demand identified for the future ➤ There is a recognised need for Gypsy and Traveller and Show people sites 	<p>those under 45</p> <ul style="list-style-type: none"> ➤ There is a high level of second home ownership ➤ Higher than average life expectancy; ➤ Low levels of obesity ➤ Higher than average participation in sport, with the exception of Scarborough Borough ➤ Lack of affordable housing, although a lot has been built during recent years ➤ Extensive rights of way network and areas of open access land
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<p>opportunities for recreation and leisure including the North York Moors National Park and an extensive network of rights of way</p>		
<p>Economic issues</p>		
<ul style="list-style-type: none"> ➤ Since the economic downturn unemployment has risen across the area, though small declines have been recorded in several districts more recently ➤ There is, however, a higher rate of economically active people in York and North Yorkshire than for the region and England ➤ In Yorkshire as a whole more than 1 in 10 people feel that they are underemployed ➤ The minerals sector is a significant employer directly supporting nearly 2,000 jobs ➤ York and North Yorkshire is generally one of the least deprived areas in the country, though Scarborough and some parts of York rank significantly higher on the indices of deprivation than the rest of the Plan Area ➤ Business appears to be ‘holding up’ during the downturn with only modest falls in active enterprises across the plan area (and growth in the number of active enterprises in York). There are signs that new business formation 	<ul style="list-style-type: none"> ➤ Key challenge is to achieve this economic success in a sustainable manner that protects the environment whilst allowing social and economic progress that recognises the needs of all people ➤ The unemployment rate gap between York and GB has increased through 2011/12 showing York’s unemployment levels are lower than the national average ➤ York seems fairly resilient to the economic downturn with a highly skilled labour force and the highest number of businesses in 2012 since 1998 ➤ The relative dependence on public sector employment is decreasing with the increase in private business ➤ The proportion of people with NVQ4+ is increasing ➤ The number of city centre vacant shops is decreasing ➤ Footfall has been negatively affected by external factors effecting spend in the city ➤ York has become less deprived but still 	<ul style="list-style-type: none"> ➤ High reliance on agriculture and tourism ➤ High reliance on low paid, seasonal, part time employment ➤ Unemployment remains below the national and regional averages although has increased in recent years

<p>is reducing however, and continued uncertainty over the economy may erode resilience</p> <ul style="list-style-type: none"> ➤ Wage levels in North Yorkshire and York are lower than England as a whole. Median earnings are significantly higher for men than women ➤ Fuel prices are rising nationally, which will have impacts on businesses and rural communities in such a large economic area ➤ Outdoor recreation brings income to many rural areas, though less money is spent outdoors by North Yorkshire people than the rates for England as a whole. Heritage assets are also popular tourist destinations ➤ North Yorkshire and York have generally better than average educational attainment levels 	<p>has pockets of high deprivation which need to be addressed</p> <ul style="list-style-type: none"> ➤ Demand for affordable homes is high ➤ York has areas which feature within the top 20% most deprived in the country in terms of barriers to housing although the number has decreased between 2007-2010. Continued access to facilities and services is paramount for local provision and needs to be factored in for the future ➤ The authority has a duty to provide and there is a clear link between York's population and the continuance of a vibrant economy support education for all for the development of skills and learning ➤ The results attained at primary and secondary level are good ➤ City of York has a highly skilled workforce which is key to York's economic success 	
Community and social issues		
<ul style="list-style-type: none"> ➤ The most remote parts of the Plan Area have little or poor access to broadband and mobile phone coverage though this is expected to improve very shortly ➤ People in North Yorkshire and York generally perceive anti-social behaviour to be less of a problem than people in England taken as a 	<ul style="list-style-type: none"> ➤ People generally think York is a safe place to live ➤ Delivering key safety protection measures are primarily out of the remit of the Local Plan. The Community Safety Plan sets out a number of objectives to deliver a safer city and other organisations, such as the safer York Partnership, would ensure that 	<ul style="list-style-type: none"> ➤ Loss of general stores and post offices over the past two decades, although recently this has levelled off ➤ Poor broadband provision and mobile phone reception in many parts of the Park ➤ Limited provision of sports and leisure facilities

<p>whole</p> <ul style="list-style-type: none"> ➤ Reported flytipping incidents are generally low, though in certain areas, such as Scarborough, reports of flytipping are more frequent 	<p>initiatives and schemes</p> <ul style="list-style-type: none"> ➤ Crime rates are decreasing ➤ Support for the future should be aimed at helping to meet the objectives and identified priorities set out in the Community Safety Plan 	
<p>Access and transport issues</p>		
<ul style="list-style-type: none"> ➤ The most significant transport corridors run north to south and include the A1, A19 and East Coast mainline ➤ There are no airports and relatively few stretches of canal in the area. However three airports lie within close range of the Plan Area, and there are major seaports nearby on the Tees and Humber 	<ul style="list-style-type: none"> ➤ Traffic levels in York have remained largely unchanged since 1998, despite continued development over this period ➤ York experiences a net daily in-commute of approximately 7250 trips ➤ The number of people cycling has increased since the introduction of the Cycling City York programme ➤ High frequency bus services match well to the areas in York with the highest number of households without a car ➤ Vehicle ownership levels are significantly higher in rural areas of the York area ➤ York is well connected by rail to many other areas of the country, but services to Harrogate are of a low frequency and rail links to the south east of the city including Hull are relatively poor ➤ Killed and seriously injured road casualties have reduced by at least 45% (from the 1994/98 average) ➤ In the past two years City of York Council has made successful bids to Government for funding programmes to improve public transport and encourage travel behaviour change to reduce 	<ul style="list-style-type: none"> ➤ High reliance on the private car ➤ Traffic levels have been decreasing in recent years although have increased over longer timescales ➤ Lack of public transport in many places

	dependency on the private car for travel	
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6 The Sustainability Appraisal Framework

6.1 Developing the Sustainability Objectives

The development of the SA Framework, containing a series of sustainability objectives, is the main output of this scoping stage (Stage A) of the sustainability appraisal. It is this framework which is used in later appraisal stages to guide the assessment of each policy option presented in the Minerals and Waste Joint Plan. The sustainability appraisal objectives contained in the SA Framework should help to show how the plan will tackle the sustainability issues that have been identified during scoping. The role of sustainability issues in defining sustainability objectives were explored in the Department of Communities and Local Government's 'Plan Making Manual' (now unavailable):

*'Identifying sustainability issues is key to reaching an informed view on the sustainability of the plan. Sustainability appraisal objectives, which can be derived from these issues, may be used to check and refine the plan. In particular, they can be used as a basis for testing and comparing the effects of alternative options considered in the plan. They build on the concept of SEA objectives, which are not mandatory but are a widely used tool in SEA for comparing alternatives'*³³

Section 5 of this report includes the key sustainability issues, derived from baseline data gathering, for the whole plan area as well as distinct parts of it. This section of the report shows the SA Framework derived from the review of sustainability issues that will be used in the Sustainability Appraisal. It also shows the SA objectives that will be applied during the assessment of options and sites.

The SA objectives are intended to be separate from the Minerals and Waste Joint Plan's objectives. However, the two may influence each other and overlaps may occur. The SA objectives should promote an integrated approach to sustainability, bringing together all relevant social, economic and environmental factors. The SEA topics identified in Annex I (f) of the SEA Directive are one of the key determinants when considering which SA objectives should be used for environmental criteria.

Table 7 sets out the Sustainability Appraisal objectives to be used in this SA of the Minerals and Waste Joint Plan. It also includes proposed sub objectives for each SA objective. These sub objectives allow the broad headline objectives to be further and more specifically defined. To see how the review of baseline and sustainability issues has informed the formation of the SA objectives and sub objectives Appendix 1 includes a summary of the justification for each objective.

6.2 The SA Framework and Indicators

A series of proposed indicators is also presented in Table 7. These indicators will be considered when the sustainability effects of options are investigated. Together, the SA objectives, sub objectives and indicators form the SA Framework.

As the sustainability appraisal of options is carried out the Sustainability Framework will inform how options are assessed by asking questions of each option through use of the SA objectives and sub objectives, as

³³ Department for Communities and Local Government, undated, DCLG Plan Making Manual

well as by predicting how these indicators might change if particular options were to be adopted. Section 6.8 explains how the appraisal will proceed in more detail.

Within the SA Framework we have included contextual indicators that allow for trends to be observed over time, irrespective of the Joint Plan. Often these are collected by third parties. A worsening trend may indicate that the Minerals and Waste Joint Plan is not performing in a sustainable way, or may indicate that there are wider factors that are contributing to the trend. We have also used a number of more specific indicators. These indicators will allow a causal link to be established between the Joint Plan and environmental, social and economic change. The assessment of options against SA objectives and sub objectives will require predictions to be made against these indicators to determine whether trends are likely to improve or worsen. This may require professional judgement, supported by available evidence; evidence arrived at through the Strategic Flood Risk Assessment and Habitats Regulations Assessment, or the use of assessment tools such as Network Analysis and evaluation of effects using Geographical Information Systems. The indicators presented alongside the objectives are for the purpose of ascertaining what the likely effects on these would be when undertaking the Sustainability Appraisal. Indicators for monitoring the actual effects of the Plan will be established through the Sustainability Appraisal process, based upon the potential effects that arise. Consideration of potential effects is not limited to the effects on the indicators as it is acknowledged that these cover a limited spectrum. Some of these indicators may ultimately form part of the monitoring framework.

IGuidance on Sustainability Appraisal³⁴ suggests it is important to limit indicators in the Sustainability Appraisal Framework (ie those for predicting likely effects) to manageable numbers. Therefore many of the individual indicators presented will show progress towards or away from more than one sub objective. Wherever possible we have tried to ensure that indicators provide information for all sub objectives (even if one indicator is informing several sub objectives), however for some sub objectives it has not been possible to provide a matched indicator due to the difficulty of gathering meaningful data. These sub objectives will rely on professional judgement when effects are predicted. More information is provided in the limitations section of this report.

Work will continue to further refine a number of indicators to ensure that they accurately measure change. We will continue to consult on the development of these indicators. Baseline data for many of the indicators can be found in Volume 2. However, for other indicators work to gather baseline data will continue as indicators are further refined.

Within this SA Scoping Report we tested the proposed objectives against rural proofing criteria and against one another (see 6.4 below). We have also introduced a compatibility testing exercise to establish whether the SA Framework would help to ensure that ecosystem services³⁵ found within the Plan area are not deleteriously affected by any of the SA objectives (see Appendix 3). Ecosystem services are the services provided by the natural environment that benefit people, such as food, fuel and flood protection, so it is important that the sustainability objectives proposed complement, rather than work against, that service provision. The results of this exercise have fed into the development of the sustainability objectives and wider SA Framework.

³⁴ ODPM, 2005. Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents

³⁵ See Appendix 3 for an explanation of the term 'ecosystem services'.

Table 7 – Sustainability Appraisal Framework

Sustainability Objective	Sub objectives	Indicators ³⁶
<p>1. Protect and enhance biodiversity and geodiversity and improve habitat connectivity</p>	<ul style="list-style-type: none"> -Protect and enhance designated nature conservation sites and protected species; -To contribute to the suitable protection of trees, woodlands and forests -Avoid damage to designated geological assets and create new areas of geodiversity value; -Seek to contribute to national targets for biodiversity, including for national and local priority species and habitats; -Seek to contribute to local targets for geodiversity; -Preserve the integrity of habitat networks and increase the connectivity between habitats; -Maximise the potential for the creation of new habitats; -Minimise the spread of invasive species; -Provide opportunities for people to access the natural environment; -Protect and manage ancient woodland; -Appropriately manage and enhance PAWS; -Promote improvements for biodiversity at the landscape scale; -Achieve a net gain for biodiversity 	<ol style="list-style-type: none"> 1. Percentage of SSSIs in favourable condition (Natural England) 2. Total area of SSSI (Natural England) 3. Total area of UK BAP Priority Habitat (Natural England) 4. Area of ancient and semi natural woodland (Natural England) 5. Area of ancient replanted woodland (PAWS) (Natural England) 6. Area of land in Higher Level Stewardship (Natural England) 7. Area of SINC land (NYCC) 8. Number of alerts for invasive species relevant to North Yorkshire (Defra)³⁷ 9. Number of alien species on UKTAG List found in North Yorkshire³⁸
<p>2. Enhance or maintain water quality and supply and improve efficiency of water use</p>	<ul style="list-style-type: none"> -Ensure that Water Framework Directive status objectives for surface and groundwater are not compromised by maintaining or improving upon ecological and chemical status; - Prevent unsustainable levels of ground and surface water abstraction; - Avoid wasting water; -Protect groundwater source protection zones; 	<ol style="list-style-type: none"> 1. Percentage of water bodies achieving overall good status in River Basin Management Plans (Environment Agency) 2. Water resource availability at low flows as reported in CAMS (Environment Agency) 3. Groundwater resource availability as reported in CAMS (Environment Agency)

³⁶ See explanation above regarding the purpose of indicators

³⁷ Species distribution to be taken from the National Biodiversity Network.

³⁸ Species distribution to be taken from the National Biodiversity Network.

Sustainability Objective	Sub objectives	Indicators ³⁶
3. Reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation	<ul style="list-style-type: none"> -Encourage more sustainable transport modes; -Reduce the impact of transporting minerals by road on local communities; -Reduce vehicle emissions due to mineral and waste movements; -Encourage proximity between minerals and waste sites and markets / sources³⁹; -Safeguard or deliver valuable infrastructure that may contribute to modal shift; -Promote active travel and sustainable commuting -Improve congestion 	<ol style="list-style-type: none"> 1. Motor vehicle traffic (Vehicle miles) by local authority (DfT) 2. Proportion of residents who walk or cycle, at least one per month, for utility purposes (for reasons other than recreation, health, training or competition) by local authority⁴⁰ (DfT) 3. Road transport energy consumption at local authority level (DfT/NAEI)
4. Protect and improve air quality	<ul style="list-style-type: none"> -Reduce all emissions to air from new development; -To reduce the causes and levels of air pollution in Air Quality Management Areas and seek to avoid new designations; -To minimise dust and odour, particularly where communities or other receptors may be affected; -Support cleaner technology for minerals and waste development; -Avoid locating development in areas of existing poor air quality where it could result in negative impacts on the health of present and future occupants / users; -Seek to avoid adding to pollutant deposition at sensitive habitats. 	<ol style="list-style-type: none"> 1. Number of Air Quality Management Areas 2. Number of SAC and SPAs exceeding critical loads for deposition of either N or S (APIS) 3. Mapped distribution of NOX, NO2, PM10 and PM2.5 (Defra LAQM)
5. Use soil and land efficiently and safeguard or enhance their quality	<ul style="list-style-type: none"> -Reduce the permanent loss of best and most versatile agricultural land; -Conserve and enhance soil resources and quality; -Promote good land management practices on restored land; -Reduce the amount of derelict, contaminated, degraded and vacant / underused land; 	<ol style="list-style-type: none"> 1. Number of minerals and waste applications which are located within areas of best and most versatile (BMV) agricultural land (NYCC) 2. Land use change: previous use of land changing to developed use annual average by region⁴¹ (DCLG)

³⁹ This reduces the distance required to transport products / waste and can provide benefits to businesses in terms of supply chains

⁴⁰ Department for Transport/Sport England, 2012. Local Area Walking and Cycling Statistics: England 2010/11 [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9105/local-area-walking-and-cycling-2010-11.pdf].

⁴¹ Derived from the Department for Communities and Local Government 'Live Tables on Land Use Change Statistics' which are collated by Government Office Region [<https://www.gov.uk/government/statistical-data-sets/live-tables-on-land-use-change-statistics>].

Sustainability Objective	Sub objectives	Indicators ³⁶
	<ul style="list-style-type: none"> -Recover nutrient value from biodegradable wastes (e.g. compost, biodigestate) -Minimise land taken up by minerals and waste development -Seek to utilise brownfield land for waste development where possible 	
6. Reduce the causes of climate change	<ul style="list-style-type: none"> -Reduce emissions of greenhouse gases; -Reduce CO2 from minerals and waste development through use of energy efficient and low and zero carbon design and adoption of efficient plant and processes; -Maximise the generation and use of renewable energy in appropriate locations; -Prevent the loss of embodied energy by promoting the use of recycled, recyclable and secondary resources; -Promote carbon storage through appropriate land management -Adhere to the principles of the energy hierarchy⁴² 	<ol style="list-style-type: none"> 1. Emissions of CO2 per capita by Local Authority (excluding LULUCF⁴³) (DECC) 2. Industrial and commercial per capita CO2 emissions by Local Authority (DECC) 3. Road transport CO2 emissions per capita by Local Authority (DECC) 4. Land use change CO2 emissions per capita by Local Authority (DECC)⁴⁴
7. Respond and adapt to the effects of climate change	<ul style="list-style-type: none"> -To plan and implement adaptation measures for the likely effects of climate change; -Ensure 'sustainable adaptation' is planned for⁴⁵; Ensure that minerals and waste developments are not susceptible to effects of climate change 	<ol style="list-style-type: none"> 1. UKCP climate change scenarios⁴⁶(UKCP) 2. Mapped extent of Flood Zones under Climate Change as reported in available Strategic Flood Risk Assessments⁴⁷ (NYCC, CYC, NYMNP) 3. Allocations requiring exception testing in North

⁴² The energy hierarchy is analogous to the waste hierarchy in that it shows a sequence of preferred approaches to obtaining energy. Broadly this can be shown as three steps, in order of preference: 'Reduce' the amount of energy required in the first place (for instance through good design); 'Re-use' waste energy such as heat (e.g. through combined heat and power technology); and 'recycling' (which means the provision of energy that has some processing applied – e.g. renewable energy to meet demand or the extracting of energy from waste). CABE, 2011. Thinking Differently – The Energy Hierarchy.

⁴³ LULUCF relates to emissions from Land Use, Land Use Change and Forestry.

⁴⁴ There is a time lag between publication of the DECC carbon statistics at a local authority level and the present year, such that 2010 figures were published in 2012.

⁴⁵ Sustainable Adaptation has been defined by Natural England. According to Natural England 'It is important that any adaptation action is sustainable. This means that any response by society should not actually add to climate change, cause detrimental impacts or limit the ability or other parts of the natural environment society or business to carry out adaptation elsewhere' (Natural England, undated. Sustainable Adaptation [URL:

<http://www.naturalengland.org.uk/ourwork/climateandenergy/climatechange/adaptation/sustainable.aspx>].

⁴⁶ Changes to precipitation and temperature to be recorded in line with latest available data.

⁴⁷ As further SFRA work becomes available the spatial extent of increased flood risk from rivers will become clearer.

Sustainability Objective	Sub objectives	Indicators ³⁶
	-Ensure that minerals and waste developments do not hinder adaptation to climate change -Will the policy contribute to food security in a changing climate?	Yorkshire SFRA (NYCC)
8. Minimise the use of resources and encourage their re-use and safeguarding	-To safeguard and use minerals resources efficiently; -Safeguard infrastructure that may support more sustainable minerals and waste development -To encourage the re-use of primary materials; -To promote the efficient use of resources throughout the lifecycle of a development, including construction, operation and decommissioning of minerals and waste infrastructure; Encourage the utilisation of sustainable construction techniques; -Promote the use of secondary and recycled minerals resources where they can play a role in reducing the need for more primary minerals extraction	1. Number / type / area of safeguarding areas defined in Plan 2. Reserves of primary land won aggregate and crushed rock (LAA) 3. Sales of secondary aggregate in the North Yorkshire sub region (LAA)
9. Minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	-Use less materials through design and processing; -Re-use materials where possible; -Encourage recycling; -Recover residual resources (e.g. through anaerobic digestion or energy recovery); -Support 'recycling on the go'; ⁴⁸ -Recognise and promote the value of waste streams as alternatives to primary mineral extraction; -Promote economic gain through re-use	1. Total waste received by waste facilities by category ('household, industrial and commercial', 'inert / construction and demolition', 'hazardous', 'unknown') (Environment Agency); 2. Waste management method of household waste arisings in North Yorkshire (NYCC) 3. Anaerobic digestion plants in the plan area ⁴⁹
10. Conserve and enhance the historic environment, heritage assets and their settings.	-To protect and enhance those elements, including setting, which contribute to the significance of: <ul style="list-style-type: none"> ➤ World Heritage Sites ➤ Scheduled Monuments ➤ Archaeological Features ➤ Listed buildings 	1. Buildings, scheduled monuments, conservation areas, registered parks and gardens, registered battlefields 'at risk' as defined by the Heritage at Risk Register (English Heritage) 2. Number of visits to historic sites (Yorkshire and the Humber) (English Heritage)

⁴⁸ 'Recycling on the go' is promoted by the Government's Waste Policy Review. It represents recycling on the street and in public places.

⁴⁹ As shown on the official biogas plant map produced by 'Anaerobic Digestion' [URL: <http://www.biogas-info.co.uk/>].

Sustainability Objective	Sub objectives	Indicators ³⁶
	<ul style="list-style-type: none"> ➤ Historic parks and gardens ➤ Historic battlefields ➤ Conservation Areas; ➤ The city of York <p>-To provide appropriate protection for archaeological features in areas of potential development;</p> <p>-To protect the wider historic environment from the potential impacts of proposed development and the cumulative impacts;</p> <p>-To improve access to, and enjoyment of, the historic environment where appropriate;</p> <p>-Preserve and enhance cultural heritage</p> <p>-Safeguard those elements which contribute to the special historic character and setting of York.</p> <p>-To ensure a steady supply of building and roofing stone for the repair and construction of buildings and structures</p> <p>-Protect and enhance important non-designated heritage assets</p>	
<p>11. Protect and enhance the quality and character of landscapes and townscapes</p>	<p>-Conserve and enhance the natural beauty and cultural heritage of the North York Moors National Park;</p> <p>- To conserve and enhance the setting of designated landscapes, including those outside of the Plan area;</p> <p>- To protect and enhance the natural beauty of Areas of Outstanding Natural Beauty</p> <p>-To protect and enhance local landscape / townscape character and quality, local distinctiveness and sense of place;</p> <p>-To protect the setting of important townscapes;</p> <p>-To protect the purposes and 'positive use'⁵⁰ of the Green Belt;</p> <p>-To protect coastal landscape and seascape character;</p> <p>-To protect and improve tranquillity levels and reduce sources of intrusion, such as light pollution;</p> <p>-To co-locate waste facilities with complementary industrial</p>	<p>1. Number of minerals and waste planning applications in the green belt / designated landscapes / conservation areas (NYCC, CYC, NYMNPA);</p> <p>2. Number of planning conditions related to visual amenity / noise / lighting for minerals and waste sites (NYCC, CYC, NYMNPA);</p>

⁵⁰ The National Planning Policy Framework defined 5 purposes to the Green Belt and also recommends that local planning authorities should 'plan positively to enhance the beneficial use of the Green Belt'.

Sustainability Objective	Sub objectives	Indicators ³⁶
	facilities where possible to reduce dispersed visual intrusion; -Preserve, enhance and complement architectural character and complexity	
12. Achieve sustainable economic growth and create and support jobs	-To increase the level and range of employment opportunities, particularly in deprived areas; -To encourage stable economic growth through provision of an adequate, sustainable and steady supply of minerals; -To promote conditions which enable sustainable local economic activity and regeneration and encourage creativity and innovation; -To capture value from waste streams by creating saleable products from them -Promote a low carbon economy -Support existing employment drivers and create new ones -Support existing businesses and the local economy outside of the minerals and waste sectors	1. Economically Active Rate of 16 to 64 year olds 2. Number of new bank accounts (first current accounts from a small business banking range) (LEP) 3. Unemployment rate (Annualised Population Survey Rate) 4. Gross median weekly earnings of residents and people who work within the area (NYCC) 5. Number of minerals and waste planning applications (NYCC)
13. Maintain and enhance the viability and vitality of local communities	-Provide opportunities to boost tourism -To promote job creation, training and volunteer opportunities through sustainable site restoration -Contribute to the provision of housing through the provision of construction materials -Promote conditions that would maintain the vitality and functionality of the community	1. Ratio of lower quartile house prices to lower quartile earnings (NYCC Stream) 2. Economically Active Rate of 16 to 64 year olds 4. Number of visits to historic sites (Yorkshire and the Humber) (English Heritage)
14. Provide opportunities to enable recreation, leisure and learning	-Provide opportunities to enable the enjoyment and understanding of the special qualities of the National Park; -Promote recreation in the countryside and AONBs, consistent with the wider social, economic and environmental facets; -Provide opportunities for lifelong learning -To contribute to networks of multifunctional green infrastructure -To increase access to the public rights of way network and the wider countryside	1. Length of Public Rights of Way Network (NYCC/CYC/NYMNP) 2. People qualified to at least level 4 who are economically active (NYCC Stream) 3. Visits to places out of doors (as measured in Natural England's MENE programme) (Natural England)
15. Protect and improve the wellbeing, health and safety of	-To minimise the impact of nuisances associated with minerals and waste development, such as noise pollution, odour and	1. Incapacity benefit claimants as percentage of working age population (NYCC Steam)

Sustainability Objective	Sub objectives	Indicators ³⁶
local communities	severance; -Reduce traffic accidents -To reduce health inequalities; -To promote healthy living, offer opportunities for more healthy lifestyles and improve life expectancy; -To improve levels of wellbeing -To ensure the safety and security of local people and visitors -To ensure that pollution does not pose unacceptable risks to health	2. Mortality rate from coronary heart disease (NYCC Stream) 3. Road accident Casualties – Killed and Seriously Injured (NYCC Stream) 4. Life expectancy at birth (ONS) 5. Fly tipping incidents reported by Local Authorities (by waste source) (NYCC Stream) 6. Anti-social behaviour (all categories) number (NYCC Stream) 7. All age respiratory disease mortality (Public Health England)
16. Minimise flood risk and reduce the impact of flooding	-To ensure that the location and design of new development has regard to the potential risk, causes and consequences of flooding; -To promote opportunities for sustainable flood alleviation; -To reduce the number of people and properties at risk of flooding.	1. Allocations requiring exception testing in North Yorkshire SFRA (NYCC) 2. Number of planning conditions relating to SUDS (NYCC, CYC, NYMNPA)
17. Address the needs of a changing population in a sustainable and inclusive manner	- To enable development and wider activity to meet the needs of the population; -To support shortened supply chains for building materials; -To enable the community to contribute to and have influence in decision making -To improve public access to facilities enabling sustainable waste management -To support community led waste management schemes -Reduce social exclusion	1. Number of consultation responses to Joint Plan and Sustainability Appraisal (NYCC) 2. Number of Household Waste Recycling Centres (NYCC, CYC) 3. Indices of Deprivation Average Rank (NYCC Stream)

6.3 Previous Work Relating to SA Objectives

As the geographical coverage of this scoping report includes 3 planning authorities, the development of the SA Framework has also been informed by previous sustainability appraisal work in each of the plan areas. While the SA Framework has arisen through review of key sustainability issues, the wording for the objectives and sub objectives, as well as the selection of a number of indicators, has also been influenced by previous SA work in each of the three Minerals and Waste Planning Authorities. However, checks have been made to ensure that the information drawn from previous SA work remains consistent with the baseline and key sustainability issues for the whole joint plan area.

For a summary of previous sustainability appraisal objectives and the links between them see Appendix 4.

6.4 Rural Proofing

The Government's Department for Environment, Food and Rural Affairs (Defra) state on their website that: *'rural proofing is a long standing process which requires policy-makers across Government to ensure that the needs and interests of rural people, communities and business are properly considered in the development and implementation of all policies and programmes'*.⁵¹

The Commission for Rural Communities has produced guidance⁵² on assessing how policies will affect rural people and places to ensure that the policies are fair and effective for all. Drawing upon this guidance, the key steps in undertaking a rural proofing exercise of a policy are to:

- Consider whether the policy is likely to have a different impact in rural areas, because of particular rural circumstances or needs;
- Make a proper assessment of those impacts, if they are likely to be significant; and
- Adjust the policy, where appropriate, with solutions to meet rural needs and circumstances.

Rural Proofing is not a statutory requirement but it is nonetheless accepted good practice. While primarily designed as a tool for policy development, the Rural Proofing Guidance includes a number of challenge questions that can be asked as policies are developed. In terms of this sustainability appraisal it is helpful to consider whether the SA Framework effectively promotes the issues alluded to by the rural proofing challenge questions, in so far as they are relevant to minerals and waste planning. The following table highlights the links between the rural proofing questions and the Sustainability Appraisal objectives and sub objectives. This demonstrates how rural proofing will be addressed by the SA objectives.

⁵¹ Defra, undated. What is Rural Proofing? [URL: defra.gov.uk/corporate/about/how/policy-guidance/rural-proofing/] (accessed 03/04/13).

⁵² Rural Proofing Guidance - Commission for Rural Communities (May 2009).

Table 8 – Rural proofing the SA framework.

Rural Proofing Criteria	Sustainability Appraisal Objectives
Service provision and availability	
Will it affect the availability of public and private services?	Yes SA objective 13 (viability of local communities) and 14 (opportunities to enable recreation leisure and learning) should promote positive effects on service provision. This is because these objectives will identify opportunities for minerals and waste infrastructure to contribute to, rather than detract from, affordable housing and key leisure and lifelong learning services. Objective 9 (waste hierarchy) should also support opportunities for greater re-use and recycling in rural communities, while SA objective 17 includes a sub objective to improve public access to sustainable waste management
Will it rely on existing service outlets, such as schools, libraries and GP surgeries?	Not relevant to minerals and waste planning.
Will it rely on the private sector or public-private service?	The SA Framework does not distinguish between public and private sector service delivery as the plan presents the spatial framework for delivery rather than a detailed project plan for specific developments.
Delivery costs	
Will the cost of delivery be higher in rural areas where clients are more widely dispersed and economies of scale can be harder to achieve?	It may potentially be more difficult to deliver some waste facilities in rural areas. However, through SA objective 17, which includes sub-objectives relating to public access to waste facilities and support for community-led waste management schemes, as well as shortening supply chains for building materials, the SA should help ensure that the interests of rural communities are considered.
Will it rely on local institutions for delivery?	The Joint Plan may plan for some minerals operations that are run by local small businesses. The SA will not distinguish between the types or scale of firms that deliver minerals and waste development.
Access and Infrastructure	
Will it affect travel needs or the ease / cost of travel?	Yes, Objective 3 of the SA Framework (transport) promotes sustainable modes of transport and promotes sustainable travel by minerals and waste employees, so the SA will make a positive contribution.
Will it rely on infrastructure (e.g. broadband ICT, main roads, utilities) for delivery?	SA objectives such as 2 (water) and 3 (transport) will assess any deleterious impact on rural infrastructure.
Will delivery of the policy be challenging at the 'edges' of administrative area?	The Duty to Co-operate should ensure that the plan considers the edges of the plan areas, while the SA objectives taken as a whole should identify sustainable solutions to dealing with cross boundary issues.

Rural Proofing Criteria	Sustainability Appraisal Objectives
Is it dependent on new buildings or development sites?	The Sustainability Appraisal will assess individual sites to ensure development is sustainably located in a way which is consistent with a wide range of rural interests.
Communications	
Will it rely on communicating information to clients?	The plan itself will be a clear statement of the spatial framework for minerals and waste and will be used by developers. The Sustainability Appraisal must ensure that social, economic and environmental issues are fully considered in the messages that the plan delivers. Within this assessment rural interests will be promoted via the SA objectives as a whole.
Economies	
Will it impact on rural businesses, including the self-employed?	Objectives 12 (sustainable economic growth) and 13 (viability and vitality of local communities) will encourage economic activity and tourism business as well as employment opportunities in rural areas.
Will it affect land-based industries and, perhaps, rural economies and environments?	Objectives 1 (biodiversity / geodiversity), 2 (water), 3 (transport), 4 (air quality), 10 (historic environment) and 11 (landscape) will protect rural environments. Objectives 12 (sustainable economic growth) and 13 (viability and vitality of local communities) will protect economies, including rural economies. Objective 5 (soil and land) will promote the interests of sustainable land based industries
Will it affect people on low wages or in part-time or seasonal employment?	Objective 12 (sustainable economic growth) and 13 (viability and vitality of local communities) will seek to increase the supply of jobs which will potentially offer alternative opportunities for some low wage or underemployed individuals. Affordable housing will also be promoted.
Disadvantage	
Will it target disadvantaged people or places?	Objective 12 (sustainable economic growth) includes a sub objective 'to increase the level and range of employment opportunities, particularly in rural and deprived areas'.

6.5 SA objectives and coverage of SEA topics

The SEA Directive requires that information is provided on the likely significant effects on a number of environmental topics. Table 9 below shows how the SEA topics are represented within the revised sustainability objectives.

Table 9 - Relationship between the SA objectives to the SEA Directive’s topics.

SEA Topic	SA Objective	Coverage in baseline
Biodiversity	Objective 1	-Biodiversity, Flora and Fauna Topic Sheet
Population*	Objective 17	-Population and Human Health Topic Sheet -Economy, Education and Deprivation Topic Sheet
Human Health	Objective 15	-Population and Human Health Topic Sheet
Fauna	Objectives 1	-Biodiversity, Flora and Fauna Topic Sheet
Flora	Objective 1	-Biodiversity, Flora and Fauna Topic Sheet
Soil	Objective 5	-Water and Soil Topic Sheet
Water	Objectives 2 & 16	-Water and Soil Topic Sheet
Air	Objectives 3 & 4	-Air Quality Topic Sheet
Climatic Factors	Objectives 3, 6 & 7	-Climatic Factors Topic Sheet
Material Assets*	Objectives 8 & 9	-Material Assets Topic Sheet
Cultural heritage including architectural and archaeological heritage	Objective 10	-Historic Environment Topic Sheet
Landscape	Objective 11	-Landscape Topic Sheet -Additional Environmental Issues Topic Sheet

* These terms are not clearly defined in the SEA Directive

6.6 SA Objectives and Internal Compatibility

Guidance on sustainability appraisal⁵³ also suggests that sustainability objectives are checked for their compatibility with one another; the object of the exercise being to highlight tensions between objectives. Where objectives are seen to be incompatible this can help clarify where mitigation or alternatives might be considered. Figure 5 summarises the internal compatibility of sustainability objectives.

Most objectives are either compatible with one another, or exhibit no relationship. There was some uncertainty between a number of objectives, and no wholly negative relationships. The assessment has been reviewed following consultation on the draft Scoping Report and following the incorporation of the actions identified in Table 10 below, although this review has not resulted in any of the scoes being amended. It should be noted that where uncertainties remain, this reflects the fact that the objectives are strategic in nature and that it is possible for them to operate alongside one another provided the actions identified are considered during the SA process. Table 10 summarises areas of uncertainty between objectives.

⁵³ ODPM, 2005. Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents (now deleted).

1																	
2	+																
3	+	0															
4	+	0	+														
5	+	+	+	+													
6	+	0	+	+	+												
7	0	+	+	0	+	+											
8	+	+	+	+	+	+	0										
9	+	+/?	+	+	0	+	0	+									
10	0	0	+	+	+	+	0	+	+								
11	+	+	+	+	+	+	0	+	+	+							
12	?	?	?	+	?	+	+	+	+	+	?						
13	?	0	+	+	?	+	+	0	?	+	?	+					
14	+	+	+	0	+	+	+	0	0	+	+	+	+				
15	0	+	+	+	0	+	+	0	+	0	+	+	+	+			
16	+	+	0	0	+	+	+	0	0	0	+	0	0	+	+		
17	+	0	+	0	0	+	+	+	+	0	0	+	+	+	+	+	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

+	Objectives are compatible
-	Objectives are potentially incompatible
0	No direct relationship
?	Uncertain relationship

Figure 5 - Sustainability appraisal objectives internal compatibility matrix.

Table 10 – Uncertainties in compatibility between SA objectives.

Area of Tension Between Objectives	Description and action required ⁵⁴
Between objective 2 (water) and objective 9 (waste hierarchy)	While managing waste higher up the waste hierarchy will generally avoid potential pollution management issues associated with leachate from landfill, as well as potential hydrological disruption from sealed landfill sites, there may be local issues associated with the quantity of water used in the processing of waste for re-use or recycling. However this impact should be balanced against the often ‘exported water footprint impacts’ of extracting raw materials and manufacturing new products which ultimately become waste <u>Action required:</u> Evaluating water impacts associated with material flows and waste management is not possible in

⁵⁴ Note: actions required have been addressed in the final Scoping Report and will be considered throughout the SA process

	<p>this SA due to insufficient resources. However, the SA should make use of published work on the water consumption of waste management processes where available when undertaking appraisal work and this will be documented in the Sustainability Appraisal reports produced at key stages.</p>
<p>Between objective 12 (economy and jobs) and 1 (biodiversity / geodiversity), 2 (water),3 (transportation), 5 (soil and land), and 11 (landscape)</p>	<p>Uncertainties exist between the economy objective and a number of others. This is because economic growth may require more resources to be consumed and transported and more buildings with a water and land footprint and visual impact to be built, the impact of which will often be highly dependent on the location of sites developed and the mitigation measures and technology utilised. The objective already refers to ‘sustainable economic growth’, which means growth will be directed in a way that may ultimately be cleaner and more efficient than previous ways of managing minerals and waste in particular. However, growth implies more economic activity so it is unclear whether efficiency gains will offset the increased impacts that would be associated with unmitigated growth. <u>Action required:</u> No action necessary as objective 12 will be balanced by other objectives in the SA Framework during the assessment.</p>
<p>Between Objective 13 (community vitality) and 1 (biodiversity), 5 (soil and land), 9 (waste hierarchy) and 11 (landscape)</p>	<p>A core part of achieving viable communities is ensuring that those communities have access to affordable housing opportunities, which are likely to have a land take. However, it is unlikely that the Joint Plan will drive demand for new housing, simply that it may be able to make construction materials more affordable, thus lessening cost. Similarly managing waste higher up the waste hierarchy may require sites for managing waste that on the one hand may help make communities more viable, but on the other may lead to negative impacts on certain receptors, depending on where that development is located. <u>Action required:</u> The initial Scoping Report recommended clarifying the sub objective ‘contribute to sustainable and affordable housing’ by changing it to ‘contribute to sustainable and affordable housing through the provision of locally sourced and recycled construction materials’. The sub objective has been amended to ‘To enable development and wider activity to meet the needs of the population’ to reflect the fact that minerals are used for a wide range of purposes other than house building. Other conflicts will be balanced by other SA objectives during the assessment.</p>

6.7 Methodology for Testing Options against the SA Framework

Consideration of Significant Effects

Stage B3 of this SA is to 'Predict and appraise the significant effects of the options'. This involves:

- *'Identifying the changes to the environmental (social and economic) baseline which are predicted to arise from the plan or programme, including alternatives.....'*
- *'Describing these changes in terms of their magnitude, their geographical scale, the time period over which they will occur, whether they are permanent or temporary, positive or negative, probable or improbable, frequent or rare, and whether or not there are secondary, cumulative and/or synergistic effects'⁵⁵.*

In order to undertake this task the SA objectives will be presented alongside each set of policy options in matrices (tables 11 and 12). Each option will be considered in terms of its potential effects on each of the SA objective (including SA sub objectives) and indicators.

The significance of these impacts will then be considered across three different timescales: the short term (0-5 years from plan adoption), medium term (6 – 15 years from plan adoption) and long term (16 – 30 years from plan adoption). Where impacts are considered to begin to occur beyond 30 years from plan adoption, or significantly increase in significance beyond 30 years, these will be recorded as long term significant impacts and explained further in footnotes to the matrix. The type of effect, including whether it is permanent, temporary, direct or indirect will also be recorded.

Box 1 gives more detail on how significance will be considered.

It is important to note that the impact score given for each objective will be a summary of direct and indirect, permanent, temporary and secondary, cumulative and synergistic impacts. In the context of the Joint Plan, permanent effects are those that are considered to be long term or permanent. However, the mechanisms by which secondary, cumulative and synergistic effects will occur will be further detailed at the bottom of the matrix (see also Box 2 below).

⁵⁵ ODPM, 2006. A Practical Guide to the Strategic Environmental Assessment Directive' ODPM, London. Text in parentheses is the author's own adaptation to reflect the broader scope of Sustainability Appraisal.

Box 1: Determining ‘Significant Effects’.

The SEA Directive makes reference to criteria for determining what significant effects might be in relation to deciding whether plans or programmes require SEA. However, these provide a useful indication of the issues to consider when establishing significance. The criteria listed in the SEA Directive are:

- *“The probability, duration, frequency and reversibility of the effects*
- *The cumulative nature of the effects*
- *The trans-boundary nature of the effects*
- *The risks to human health or the environment (e.g. due to accidents)*
- *The magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)*
- *The value and vulnerability of the area likely to be affected due to:*
 - *Special natural characteristics or cultural heritage*
 - *Exceeded of environmental quality standards or limit values*
 - *Intensive land use*
- *The effects on areas or landscapes which have a recognised national, Community or international protection status”.* (Annex II: 2.)

While helpful in a broad sense they say little about the point at which an impact of a plan becomes significant. They are also restricted to environmental and human health effects (i.e. the scope of the SEA Directive) rather than examining additional social and economic effects. However, the Plan Making Manual points out that *“significance has to be determined individually in each case”* and *“ultimately, the significance of an effect is a matter of judgment and should require no more than a clear and reasonable justification”* (DCLG, undated).

This assessment has regard to the SEA Directive’s criteria of significance in making professional judgements about sustainability that will be supported by a clear and reasonable justification.

The matrix will record the findings of the assessment by using a scoring system. The scores used will be as follows:

Score	Significance
++	The option is predicted to have major positive effects on the baseline and the achievement of the SA objective.
m+	The option is predicted to have moderate positive effects on the baseline and the achievement of the SA objective.
+	The option is predicted to have minor positive effects on the baseline and the achievement of the SA objective.
0	The option will have no effect on the baseline and the achievement of the SA objective.
-	The option is predicted to have minor negative effects on the baseline and the achievement of the SA objective.
m-	The option is predicted to have moderate level negative effects on the baseline and the achievement of the SA objective.

--	The option is predicted to have major negative effects and the achievement of the SA objective.
?	The impact of the objective on the baseline / SA objective is uncertain.

In addition, a justification for each score will be documented in the matrix in an analysis column. This will include any evidence which has contributed to the assessment and any areas of uncertainty. A column will also set out suggested mitigation and enhancement measures. Table 11 below shows the layout of the matrix.

Table 11 - Proposed options appraisal matrix (includes illustrative example of how table will be completed).

Option	[Description of Option]							
SA Objective	Impact / timescale			Type of effect				Analysis
	S ⁵⁶	M	L	P ₅₇	T	D	I	
1. To protect and enhance biodiversity and geodiversity and improve habitat connectivity	-	+	++	✓			✓	Biodiversity is likely to benefit from * ⁵⁸ , * and *. In the longer term these effects will be enhanced as habitats mature. However there may be minor impacts from habitat loss as construction works are undertaken. Further secondary effects are likely to occur and are noted at the bottom of the table
2. To enhance or maintain water quality and improve efficiency of water use	0	0	-		✓	✓		Option is likely to reduce pressure on high quality agricultural land in the short and medium term, though in the longer term demand for sites in different areas may be required.
Secondary, Cumulative and Synergistic Effects	<p><u>Secondary effects:</u> There may be secondary effects on biodiversity resulting from*. These are likely to have a minor impact.</p> <p><u>Synergistic effects:</u> The option could result in positive or negative synergistic effects arising from interaction with options *, * and *. These are*****.</p> <p><u>Cumulative effects:</u> There are * predicted cumulative effects.</p>							
Recommendations for Mitigation								

⁵⁶ S, M, L stand for 'short term', 'medium term' and 'long term' respectively.

⁵⁷ P, T, D, I stand for 'permanent', 'temporary', 'direct' and 'indirect'.

⁵⁸ The text within the matrix is purely indicative and '*' symbols are used to give an indication of areas of text where environmental effects will be described.

A summary version of the table will also be presented to allow easy comparison between options within the main Sustainability Report (see table 12). A discussion of the significant effects will follow the comparison of each set of options to help the reader consider their relevant merits and the justification for any mitigation proposed.

Table 62 - Options comparison matrix (includes illustrative example of how table will be completed).

Option	Example Option X			Example Option Y			Example Option Z		
	SA Objective			Impact / timescale			Impact / timescale		
	S	M	L	S	M	L	S	M	L
1. To protect and enhance biodiversity and geodiversity and improve habitat connectivity	-	+	++	++	++	++	?	-	--
2. To enhance or maintain water quality and improve efficiency of water use	0	0	-	0	+	++	0	--	--

Consideration of Synergistic, Cumulative and Secondary effects

Synergistic, cumulative and secondary effects and their predicted significance will be noted in the options assessment matrices at the bottom of the full options appraisal matrix (table 11 above). Box 2 gives further explanation of synergistic, cumulative and secondary effects.

Box 2: What do we mean by Synergistic, Cumulative and Secondary effects?

Annex 1 of the SEA Directive requires the assessment of effects to include secondary, cumulative and synergistic effects. These can be defined as:

- Secondary (or indirect) effects** are effects that do not directly result from the implementation of the plan. For instance, where the direct effect of a policy might include the loss of some hedgerows, an indirect effect might be that, as a result of that loss, the erosion rate of soils increases.
- Cumulative effects** are where effects, that may not in themselves be significant, are, when taken together with other effects, significant.
- Synergistic effects** are where two or more effects interact to create an effect that is greater than the sum of those effects. For example, an air pollutant in the presence of other pollutants may have a different effect than an air pollutant on its own.

6.8 Monitoring

Whilst the Sustainability Appraisal will identify the effects of the Plan which are likely to occur or may occur, only through monitoring the Plan's implementation can the actual effects on sustainability be determined. This enables implementation to be managed to address any unforeseen issues which arise.

Requirements of the SEA Directive:

'Member states shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action.' (Article 10.1)

The Environmental Report shall include 'a description of the measures envisaged for monitoring'.

Whilst indicators will be established to monitor overall trends in sustainability topics where these relate to the Joint Plan, it is important to note that it is not necessary to monitor everything and the main focus should be on significant effects. Monitoring of significant effects needs to be clearly linked to the Sustainability Appraisal process, relating to for example, sustainability objectives, features of the baseline that will indicate the effects of the Plan, likely significant effects and any associated mitigation measures.

Indicators have been identified as part of the development of the baseline and are also shown in the Sustainability Framework. As Sustainability Appraisal is carried out on the draft Plan (which will take place at various stages as outlined in section 3 of this report), where any potential significant effects are highlighted indicators to monitor this will be established, these may or may not be the same indicators identified in the baseline. The Planning Advisory Service guidance on Sustainability Appraisal⁵⁹ suggests that where policies are put in place to mitigate adverse effects, monitoring of the implementation of this policy may help to identify whether or not significant adverse effects will be occurring.

Whilst current Government planning policy, contained in the National Planning Policy Framework, is minimal on requirements for monitoring the Plan itself, the Localism Act requires local planning authorities to produce a monitoring report annually titled the 'Authority report'. In relation to minerals and waste planning requirements for monitoring are also set out via the requirement for a Local Aggregate Assessment⁶⁰ and the requirements of the EU Waste Framework Directive⁶¹ respectively. A suite of indicators for monitoring the implementation of the Joint Plan itself will therefore be established as part of the Plan production process. It is likely that each of the three minerals planning authorities will report on progress separately, although some indicators may relate to the Joint Plan Area. It is envisaged that the indicators established to monitor effects on the sustainability objectives will form part this monitoring process and be reported in the same way. Efforts will be made to avoid duplication of monitoring where possible.

⁵⁹ Sustainability Appraisal Advice Note (Planning Advisory Service, July 2010)

⁶⁰ National Planning Policy Framework (CLG, 2012) – see paragraph 145

⁶¹ See Guidance for local planning authorities on implementing planning requirements of the EU Waste Framework Directive (2008/98/EC) (CLG, 2012)

6.9 Limitations

While an objectives led Sustainability Appraisal such as that proposed in this scoping report can examine and seek to mitigate environmental, social and economic effects that arise from strategic level plans, it should be noted that there are a number of limitations to the approach. These are summarised in Table 13 below.

Table 13: Limitations of this Sustainability Appraisal

Limitation	Description
Strategic focus	<p>The SA will be undertaken at a strategic level. That means that in many cases it will not be possible to identify the specific receptors that may be affected by sustainability effects. For instance, if a policy were deemed in the appraisal to increase the risk of flooding to future development, local circumstances may dictate whether specific individual future development is more or less flood prone. However, wherever possible the SA will make recommendations that will inform the information that will be requested of future planning applications.</p> <p>A more detailed site and area assessment process is also being developed to complement the sustainability appraisal.</p>
Limited number of appraisal objectives, sub objectives and indicators	<p>When assembling the SA Framework the most relevant SA objectives and sub objectives have been chosen, informed by the review of baseline information. However, this does not mean that all environmental, social and economic effects are dealt with by the SA Framework.</p> <p>Consultation should help refine the SA Framework, but sustainability effects are often highly complex and it may be that there are issues that may be significant that have not been addressed and may come to light later in the appraisal process. To address this, the scope of this SA will remain open during plan production so that any unforeseen sustainability effect can be taken into consideration.</p> <p>While the monitoring of indicators will help identify any additional sustainability problems, it should be noted</p>

	<p>that only a limited basket of indicators has been presented based on the accessibility of available data. While professional judgement will help to address gaps in data, resource constraints mean that every potential sustainability effect does not have indicators associated with it.</p>
<p>Life cycle and imported 'footprints' impacts</p>	<p>One key data gap is the lack of data feeding in to this appraisal on the lifecycle impacts of the resources employed in pursuing minerals and waste development. Often items such as building materials, use of vehicles and land restoration processes can exhibit good or bad 'end of pipe' sustainability effects, however this may mask sustainability effects incurred when bringing products used to market or disposing of them at the end of their life. Often these effects can occur at considerable (transnational) distance from the place where products or services are utilised.</p> <p>Life cycle assessment (LCA) is often used to investigate and evaluate these 'embedded' sustainability effects. Undertaking LCA can involve significant, lengthy and sometimes costly investigative work. While relevant published life cycle assessment data may be reviewed where relevant to the appraisal of certain development options, it is not the intention of this SA to commission new LCA.</p>

Glossary

Agricultural Land Classification (ALC) places agricultural land in five categories according to its versatility and suitability for growing crops (grade 1 being the best; grade 5 the poorest). The top three grades, grade 1, 2 and 3a, are referred to as 'best and most versatile' land, and enjoy significant protection from development.

Air Quality Management Area (AQMA) is a specific place where national targets for air quality are not being met. Each local authority is responsible for measuring their air quality and trying to predict how it may change over several years. The aim of the review is to make sure that the national air quality objectives will be achieved across the UK by the relevant deadlines. These objectives have been put in place to protect people's health and the environment. If objectives are not achieved an AQMA with an accompanying plan is produced in order to improve air quality.

Area of Outstanding Natural Beauty (AONB) is an area of countryside which is considered to have significant landscape value. There are two AONBs wholly within the plan area, the Nidderdale and Howardian Hills AONBs and two partially, the Forest of Bowland and the North Pennines AONBs.

Biodiversity simply means biological diversity. It is the degree of variation amongst living organisms within a given area. Biodiversity provides many services to society; human survival depends on it and it is the foundation of our economy and lifestyles. Therefore, diminishing biodiversity has a negative impact on humanity.

Biodiversity Action Plan (BAP). A BAP is an internationally recognised plan which shows how species and habitats will be conserved. The UK Biodiversity Action Plan (UK BAP) was published in 1994, and is the UK Government's response to the Convention on Biological Diversity (CBD). The CBD called for the development and enforcement of national strategies and associated action plans to identify, conserve and protect existing biological diversity, and to enhance it wherever possible. BAPs can exist at national, local or organisational levels.

Civil Engineering Environmental Quality Assessment and Award Scheme (CEEQUAL) is the assessment and awards scheme for improving sustainability in civil engineering and the public realm. It aims to deliver improved project specification, design and construction and to demonstrate the commitment of the civil engineering industry to improved environmental and social performance.

Department for Business, Innovation and Skills (BIS) (merger of the Department for Business, Enterprise and Regulatory Reform and the Department for Innovation, Universities and Skills), is the government department responsible for economic growth.

Department of Communities and Local Government (DCLG) sets policy on: local government; community cohesion; building regulations; housing; planning; decentralisation; and fire services.

Department of Environment Food and Rural Affairs (Defra) is the UK government department responsible for environmental protection, food production and standards, agriculture, fisheries and rural communities.

District Councils are local authorities which look after tourism, leisure, designated parking, local development planning and frameworks, housing, environmental health and other local issues within districts. There are seven district council areas in North Yorkshire: Craven, Hambleton, Harrogate, Richmondshire, Ryedale, Scarborough and Selby.

Development Plan Documents (DPDs) are the statutory components of local development frameworks. Development plan documents include core strategies, areas action plans and site-specific allocations. These documents guide the future use and development of land. It is prepared in consultation with the public and interested groups and organisations.

Ecosystems Services can be simply described as the benefits people obtain from ecosystems. These include: provisioning services (food and water); regulating services (flood and disease control); cultural services (such as spiritual and cultural benefits); and supporting services (such as nutrient cycling that maintains conditions for life on Earth).

English Heritage (EH) is the government body responsible for the historic built environment and archaeology.

Environment Agency (EA) is an England-only government regulatory organisation which looks after waste management, catchment management, pollution control and protection of the environment.

Environmental Stewardship is a government scheme that offers financial rewards for good stewardship and management of the land to improve the quality of the environment. The funding is provided to farmers and other land managers. Schemes range from Entry Level Stewardship to more complex Higher Level Stewardship.

European Landscape Convention promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues.

Geodiversity incorporates all the variety of rocks, minerals, fossils, soils and landforms and the associated natural processes which have formed these features throughout geological time.

Geodiversity Action Plans (GAPs) set out actions to conserve and enhance the geodiversity of a particular area. They aim to: identify and conserve the best geological sites in an area; promote geological sites; provide a Geodiversity audit; and influence local planning policy.

Geographic Information System (GIS) is a computer application which allows users to capture, store, manipulate, analyse, manage and present all kinds of geographical data.

Geomorphology is the study of landforms and the process that form landforms. Formation and evolution of landforms can take place on different scales (e.g. river beds, to valleys) and by different media, such as water, wind and ice (including glaciers).

Green Infrastructure (GI) is a strategically planned and delivered network of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities. Green Infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens.

Habitats Regulations Assessment (HRA) is founded in European legislation and government regulations which introduced a need to carry out Habitat Regulations Assessments (and the associated appropriate assessment) for any plans which may affect European sites of significance (Natura 2000 sites).

Heritage Coast is a non-statutory designation which covers coastline around England and Wales that are noted for their natural beauty or scientific significance.

Heritage at Risk/At Risk Register is updated by English Heritage and provides information on the health of England's built heritage. It aims to reduce the number of sites at risk of loss through neglect, decay, or development.

Historic Environment Records are records of archaeological sites and monuments, finds, historic buildings, parks and gardens, battlefields, industrial and 20th century remains, archaeological fieldwork and information on historic landscape character.

Historic Landscape Characterisation is a method for understanding and mapping the landscape that we see today with reference to its historical development.

Hydromorphology is a term used in river basin management to describe the combination of hydrological and geomorphological (structural) processes and attributes of different water bodies.

Index of Multiple Deprivation is a UK government measure which provides information on deprived areas across UK local councils. It measures deprivation by information on income, employment, health and disability, education, skills and training, barriers to housing or services, crime and environment.

Listed Buildings are buildings that have been placed on the Statutory List of Buildings of Special Architectural or Historic Interest. A listed building may not be demolished, extended or altered without special permission from the local planning authority.

Local Development Documents (LDDs) are a set of documents specified in planning law which a local planning authority creates to describe their strategy for development and use of land in their area of authority. They include development plan documents.

Local Development Frameworks (LDFs) are spatial planning strategies introduced in England and Wales by the Planning and Compulsory Purchase Act 2004. These documents outline how planning will be managed in a local area.

Local Enterprise Partnerships (LEPs) are locally-owned partnerships between local authorities and businesses. They aim to determine local economic priorities and undertake activities to drive economic growth and create jobs.

Local Nature Reserves (LNRs) are places with wildlife or geological features that are of special interest to local people. LNRs are controlled by their local authority through ownership, lease, or agreement with the owner.

Minerals and Waste Joint Plan (MWJP) is a planning policy document which will set out a local basis for minerals and waste planning over the local plan area.

Minerals and Waste Planning Authority North Yorkshire County Council, the North York Moors National Park Authority and the City of York Council are together the minerals and waste planning authorities for the parts of the County outside the Yorkshire Dales National Park together with the City of York. The authorities have a statutory duty to prepare a Minerals and Waste Joint Plan, containing proposals and policies to guide minerals and waste planning decisions.

National Nature Reserves (NNRs) represent the finest wildlife and geological sites in England. Natural England declares NNRs in England. NNRs contain some of England's most pristine habitats, rarest species and most significant geology.

National Park Authorities are organisations which manage the national parks of the UK. National park authorities have two main purposes: to conserve and enhance the natural beauty, wildlife and cultural heritage of a national park; and to promote opportunities for the understanding of the special qualities of the national park.

Natura 2000 is a Europe-wide network of sites which aim to protect the most seriously threatened habitats and species across Europe. Sites include Special Protection Areas (designated for birds) and Special Areas of Conservation (designated for habitats).

Natural England (NE) is a non-departmental public body whose purpose is to protect and improve England's natural environment.

Ordnance Survey (OS) is a non-ministerial government department that produces and licenses map-based information.

Plan Area The planning authority areas of North Yorkshire (i.e. the part of the county outside of the two National Parks), the City of York and the North York Moors National Park.

Plans, Policies, Programmes, Strategies and Initiatives (PPPSIs) are reviewed and updated during the production of a strategic environmental assessment or sustainability appraisal of a local authority plan. The review is carried out in order to identify how options within local plans might be affected by other international, national, regional or local PPPSIs.

Proposals Maps display (on Ordnance Survey maps) policies and proposals from the adopted local development documents of the local development framework.

Protected Wrecks are designated shipwrecks that are given protection under the Protection of Wrecks Act (1973). Designated sites are identified as being likely to contain the remains of a vessel, or its contents, which are of historical, artistic or archaeological importance.

Public Rights of Way are paths on which the public have a legally protected right of passage.

Ramsar Sites, or the Ramsar Convention is an intergovernmental treaty that embodies the commitments of its member countries to maintain the ecological character of their Wetlands of International Importance and to plan for the "wise use", or sustainable use, of all of the wetlands in their territories. A number of internationally important wetland sites are designated as Ramsar sites.

Registered Battlefields, or the Register of Historic Battlefields comprises the sites of 43 of the most important military battles on English soil. The registration offers battlefields protection and promotes understanding of their significance.

Registered Parks and Gardens is a listing and classification system for historic parks and gardens similar to that used for listed buildings. The register is managed by English Heritage under the provisions of the National Heritage Act 1983. Over 1,600 sites are listed, ranging from the grounds large stately homes to small domestic gardens, as well other designed landscapes such as town squares, public parks and cemeteries.

Rural Proofing is the scrutiny of public policy to ensure that impacts on rural areas are considered when implementing new policies and programmes.

Scheduled Monuments are nationally important sites and monuments which are given legal protection by being placed on a list, or 'schedule'. English Heritage takes the lead in identifying sites in England which should be placed on the schedule by the Secretary of State for Culture, Media and Sport.

Scoping Report or SA Scoping Report establishes the scope of, and methodology for, the sustainability appraisal and identifies appropriate data that maybe of relevance to the assessment.

Sites of Nature Conservation Interest (SINCs) are designations applied to locally important nature conservation sites and can be designated for both their ecology and geological interest.

Sites of Special Scientific Interest (SSSIs) are the country's very best wildlife and geological sites.

Special Areas of Conservation (SACs) are strictly protected sites designated under the EC Habitats Directive (92/43/EEC). The listed habitats and species are those considered to be most in need of conservation at a European level.

Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, 2009/147/EC (the codified version of Council Directive 79/409/EEC as amended). The areas are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

Strategic Environmental Assessment (SEA) relates to European Directive 2001/42/EC and is a process to ensure that significant environmental effects arising from policies, plans and programmes are identified, assessed, mitigated, communicated to decision-makers and monitored and that opportunities for public involvement are provided.

Sustainability Appraisal (SA) is a mechanism for assessing social, environmental and economic effects of plans in order to ensure that decisions are made that contribute to sustainable development.

Sustainability Appraisal Framework (SA Framework) is a framework that shows the objectives by which a sustainability appraisal will assess a plan or policy. In addition, an SA framework also sets out the mechanisms to monitor the achievement of those objectives.

World Heritage Sites are places (such as a forests, mountains, lakes, deserts, monuments, buildings, complexes, or cities) that are listed by UNESCO (United Nations Educational, Scientific and Cultural Organization) as of special cultural or physical significance. The program catalogues, names, and conserves sites of outstanding cultural or natural importance to the common heritage of humanity.

Bibliography

- Council of Europe, 2000 (adopted 2004). European Landscape Convention [URL: http://www.coe.int/t/dg4/cultureheritage/heritage/landscape/default_en.asp].
- DCLG, Scottish Executive, Welsh Assembly Government and Department for the Environment Northern Ireland (formerly ODPM), 2005. A Practical Guide to the Strategic Environmental Assessment Directive. [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf].
- DCLG, 2011. Planning Policy Statement 10: Planning for Sustainable Waste Management. [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/11443/1876202.pdf].
- DCLG, 2012. National Planning Policy Framework. [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf].
- DCLG, 2012. Technical Guidance to the National Planning Policy Framework [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6000/2115548.pdf].
- DCLG, 2013 Draft National Planning Practice Guidance – Strategic Environmental Assessment and Sustainability Appraisal [URL: <http://planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/what-is-a-sustainability-appraisal-and-how-does-it-relate-to-strategic-environmental-assessment/>].
- Defra, undated. Rural Proofing Guidance. [URL: <https://www.gov.uk/rural-proofing-guidance>].
- Defra, 2005. Securing the Future: Delivering UK sustainable development strategy [deleted from the Defra website, though a publication record page is available for archive purposes only at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69412/pb10589-securing-the-future-050307.pdf].
- Defra, 2007. An Introductory Guide to Valuing Ecosystem Services. [URL: <http://archive.defra.gov.uk/environment/policy/natural-environ/documents/eco-valuing.pdf>].
- Defra, 2010. English National Parks and the Broads – UK Government Vision and Circular. [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/181876/pb13387-vision-circular2010.pdf.pdf].
- Defra, 2011. Mainstreaming Sustainable Development: The Government's Vision and What this Means in Practice. [URL: <http://sd.defra.gov.uk/documents/mainstreaming-sustainable-development.pdf>].
- Defra, 2011. The Natural Choice: securing the value of nature. [URL: <http://www.ukeof.org.uk/documents/Defra-white-paper.pdf>].
- Defra, 2011. Biodiversity 2020: A strategy for England's wildlife and ecosystem services. [URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf].
- Defra/UK National Ecosystem Assessment, 2011. The UK National Ecosystem Assessment: Synthesis of the Key Findings. UNEP-WCMC, Cambridge [URL: <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx>].

European Union, 2001. Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the Assessment of the Effects of Certain Plans and Programmes on the Environment, the 'Strategic Environmental Assessment Directive'. [URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:197:0030:0037:EN:PDF>].

European Union, 2008. Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste and Repealing Certain Directives, the 'Waste Framework Directive'. [URL: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:0030:EN:PDF>].

HM Government, 2004. Planning and Compulsory Purchase Act. [URL: <http://www.legislation.gov.uk/ukpga/2004/5/contents>].

HM Government, 2004. The Environmental Assessment of Plans and Programmes Regulations 2004. [URL: <http://www.legislation.gov.uk/uksi/2004/1633/contents/made>].

HM Government, 2008. The Planning Act 2008. [URL: <http://www.legislation.gov.uk/ukpga/2008/29/contents>].

Millennium Ecosystem Assessment, 2005. Ecosystems and Human Wellbeing: Synthesis. Island Press, Washington DC.

National Ecosystem Assessment, 2011. UK National Ecosystem Assessment: synthesis of key findings. [URL: <http://uknea.unep-wcmc.org>].

ODPM, 2005. 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents' [deleted from the DCLG website, though a publication record page is available for archive purposes only at: <http://webarchive.nationalarchives.gov.uk/20120919132719/http://www.communities.gov.uk/archived/publications/planningandbuilding/sustainabilityappraisal>].

Planning Advisory Service, 2009. DCLG Plan Making Manual: Sustainability Appraisal. [URL: <http://www.pas.gov.uk/pas/core/page.do?pagelid=152450>].

University of York, Ursus Consulting, 2010. Applying an Ecosystem Services Approach in Yorkshire and Humber: A report to Yorkshire Futures, Leeds.

World Commission on Environment and Development. 1987. Our Common Future. United Nations [URL: <http://www.un-documents.net/wced-ocf.htm>].

World Wildlife Fund, 2002. Ecological Footprints: A Guide for Local Authorities. [URL: <http://www.gdrc.org/uem/footprints/wwf-ecologicalfootprints.pdf>].

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1 Introduction

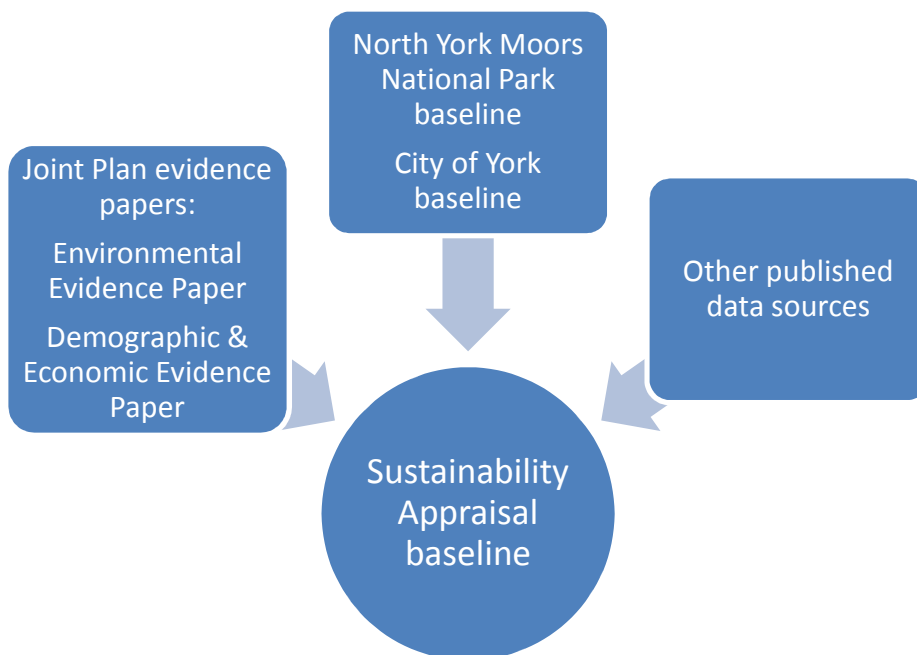
An important part of the scoping stage for Sustainability Appraisal (SA) is establishing the baseline. The baseline is a set of data, both quantitative and qualitative, which establishes the current state of the area, and trends over time, in terms of sustainability themes. Whilst highlighting themes or pieces of information that may be particularly relevant to the Minerals and Waste Joint Plan (MWJP), or the ‘Joint Plan’, it does not aim to consider possible ways of addressing any issues. It is purely a factual account.

This baseline information represents the baseline for the purposes of SA for the MWJP. Environmental and Economic & Demographic Evidence Papers have been produced as part of the evidence base for the Joint Plan. The baseline has drawn upon this evidence but it is important to retain the SA baseline as separate, in order to clearly set out the relationship between this and the sustainability issues which will directly inform the sustainability objectives.

Separate baselines have been compiled for the City of York and for the North York Moors National Park. Where relevant, these have been referred to, to ensure that issues specific to these areas are not ‘lost’ within the overall baseline. These separate baselines are available to view at www.york.gov.uk/NewLocalPlanforYork and www.northyorkmoors.org.uk/living-in/planning/advice/background-documents respectively. The baselines for the North York Moors and the City of York have been developed for a wider range of plans and so not all of the information contained within them will be relevant to the Joint Plan.

Figure 1.1 overleaf shows how this document fits in with the baselines already produced for the North York Moors National Park and the City of York and the Environmental and Economic & Demographic Evidence Papers produced as part of the evidence base for the Joint Plan itself. Some information contained in the latter is repeated within this document, and there is therefore some overlap between the two.

Figure 1.1: Sources of information for the baseline.



In some cases, it has not been possible to obtain or aggregate information precisely to the Joint Plan Area¹ and therefore the data relates to either:

- North Yorkshire county (including those parts of the North York Moors and Yorkshire Dales National Parks which are within North Yorkshire but excluding those parts which are outwith North Yorkshire);
- North Yorkshire and York sub-region (including the administrative areas of North Yorkshire County Council and the City of York Council, but excluding the parts of the North York Moors and Yorkshire Dales National Parks which are outside North Yorkshire);
- North Yorkshire and York planning sub-region (including the entire administrative areas of North Yorkshire County Council, the City of York Council, the North York Moors National Park and the Yorkshire Dales National Park);
- The Plan Area (the whole of the administrative areas of the North York Moors National Park and the City of York, and the whole of the North Yorkshire County Council area except for the part of the county within the Yorkshire Dales National Park);
- North Yorkshire Minerals and Waste Planning Authority area (the North Yorkshire County Council administrative area excluding the area within the North York Moors and Yorkshire Dales National Parks).

Whilst a small part of the North York Moors National Park lies within Redcar and Cleveland borough, for some datasets where data is not available at National Park level, it is considered that reference to data for North Yorkshire will provide a fairly accurate overview as data for the urban area of Redcar may otherwise distort the overall picture.

The topics addressed in the baseline have been identified against the relevant Strategic Environmental Assessment (SEA) topics, as listed in the SEA Directive. Additional topics have been added which relate to the economic and social topic areas, along with cross-cutting areas, which are relevant to SA in addition to the environmental topics. Table 1.1 identifies the topic areas covered and how these relate to the SEA topics and/or SA categories.

Key messages arising from the baseline have been summarised at the end of each section and these have informed the development of Sustainability Objectives, as detailed in the Scoping Report.

Indicators have also been identified against each of the topic areas which have also been used in the development of the Sustainability Objectives as detailed in the Scoping Report. As the SA process progresses the indicators will be defined and a final list of indicators for monitoring the effects of the Joint Plan will be presented upon adoption of the Joint Plan.

¹This is largely due to the fact that most data is not available at National Park level. As well as the North York Moors National Park being one of the three minerals and waste planning areas involved in the MWJP, the eastern boundary of the plan area is defined by the western boundary of the Yorkshire Dales National Park.

Table 1.1 SEA Topic /SA Category

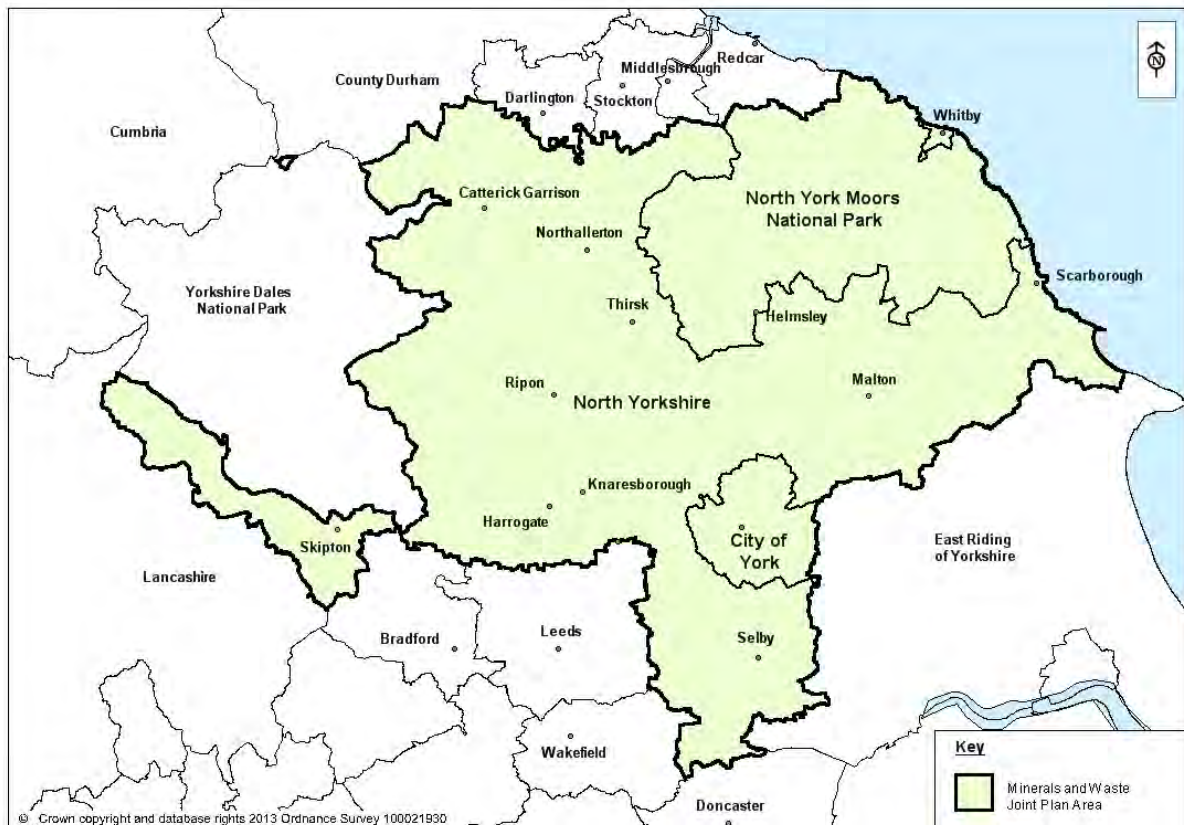
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2 Context

The MWJP area comprises the three minerals and waste planning authorities of North Yorkshire County Council (which is the area of the county outside of the North York Moors National Park), the North York Moors National Park Authority and the City of York Council. The total size of the area is 6,718 square kilometres. The Joint Plan Area is shown on Figure 2.1 below.

Figure 2.1 Minerals and Waste Joint Plan Area.



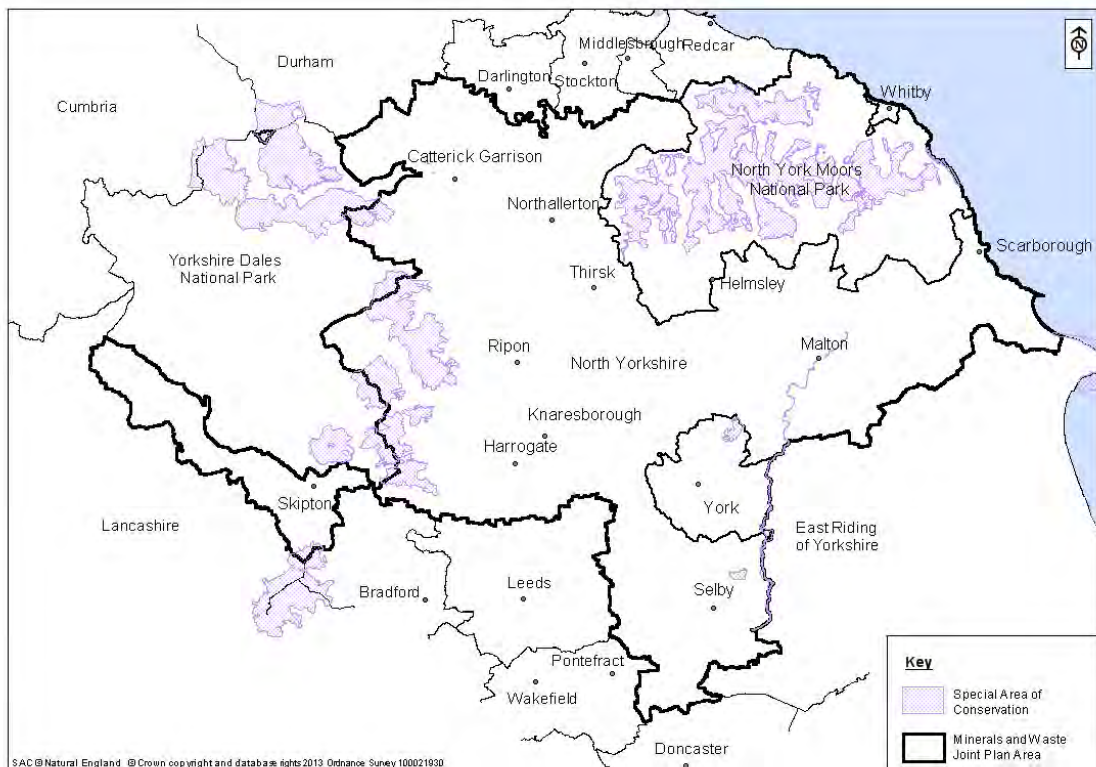
The three authorities cover distinctly different areas and therefore there is a diverse character to the Joint Plan Area. North Yorkshire (outside the National Parks) is a largely rural county containing a number of small market towns plus the larger towns of Harrogate and Scarborough, along with two Areas of Outstanding Natural Beauty (AONB). The A1 and A1(M) run north-south through the centre of the area. The City of York area is mostly urban, focused upon the historic city of York itself. The North York Moors National Park was designated due to its *'intrinsic merits as an area of beautiful and unspoilt country and magnificent coast with a wealth of architectural interest'*. It is largely rural, and the settlements in the park are comparatively small.

3 SEA Topic/SA Category – Biodiversity, Flora and Fauna

Protected Sites

A significant proportion of the land in the Joint Plan Area, particularly within the NYMNP and in the Nidderdale AONB, is protected at European level under the Habitats Directive² as Special Area of Conservation (SAC) and/or under the Birds Directive³ as Special Protection Area (SPA), for its nature conservation importance. A total of 124,177ha of land is designated as SAC and a total of 105,368ha is SPA. These areas do overlap, for example most of the moorland in the NYMNP is designated as both SAC and SPA. There is also one Ramsar site, Lower Derwent Valley, designated under the Convention of Wetlands of International Importance, in the eastern part of Selby District in the south of the Joint Plan Area. Figure 3.1 and Figure 3.2 below show the extent of European protected sites in the Joint Plan area.

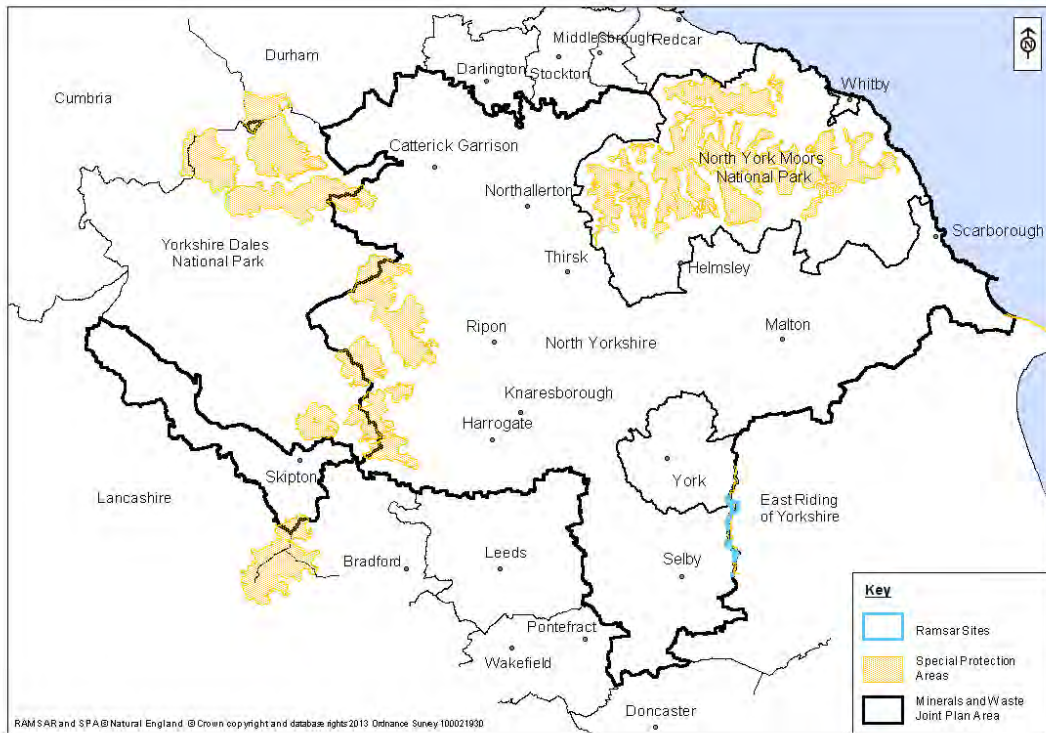
Figure 3.1: Special Areas of Conservation



² EC Habitats Directive (92/43/EEC).

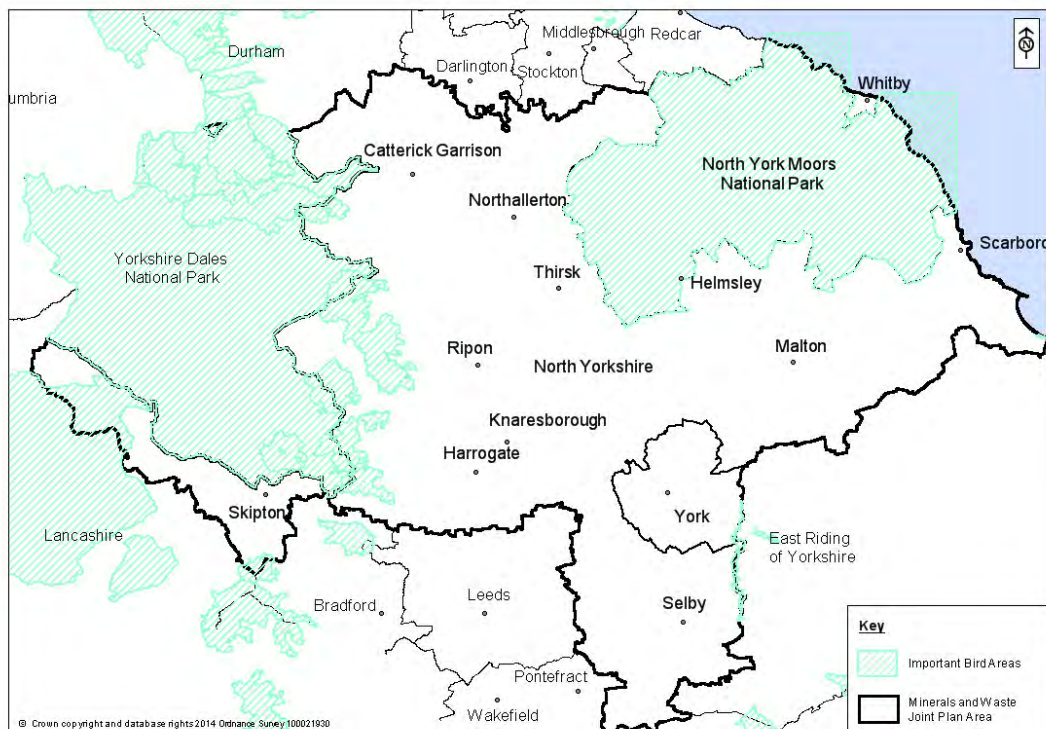
³ EU Birds Directive (2009/147/EC).

Figure 3.2: Special Protection Areas and Ramsar Sites.



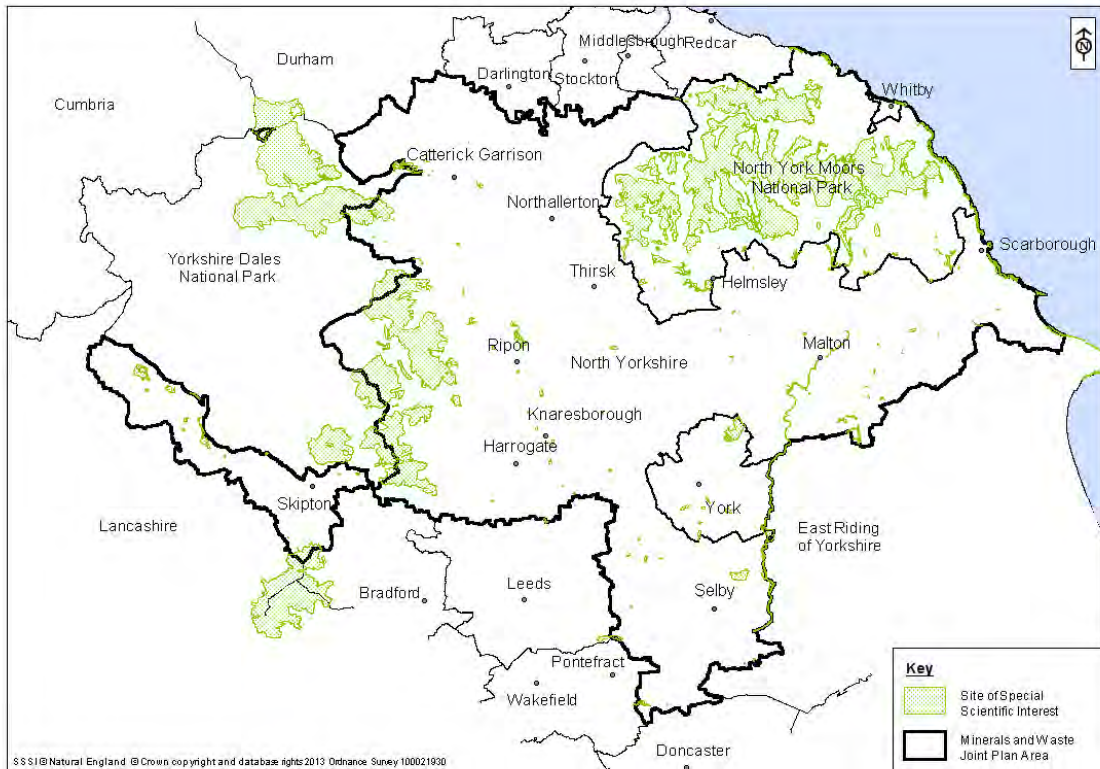
Important Bird Areas are identified by the global BirdLife partnership of conservation organisations due to the presence of rare or vulnerable species or importance for bird congregations. Large parts of the Joint Plan area, particularly the North York Moors National Park, are identified as important bird areas, as shown in Figure 3.3.

Figure 3.3: Important Bird Areas.



At the national level, many parts of the Joint Plan area are protected as Sites of Special Scientific Interest (SSSI). These represent some of the country’s best wildlife and geological sites. There are a total of 110,140 hectares of SSSIs in the Joint Plan area, these are shown on Figure 3.4. The largest proportion of SSSIs in the Joint Plan area is in the NYMNP, with a significant area also in the Nidderdale AONB.

Figure 3.4: Sites of Special Scientific Interest



Of the total area of SSSIs (excluding York) 58% is in favourable condition and 35% is in unfavourable recovering condition, split between each authority as shown in Table 3.1. This shows that only a small proportion of SSSI area is categorised as ‘unfavourable declining’ or ‘unfavourable no change’, showing that the trend is for improvement. Biodiversity 2020⁴ sets national targets for 50% of SSSI to be in favourable condition and 95% to be in favourable recovering condition by 2020.

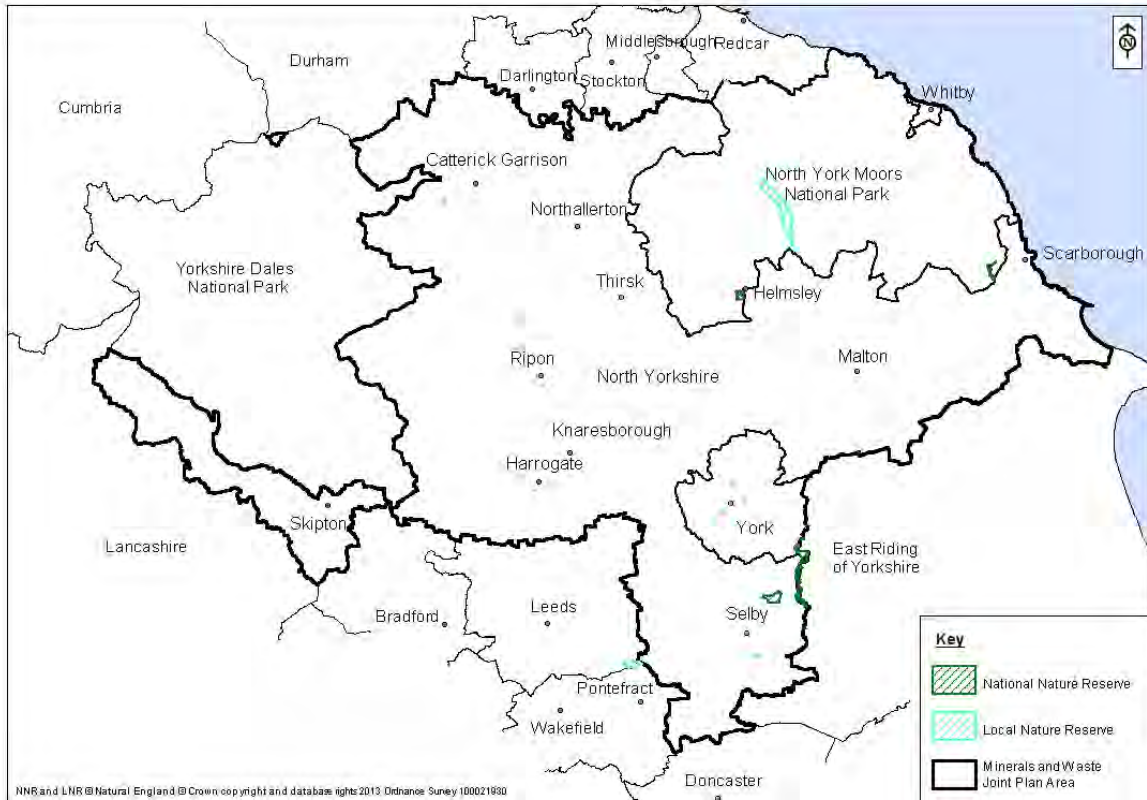
Table 3.1: SSSI condition

	Area of SSSI (ha)	Favourable condition (%)	Unfavourable recovering condition (%)
North Yorkshire	60,842	54.7%	33.8%
NYMNP	47,387.9	61.0%	35.8%
City of York	916.8	42.6%	46.6%
Joint Plan area	110,140	52.8%	38.8%

⁴ Biodiversity 2020 – A Strategy for England’s wildlife and ecosystem services (DEFRA, 2011).

Part of the purpose of the designation of the NYMNP is to conserve and enhance the wildlife of the Park and therefore the whole of the National Park is protected nationally for its importance to wildlife. The five National Nature Reserves in the Plan Area occupy 829ha of the Joint Plan Area. There are also 15 Local Nature Reserves covering 1,405ha. National and Local Nature Reserves are shown on Figure 3.5.

Figure 3.5: Local and National Nature Reserves



Sites of Importance for Nature Conservation (SINCs) are designated by a local sites panel made up of local authorities and other interested parties. These have been designated in North Yorkshire and in the City of York, but have not been designated in the North York Moors National Park due to the national significance of and associated level of protection for the whole Park for wildlife. This is with the exception of the small part of the National Park which is in Redcar and Cleveland where Local Wildlife Sites⁵ have recently been identified. A total area of 11,685ha of land is designated as SINC and there are a few small areas of land designated as Local Wildlife Sites in the Redcar and Cleveland part of the National Park.

⁵ Local Wildlife Sites are a more contemporary term for Sites of Importance for Nature Conservation – the two have the same status.

Figure 3.6: Sites of Importance for Nature Conservation and Local Wildlife Sites

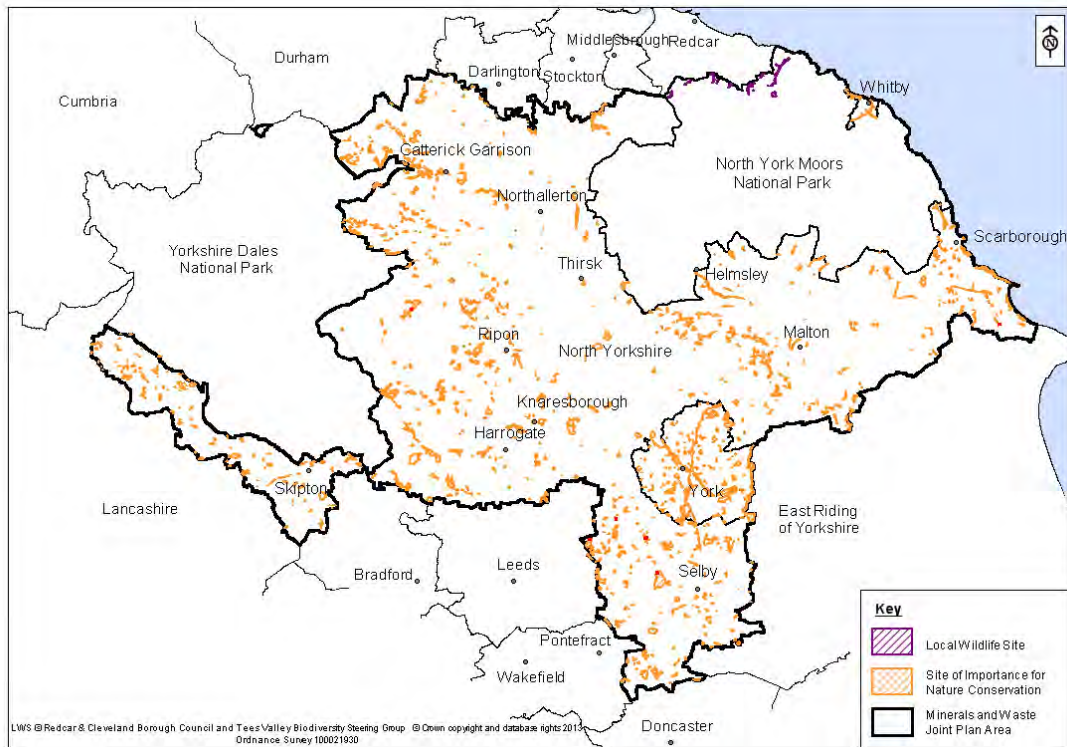


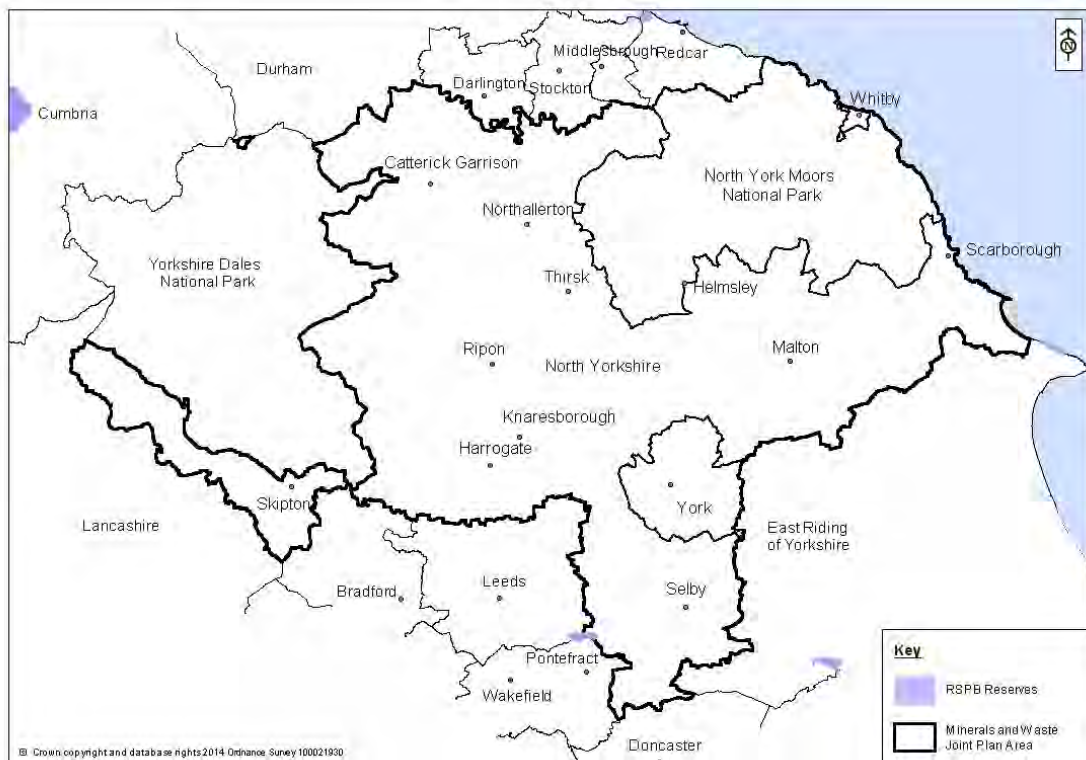
Table 3.2 summarises the extent of nature conservation designations within each SPA area (Note that in some places the designations overlap so columns cannot be totalled).

Table 3.2: Extent of nature conservation designations in the Plan Area

Site	NYCC (ha)	NYMNP (ha)	CYC (ha)	Joint Plan Area (ha)
SAC	TBC	44,445	715	65,306
SPA	TBC	44,088	136	63,897
Ramsar	0	0	1,201	1,201
SSSI	38,403	47,387	917	86,558
NNR	522	171	136	829
LNR	338	1,000	67	1,405
SINC	11,104	n/a	581	11,685

Some environmental charities also manage nature reserves, though often these coincide with other formal designations such as SSSI. Within the Plan area Fairburn Ings is managed by the RSPB.

Figure 3.7: RSPB Reserves



Trees and Woodland

Woodlands and trees provide a number of benefits including habitats for wildlife, timber production, recreation, carbon storage and flood alleviation, and different areas may be managed for different or a range of purposes. The total area of woodland in North Yorkshire is 60,843ha and there is a further 998ha in the City of York area. Of this, around 41.2% is broadleaved, 32.3% is coniferous and 13.7% is mixed with the remaining 11.2% being open space within woodland. Around half of this woodland is in the North York Moors National Park.

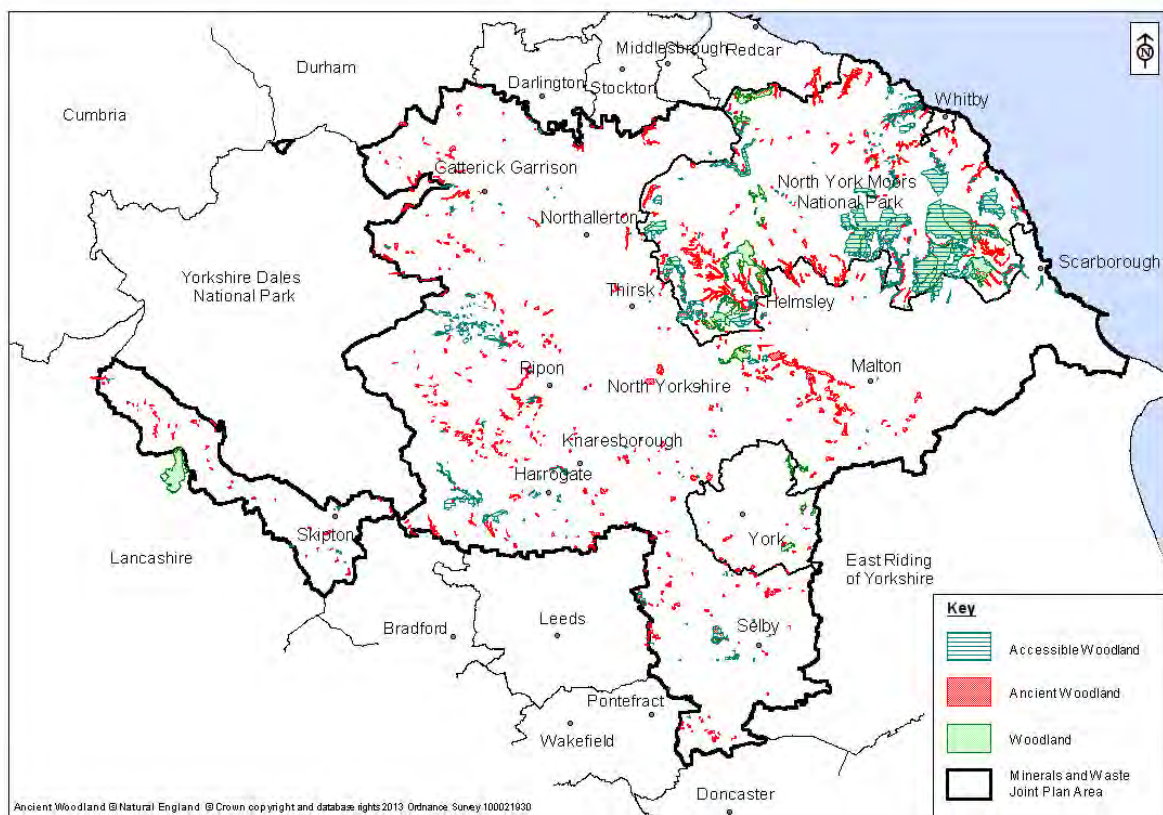
In terms of their benefits for wildlife, 6,813ha are ancient woodlands of which the majority is in the North York Moors National Park. A total of 8,708ha of woodland in the Plan Area is ancient replanted woodland (previously referred to as Plantation on Ancient Woodland Sites (PAWS)). Ancient woodland sites can be defined as sites 'where the original native tree cover has been felled and replaced by planting, usually with conifers and usually this century'⁶. 58% of the ancient woodland in NYMNP is ancient replanted woodland, the largest concentration in Northern England, and work is underway to restore this to ancient woodland – 141ha of restoration has been initiated since the start of 2011. Figure 3.8 shows the extent of woodland within the Plan Area and also identifies ancient woodland (this includes ancient woodland,

⁶ Natural England, undated. Ancient Woodland Inventory (Provisional) for England – Digital Boundaries [URL: http://www.gis.naturalengland.org.uk/pubs/gis/tech_aw.htm]

ancient semi-natural woodland⁷ and ancient replanted woodland) and accessible woodland. There is a target to plant 300 hectares of woodland in NYMNP by 2017 and an aim to plant 50,000 new trees in York⁸.

Veteran trees are important habitats for a range of wildlife. It is not known how many veteran trees there are in the Plan Area but there are around 350 in the North York Moors National Park. Data on veteran trees in the plan area can be found using the Woodland Trust’s interactive map: <http://www.ancient-tree-hunt.org.uk/discoveries/interactivemap>. Veteran trees in the plan area are concentrated in the Harrogate Borough (in particular the Nidderdale AONB), the North East corner of the Richmondshire District, the South East corner of the North York Moors, the Howardian Hills AONB and surrounding York city centre.

Figure 3.8: Woodland (including accessible woodland and ancient woodland)



Biodiversity Action Plans

The Post 2010 Biodiversity Framework, which succeeded the UK Biodiversity Action Plan (BAP), sets out priorities for biodiversity at a UK level, with county level strategies setting targets in each of the UK’s four countries. In England, the England Biodiversity Strategy sets a target to achieve no net loss of priority habitat and increase their overall extent by at least

⁷ Ancient semi-natural woodland is defined as ‘ancient woodland sites that have retained the native tree and shrub cover that has not been planted. Although it may have been managed by coppicing or felling and allowed to regenerate naturally’ Natural England, *ibid*.

⁸ https://www.york.gov.uk/download/downloads/id/926/tremendous_york.pdf

200,000 hectares by 2020⁹. The distribution of UK BAP priority habitats in North Yorkshire can be seen at: <http://www.natureonthemap.naturalengland.org.uk>. The total areas of different UK priority habitat found within the Joint Plan area are listed within Table 3.3. The National Planning Policy Framework advises that impacts on biodiversity from planning should be minimised and that priority habitats should be preserved, restored and re-created and that suitable indicators should be used to monitor this.

Table 3.3: List and corresponding area of priority habitats within the Joint Plan area.

Priority Habitat	Area (ha)
Lowland Dry Acid Grassland	15,157ha
Blanket Bog	18,245ha
Lowland Meadows	736.28ha
Lowland Calcareous Grassland	730.481ha
Lowland Heathland	829.005ha
Lowland Raised Bogs	94.941ha
Maritime Cliff and Slopes	Area not supplied in source data
Mudflats	28.508ha
Limestone Pavement	0
Purple Moor Grass and Rush Pastures	535.01ha
Reedbeds	2,421.16ha
Saline Lagoons	Area not supplied in source data
Sand Dunes	0
Upland Calcareous Grassland	351.62ha
Upland Hay Meadows	Area not supplied in source data
Upland Heathland	Area not supplied in source data

Source – Natural England.

There are also a number of Local Biodiversity Action Plan Partnerships in the Joint Plan area which set out local action plans for UK BAP priority habitats and species, alongside actions for locally significant species. These plans include:

- Bedale and Upper Swale Internal Drainage Board BAP
- Craven BAP
- Hambleton BAP
- Harrogate BAP
- North York Moors National Park BAP
- Richmondshire BAP
- Ryedale BAP
- Scarborough BAP
- Selby Area Internal Drainage Board BAP
- Selby BAP.

In total, there are 93 habitats with actions in the Plan Area and 27 species with actions, details of which can be found on Defra's BARS website: <http://ukbars.defra.gov.uk/plans/nonj.asp>.

⁹ Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services (Defra, undated).

The National Biodiversity Network Gateway gives broad details of the distribution of species: <http://data.nbn.org.uk/>.

Agri-Environment Schemes

Under agri-environment schemes, land managers (including farmers) select options to address environmental objectives, such as restoring biodiversity or managing soil erosion. In 2009, 66% of the agricultural land in England was covered by some form of agri-environment scheme. There are a number of agri-environment schemes in operation, including:

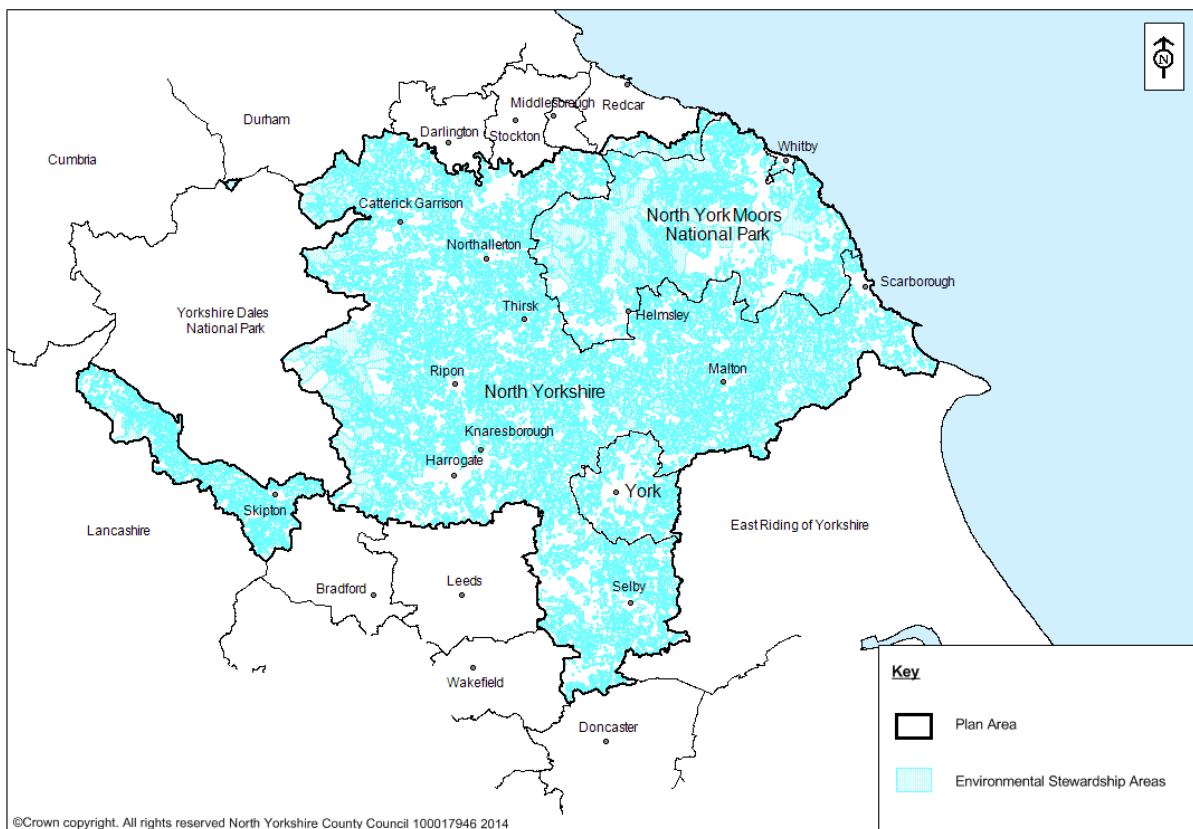
- Environmental Stewardship
- Countryside Stewardship
- Environmentally Sensitive Areas
- Woodland Grant Schemes.

All current agri-environment schemes are mapped on Natural England’s ‘Nature on the Map’ website. In addition, target areas for Higher Level Stewardship (a more comprehensive approach to land management in priority areas) are shown:

<http://natureonthemap.naturalengland.org.uk>

Figure 3.9 shows that there is a large proportion of land within the Joint Plan area that is under an Environmental Stewardship scheme (74% within the NYCC part of the Joint Plan area and 60% of the NYMNP). Within the Joint Plan area (excluding York) there are 3,383 schemes in place.

Figure 3.9: Environmental Stewardship Areas



Invasive Species

Invasive species are non-native species which may cause harm to ecosystems. There are currently 32 species listed as high impact on the UKTAG list (compiled in January, 2013), of which 17 are listed as present in the 10km grid squares that correspond to the Plan Area by the National Biodiversity Network (including squares which overlap with other local authorities). These are shown in Table 3.4 below.

Table 3.4: Aquatic Invasive Species classified as high impact recorded in North Yorkshire and overlapping 10km squares in March, 2013.

Common name	Scientific name
Australian swamp stonecrop	<i>Crassula helmsii</i>
Floating pennywort	<i>Hydrocotyle ranunculoides</i>
Water fern	<i>Azolla filiculoides</i>
Water fern	<i>Azolla caroliniana</i>
Canadian pondweed	<i>Elodea canadensis</i>
Nuttall's pondweed	<i>Elodea nuttallii</i>
Japanese knotweed	<i>Fallopia japonica</i>
Himalayan balsam	<i>Impatiens glandulifera</i>
Giant hogweed	<i>Heracleum mantegazzianum</i>
Rhododendron	<i>Rhododendron ponticum</i>
North American signal crayfish	<i>Pacifastacus leniusculus</i>
Chinese mitten crab	<i>Eriocheir sinensis</i>
Slipper limpet	<i>Crepidula fornicata</i>
Zebra mussel	<i>Dreissena polymorpha</i>
Colonial tunicate	<i>Non-native Didemnum spp.</i>
Common carp	<i>Cyprinus carpio</i>
Curly water-thyme	<i>Lagarosiphon major</i>

Sources - UK TAG list and <http://data.nbn.org.uk/imt/> - National Biodiversity Network.

Defra provides alerts in relation to a number of invasive species as shown in Table 3.5 below. As of August 2016, only Water Primrose is present in the Joint Plan area.

Table 3.5: Number of alerts for invasive species.

Species Name	Status in plan area	Date of check made on website
Quagga Mussel	Not yet found in GB according to Defra website	25/08/2016
Killer Shrimp	Thus far confined to East Anglia according to Defra website	25/08/2016
Water Primrose	Although noted as present in some parts of England, there are no records in the Plan Area according to the National Biodiversity Network Gateway.	25/08/2016
Carpet sea squirt	Marine species n/a to terrestrial planning	25/08/2016
Asian hornet	Not yet found in GB according to Defra website	25/08/2016

Source – Defra.

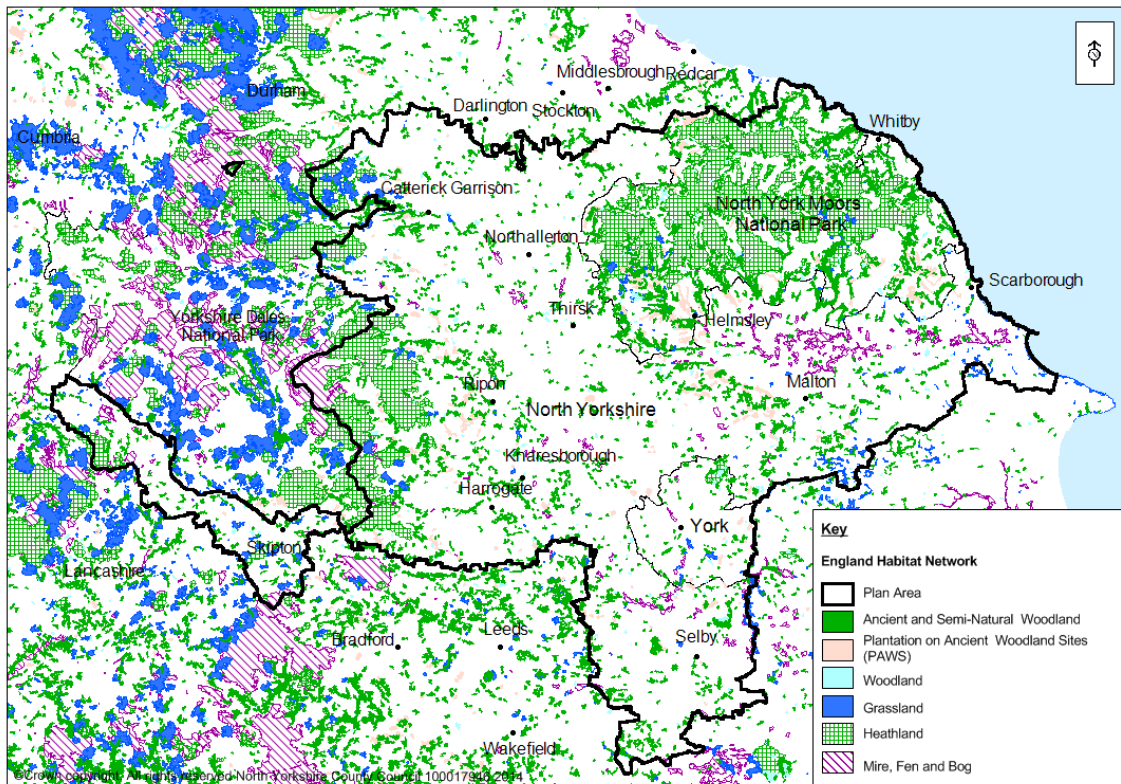
Habitat Networks

Habitat networks are becoming increasingly important, particularly as the predicted effects of climate change may have a detrimental effect on these habitats through fragmentation. The England Habitat Network attempts to identify areas of functional connectivity of ecosystems

across landscapes. The network is built up from patches of defined habitat that are known to exist, plus areas of permeable landscape (dispersal intervals) that are connected to the patches. Dispersal intervals are based on information on the capacity of groups of species to move outside their core habitat. Movement of plant and animal species across the landscape allows populations to adapt to the changing environment and for plant and animal communities to adapt to these changes over shorter time periods as they can find optimal locations for growth and reproduction.

Figure 3.10 shows where patches and dispersal intervals coalesce to give a broad indication of the networks that exist in the county, based on the types of land cover likely to have the greatest permeability to flora and fauna. The true extent of networks must distinguish between habitat types due to the impact that these different types of land cover have on the movement of species.

Figure 3.10: England Habitat Network.



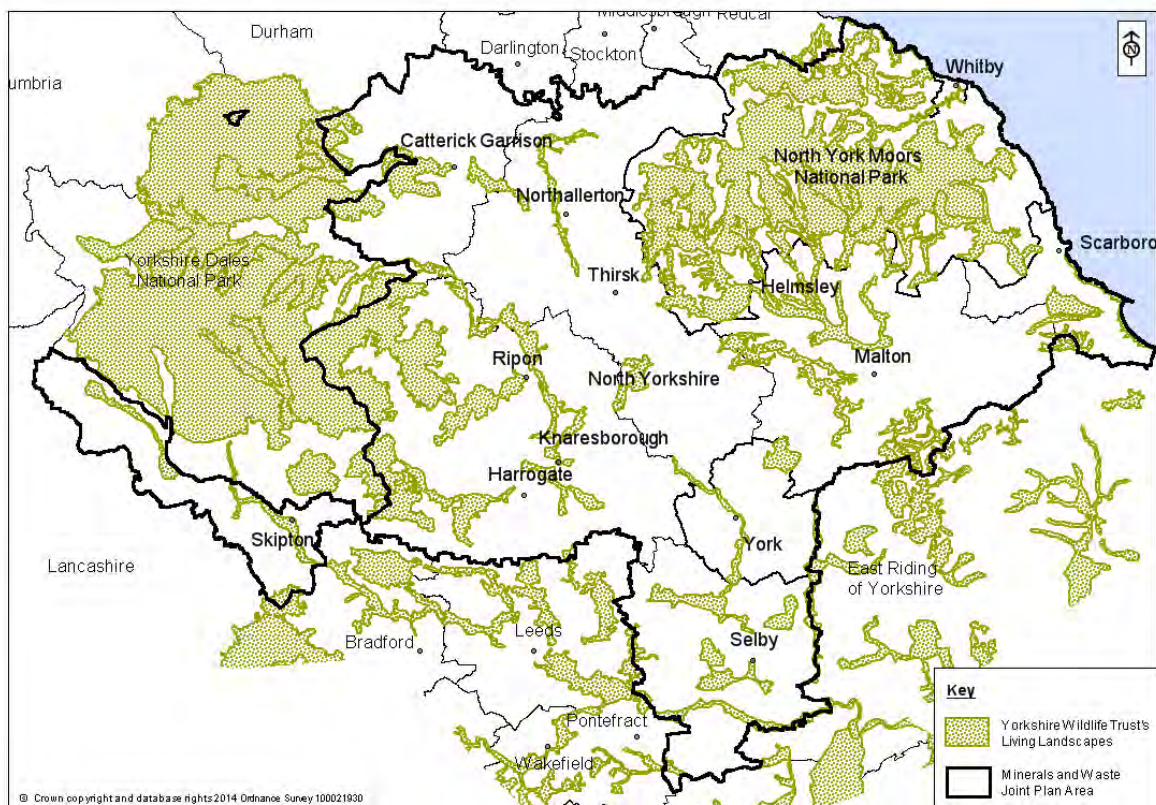
Source – Natural England.

In addition to the England Habitat Network, mapping of ecological networks at a local scale within the Plan Area has also been carried out by the Yorkshire Wildlife Trust, the North Yorkshire and York Local Nature Partnership and the North York Moors National Park Authority.

The Yorkshire Wildlife Trust’s (YWT) ‘Living Landscapes’ work has focussed on the restoration, recreation and reconnection of nature reserves and areas of ecological

importance within nature corridors such as rivers, verges and hedgerows. A map of the YWT's broad areas of nature conservation can be found on the YWT website¹⁰. In addition, a more detailed map of the YWT's Living Landscapes is displayed in Figure 3.11. The work being carried out to join up Yorkshire's nature reserves and ecologically important areas is being carried out through partnerships between local communities, landowners, schools and businesses. At present, the YWT has identified 33 Living Landscape areas within the North Yorkshire Ecological Network. Identification of clusters of habitats and core biodiversity areas will then allow the YWT to create functional ecological networks and integrated habitats.

Figure 3.11: The Yorkshire Wildlife Trust's areas of Living Landscape across Yorkshire and the Humber.



The North York Moors National Park Authority has similarly identified broad strategic habitat networks and sites of importance for habitat connectivity (see Figure 3.12 and Figure 3.13). The National Park Authority has recently begun work to improve these networks through targeting habitat restoration and creation at specific sites as shown in Figure 3.14. Work in the National Park has already been carried out which focuses on restoration of Plantation on Ancient Woodland Sites (PAWS), improvement of riparian habitats and conservation of species-rich grasslands. These areas together with SSSIs (Sites of Special Scientific Interest) make the basis of a habitat network. However, work on further enhancement and restoration is needed due to the isolation of some of these areas from the rest of the network – meaning that they may not function as effective ecosystems.

¹⁰ <http://www.ywt.org.uk/living-landscapes>

The habitat mapping exercise, which has identified well-connected habitat networks and sites of importance for habitat connectivity has been carried out in order to establish where the 'building blocks' of well-connected habitat exist within the Park's boundary and where these connections may link to the wider regionally and nationally identified habitat networks. Work now will focus on enhancement of the networks in order to improve habitats and ultimately create strong and diverse ecosystems to support wildlife

Figure 3.12: Strategic Habitat Connections in the North York Moors National Park

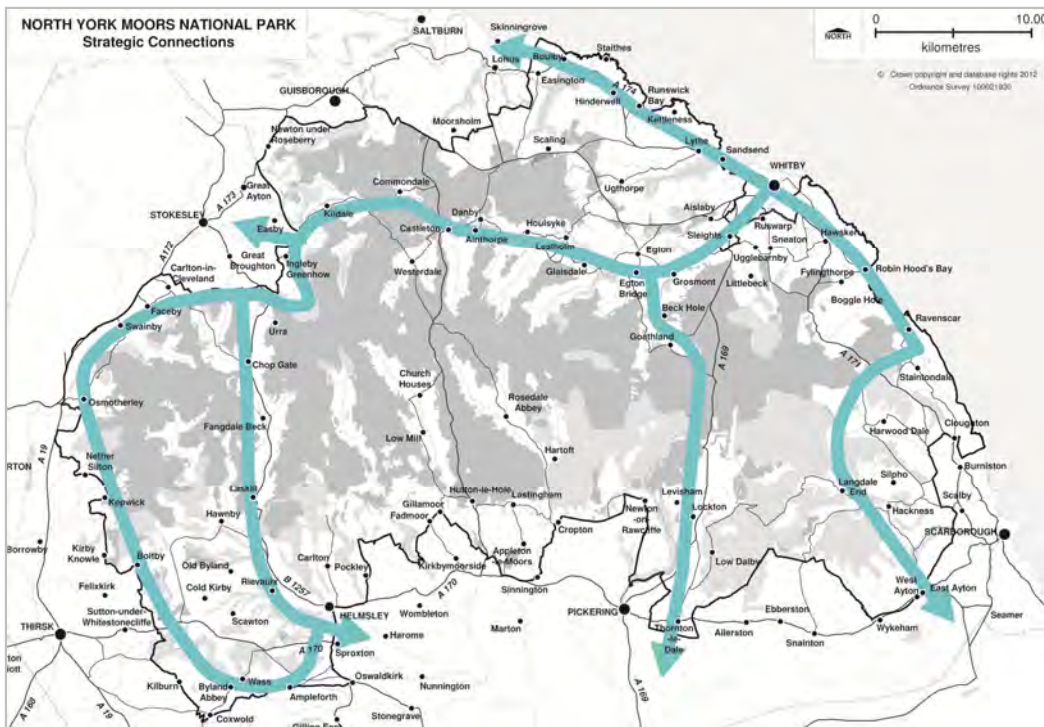
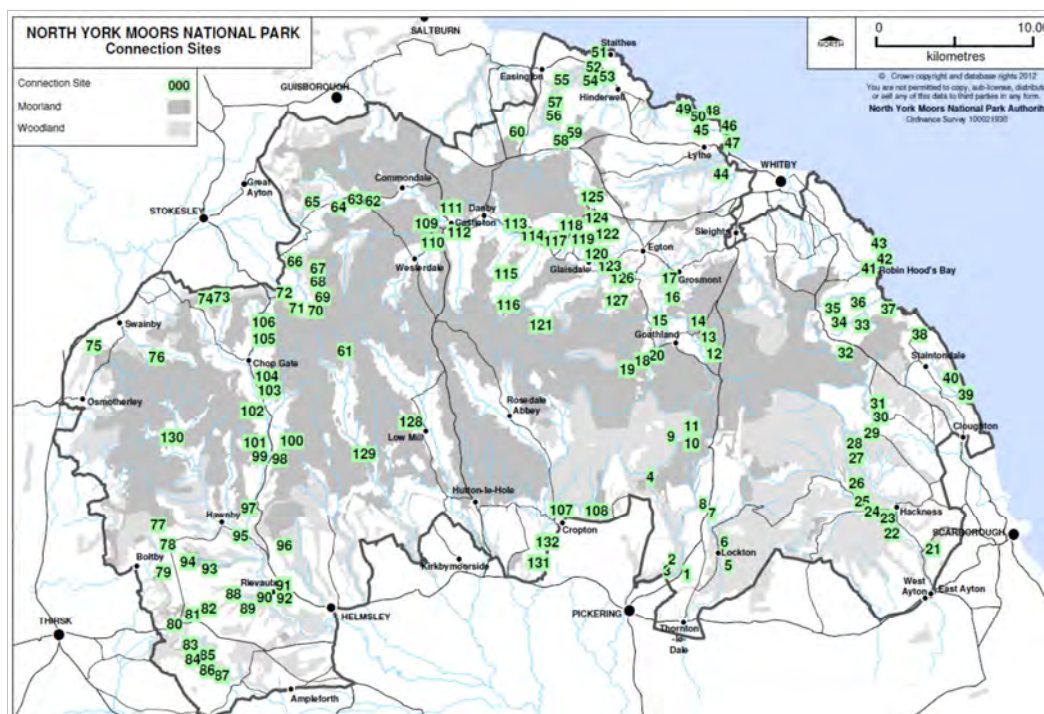


Figure 3.13: Habitat Connection sites in the North York Moors National Park.



Local Nature Partnerships (LNPs) also carry out important work on Nature Improvement Areas (NIAs) at a local level around England. NIAs are defined as places where opportunities to deliver ecological networks exist and significant enhancement of the network can be achieved over a large area. They focus on improving habitat connectivity within 12 defined NIA projects in England.

There are currently no NIAs in the Joint Plan area, though the south-east fringe lies around 600 metres from the nearby Humberhead Levels NIA.

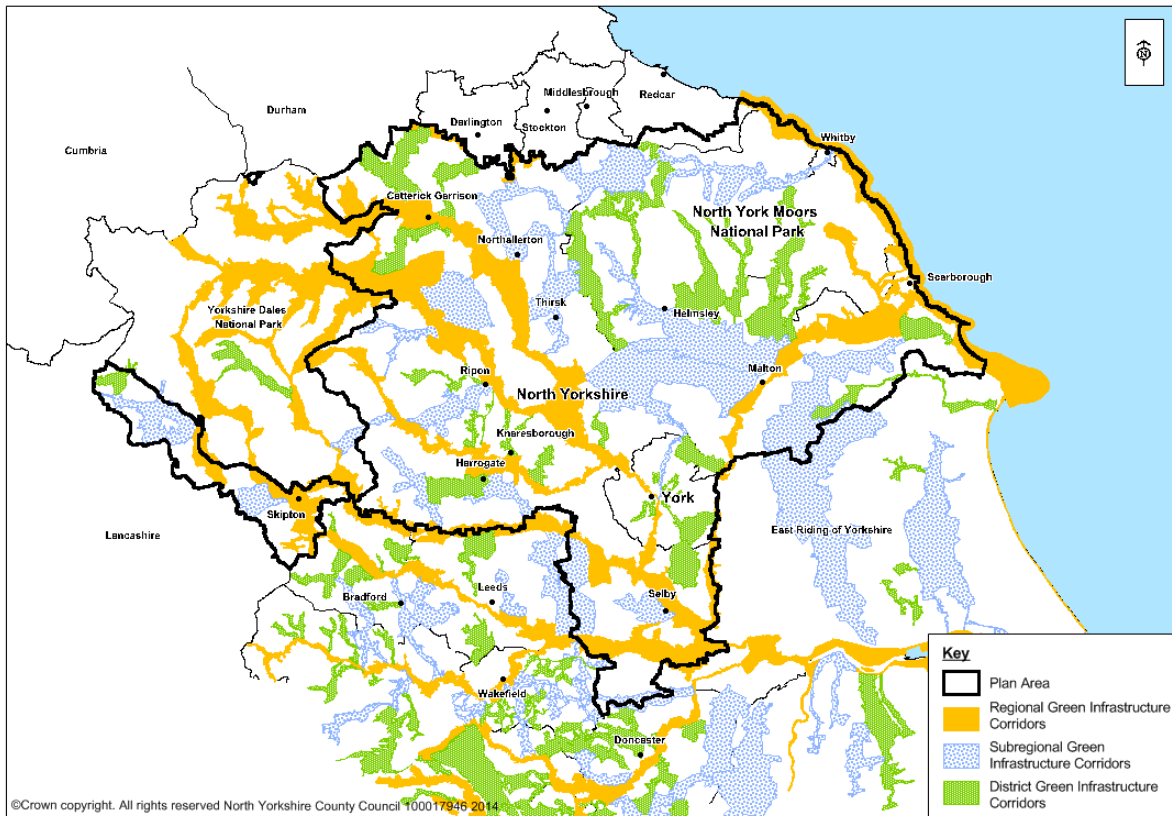
Figure 3.14: Nature Improvement Areas



Green Infrastructure

Green Infrastructure is the network of corridors and spaces that each provides a variety of functions such as nature conservation, opportunities for recreation, flood risk management or education. The whole of the part of NYMNP in Redcar and Cleveland is identified as Green Infrastructure in the Tees Valley Green Infrastructure Strategy. Green Infrastructure corridors for the rest of the Plan Area are defined in the green infrastructure corridors map produced by Natural England. This shows corridors of regional, sub-regional and district significance within the Plan Area. This is based upon the provision of a range of functions including provision of rights of way, green linkages and flood control, as well as their importance for biodiversity. Figure 3.15 shows the green infrastructure corridors identified in the Yorkshire and Humber region.

Figure 3.15: Green Infrastructure corridors in the Yorkshire and Humber region.



Source – Natural England.

Ecosystem Services

The natural environment provides many useful functions that help human communities survive and prosper. For example, the organisms that pollinate crops and cycle nutrients in soils provide a critical role in helping us to farm and produce food, while natural processes play a crucial role in removing carbon dioxide and other greenhouse gases that contribute to global warming from the air. Often we take these ‘free’ services for granted, but the UK’s recent National Ecosystems Assessment (NEA) showed that many services provided by nature are under pressure and could be enhanced by appropriate management. Table 3.6 summarises the four categories identified by the UK’s NEA as being delivered in the UK.

Table 3.6: Four categories of ecosystem service.

Supporting services	These provide the basic infrastructure of life and all other ecosystem services depend on them. They include primary production where sunlight is converted into the organic compounds that ultimately provide the food for almost all life. They also include services such as soil formation and the cycling of water and nutrients in the environment.
Regulating services	These services include pollination, pest and disease regulation, and climate and hazard regulation, for instance protection from flooding.
Provisioning services	These are the goods that people obtain from ecosystems, such as food and fibre, fuel from materials such as wood, and water from rivers, lakes and aquifers. Goods may be provided from heavily managed ecosystems, as with agriculture, or by natural and semi-natural habitats, such as through fishing. These services are often heavily dependent on supporting services and regulating services.

Cultural services	Cultural goods and benefits are derived from the interaction of humans and nature. Environments such as gardens, parks, lakes and rivers, the seashore and the wider countryside provide opportunities for outdoor learning, recreation, improvement to health and fitness and aesthetic satisfaction.
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Source – National Ecosystem Assessment.

The services provided by ecosystems can be expressed in terms of the financial value of those services, for instance by taking account of the market value of particular services or other indirect measures of value, such as the cost of providing equivalent replacement services (e.g. replacing a natural flood storage area with a flood defence that provides equivalent protection) or evaluating people’s willingness to pay. While, according to the NEA, it is not practical to estimate the total value of ecosystem services as “*many of these services are essential to continued human existence and total values are therefore underestimates of infinity*”, it is possible to attribute values to changes in individual service provision, for example, pollination services arising from biodiversity are estimated to be £430 million per year, while willingness to pay estimates for terrestrial biodiversity range from £540 million to £1,262 million per year. This has led the authors of the NEA to report that “*The contribution that ecosystem services make to the national economy in terms of a sustained flow of income is very substantial*” and “*the continued maintenance of this natural capital stock is critically important for the future prospects of a thriving ‘green’ economy*”.

In North Yorkshire there is a growing body of evidence that a wide range of ecosystem services across all four of the NEAs categories of services are present. Natural England have recently identified key provisioning, regulating and cultural ecosystems service being delivered in National Character Areas (NCA) in their NCA updates. Table 3.7 summarises this.

Table 3.7: Ecosystem services in the Joint Plan area.

NCA ¹¹	Predominant provisioning services identified by NCA Profile	Predominant regulating services identified by NCA Profile	Predominant cultural services identified by NCA Profile
North York Moors and Cleveland Hills*	Food provision, timber provision, biomass energy, water availability, genetic diversity	Climate regulation, regulating water quality, regulating water flow, regulating soil quality, regulating soil erosion, pollination, regulating coastal processes	Sense of place/inspiration, tranquillity, sense of history, recreational opportunity, biodiversity, geodiversity
Vale of Pickering NCA	Food provision, water availability	Climate regulation, regulating water quality, regulating water flow (flooding), regulating soil erosion, regulating soil quality, regulating coastal flooding and erosion	Sense of place/inspiration, sense of history, biodiversity, geodiversity
Yorkshire Wolds*	Food provision, water availability	Regulating soil erosion, regulating soil quality,	Sense of place/inspiration, sense of history.

¹¹ Some NCAs overlap other local authority areas so some of the listed services may be partly attributed to areas outside the Plan Area. These are labelled with a star (*).

NCA ¹¹	Predominant provisioning services identified by NCA Profile	Predominant regulating services identified by NCA Profile	Predominant cultural services identified by NCA Profile
Vale of York*	Food provision, water availability	regulating water quality Regulating climate change, regulating soil erosion, regulating soil quality, regulating water quality, regulating water flow (flooding)	Sense of place/inspiration, sense of history, recreation, biodiversity
Bowland Fringe and Pendle Hill*	Food supply, water availability	Regulating climate change, regulating soil erosion, regulating water quality, regulating water flow (flooding)	Sense of place/inspiration, sense of history, recreation, biodiversity
Bowland Fells NCA*	Food provision, timber provision, water availability	Climate regulation, regulating soil erosion, regulating soil quality, regulating water quality, regulating water flow	Sense of place/inspiration, sense of history, tranquillity, recreation, biodiversity, geodiversity
Southern Pennines*	Food supply, water availability	Regulating climate change. Regulating soil erosion, regulating water quality, regulating water flow (flooding)	Sense of place/inspiration, sense of history, recreation, biodiversity
Humberhead Levels NCA*	Food supply, water availability, biomass	Regulating soil erosion, regulating climate change, regulating river and coastal flooding	Sense of place/inspiration, sense of history, recreation, biodiversity, tranquillity
Howardian Hills	Food provision, timber provision, biomass energy, water availability	Climate regulation, regulating soil erosion, regulating soil quality, regulating water quality, regulating water flow, pollination	Sense of place/inspiration, sense of history, tranquillity, recreation, biodiversity, geodiversity
North Pennines NCA *	Food provision, timber provision, water availability	Climate regulation, regulating soil erosion, regulating water quality, regulating water flow	Sense of place/inspiration, sense of history, tranquillity, recreation, biodiversity, geodiversity
Yorkshire Dales NCA *	Food provision, water availability	Climate regulation, regulating soil erosion, regulating soil quality, regulating water quality, regulating water flow	Sense of place/inspiration, sense of history, tranquillity, recreation, biodiversity, geodiversity
Pennine Dales Fringe NCA *	Food provision, timber provision, biomass energy, water availability	Climate regulation, regulating water quality, regulating water flow	Sense of place/inspiration, sense of history, recreation, biodiversity
Tees Lowlands *	Food provision	Climate regulation, regulating water quality, regulating water flow, regulating coastal flooding and erosion	Sense of place/inspiration, sense of history, tranquillity, recreation, biodiversity, geodiversity
Vale of Mowbray	Food provision, water	Climate regulation,	Sense of place/inspiration,

NCA ¹¹	Predominant provisioning services identified by NCA Profile	Predominant regulating services identified by NCA Profile	Predominant cultural services identified by NCA Profile
	availability	regulating soil erosion, regulating soil quality, regulating water quality, regulating water flow, pollination	sense of history, tranquillity, biodiversity
Southern Magnesian limestone *	Food provision, water availability	Regulating water quality	Sense of place/inspiration, sense of history, biodiversity, geodiversity
Lancashire Valleys *	Food provision, timber provision, water availability	Climate regulation, regulating soil quality, regulating water quality, regulating water flow	Sense of place/inspiration, sense of history, recreation, biodiversity, geodiversity

Source –Natural England’s NCA profiles <http://publications.naturalengland.org.uk/category/587130>.

Changes in ecosystems can lead to changes in the level of ecosystem services that they deliver. For instance, the replacement of lowland heath with farmland can lead to a flux of carbon dioxide to the atmosphere and the reduction of further capacity to absorb carbon from the atmosphere. The NEA provided a snapshot of changes in broad habitat types and summarised their contribution to ecosystem services in a technical report on 'Status and Changes in the UK Ecosystems and their Services to Society: England'¹². Table 3.8 shows the broad habitats studied in the NEA that are also present at significant levels in the Joint Plan Area, the direction of change in England (more local data is not yet available) and the importance of that habitat type for delivering ecosystem services¹³.

¹² Defra et al, 2011. UK National Ecosystem Assessment Technical Report: <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx>.

¹³ The table should be taken as indicative as importance may vary locally. It should also be noted that the importance of habitats for delivering ecosystem services is partly due to the extent of the habitat and partly due to their structure and functioning. So enclosed farmland, which is very extensive in distribution is amongst the most important habitats for regulating climate change across England, but at a local scale, when equal areas of habitat are compared, enclosed farmland may be of lesser importance (e.g. conversion of semi natural grasslands to arable systems show that 14.29 Mt of carbon was lost to the atmosphere between 1990 and 2006 – see Alonso, I et al, 2012. Natural England Research Report NERR043: Carbon Storage by Habitat: Re of the Evidence of the Impacts of Management Decisions and Condition of Carbon Stores and Sources (publications.naturalengland.org.uk/file/1438141).

Table 3.8: Direction of change for England’s ecosystem services in the Joint Plan Area.

Service group	Final Ecosystem Service	Moorland, Mountain and Heaths	Semi natural Grasslands	Enclosed Farmland	Woodlands	Freshwaters, Openwaters, Wetlands and Floodplains	Urban	Coastal Margins
Provisioning	Crops		→	↑			↗	↘
	Livestock	→	→	→	→			↘
	Fish			→		↓		↘
	Trees, standing vegetation	↘	↗	↗	↑		↗	
	Water supply	→	↘	→	→	↘	→	→
	Wild species diversity	↗	→	↓	↗	↓	↗	→
Cultural	Recreation	↑	↑	↗	↑	↑	↑	↑
	Tourism	↑	↑	↗	↑	↑	→	↑
	Landscapes / seascapes	↑	↑	↑	↑	↗	→	↑
Regulating	Climate	↘	↗	↘	↑	→	↘	↘
	Hazard	→	↘	↘	↗	→	↘	↘
	Disease and pests		↗	↘	→	↘	↘	

	Water quality	↘	→	→	↗	↘	→	
	Soil quality	→	↘	↘	↗	→	↘	→
	Air quality	→	↘	↘	↗		→	→
Importance of broad habitat for delivering the ecosystem service					Direction of change in the flow of the service since 1990			
High	Medium High	Medium Low	Low	↑ Improving, ↗ Some improvement, → Improvement and/or deterioration in different locations, ↘ Some deterioration, ↓ deterioration				

Sources - Adapted from Berry P and Hopkins, J. Status and Changes in the UK Ecosystems and their Services to Society: England in Defra et al, 2011. UK National Ecosystem Assessment Technical Report <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx>.

Key messages from the baseline

- Large number of nationally designated wildlife sites and significant areas of internationally designated wildlife sites.
- Outside of these areas there are large numbers and a wide distribution of locally important Sites of Importance for Nature Conservation and UK BAP priority habitats.
- Much of the farmland is covered by some form of agri-environment scheme.
- Despite this many habitats in this area are fragmented and isolated.
- Outside of the National Park, woodland is generally found in small fragments.
- Invasive species are an increasing threat to native wildlife.
- Key ecosystem services include regulating water flow, food provision and cultural services such as the provision of a sense of history.

Predicted Future Trends

- The overall condition of the protected site network is predicted to improve in the short and medium term as targets for SSSI condition are met. Similarly, the target of no net loss of priority habitat by 2020 is likely to mean that declines for priority habitats will halt over the short and medium term (assuming the target is successfully met). However, there is uncertainty over the short and medium term contribution of agri-environment schemes due to uncertainty over the outcome of Common Agricultural Policy reform, which may impact on populations of farmland species in particular. In addition, some habitats are continuing to show near term declines in the ecosystem services they deliver, such as freshwater habitats role in supplying wild species diversity, and uplands' role in climate and hazard regulation.
- Biodiversity faces some key threats which will become more significant in the longer term, including continued urbanising and development of land (including the extraction of minerals that will take place without a plan in place). The effects of climate change and invasive species / plant diseases will also become increasingly evident in the longer term¹⁴. For instance, because of changes in species ranges and the fragmented nature of the current protected sites network, smaller protected sites may no longer be fit for purpose, while coastal squeeze from sea level rise may affect protected coastal areas. This would have a negative effect on biodiversity. However, other species may spread northwards meaning that some previously uncommon species may become more widespread¹⁵. The cumulative effect of future forces for change is predicted to be negative.

Table 3.9: Biodiversity, Flora and Fauna Indicators

Indicator	Baseline Data (and year)	Source
Area of SSSI in 'favourable' condition and area of SSSI in 'unfavourable recovering' condition	See Table 3.1	Natural England
Number of agri-environment schemes in place	3,383 (2013)	Natural England

¹⁴ For a comprehensive discussion paper on drivers of ecosystem change in England see Berry, P and Hopkins, J, 2011. UK National Ecosystem Assessment Technical report: Status and Changes in the UK Ecosystems and their Services to Society: England

¹⁵ Defra, 2012. The UK Climate Change Risk Assessment 2012 Evidence Report. [URL: <https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-government-report>]

Indicator	Baseline Data (and year)	Source
Number of alerts for invasive species	See Table 3.5	Defra
Total area of UK Priority Habitat	See Table 3.3	Natural England

4 SEA Topic/SA Category – Landscape

Landscapes across the Joint Plan area

The Joint Plan Area has a rich and varied landscape, which falls within a number of National Character Areas (see Figure 4.1). A large part of the area is designated nationally for the importance of its landscapes, as shown in Figure 4.2. National Parks and AONBs are statutorily protected which is important in the context of the Joint Plan as such developments can be particularly intrusive.

Whilst designated landscapes enjoy the highest level of protection, the European Landscape Convention acknowledges that all landscapes are important and describes landscape as ‘*An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors*’.

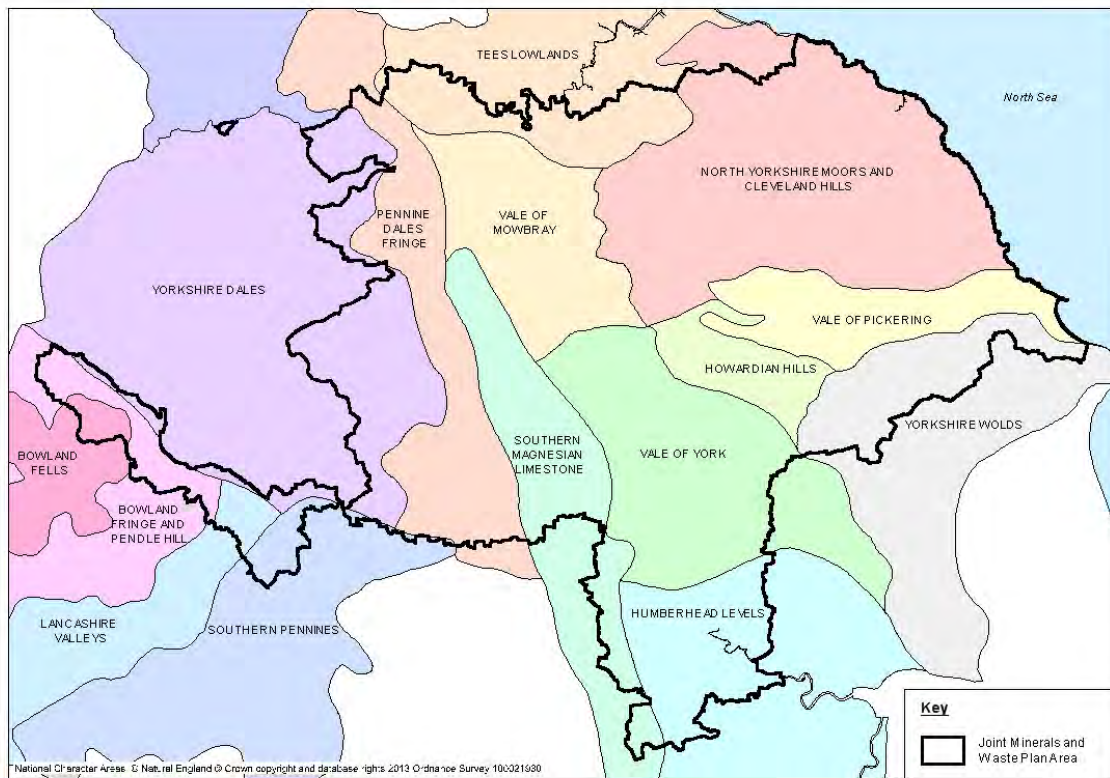
Each of the National Character Areas has been defined in terms of their current condition. This shows that the North York Moors and Cleveland Hills, the Yorkshire Wolds and the Bowland Fells are enhancing, whilst the Tees Lowlands, Vale of Mowbray and Vale of York are classed as neglected. The rest of the Plan Area is either maintained or diverging.

Landscapes across the Plan Area include upland areas as can be found in the North York Moors, rolling chalk lands such as the Wolds and flatter lowland landscapes such as the Vale of York and Humberhead Levels. North Yorkshire’s Landscape Characterisation Project identifies the following Primary Landscape Units within North Yorkshire and York, within which further categories of landscape have been identified:

- Urban landscapes
- Urban fringe and valley landscapes
- Sandstone landscapes
- Limestone landscapes
- Upland fringe and valley landscapes
- Farmed lowland and valley landscapes
- Gritstone landscapes
- Coastal landscapes
- Chalk landscapes.

The Landscape Characterisation Project includes overarching guiding principles for managing agricultural and land management change, managing projected impacts of climate change and managing minerals extraction. An interactive website showing landscape character types across North Yorkshire and York has is available on the North Yorkshire website at: http://www.northyorks.gov.uk/media/23669/Map-showing-N-Yorkshire--York-landscape-classification/pdf/Map_showing_N_Yorkshire___York_landscape_classification.pdf

Figure 4.1: National Character Areas.



Source – Natural England.

Protected Landscapes

National Parks and Areas of Outstanding Natural Beauty are part of a global network of protected landscapes. The North York Moors National Park, designated primarily for its landscape quality, extends to 1,436km² and was described in the 1947 Hobhouse Report as ‘within a relatively small compass an amazing wealth of variety and beauty’. The landscape of the National Park includes open heather moorland, intimate dales, the coast, the open landscapes of the Hambleton and Tabular Hills, extensive wooded areas and dramatic geological features such as Sutton Bank and Roseberry Topping. The latest Natural England report describes the North York Moors is described as ‘Enhancing (changing)’ which means that the landscape is improving¹⁶. The Yorkshire Dales National Park adjoins the boundary of the western part of the Plan Area and the impact of any development on its setting is therefore relevant to the Joint Plan.

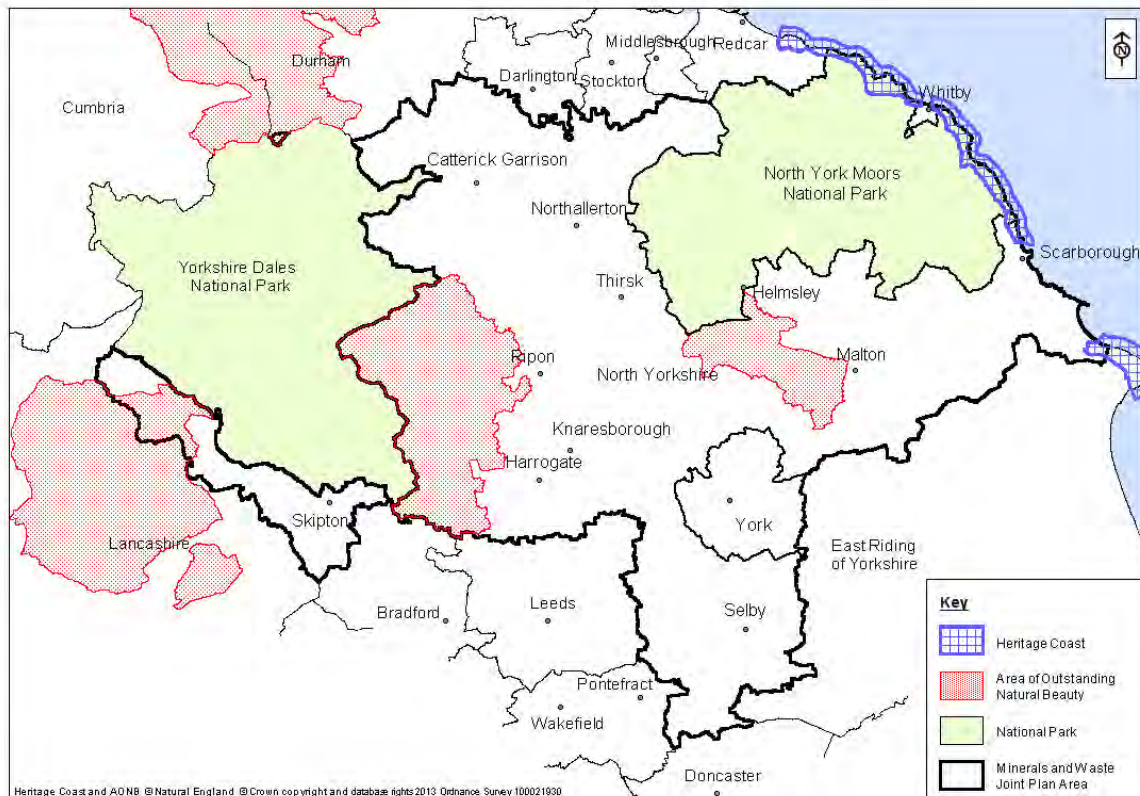
The Joint Plan Area also includes two Areas of Outstanding Natural Beauty (Nidderdale and the Howardian Hills) and small parts of the Forest of Bowland AONB and North Pennines AONB. The primary aim of the designation being to conserve and enhance the natural beauty of the landscape. Nidderdale AONB is recognised for its heather moorland to the west, where it abuts the Yorkshire Dales National Park, and its rolling farmland landscapes to the east. The Howardian Hills AONB is recognised for its woodland, rolling agricultural landscapes and

¹⁶ State of the Natural Environment in Yorkshire and the Humber (Natural England, 2008).

parkland. The Forest of Bowland is characterised by upland fells and vast tracts of heather moorland and the North Pennines AONB is characterised predominantly by open heather moorlands. The landscape of the National Character Areas covering all four AONBs has been identified as ‘maintained (stable)’.

Most of the North Yorkshire and Cleveland Heritage Coast and part of the Flamborough Head Heritage Coast are also in the Plan Area. Heritage Coasts are designated to conserve their natural beauty and improve accessibility.

Figure 4.2: National Parks, AONBs and Heritage Coast in and surrounding the Plan Area.



Managing Landscape Change

North Yorkshire County Council Planning Authority Area

In January 2011 North Yorkshire County Council commissioned a project, with funding provided by English Heritage, to develop an ‘environmental evidence base and assess sensitivities and capacity in North Yorkshire to inform a spatial planning strategy for the extraction of minerals’¹⁷. This project analysed the best available knowledge about Areas of Minerals Resource Potential (ASMRPs) and went on to describe the sensitivity of these areas in terms of the historic environment, biodiversity and landscapes. This allowed an assessment of the capacity for change of each ASMRP and provided ‘a strategic assessment

¹⁷ Thompson, A. et al. 2011. Managing Landscape Change: A multi-disciplinary approach to future mineral extraction in North Yorkshire; Stage 5 Final Report. English Heritage and North Yorkshire County Council. [URL: <http://www.northyorks.gov.uk/index.aspx?articleid=20126>].

of the degree of impact that minerals extraction would have on each'. It should be noted that this study only relates to the North Yorkshire County Council planning authority area (i.e. it does not include the North York Moors National Park or the City of York areas).

The report recognised that ASMRPs vary in their degree of homogeneity. To acknowledge this fifteen land categories were defined, in terms of their similarities relating to topography, environmental characteristics and sensitivities. One ASMRP may contain several land categories. The mixture of these categories was used as a basis for assessment of capacity for further minerals extraction. However, the capacity assessments were broad generalisations relating to the whole area of each land category that should not be applied to any specific location, which may have a higher sensitivity and lower capacity than the broader indicative assessment.

Table 4.1 summarises the key environmental characteristics associated with each ASMRP. Assessment of sensitivity and capacity associated with ASMRPs, along with maps, is available at <http://www.northyorks.gov.uk/index.aspx?articleid=20126>.

Table 4.1: Environmental Characteristics in each ASMRP.

ASMRP	Summary of key environmental characteristics	Additional observations	Capacity ratings for land categories contained within ASMRP
ASMRP1: Sub alluvial sand and gravel	<ul style="list-style-type: none"> -Watercourses are the most distinctive feature of the landscape and most surviving built structures relate to water use; -Predominantly modern improved fields, generally flat landform, traditional nucleated villages; -Great potential deeply buried prehistoric deposits from earlier human activity concealed beneath more recent fluvial deposits; -Patch work of fen, flood meadows, floodplain mires, marsh and swamp, as well as the river channels and riparian vegetation which form vital wildlife corridors 	Representative of the majority, but not all of ASMRP1. Sensitivity and capacity discussed in report.	Contains land categories ranging from a medium to low capacity for change.
ASMRP2: River terrace sand and gravel	<ul style="list-style-type: none"> -Older flood plains forming river terraces that developed in the post glacial period in parallel with human activity; -Well drained and with reduced tendency to flooding presents a more mature landscape and intensive agricultural use; -Range of more recent land uses include historic houses and parks and gardens; -Remnants of the former rich biodiversity which once characterized the river terraces 	Representative of the majority of the ASMRP except for small areas. Sensitivity and capacity discussed in report.	Contains land categories ranging from a medium to low capacity for change.
ASMRP3: Glacio fluvial sand and gravel	<ul style="list-style-type: none"> -Gently undulating or flat topography, some evidence of former rich biodiversity; -This minerals resource was laid down prior to human activity so is unlikely to contain evidence of the earliest human activity; however it is well drained and likely to have been attractive for early post glacial settlement with significant evidence from the Mesolithic onwards, including the Neolithic Thornborough Henges. 	Representative of the majority of the ASMRP where they lie over the Magnesian limestone. Sensitivity and capacity discussed in report.	Contains land categories including a high, medium and low capacity for change.
ASMRP 4: Glacial sand and gravel	<ul style="list-style-type: none"> -Similar characteristics to ASMRP3. Limited biodiversity interest largely confined to mature hedgerows and small areas of woodland; -Archaeological site visibility is poor largely due to the increase of clay sediment and the action on ploughing on surface features; -Remnant ridge and furrow and HLC / field evidence of early post medieval enclosure 	Representative of the majority of the ASMRP. Sensitivity and capacity discussed in report.	Medium to high capacity for change.

ASMRP	Summary of key environmental characteristics	Additional observations	Capacity ratings for land categories contained within ASMRP
ASMRP 5: Undifferentiated sand and gravel	<ul style="list-style-type: none"> -Low-lying open landscape with extensive views over the Vale of Pickering -Early post glacial human activity on the margins of the ice damned Lake Pickering -Enormous archaeological potential related to a continuum of activity since the Mesolithic, although site visibility is variable. Deep ploughing and dewatering have affected areas of sub surface waterlogged remains; -Fragmented habitats survive, and small areas of plantation woodland and watercourses that are the result of more recent land management provide opportunity for other species. 	Representative of the majority of the ASMRP. Sensitivity and capacity discussed in report.	Contains land categories with a high, medium and low capacity for change
ASMRP 6: Quaternary brick clay	<ul style="list-style-type: none"> -Clay laid down within Quaternary glacial deposits in low lying areas of the Vales of Mowbray and York, and the Humberhead Levels; -Wetland marsh and mire characterized this landscape in the post glacial period and would not have been attractive for human occupation. The modern agricultural landscape was the result of post medieval drainage and intensive cultivation. The landscape is characterized by medium sized hedged fields, but in the Humberhead Levels drainage ditches bound larger and more recent fields; -Poor site visibility as a result of the heavy clay soils, and therefore potential for well-preserved archaeological deposits. 	Representative of the majority of the ASMRP. Sensitivity and capacity discussed in report.	High capacity for change
ASMRP7: Cretaceous chalk	<ul style="list-style-type: none"> -70% of this area is made up of rolling chalk wolds, an open tranquil landscape in a relatively elevated position; -The area was ice free during the last glaciations and there is evidence of human activity from the Neolithic period onwards; -The area has been continually but not intensively settled, with agricultural uses predominating. Deserted medieval villages are a feature of this area; -Earlier natural habitats dominated by species rich calcareous grassland have given way to large scale intensive arable cultivation apart from the steeper slopes. 	The northern edge is visible at a distance from within parts of the North York Moors National Park. Sensitivity and capacity discussed in report.	Contains land categories with a low capacity for change
ASMRP8: Jurassic limestone	<ul style="list-style-type: none"> -A slightly undulating, well drained landscape on the dip slope of the North York Moors, facing south over the Vale of Pickering; 	Representative of the majority of the ASMRP.	Low capacity for change

ASMRP	Summary of key environmental characteristics	Additional observations	Capacity ratings for land categories contained within ASMRP
	<ul style="list-style-type: none"> -The landscape is predominantly arable but there are important survivals of ancient woodlands, particularly on steeper slopes; -Scattered Bronze Age cairns and potential for sub surface remains associated with Roman activity and settlement, the character of the landscape is largely post medieval with regularly spaced settlements and field enclosure; -The stone was widely used for housing and dry stone walling in the past and there are numerous remains of small stone working sites 	Sensitivity and capacity discussed in report.	
ASMRP9: Magnesian limestone	<ul style="list-style-type: none"> -Extensive north-south oriented outcrop elevated above land to the east; -In many areas the limestone is overlain with glacial till; -High archaeological potential because of the long association with a major communications route (now the A1) and settlement; -The rock weathers to form a light and friable soil and extensive arable cultivation has to some extent degraded this archaeological resource; -Steeper valley sides in particular allow areas of semi natural broad-leaved woodland and calcareous grassland to survive. 	Representative of the majority of the ASMRP. Sensitivity and capacity discussed in report.	Contains land categories with a medium to high capacity for change
ASMRP10: Shallow coal	<ul style="list-style-type: none"> -Characteristic 'drumlin' topography in the Forest of Bowland AONB to south of Clapham, other deposits occur within the overlying Magnesian limestone ridge; -High ecological sensitivity 	Not assessed in further detail in report.	Low to medium capacity for change
ASMRP11: Carboniferous brick clay	<ul style="list-style-type: none"> -Occurs within the overlying Magnesian limestone ridge 	Not assessed in further detail in report.	-
ASMRP12: Carboniferous limestone	<ul style="list-style-type: none"> -The sandstone is primarily found exposed in moorland areas where the glacial overburden is thinner or absent -Natural and man-made (former quarries) outcrops of stone are a strong influence on the modern landscape -Summit areas are largely unimproved acid grassland, with semi-improved acid grassland and improved pasture on the sloping valley sides. There is little or no arable grazing. -Early human activity is evidenced by ring cairns and rock art which are highly visible to those who look for them. 	Representative of the majority of the ASMRP. Sensitivity and capacity discussed in report.	Contains land categories ranging from a medium to low capacity for change.
ASMRP13: Silica sand	<ul style="list-style-type: none"> -Occurs as small outcrop in two locations within the project area at 	Not assessed in further	Contains land categories

ASMRP	Summary of key environmental characteristics	Additional observations	Capacity ratings for land categories contained within ASMRP
	<p>Blubberhouses in Nidderdale and Burythorpe in the Chalk Foothills of the Yorkshire Wolds;</p> <p>-Both have been exploited in the past.</p>	<p>detail in report.</p>	<p>with a low capacity for change</p>
<p>ASMRP14: Carboniferous limestone</p>	<p>-Limestone outcrops occur in the west of the study area and are linked to more extensive outcrops in the Yorkshire Dales National Park. The limestone underlies extensive upland plateau and also occurs as scars on the dale sides;</p> <p>-Shake holes created by natural dissolution occur on upland surfaces;</p> <p>-Extensive upland forests were succeeded by blanked bog. Drainage of these upland areas for sheep grazing has led to a mosaic of avid grassland and dry heath, with isolated woodlands confined to the valley sides;</p> <p>-Strong historic land use pattern with dry stone walls and hedgerows;</p> <p>-There are extensive remains of former lead mining activity, past and current stone extraction and evidence of early human activity;</p> <p>-There is potential for subsurface remains beneath peat deposits;</p> <p>-This landscape is of generally high ecological value for bogs, mires and moors, and species rich meadows and pastures</p>	<p>In ASMRP 14 the underlying limestone forms part of a succession of underlying rock types including sandstone and chert.</p>	<p>Contains land categories with a low to medium capacity for change</p>

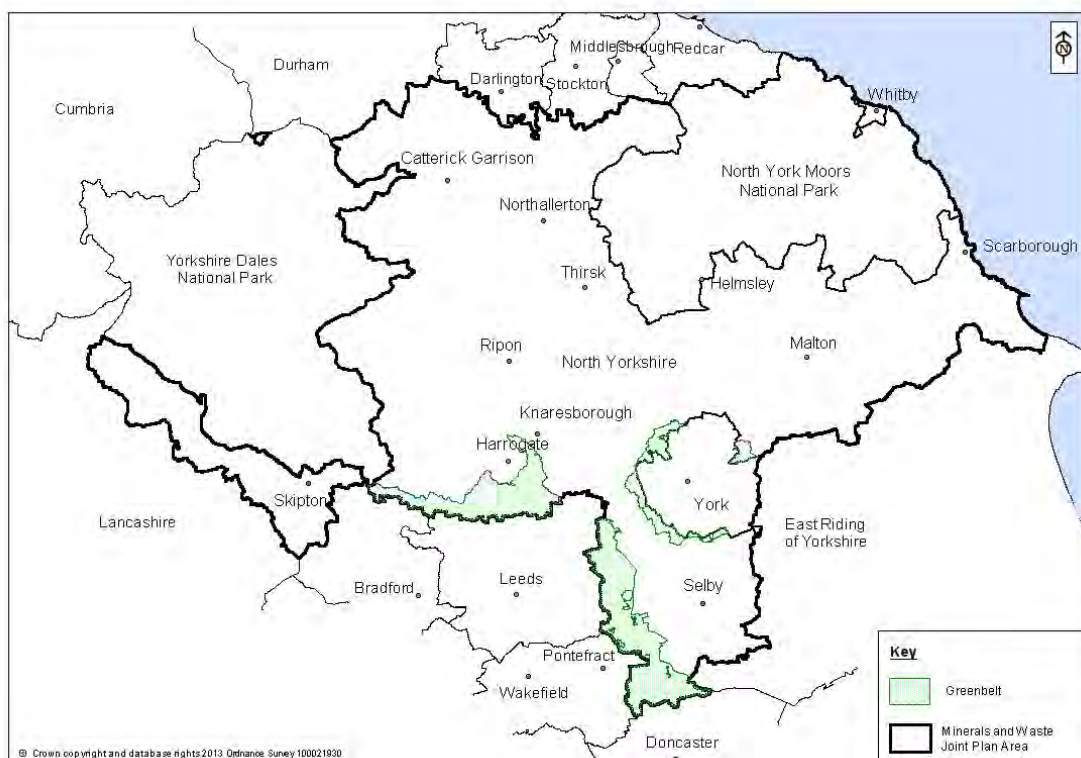
North York Moors Landscape Character Assessment

Although not undertaken specifically for the purpose of minerals and waste planning, the North York Moors Landscape Character Assessment (LCA) also contains considerations relevant to minerals and waste planning and managing change in the landscape. The LCA identifies 9 LCAs and within these a further 31 landscape character types. Whilst not identifying specifically the capacity for change, it identifies the significance of pressure to the landscape character from development more generally for each LCA.

Green Belt

Green Belt is designated to maintain the open spaces around towns and cities, providing spaces for agriculture and leisure opportunities as well as maintaining open landscapes. The southern part of the Joint Plan Area falls within the Green Belt designated around Leeds and an area of Green Belt is also in the process of being designated around the City of York. In relation to the latter, the outer boundary is designated in the adopted plans of the City of York’s adjoining districts and boroughs, and an inner boundary has been approved by the City of York Council for development management purposes. Figure 4.3 shows the extent of Green Belt in the Plan Area.

Figure 4.3: Green Belt



Key messages from the baseline

- Although large parts of this area are relatively low lying, variation in geology, soils, topography and historical factors have helped create a range of distinctive and valued landscapes.
- The North York Moors National Park makes up a large part of the Plan Area and a significant portion of the Plan Area lies within Areas of Outstanding Natural Beauty or Heritage Coasts.

- Green belts limit development in parts of the south of this area.
- While the county of North Yorkshire as a whole is one of the most tranquil in England, outside of the national parks and AONBs tranquillity levels often fall due to transport corridors or when near to settlements.

Predicted Future Trends

- Changes in the Plan Area landscape appear varied in nature, with some areas enhancing and some not. It is likely that this would continue to be the case depending upon levels of intervention across different areas. Effects could take place in the short, medium or long term, but major changes to the landscape are likely to only be evident in the longer term.
- In the absence of a Plan for minerals and waste development it is possible that the quality of the landscape would decline due to the nature of these types of development.

Table 4.2: Landscape Indicators

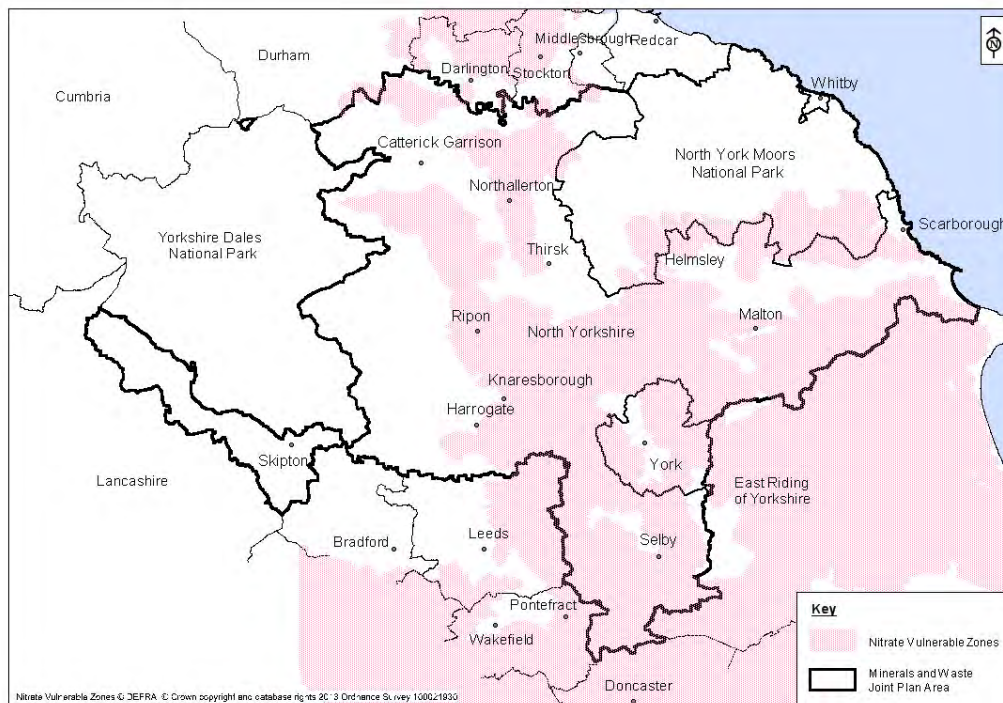
Indicator	Baseline Data (and year)	Source
Condition of the National Character Areas	3 enhancing (2008) 3 neglected (2008)	Natural England

5 SEA Topic/SA Category – Water and Soil

Water Quality

Minerals development and open air waste management sites have the potential to result in groundwater pollution. However, environmental regulations should ensure that adverse impacts are avoided. Nitrate Vulnerable Zones (NVZ) are areas of land that drain into nitrate polluted waters, or waters (in rivers, streams and lakes) which could become adversely polluted by nitrates (most of which come from agricultural sources). Groundwater Source Protection Zones (SPZs) are defined around large and potable groundwater abstraction sites and are designated in order to protect drinking water quality from nearby activities which have the potential to impact upon these sources. Figures 5.1 and 5.2 show the Nitrate Vulnerable Zones and Source Protection Zones in the Joint Plan Area.

Figure 5.1: Nitrate Vulnerable Zones.



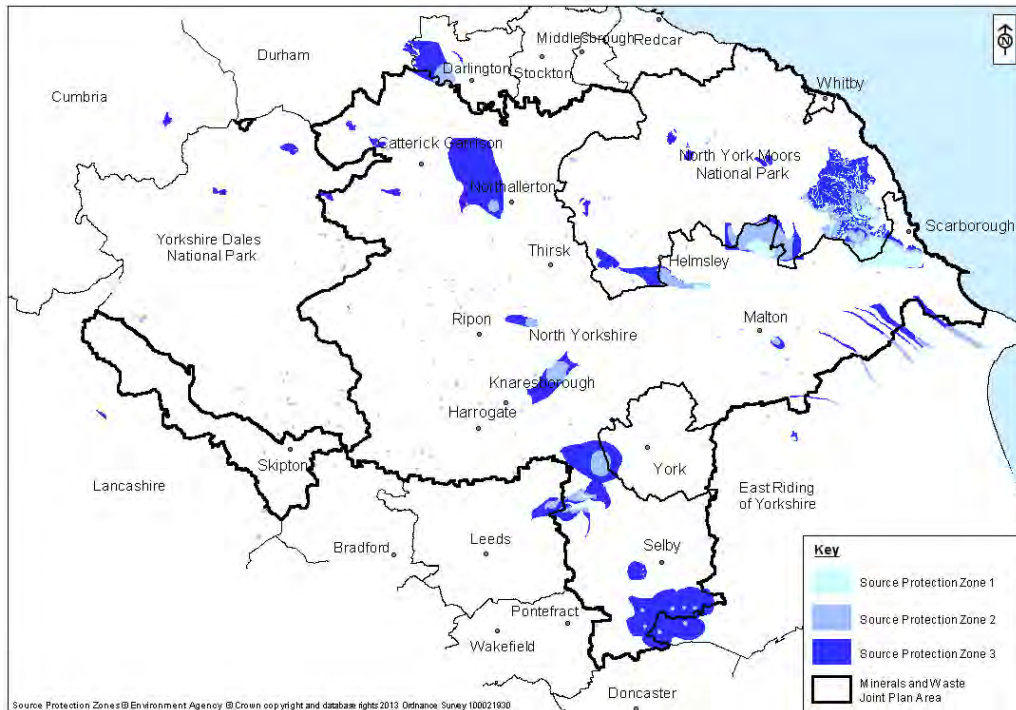
Source – Environment Agency.

It can be seen that the Joint Plan area is especially affected by nitrate vulnerability, although groundwater protection is also a significant issue. A central corridor of Water Protection Zones can be found in Selby, Hambleton, Ryedale and Harrogate Districts from observation of the above map. This should be taken into account when developing new planning policies.

The quality and quantity of ground water resources is an important issue. Minerals extraction can affect water resources through dewatering and physical removal of material which is essential to the protection of aquifers. In addition, minerals-related development can cause physical disturbances which can artificially alter groundwater levels. Open air waste management facilities, such as landfill and composting sites, have the potential to produce leachate (a polluting liquid) which unless managed safely may cause harmful effects on the surrounding groundwater. Across the Joint Plan Area the quantitative quality, degree to which groundwater is affected by abstractions, is generally good whereas the chemical quality is

generally poor/deteriorating. There are variances within the Joint Plan Area, in the National Park, both quantitative and chemical quality are generally good.

Figure 5.2: Source Protection Zones



Source – Environment Agency.

Under the Water Framework Directive good chemical and ecological status in inland and coastal waters must be achieved by 2021¹⁸. The Joint Plan area falls within 10 catchments (Northumbria, Humber and North West River Basin Districts). Table 5.1 shows the current overall (ecological and chemical) performance of water bodies in each of these catchments. The catchments within the Plan Area do not necessarily match the boundary of the area, but in the case of water it is relevant to look at the condition of the whole catchment not just the part within the Joint Plan area.

Table 5.1: Status of waterbodies in catchments falling within or partly within the Joint Plan Area (2012).

Catchment	% of waterbodies with good status	% of waterbodies with moderate status	% of waterbodies with poor status
Aire and Calder	9.30	85.27	5.42
Derwent (Humber)	11.49	71.26	13.79
Esk and Coast	16.13	70.97	12.90
Hull and East Riding	13.04	75.36	10.14
Swale, Ure, Nidd and Upper Ouse	19.53	66.40	13.28
Tees	32.46	41.22	19.29
Wharfe and Lower Ouse	24.00	66.00	10.00

¹⁸ http://ec.europa.eu/environment/water/water-framework/info/timetable_en.htm

Catchment	% of waterbodies with good status	% of waterbodies with moderate status	% of waterbodies with poor status
Don and Rother	7.29	72.92	17.70
Lune	43.64	50.91	1.82
Ribble	29.41	53.92	15.69

Source: Environment Agency / HM Government¹⁹

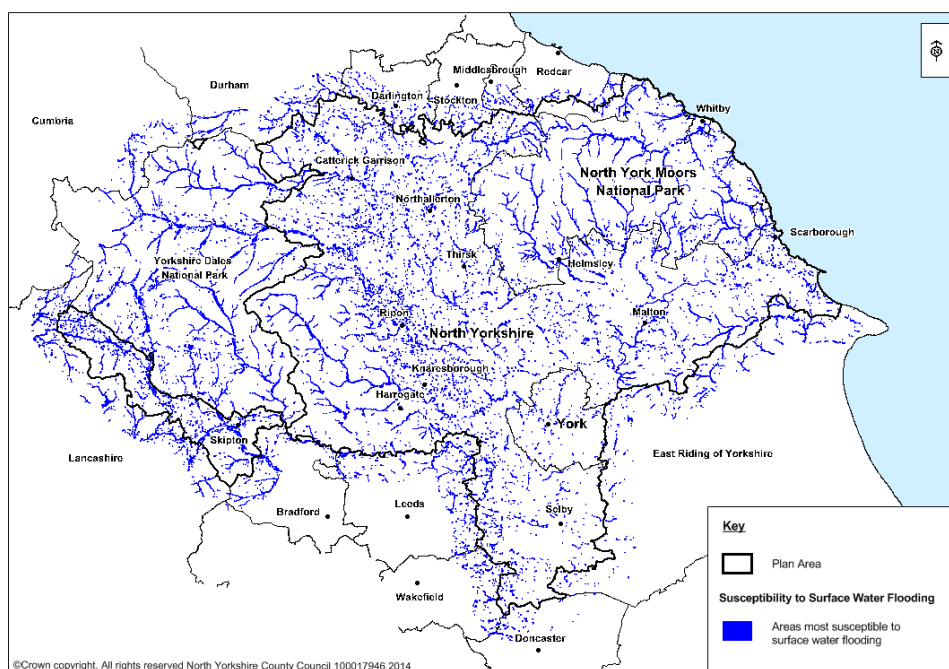
Across the Plan Area there are a variety of reasons why waterbodies are failing to achieve good status. For the main catchments of the Plan Area these include diffuse pollution from agriculture (e.g. the Esk and Coast, Swale, Ure, Nidd and Upper Ouse, Wharfe and Lower Ouse and Tees), point source discharges from industry or sewage (e.g. Esk and Coast, Swale, Ure, Nidd and Upper Ouse, Aire and Calder and Tees), water industry storm discharges (e.g. Aire and Calder, Swale, Ure, Nidd and Upper Ouse) and physical modification to watercourses for reasons such as flood protection (e.g. Tees and Derwent).

Flooding

Surface Water Flooding

Surface water flood events are usually associated with high-intensity rainfall (typically >30mm/hr) and occur when the local drainage system cannot cope with the rainfall. Figure 5.3 displays those areas which are the most susceptible to surface water flooding across the Joint Plan Area. The data used to generate the map has been simplified and only gives an indication of areas that may be more likely to suffer from surface water flooding.

Figure 5.3: Areas most susceptible to surface water flooding across North Yorkshire.



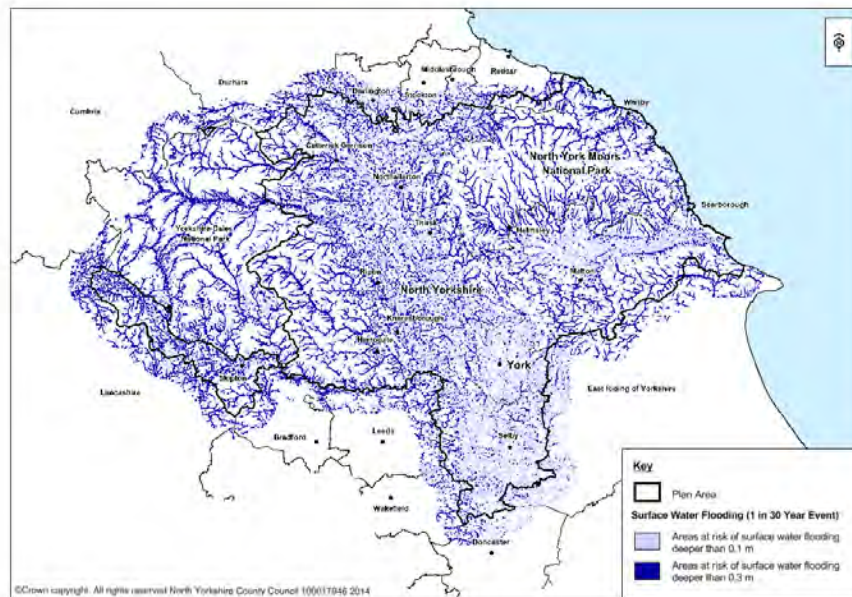
Source – Environment Agency, 2010

¹⁹ Water Framework Directive – Surface Water Classification Status and Objectives (<https://data.gov.uk/dataset/wfd-cycle-1-surface-water-classification-status-and-objectives>).

Figure 5.4 and

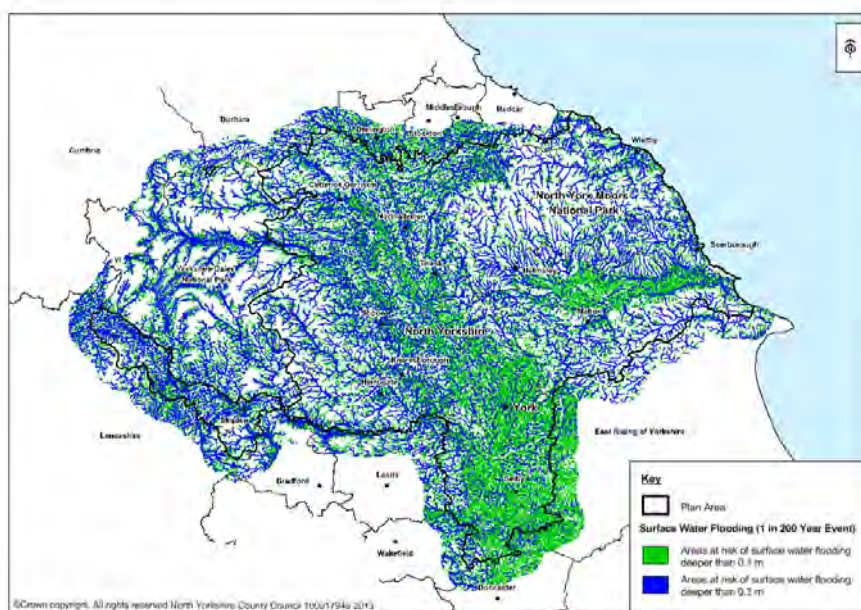
Figure 5.5 display the Environment Agency’s flood maps for the 1 in 30 and 1 in 200 rainfall events. These maps give a broad indication of areas likely to be at risk from surface water flooding from two different rainfall events (i.e. areas where surface water would be expected to flow or pond). Each map displays where this flooding is likely to be deeper than 0.1 metres and deeper than 0.3 metres.

Figure 5.4: Flood map for surface water for North Yorkshire, displaying the 1 in 30 rainfall event for areas at risk of surface water flooding at depths of 0.1 and 0.3 metres.



Source – Environment Agency, 2010.

Figure 5.5: Flood map for surface water for North Yorkshire, displaying the 1 in 200 rainfall event for areas at risk of surface water flooding at depths of 0.1 and 0.3 metres.

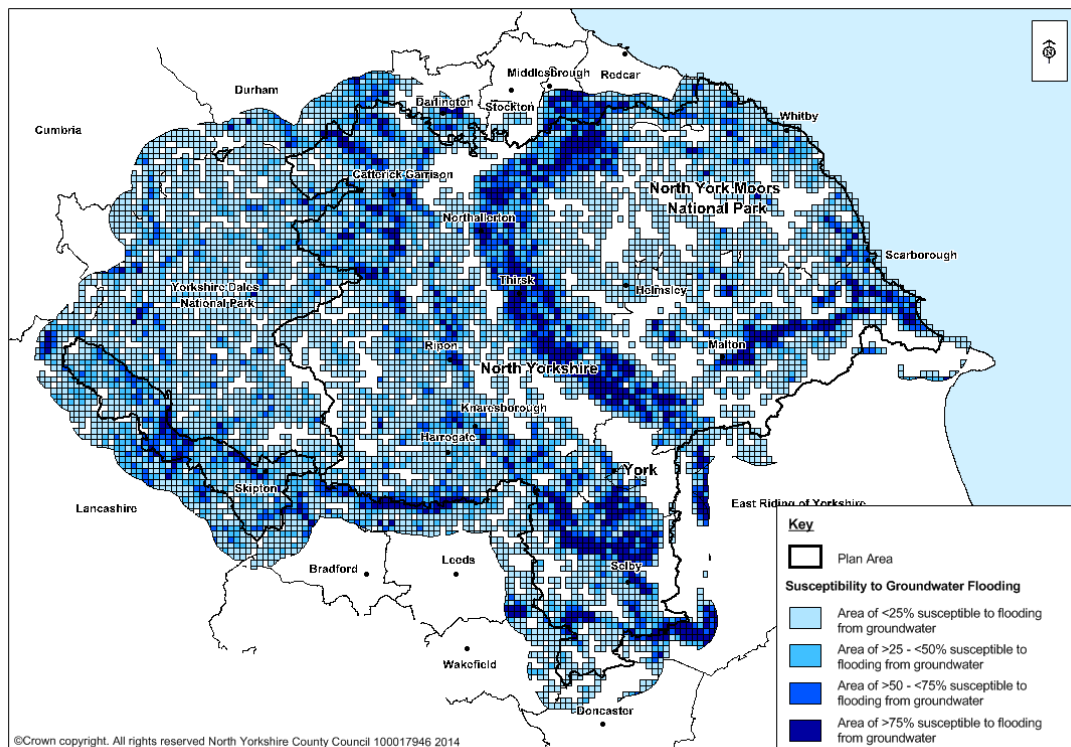


Source – Environment Agency, 2010.

Groundwater Flooding

Figure 5.6 displays a 1km² grid across North Yorkshire of the areas susceptible to groundwater flooding and the level of their susceptibility. Each grid is classified as a proportion of that 1km² that is susceptible to groundwater emergence. These classifications are: <25% of area; >25% to <50% of area; >50% to <75% of area; and >75% of area. It shows that much of the Plan Area is susceptible to groundwater flooding and displays relatively low susceptibility, with a lower proportion of land that is >75% and >50% to <75% susceptible to groundwater flooding compared to the area that is <50% susceptible. It should be noted, however, that areas of higher susceptibility exist in localised bands bordering higher land in the eastern portion of the plan area, as well as along the River Wharfe and in the lower Ouse catchment in the district of Selby.

Figure 5.6: Areas susceptible to groundwater flooding across North Yorkshire.



Source – Environment Agency, 2010.

The Flood Defence Network and Sustainable Drainage

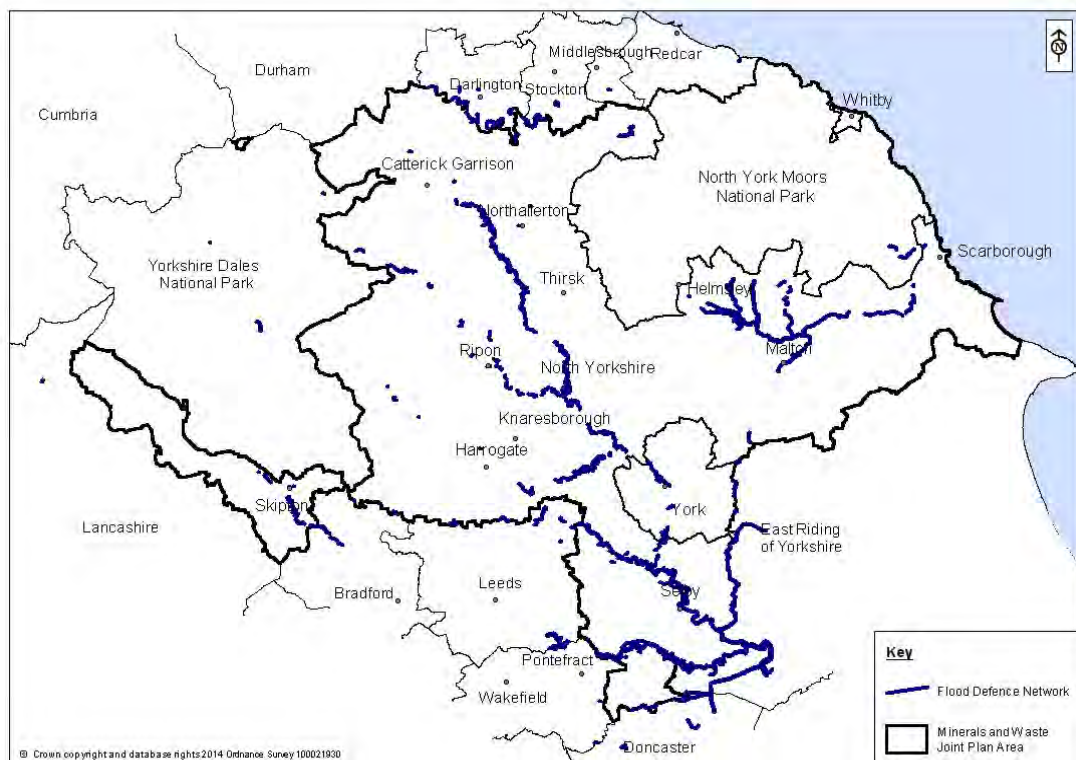
Flood Defences

The Flood Defence Network Map, shown on

Figure 5.7, displays linearly-raised flood defences (such as embankments and walls) that have been constructed within the last five years across North Yorkshire and City of York, where the standard of protection from flooding is equal to, or better than 1% (1 in 100) for rivers and 0.5% (1 in 200) from the sea.

The map that displays the floodplain across the county (comprising Flood Zones 2 and 3 – see Figure 5.8 below) does not take into account the presence of flood defences. Therefore, it is possible that development that takes place within Flood Zones 2 and/or 3 could have a reduced chance of flooding or a reduction in the impact of a flood event due to the presence of the flood defences. However, it should be noted that flood defence assets will not always provide sufficient protection from flood events. Flood assets are also subjected to improved decision making, related to assessing risks and managing performance.

Figure 5.7: The flood defence network for North Yorkshire.



Source – Environment Agency, 2011. (figure shows defences noted in the National Flood and Coastal Defence Database – other defences, e.g. some privately owned defences may be unmapped)

Extent of Floodplains

Development planning (as set out in the Technical Guidance to the National Planning Policy Framework) needs to take into account flood risk and to consider how this is best approached

with different development applications. The vulnerabilities of minerals- and waste-related development are set out below.

Essential Infrastructure:

- Water treatment works that need to remain operational in times of flood.

More Vulnerable:

- Landfill and sites used for waste management facilities for hazardous waste.

Less Vulnerable:

- Waste treatment (except landfill and hazardous waste facilities).
- Water treatment works which do not need to remain operational during times of flood.
- Sewage treatment works (if adequate measures to control pollution and manage sewage during flooding events are in place).
- Minerals working and processing (except for sand and gravel working).

Water-Compatible Development:

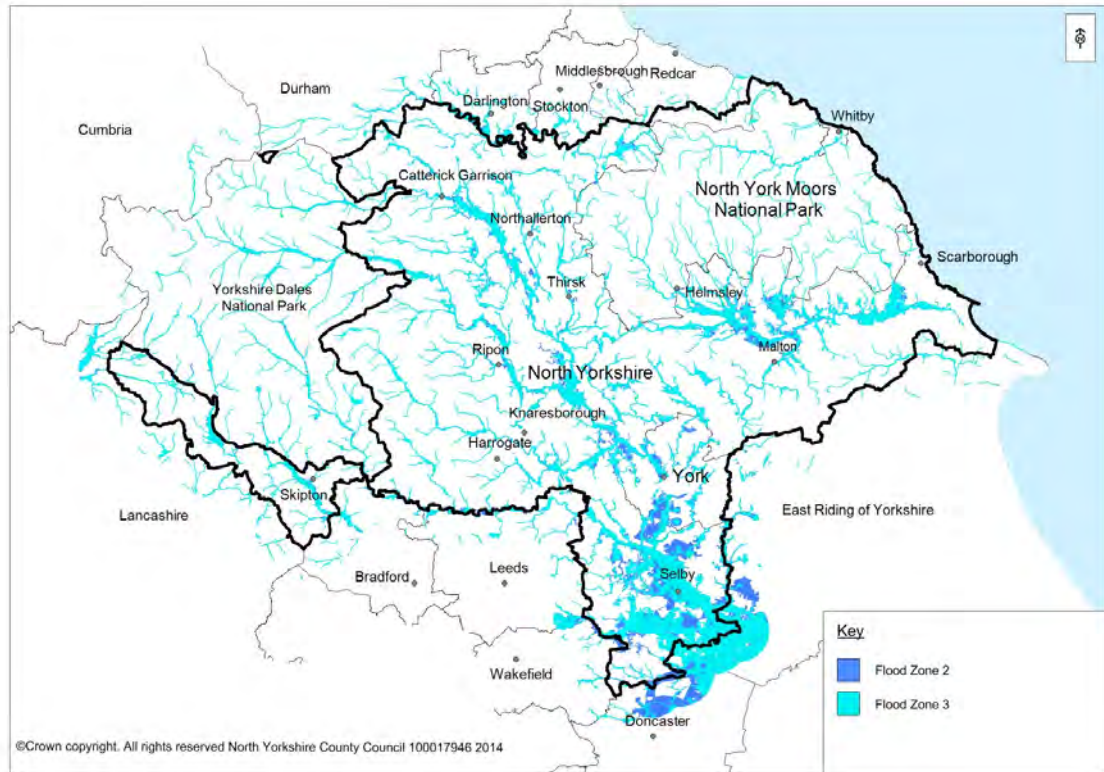
- Sewage transmission infrastructure and pumping stations.
- Sand and gravel working.

The classifications detailed above inform planning proposals when cross-referenced with the flood zone of a given site. The Environment Agency has mapped areas of land across England and Wales that could be affected by flooding from rivers and/or the sea. These areas have been split into Flood Zones 2 and 3, which are displayed in Figure 5.8. Flood Zone 3 is an estimate of areas of land with a 1% (1 in 100) or greater chance of flooding each year from rivers, or with a 0.5% (1 in 200) chance or greater of flooding each year from the sea. Flood Zone 2 is an estimate of areas of land between Zone 3 and the extent of flooding from rivers and/or the sea with a 0.1% (1 in 1000) chance of flooding in a given year.

The Joint Plan area has an extensive network of rivers and many areas are susceptible to flooding from rivers. Therefore, minerals and waste sites should be allocated on areas of land where the risk from flooding is compatible with the type of site being developed. In addition, the Joint Plan should also seek to reduce the risk and impact of flooding from minerals and waste related development.

A Strategic Flood Risk Assessment (SFRA) is a key tool to help inform flooding issues in a Sustainability Appraisal. Within the Plan Area there are two completed SFRAs that apply to York and the North York Moors. A minerals and waste specific SFRA is also being prepared to accompany the sustainability appraisal to ensure that all sites can be screened for flood risk.

Figure 5.8: Extent of floodplains indicated by Zones 2 and 3.



Source – Environment Agency, 2011.

Water Availability

The Environment Agency issues licenses for water abstraction depending upon the current availability of water flow at Assessment Points (AP). Where ground water abstraction directly impact on surface water flow, the impact is measured at the surface water AP. This process is regulated via the Catchment Abstraction Management Strategy (CAMS)²⁰ process and abstraction licensing strategies, typically a licence is required if you want to abstract more than 20 cubic meters (m³) (4,400 gallons) of water per day.

²⁰ <https://www.gov.uk/government/collections/water-abstraction-licensing-strategies-cams-process>

Table 5.2 below shows that at present there are 14 locations in the Plan Area where surface water is not available for licensing and 6 locations where groundwater is not available for licensing.

Table 5.2: Surface Water Resource availability at low flows as reported in CAMS/Groundwater resource availability as reported in CAMS.

Catchment /CAMS Area	Assessment Points (point on main rivers) with surface water not available for licensing ²¹	Areas where no groundwater available ²² (restrictions may still be in place)	Date of CAMS
Aire and Calder	0/10	1/2 (Sherwood Sandstone Aquifer)	February 2013
Derwent	3/10 (East Cottingwith, River Hertford and West Ayton. Barmby Tidal Barrage-not assessed)	0/2	February 2013
Don and Rother (note very little of this catchment is in the Plan Area)	0/9	1/4 (Sherwood Sandstone Aquifer)	February 2013
Esk and Coast	1/4 (Lower Esk)	No principal aquifers in this area	February 2013
Hull and East Riding (note only a small part of this catchment is in the plan area)	2/9 (Upper Hull and Lower Mires Beck)	1/2 (Sherwood Sandstone Aquifer)	February 2013
Swale, Ure, Nidd and Upper Ouse	3/18 (Birstwith GS Nidd, Ure conf with Swale and Westwick GS)	0/4	February 2013
Tees (note only a small part of this catchment is in the plan area)	0/4	0/2	February 2013
Wharfe and Lower Ouse	1/6 (River Washburn)	0/3 (note 1 groundwater management unit (Magnesian Limestone Aquifer (Tidal) has	February 2013

²¹ Surface water actual flows fall below the Environmental Flow Indicator (EFI) and below the indicative flow requirement to help support Good Ecological Status (as required by the Water Framework Directive). For new licence, local restrictions may be in place. Water may not be available / or only available during periods of high flows with Hands-off Flow conditions, if river drops below the required needed to protect the environment.

²² Groundwater unit balance shows more water has been abstracted based on recent amounts than the amount available. No further consumptive licence will be granted.

Catchment /CAMS Area	Assessment Points (point on main rivers) with surface water not available for licensing ²¹	Areas where no groundwater available ²² (restrictions may still be in place)	Date of CAMS
		not been assessed and around Selby where groundwater is not available).	
Lune and Wyre (note only a small part of this catchment is in the Plan Area)	For Lune CAMS 0/13	2/4 (none are in Plan Area)	February 2013
Ribble, Douglas and Crossens ((note only a small part of this catchment is in the Plan Area)	For Ribble CAMS 4/16 (Lower / Upper Hodder, Langden Brook and River Brennand))	1/5 (none in the Plan Area)	February 2013

Source – Environment Agency CAMS, 2013.

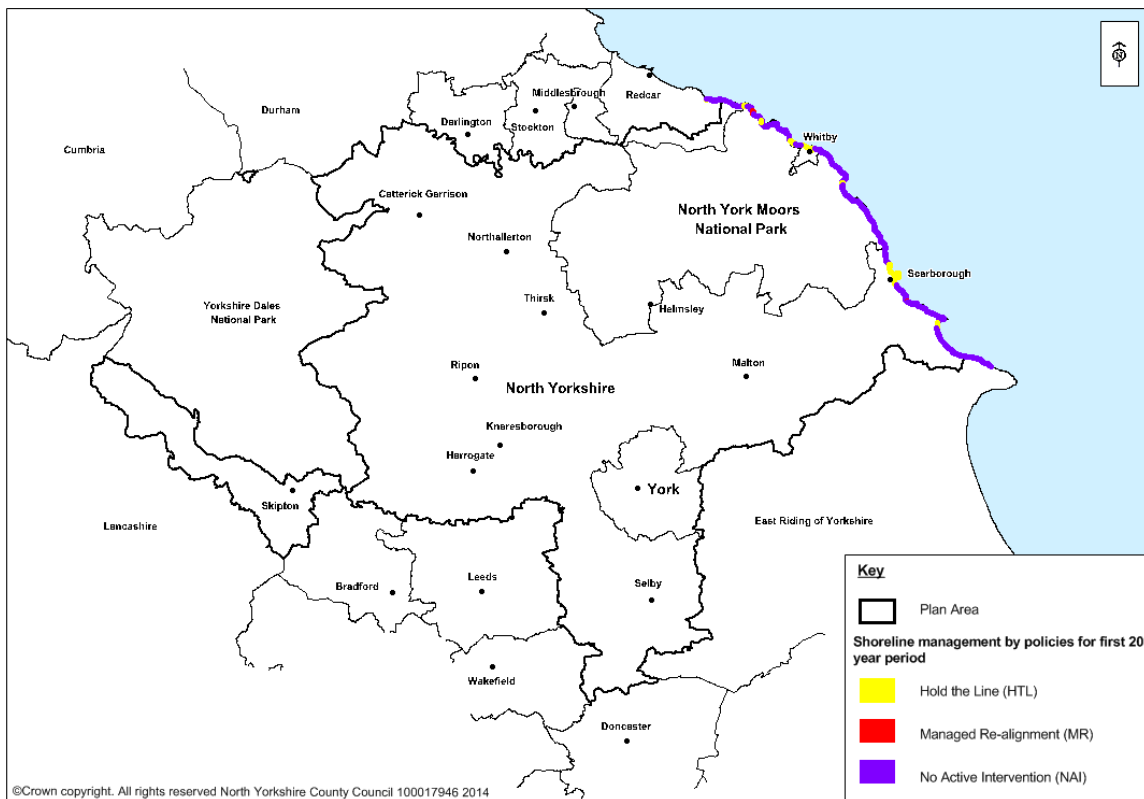
Shoreline Erosion and Management

Shoreline Management Plans (SMP) provide a policy framework for coastal defence management for selected time periods: now until 2025 (short-term), 2025 to 2055 (medium-term), and 2055 to 2105 (long-term). The range of policies includes:

- No Active Intervention (NAI): here a decision has been made not to invest in providing or maintaining defences.
- Hold the Line (HTL): this policy shows that the level of protection provided by defences will be maintained or changed, and includes operations to carry out work in front of or behind the current defence while still maintaining the current defence line.
- Advance the Line (ATL): this involves building new defences on the seaward side of the existing defence and is limited to policy units where significant land reclamation is considered.
- Managed re-alignment (R): this allows realignment of the shoreline with management to control movement.

Figure 5.9 displays the Shoreline Management Plan policies for the Plan Area coastline under the North East Coastal Authorities Group Shoreline Management Plan 2 (SMP2). Mineral and Waste Development in coastal areas will need to assess the risks of flooding from the sea via a sequential approach, and where flood risk remains an issue, will need to ensure the Exception Test takes full account of, and is consistent with, the policy prescriptions advocated in the SMP2.

Figure 5.9: Shoreline Management Plan policies applicable along the Joint Plan Area coastline.



Source – Environment Agency.

Agricultural Land and Soil

Soil is an irreplaceable and fundamental natural resource which provides many essential services on which we rely including food production, water management and support for valuable biodiversity and ecosystems. It also plays a vital role in the fight against climate change as a major reservoir of carbon. Safeguarding our Soils: A Strategy for England', reported that the carbon stored in UK soils is in the order of some 10 billion tonnes.

The National Soil Resource Institute provides a map of soils across England and Wales. This is based on a National Soil Map called NATMAP(vector) and allows users to examine the variations that occur between soil types and how soils affect the environment. The maps are available through Defra’s Magic website <http://magic.defra.gov.uk/>.

The soilscape maps show that there is a wide variety of soils in the Plan Area. For instance, the Vales of York and Mowbray contain large areas of *‘slowly permeable, seasonally wet slightly acid but base rich loamey and clayey soils’*. These soils support grassland and arable farming, are of moderate fertility, and can support habitats such as seasonally wet pastures. There is also a large area of *‘naturally wet very acid sandy and loamy soil’*, which supports arable and horticulture, and can support heathland habitats, that runs through the Vale of York, including the eastern part of the City of York, and into Selby District.

Elsewhere, there are significant areas of *‘freely draining, slightly acid loamy soils’* which support arable and grassland farming at various locations throughout the northern part of the plan area, and *‘shallow lime rich soils over chalk or limestone’* in the eastern part of the Plan Area (e.g. in the Vale of Pickering and Yorkshire Wolds). The more upland parts of the Plan Area in the North York Moors and in Craven District support soilscape types such as the very

low fertility *'blanket bog peat soils'*, and *'slowly permeable, wet, very acid upland soils'*, supporting rough grazing and forestry. Towards the south of the plan area *'naturally wet, loamey and clayey floodplain soils'* are often found.

The European Soil Atlas cites the Communication to European Commission to the Council and the European Parliament, entitled 'Towards a Thematic Strategy for Soil Protection', when identifying the eight main threats to soils. Table 5.3 summarises the eight main threats and their potential relationship to minerals and waste planning.

Table 5.3: Main threats to soils and their relevance to minerals and waste planning.

Threat	Description	Relevance to Minerals and Waste Development
Soil sealing	Occurs through the development of technical, social and economic infrastructure which 'seals in' the soil blocking its functions.	Aside from the removal of soils when creating voids in the ground, this will be a key threat where soil is left in place and built upon by supporting infrastructure such as buildings, car parking and access roads.
Erosion	Although a natural process, accelerated erosion is a concern. Generally the action of rain and wind can remove soils at an accelerated rate particularly when vegetation is removed, changes occur to land cover or management or the landform is altered. This becomes a problem when soil particles are removed faster than natural processes can replace them.	Minerals and waste development may involve the reprofiling of sites during landscaping works leading to soil erosion. Uncontrolled runoff from hard surfaces may also exacerbate erosion.
Loss of organic matter	Occurs when organic residues are not sufficiently produced or recycled to soil. This can change the structure of the soil and lead to declines in fertility.	Not directly relevant to minerals and waste development, though may be an issue in site restoration.
Decline in soil biodiversity	This is strongly linked to loss of organic matter. Loss of soil biota may lead to loss of key ecosystem services delivered by the soil including nutrient cycling, regulation of water flow. Regulation of soil and sediment movement, regulation of pests and diseases and regulation of atmospheric composition.	Soil biodiversity may be reduced by forms of development that damage soils (such as through increasing erosion and loss of organic matter) and may take place throughout the lifecycle of minerals and waste development.
Contamination	Can be widespread or localised and occurs due to human activities ranging from traffic generation to industrial processes. As well as physically damaging soils and soil biota, contamination of soils may also percolate through to groundwater. Contaminated soils may cause health risks to humans or can affect the functioning of ecosystems.	Runoff from onsite roads, potential ingress of toxins from poorly managed waste management sites, or potentially toxic disposal of tailings or acid mine drainage from certain minerals development (e.g. from extracting energy minerals) can cause contamination of soils. Diffuse eutrophication or acidification of soils may also occur where significant sulphur or nitrogen input to the atmosphere occurs.
Compaction	Caused through the application of high pressure, often from vehicles, on soils.	Can be a significant source of soil damage during the construction and

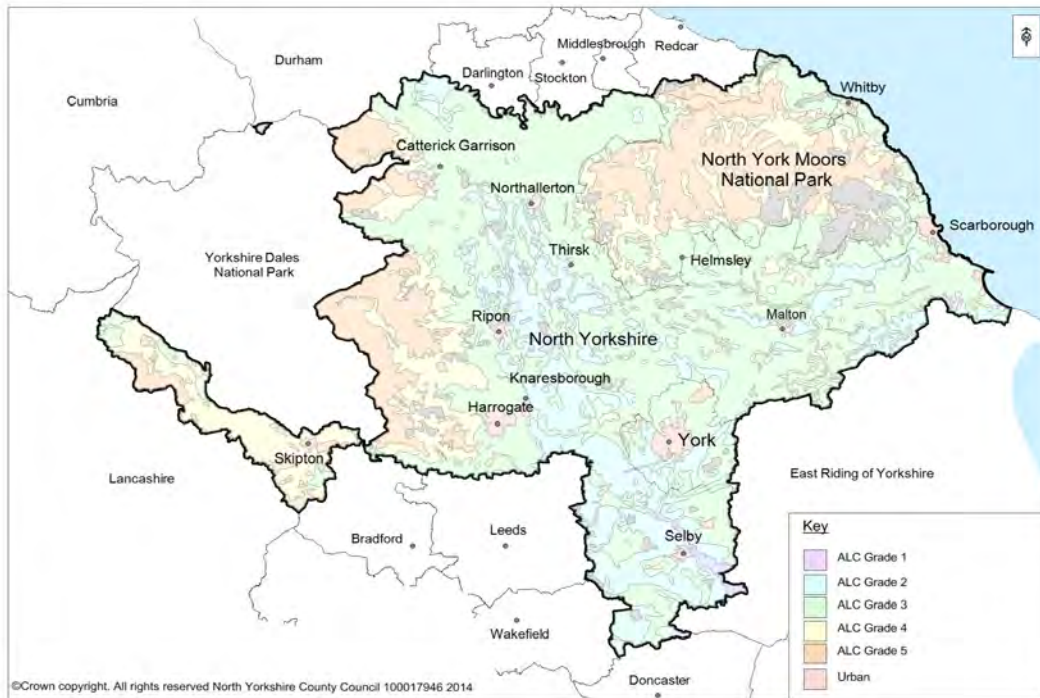
Threat	Description	Relevance to Minerals and Waste Development
		restoration phases of minerals and waste development.
Hydro-geological risk	Soils play a key role in regulation flooding and drought by slowing down the rate of runoff during rainfall events and retaining moisture after those events. However, compacted or poorly managed soils may increase runoff rates, or may remove the water storage capacity of soils. Slope failure may also occur in some circumstances.	Ill-considered reprofiling or compacting of land during minerals development in particular can increase hydro-geological risk.
Salinisation	Mainly a problem elsewhere in Europe. It is the accumulation of soluble salts of sodium, magnesium and calcium in the soil, thereby reducing fertility.	May be a local problem where de-icing of roads occurs.

Source – Adapted from information provided in European Commission, 2008. *Soil Atlas of Europe* <http://esdac.jrc.ec.europa.eu/content/soil-atlas-europe> .

The European Soils Data Centre map shows that some parts of the Joint Plan area (e.g. parts of the Vales of York and Mowbray) suffer from higher soils erosion rates (2 to 5 tonnes per hectare) than other areas. Similarly, there is variation in susceptibility to soil compaction, with parts of the Plan Area ranging from low susceptibility to very high susceptibility. The soils map also shows the highest soil carbon in the North York Moors. The European Soil Data Centre MapViewer can be viewed at <http://esdac.jrc.ec.europa.eu/viewer>.

Agricultural land is categorised into 6 classifications, with the Best and Most Versatile falling into Grades 1, 2 or 3a of the Agricultural Land Classification (ALC) with the others being 3b, 4 and 5. ALC land in the Joint Plan area is shown on Figure 5.10.

Figure 5.10: Extent of best and most versatile agricultural land (map does not distinguish between Grade 3a and Grade 3b).



There is considerable overlap between areas of minerals resource and areas of higher quality agricultural land. The agricultural sector is an import element of the North Yorkshire economy and whilst it may sometimes be possible for former mineral sites in these areas to be restored to agricultural land this is not always practicable, for example when extraction takes places below the water table.

Table 5.4 shows that in the Yorkshire and Humber region a total of 300ha of agricultural land was lost to development between 2006 and 2009.

Table 5.4: Land Use Change – Use of Land Changing to Developed Use (ha) (2006 – 2009)

	Yorkshire and Humber	England
Agriculture	300ha	2610ha
All not previously developed	320ha	3330ha
All previously developed	450ha	3760ha
All uses	860ha	7100ha

Source: DCLG, 2012. *Live Tables on Land Use Change Statistics (Table P261 to P265; Land use change: changes to developed uses)* [URL: <https://www.gov.uk/government/statistical-data-sets/live-tables-on-land-use-change-statistics>].

Waste management facilities are likely to have less of an impact upon soil quality and agricultural land within the Plan Area than minerals related development, however, any potential impacts need to be taken into account in the production of the Joint Plan.

Key messages from the baseline

- Long stretches of river catchments can be found within the Plan Area, all of which ultimately drain to the Humber Estuary, with the exception of the Esk and Tees.
- Significant floodplains form around large parts of these rivers, becoming more significant as they travel east.

- River Basin Management Plans set demanding targets for water quality across many water bodies; there are still significant numbers of water bodies at poor or bad status.
- Important groundwater resources are protected by Groundwater Source Protection Zones.
- Flooding is already a problem in lower lying areas. However, climate change is likely to increase the risk of surface water and river flooding.
- Much of the Plan Area is made up of high quality farmland, though there are significant areas of poorer soils particularly in uplands.
- Parts of the Plan Area are subject to issues such as soil erosion and compaction.
- Areas of high soil carbon exist in the North York Moors.

Predicted Future Trends

- Flooding is already a significant issue within North Yorkshire. However, because of climate change, flooding from rivers, the sea, and surface water is predicted to become a significantly greater risk²³ in the medium and long term. However, policy interventions such as Catchment Flood Management Plans may moderate this to a degree.
- Climate change, together with other factors such as population growth and development and farming demands, is expected to have negative effects on water availability: a situation which is expected to get worse over time, most significantly in the longer term.
- Soils are also vulnerable resources, and erosion, loss of soil carbon, and reduction in soil biodiversity are all issues that may become worse in the long term as development and increasingly climate change (e.g. drought and flooding) increasingly impact upon soils²⁴.

Table 5.5: Water and Soil Indicators

Indicator	Baseline Data (and year)	Source
Percentage of water bodies achieving overall good status in River Basin Management Plans	See Table 5.1	Environment Agency
Water resource availability at low flows as reported in Catchment Abstraction Management Strategies	See Table 5.2	Environment Agency
Groundwater resource availability as reported in Catchment Abstraction Management Strategies	See Table 5.2	Environment Agency
Allocations requiring exception testing in North Yorkshire SFRA	Data not yet available	NYCC
Number of planning conditions relating to SUDS	Data not yet available	NYCC, CYC, NYMNPA
Number of minerals and waste applications which are located within areas of Best and Most Versatile Agricultural Land	Data not yet available	NYCC, CYC, NYMNPA

²³ See CLG, 2012. Technical Guidance to the National Planning Policy Framework [URL: <http://planningguidance.communities.gov.uk/wp-content/themes/planning-guidance/assets/NPPF.pdf> / <http://planningguidance.communities.gov.uk/>] which sets out precautionary sensitivity ranges for different types of flooding.

²⁴ See for example, Defra, 2005. Impacts of climate change on soil functions [URL: http://randd.defra.gov.uk/Document.aspx?Document=SP0538_3603_FRP.doc]

Indicator	Baseline Data (and year)	Source
Land use change: previous use of land changing to developed use annual average by region	See Table 5.4	DCLG

6 SEA Topic/SA Category – Air

Air Quality

Each local authority must monitor air quality in their areas to ensure that national air quality objectives are being met. If the authority finds that the objectives are unlikely to be achieved they must declare an Air Quality Management Area. In the Plan Area there are eight AQMAs as set out in Table 6.1 below. All four AQMAs are transport related. There are no AQMAs in the North York Moors National Park.

Table 6.1: AQMAs in the Joint Plan Area.

Local Authority area	Site	Name	Pollutant	Main source
Harrogate	A59 Bond End, Knaresborough	Knaresborough AQMA No1	Nitrogen Dioxide	Traffic
Harrogate	B6265 Skellgate, Ripon	Ripon AQMA No1	Nitrogen Dioxide	Traffic
Ryedale	B1248 Butcher Corner & B1257, Malton	Malton AQMA	Nitrogen Dioxide	Traffic
York	Around the Inner Ring Road	York City Centre	Nitrogen Dioxide	Traffic
York	Area around Fulford Road	Fulford (York No. 2)	Nitrogen Dioxide	Traffic
York	Area around Salisbury Terrace	Salisbury Terrace (York No. 3)	Nitrogen Dioxide	Traffic
Scarborough	The majority of the village of Staithes.	Scarborough	PM10 & Sulphur Dioxide ²⁵	Burning of solid fuel for heating
Selby	New Street, Ousegate, The Crescent and Park House.	Selby AQMA No 1	Nitrogen Dioxide	Traffic

A further site in Harrogate Borough, A661 Woodlands Junction, is close to being designated as an AQMA due to Nitrogen Dioxide (NO₂) emissions from traffic. Monitoring of Woodland junction is on-going and a request to defer declaration has been made due to the potential for NO₂ levels to be reduced by a planned upgrade to the junction and signals.

Defra publish a map of Air Quality Management Areas which shows which local authorities have declared AQMAs, their location and the pollutant for which the AQMA is declared. This is available at <http://aqma.defra.gov.uk/aqma/maps.php>.

Air pollutants can have various effects on both humans and habitats, and the current situation in the Joint Plan Area in relation to key pollutants is outlined below.

PM10 (particulate matter)

Particulate matter can have effects on lungs in humans and effects of smothering, eutrophication and acidification on habitats. PM₁₀ can occur naturally in the environment through natural phenomena such as volcanoes or fires, but man-made emissions typically arise from traffic, power plants (particularly coal fired power stations) and industrial processes, including quarrying. PM₁₀ concentrations tend to be highest in urban areas and lower in rural

²⁵ <http://www.scarborough.gov.uk/home/environment/pollution/air-quality> 2013 Air Quality Progress Report for SBC

areas²⁶. In the Joint Plan Area concentrations are lowest in the upland areas of the North York Moors National Park at <0.003t/km² and are highest in the more urban parts of the area, particularly York and Harrogate where concentrations reach >4t/km². As would be suggested by the sources of PM₁₀, the road network of the Plan Area also features higher concentrations, typically 0.2-1t/km².

Sulphur Dioxide

Like PM₁₀, Sulphur Dioxide can have effects on lungs in humans and effects of eutrophication and acidification on habitats. Sulphur dioxide is emitted naturally from volcanoes but the main human source of emissions is from industrial processes such as burning fossil fuels and traffic. The national mapping shows the highest concentrations occur around towns and the major road networks with concentrations also occurring offshore around parts of the coastline²⁷. This pattern is broadly reflected in the Joint Plan Area. Most of the Plan Area is within the ranges of 0.03-0.1, 0.1-0.5, 0.5-0.8 and 0.8-10t/km² and whilst higher concentrations broadly follow the roads and built up areas a fairly mosaic pattern is evident. Lower concentrations are evident in the upland parts of the North York Moors National Park which largely has emissions of 0-0.01t/km².

Benzene

The main source of benzene emissions is vehicles. In humans this can have effects on lungs although effects on habitats are unknown. Following the national trend, the highest concentration in the Joint Plan Area are found along the main roads and in the built up areas, with concentrations also occurring offshore around parts of the coastline²⁸. Most parts of the area fall within the categories of 0.003-0.01, 0.01-0.03 and 0.03-0.3t/km². The upland parts of the North York Moors National Park however have lower concentrations in the categories of 0-0.0003t/km² and 0.001-0.003t/km².

Nitrous Oxides

As with the chemicals above, Nitrous Oxides can have effects on lungs in humans and effects of eutrophication and acidification on habitats. Although it occurs naturally in the atmosphere, the main human source is through emissions from agriculture, but also through industrial processes. National mapping shows the highest concentrations along the main roads²⁹. In the Joint Plan Area most of the A and B roads are categorised within the 0.3-1t/km² emissions range, with dual carriage roads and motorways in the area falling within the national categories of 1-25 and >25t/km² respectively. The more rural parts of the plan area have lower Nitrous Oxides emissions rates, with the upland areas of the North York Moors National Park falling within the <0.01-0.4t/km² category.

²⁶ http://naei.defra.gov.uk/images/mapping_2013/24_large.png .

²⁷ http://naei.defra.gov.uk/images/mapping_2013/8_large.png .

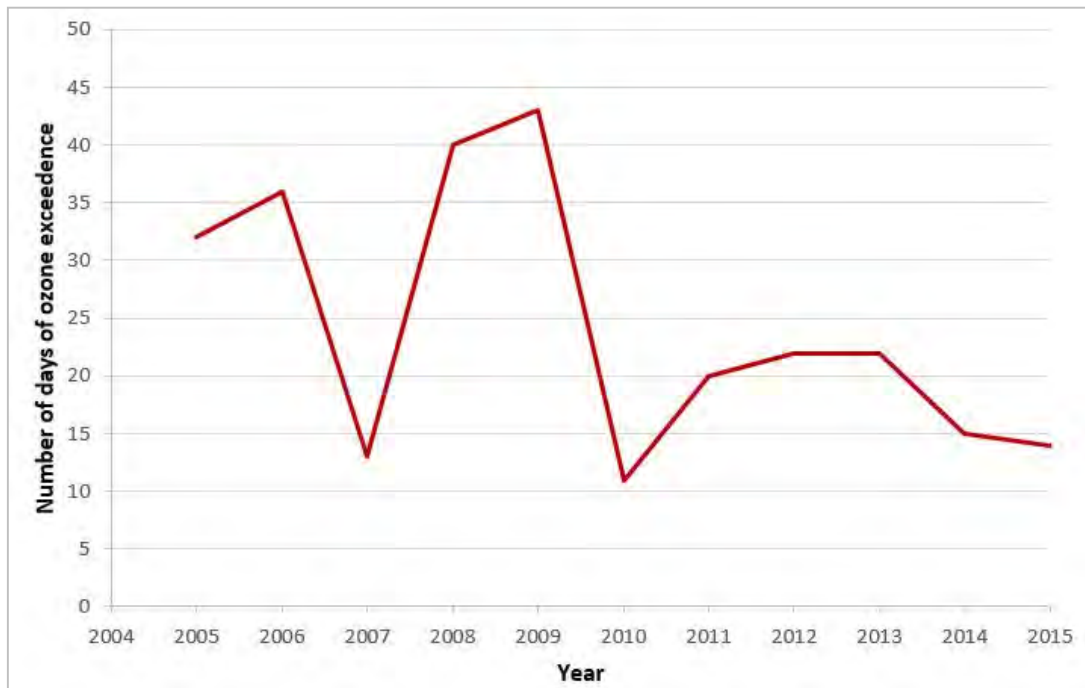
²⁸ http://naei.defra.gov.uk/images/mapping_2013/22_large.png .

²⁹ http://naei.defra.gov.uk/images/mapping_2013/5_large.png .

Ozone

Ground level ozone, which is formed by sunlight reacting with other pollutants such as nitrogen oxides, can have various effects on plants, animals and humans but is the result of emissions often a long way from the sources of pollution. This is only monitored in one location in the Joint Plan area – High Muffles (near to Cropton Forest, north of Pickering). Monitoring of exceedences shows that levels have fluctuated over the past decade, as shown in Figure 6.1.

Figure 6.1: Ozone exceedences at High Muffles



Source - www.uk-air.defra.gov.uk.

The Air Pollution Information System monitors the effects of nitrogen and sulphur emissions on Special Areas of Conservation and Special Protection Areas³⁰. Table 6.2 below summarises whether critical loads³¹ are being exceeded in relation to the qualifying features of these sites within and close to the plan area. It must be noted that, in terms of the qualifying features of the protected habitats, where critical loads are being exceeded this does not imply that this is having negative effects on the qualifying features. The main sources of nitrogen deposition are livestock production, followed by imported emissions, with road transport providing a less significant contribution. The main sources of sulphur emissions are industrial emissions from either nearby or further afield. The effects on the sites themselves vary and include changes to vegetation, toxicity, eutrophication and also potential positive effects on food supply for some important birds. These will be examined in more detail as part of the Habitats Regulations Assessment.

³⁰ <http://www.apis.ac.uk/srcl>.

³¹ Air Quality Strategy Standard for 2005 (O3) daily maximum 8-hour running mean >100 µgm-3.

It is noted that local climatic conditions may exacerbate air quality conditions, such as in sheltered areas that have limited air circulation.

Table 6.2: Exceedence of critical loads of nitrogen and sulphur on protected habitats – 2005 data.

Protected site	Nitrogen emissions exceedence of critical load	Main sources (largest contributor first)	Sulphur deposition exceedence of critical loads	Main sources (largest contributor first)
Arnecliff and Park Hole Woods SAC	Y	Livestock production, imported emissions, international shipping and road transport	N	Imported emissions, international shipping, various nearby power stations and industrial premises and livestock.
Beast Cliff – Whitby SAC	n/a	Livestock production, imported emissions, international shipping	n/a	Imported emissions, nearby power stations and industrial premises.
Craven Limestone Complex SAC	Y for certain features (active raised bogs, limestone pavements, lady's slipper orchid, Tilio-Acerion forest, semi dry grasslands, molinia meadows, petrifying springs, calminarian grasslands) N alkaline fens n/a (others)	Livestock production, imported emissions, road transport, ammonia emissions	Y (active raised bogs, limestone pavements) N (lady's slipper orchid, Tilio-Acerion forest, semi-natural dry grasslands, molinia meadows, calaminarian grasslands) n/a (others)	Imported emissions, international shipping Ferrybridge power station
Ellers Wood and Sand Dale SAC	N	Livestock production, ammonia emissions, imported emissions	N	Imported emissions, nearby power stations and industrial and residential premises
Fen Bog SAC	Y	Livestock production, imported emissions, international shipping	Y	Imported emissions, livestock, various nearby power stations
Flamborough Head SAC	n/a	Livestock production, imported emissions, ammonia emissions from non-agricultural sources	n/a	Imported emissions, international shipping, Eggborough power station, Drax power station
Flamborough Head and Bempton Cliffs SPA	n/a	Livestock production, imported emissions, ammonia emissions from non-agricultural sources	n/a	Drax power station, imported emissions, livestock, international shipping

Protected site	Nitrogen emissions exceedence of critical load	Main sources (largest contributor first)	Sulphur deposition exceedence of critical loads	Main sources (largest contributor first)
Ingleborough Complex SAC	Y (limestone pavements, calcareous rocky slopes, blanket bogs, Juniperus communis formations, Tilio-Acerion forests, (semi-natural dry grasslands and scrubland, molinia meadows, petrifying springs,) N alkaline fens)	Livestock production, imported emissions, international shipping	Y (blanket bogs) N (limestone pavements, calcareous rocky slopes, Juniperus communis, Tilio-Acerion, semi-natural dry grasslands and scrubland, molinia meadows) n/a (others)	Imported emissions, international shipping, commercial and residential combustion
Kirk Deighton SAC	n/a	Livestock production, imported emissions, road transport, ammonia emissions from agricultural sources	n/a	Imported emissions, Drax power station, commercial, industrial and residential emissions
Lower Derwent Valley SAC	Y n/a lutra lutra otter	Livestock production, imported emissions, ammonia emissions from non-agricultural sources	N n/a lutra lutra otter	Livestock, Drax power station, Ferrybridge C power station.
Lower Derwent Valley SPA	Y (European golden plover - Raised & blanket bogs, northern wet heath, pioneer low-mid & mid-upper saltmarshes, moss & lichen dominated mountain summits, hay meadows, Eurasian wigeon - Pioneer, low-mid & mid-upper saltmarshes, Low and medium altitude hay meadows Ruff - Pioneer, low-mid & mid-upper saltmarshes, low and medium altitude hay meadows, Eurasian teal - Pioneer, low-mid & mid-upper saltmarshes, Northern shoveler - low & medium altitude hay meadows, n/a (others)	Livestock production, imported emissions, ammonia emissions from non-agricultural sources, imported emissions.	Y (European golden plover - bogs, montane, acid grassland, dwarf shrub heath, Eurasian teal - acid grassland, Ruff - acid grassland, Eurasian wigeon - acid grassland, Northern shoveler - acid grassland, N (Ruff - calcareous grassland, European golden plover - calcareous grassland Eurasian teal - calcareous grassland)Northern shoveler. n/a (others)	Residential & industrial emissions, Drax power station, Eggborough power station
North Pennine	Y (mountain hay meadows, moist and	Livestock production,	N	Imported emissions,

Protected site	Nitrogen emissions exceedence of critical load	Main sources (largest contributor first)	Sulphur deposition exceedence of critical loads	Main sources (largest contributor first)
Dales Meadows SAC	wet oligotrophic grasslands)	imported emissions, international shipping, road transport		livestock, international shipping, industrial and residential combustion
North Pennine Moors SAC	Y (marsh saxifrage, blanket bogs, siliceous alpine and boreal grasslands, calcareous rocky slopes, siliceous scree, siliceous rocky slopes, old sessile oak woods, European dry heaths, Juniperus communis, Northern Atlantic wet heaths, mountain rich fens, Sub-atlantic semi-dry calcareous grassland,) N (alkaline fens)	Livestock production, imported emissions, road transport, international shipping	Y (blanket bogs) N (montane siliceous rocky slopes, marsh saxifrage, siliceous alpine and boreal grasslands, montane calcareous rocky slopes, siliceous scree, old sessile oak woods, European dry heaths, Juniperus communis, Northern Atlantic wet heaths, semi-natural dry grasslands and scrubland, calaminarian grasslands)	Imported emissions, industrial & residential combustion, international shipping
North Pennine Moors SPA	Y (European golden plover - raised & blanket bogs, northern wet heath, pioneer, moss and lichen dominated mountain summits, hen harrier - Northern wet heath, peregrine falcon - Northern wet heath, – dwarf shrub heath, merlin - dry heaths, northern wet heath, N (European golden plover - low-mid, mid-upper saltmarshes, low and medium altitude hay meadows, Hen Harrier - Rich fens, pioneer, low-mid, mid-upper saltmarshes, Merlin - pioneer, low-mid, mid-upper saltmarshes, n/a (peregrine falcon – supralittoral rock)	Livestock production, imported emissions, road transport, international shipping	Y (European golden plover - bogs) N (European golden plover – montane habitats, acid grassland, dwarf shrub heath, calcareous grassland hen harrier - dwarf shrub heath, , merlin – dwarf shrub heath,)	Imported emissions, commercial & residential combustion, international shipping
North York Moors SAC	Y	Livestock production, imported emissions,	Y (blanket bogs) N (heaths)	Livestock production, Imported emissions,

Protected site	Nitrogen emissions exceedence of critical load	Main sources (largest contributor first)	Sulphur deposition exceedence of critical loads	Main sources (largest contributor first)
		road transport, ammonia emissions from agriculture, international shipping		international shipping, various nearby power stations and industrial premises.
North York Moors SPA	Y(European golden plover - raised & blanket bogs, northern wet heath, pioneer, low-mid, mid-upper saltmarshes, moss and lichen dominated mountain summits, low and medium altitude hay meadows, Merlin – Dry heaths, northern wet heath, Pioneer, low-mid, mid-upper saltmarshes) N (European golden plover - pioneer, low-mid, mid-upper saltmarshes)	Livestock production, imported emissions, road transport, agricultural ammonia emissions, international shipping	Y (European golden plover – bogs) N (European golden plover - montane, acid grassland, dwarf shrub heath, calcareous grassland Merlin - dwarf shrub heath,)	Livestock production, imported emissions, Teeside, international shipping, various nearby power stations and industrial premises
Ox Close SAC	Y	Livestock production, imported emissions, international shipping	N	Imported emissions, international shipping, commercial, industrial & residential combustion
River Derwent SAC	n/a	Livestock production, imported emissions, road transport	n/a	Commercial, industrial & residential combustion, Drax power station, Ferrybridge power station, imported emissions
Skipwith Common SAC	N	Livestock production, imported emissions, ammonia emissions agricultural sources, road transport,	N	Drax power station, Ferrybridge C power station Commercial, industrial & residential combustion
South Pennine Moors SAC	Y	Livestock production, imported emissions, road transport, international shipping	Y	Commercial, industrial & residential combustion, Imported emissions, livestock production
South Pennine	Y (Common sandpiper – Permanent	Livestock production,	Y (European golden plover -	Commercial, industrial &

Protected site	Nitrogen emissions exceedence of critical load	Main sources (largest contributor first)	Sulphur deposition exceedence of critical loads	Main sources (largest contributor first)
Moors (Phase 2) SPA	oligotrophic waters: Softwater lakes, Dunlin - Northern wet heath, raised and blanket bogs, dry heaths Common snipe - Non-mediterranean dry acid and neutral closed grassland, Raised and blanket bogs, low and medium altitude hay meadows, European golden plover - Raised and blanket bogs, northern wet heath, Pioneer, low-mid, mid-upper saltmarshes, Moss and lichen dominated mountain summits, low and medium altitude hay meadows, Ring ouzel - Coniferous woodland, northern wet heath, Eurasian curlew - Moist and wet oligotrophic grasslands, Short-eared owl - Northern wet heath, Whinchat - dry heaths, Merlin - Northern wet heath, pioneer, low-mid, mid-upper saltmarshes Northern wheatear - Northern wet heath, Twite - Northern wet heath, Eurasian curlew - Low and medium altitude hay meadows, Common redshank - Pioneer, low-mid, mid-upper saltmarshes, Low and medium altitude hay meadows Northern lapwing - Pioneer, low-mid, mid-upper saltmarshes, Low and medium altitude hay meadows n/a (others)	imported emissions, road transport ammonia emissions from non-agricultural sources,	Montane, acid grassland, bogs, dwarf shrub heath, Eurasian curlew - Acid grassland, Common snipe – acid grassland, bogs, Dunlin – acid grassland, Common redshank - Acid grassland, Northern lapwing – Acid grassland, Dunlin – bogs, Ring ouzel - unmanaged Broadleaved/Coniferous Woodland, dwarf shrub heath, Northern wheatear - Dwarf shrub heath, Whinchat - Dwarf shrub heath, Twite – Dwarf shrub heath, Short-eared owl - Dwarf shrub heath, Merlin – dwarf shrub heath, N (common snipe – grassland calcareous, Northern lapwing - calcareous grassland, European golden plover - calcareous grassland, Eurasian curlew - calcareous grassland, Common redshank - calcareous grassland, - n/a (others)	residential combustion, Imported emissions, international shipping, livestock production
Strensall Common	Y	Livestock production, imported emissions, ammonia emissions from agricultural sources, road transport	N	Drax, imported emissions, livestock production, commercial, industrial and residential emissions

Protected site	Nitrogen emissions exceedence of critical load	Main sources (largest contributor first)	Sulphur deposition exceedence of critical loads	Main sources (largest contributor first)
Teesmouth and Cleveland Coast SPA	Y (acidic supralittoral element) (Sandwich tern - Coastal stable dune grasslands - acid type, Coastal stable dune grasslands - calcareous type Little tern - Coastal stable dune grasslands - acid type, Coastal stable dune grasslands - calcareous type) N (others) (Sandwich tern - Shifting coastal dunes, Little tern - Shifting coastal dunes, Sanderling - Pioneer, low-mid, mid-upper saltmarshes, Red knot - Pioneer, low-mid, mid-upper saltmarshes, Eurasian teal - Pioneer, low-mid, mid-upper saltmarshes, Common shelduck - Pioneer, low-mid, mid-upper saltmarshes, Sanderling - Pioneer, low-mid, mid-upper saltmarshes Common redshank - Pioneer, low-mid, mid-upper saltmarshes, Low and medium altitude hay meadows, Eurasian teal - Low and medium altitude hay meadows, Northern shoveler - Low and medium altitude hay meadows) n/a (others)	Livestock production, imported emissions, international shipping	N (Northern shoveler - Acid grassland, Calcareous grassland Eurasian teal - Acid grassland, Calcareous grassland, Sandwich tern - Acid grassland, Calcareous grassland, Little tern - Acid grassland, Calcareous grassland Common redshank - Acid grassland, Calcareous grassland) n/a (others)	Other transport – not roads, international shipping, Teesside, commercial, industrial and residential combustion

Source - www.apis.ac.uk.

Key messages from the baseline

- Air quality is mainly an issue for a few very local urban areas, however some important upland habitats are being affected by deposition of air pollutants

Predicted Future Trends

- It is possible that contributions would be made towards improving air quality over the medium to longer term through advances in technology and efforts focussed on improving air quality in particular areas, particularly when factoring in other likely trends such as reductions in greenhouse gas emissions.
- Conversely, increased activity associated with increases in population (through for example more development and transportation requirements) may have a detrimental effect on air quality in the longer term.
- Minerals and waste developments may have localised effects over which there would be less control without minerals and waste planning policies in place (although recognising the role of other organisations in controlling air quality).

Table 6.3: Air Quality Indicators

Indicator	Baseline Data (and year)	Source
Number of Air Quality Management Areas	8 (2016)	DEFRA
Number of SACs and SPAs with >1 feature exceeding critical loads for deposition of either N or S	N = 15 S = 10	APIS
Mapped distribution of NO _x , PM ₁₀ and PM _{2.5}	For NO _x see: http://naei.defra.gov.uk/data/map-uk-das?pollutant_id=6 For PM ₁₀ see: http://naei.defra.gov.uk/data/map-uk-das?pollutant_id=24 For PM _{2.5} see: http://naei.defra.gov.uk/data/map-uk-das?pollutant_id=24	DEFRA LAQM

7 SEA Topic/SA Category – Climatic Factors

A large proportion of climate change and global warming is considered to have been brought about due to large scale anthropogenic emissions of carbon dioxide and other greenhouse gases (GHGs) since the industrial revolution, with much of the warming impact having occurred in the last 50 years. Hotter summers, wetter winters, more storms and sea level rise are some of the consequences of climate change that are predicted to take place over the coming decades. The degree of future changes depends upon the amount of future greenhouse gas emissions.

Climate Change Projections

The most up to date projection of future changes to the climate are contained in the UK Climate Projections 2009 (UKCP09). The projections are based upon a range of possibilities based on different scenarios, and are not predictions of precisely how it is expected the climate will change. The projections consider low, medium and high emissions scenarios to provide a range of projections for the 2020s, 2050s and 2080s in relation to summer temperature, summer rainfall, winter temperature and winter rainfall. For the Yorkshire and Humber region the projections are set out in Table 7.1.

Table 7.1: Climate change projections for the Yorkshire and Humber region (Source – UKCP09)

Timescale	Increase in average summer temperature is...			Change in average summer rainfall is...		
	Very unlikely to be less than:	Most likely to be:	Very unlikely to be more than:	Very unlikely to be less than:	Most likely to be:	Very unlikely to be more than:
2020s	0.5°C	1.3°C	2.3°C	-24%	-8%	+10%
2050s	1.1°C	2.3°C	3.9°C	-36%	-19%	+1%
2080s	1.7°C	3.3°C	5.4°C	-44%	-23%	0%
Timescale	Increase in average winter temperature is...			Change in average winter rainfall is...		
	Very unlikely to be less than:	Most likely to be:	Very unlikely to be more than:	Very unlikely to be less than:	Most likely to be:	Very unlikely to be more than:
2020s	0.6°C	1.3°C	2.1°C	-3%	+4%	+13%
2050s	1.1°C	2.2°C	3.4°C	+1%	+11%	+24%
2080s	1.6°C	3.0°C	4.6°C	+2%	+15%	+33%

Projections for sea level rise are made in relation to points around the UK's coastline. It is considered that the coastline of the National Park would fall somewhere between the projections for London and Edinburgh:

Table 7.2: Sea level rise projections (Source – UKCP09).

Timescale	London (cm)			Edinburgh (cm)		
	High	Med	Low	High	Med	Low
2020s	11.5	9.7	8.2	7.5	5.7	4.3
2050s	25.8	21.8	18.4	18.0	13.9	10.5
2080s	43.3	36.3	30.5	31.4	24.4	18.6

It is also considered that more extreme weather events, such as storms and flooding, will become more prevalent.

Emissions

Emissions of greenhouse gases are widely accepted as causing changes in the climate. The greenhouse gases emitted through human activities are carbon dioxide (CO₂), methane, nitrogen oxides and fluorinated gases. CO₂ emissions are the most commonly reported and are mainly the result of burning fossil fuels for transportation and energy production. In 2014, CO₂ emissions attributed to North Yorkshire were 5. million tonnes, a decline of 22.2% since 2006. The Climate Change Act 2008 sets a target for a reduction in the UK's greenhouse gas emissions by 80% (from 1990 levels) by 2050, and a reduction of 34% by 2020. The large level of emissions in Redcar and Cleveland are due to the borough's large industrial base which is outside of the National Park.

Table 7.3: Total CO₂ emissions by Local Authority area.

Local Authority	Emissions (kilotons)					
	2009	2010	2011	2012	2013	2014
Craven	453.9	471.7	436.6	446.7	443.3	412.5
Hambleton	922.2	942.9	902.0	929.9	929.0	853.8
Harrogate	1,390.6	1,440.0	1,345.3	1,387.5	1,354.6	1,241.6
Richmondshire	521.1	524.1	491.7	493.8	486.9	461.4
Ryedale	566.4	591.5	546.6	555.4	544.4	502.1
Scarborough	740.5	768.9	702.0	732.5	714.2	653.2
Selby	1,042.8	1,110.5	1,025.3	1,044.4	1,052.0	894.1
North Yorkshire total	5,637.6	5,849.7	5,449.5	5,590.3	5,524.4	5,018.6
York	1,081.4	1,149.2	1,038.3	1,084.3	1,066.1	963.9
Redcar and Cleveland	8,462.4	4,411.4	3,697.2	8,153.7	9,724.6	8,915.7

Source – Defra/DECC³²

Per capita CO₂ emissions vary across the Plan Area and tend to be higher in the more rural parts of North Yorkshire, as shown in Table 7.4. Redcar and Cleveland has particularly high per capita emissions although this is due to the large industrial base in the part of the borough which is outside of the National Park.

Table 7.4: CO₂ emissions per capita by Local Authority area.

Local Authority	Per Capita Emissions (tonnes)					
	2009	2010	2011	2012	2013	2014
Craven	8.2	8.5	7.9	8.1	8.0	7.4
Hambleton	10.4	10.6	10.1	10.4	10.3	9.5
Harrogate	8.9	9.1	8.5	8.7	8.6	7.9
Richmondshire	9.9	9.9	9.2	9.2	9.0	8.8
Ryedale	10.9	11.4	10.5	10.7	10.4	9.5

³² <https://www.gov.uk/government/publications/updated-energy-and-emissions-projections-2015>.

Local Authority	Per Capita Emissions (tonnes)					
	2009	2010	2011	2012	2013	2014
Scarborough	6.8	7.1	6.5	6.7	6.6	6.0
Selby	12.7	13.4	12.3	12.4	12.4	10.5
North Yorkshire total	9.5	9.8	9.1	9.3	9.2	8.3
York	5.6	5.9	5.2	5.4	5.3	4.7
Redcar and Cleveland	62.3	32.6	27.4	60.4	72.1	66.0
Yorkshire and Humber	8.3	8.8	8.2	8.2	8.1	7.3
England	8.4	8.4	8.4	8.4	8.4	8.4

Source – Defra/DECC.

Emissions of methane and nitrous oxide are linked predominantly to agriculture. In rural areas these emissions can be as significant as CO₂ emissions – in 2006 emissions of methane and nitrous oxide in the North York Moors National Park accounted for the equivalent of 314kt of CO₂, compared to 396.7kt of CO₂ emissions³³.

Table 7.5 below shows the CO₂ emissions per capita in relation to industrial and commercial and transport emissions. This shows that urban local authorities such as York generally have lower per capita emissions in these two sectors. Again Redcar and Cleveland’s figure reflects the high level of industrial activity in the Borough as a whole.

Table 7.5: Per capita CO₂ emissions.

Local Authority	Industrial and Commercial			Road Transport		
	2012	2013	2014	2012	2013	2014
Craven	2.7	2.7	2.5	2.4	2.4	2.4
Hambleton	3.4	3.2	2.8	4.1	4.4	4.3
Harrogate	3.0	2.8	2.5	3.2	3.3	3.4
Richmondshire	2.7	2.7	2.5	4.0	4.1	4.3
Ryedale	5.5	5.5	5.1	3.2	3.2	3.2
Scarborough	2.7	2.6	2.5	1.5	1.5	1.5
Selby	6.5	6.6	5.1	3.3	3.3	3.3
North Yorkshire total	3.7	3.6	3.1	3	3	3.1
York	2.0	1.9	1.7	1.4	1.3	1.3
Redcar and Cleveland	56.8	68.6	62.9	1.5	1.4	1.4
Yorkshire and Humber total	4	4	3.6	1.9	1.9	1.9

Source - Local and regional CO₂ emissions estimates for 2005-2014 (DECC, 2015). For full dataset see: <https://www.gov.uk/government/publications/local-authority-emissions-estimates>.

Different types of land management can have a significant impact on CO₂ emissions. LULUCF stands for Land Use, Land Use Change and Forestry (LULUCF). A negative figure shows that land management is acting as a carbon sink; otherwise LULUCF is a net source of emissions. At a UK level LULUCF represents a carbon sink rather than a source of emissions. Table 7.6 shows that on the whole LULUCF in North Yorkshire and York represents a sink of carbon in 2014.

³³ Greenhouse Gas Emissions Estimates for England’s National Parks (English National Park Authorities Association, 2010).

Table 7.6: Land Use, Land Use Change and Forestry Emissions.

Local Authority	LULUCF net emissions (kt CO ₂)		
	2012	2013	2014
Redcar and Cleveland	-0.6	-0.8	-1.4
Craven	6	5.6	4.4
Hambleton	2.9	1.1	-3.6
Harrogate	-10	-11.5	-15.1
Richmondshire	-5.1	-5.8	-8.2
Ryedale	-47.6	-49.2	-55.2
Scarborough	4.4	4.3	1.7
Selby	-6.1	-7.4	-10.2
North Yorkshire total	-55.5	-63	-86.1
York	-3.5	-4	-5
Yorkshire and Humber total	126.6	139.5	94.1

Source - Local and regional CO₂ emissions estimates for 2005-2014 (DECC, 2015). For full dataset see: <https://www.gov.uk/government/publications/local-authority-emissions-estimates>.

Climate Change Vulnerability

The changes to the climate outlined above can have a range of effects. The degree and extent of these effects will depend upon the precise future changes to the climate and may vary across different parts of the Joint Plan Area. Generally, for the Plan Area the predicted effects are as outlined below³⁴:

- Flooding of infrastructure (buildings, roads, footpaths) and habitats, having relatively short term but potentially fairly significant consequences;
- Drought, affecting flora and fauna and also productivity;
- Changes to the coastline as a result of a combination of sea level rise, increased rainfall and increased storminess;
- Increased risk of fire on the moorland;
- Cumulative effects of a number of changes to conditions for agricultural production may lead to different types and/or new ways of managing crops and stock in the future;
- Cumulative effects of a number of changes to conditions for biodiversity may result in loss of some species and an increase / introduction of other, potentially threatening, species;
- Changing composition of native woodland, including tree species and ground flora, and economic implications in relation to timber production;
- Increased occurrences of disease affecting wildlife, trees, crops and livestock;
- Pressure on water resources;
- Increased physical stress on cultural heritage;
- Increased pressure on health and emergency services;

³⁴ Climate Impact Profiles for North Yorkshire local authorities and Adapting to Climate Change in the North York Moors National Park (North York Moors National Park Authority, 2011).

- Damage to transport infrastructure.

As part of the adaptation to and mitigation of flooding within the plan area, a Strategic Flood Risk Assessment (SFRA) will be carried out alongside the development of the Joint Plan to support the Sustainability Appraisal. The SFRA will aim to assess the vulnerability of potential minerals and waste sites to flooding and allow a reasoned approach to be taken when making decisions on specific minerals and waste sites and their likelihood to contribute towards the increased risk of flooding in other locations. Similar SFRAs have been carried out for York and for north east Yorkshire, including the National Park.

Key messages from the baseline

- Harrogate has the highest total emissions of CO₂, followed by York and Selby, though across the Plan Area total emissions are falling.
- Per capita emissions are falling, but remain highest in the more rural parts of the Plan Area.
- Climate change is likely to have a range impacts on the Plan area including increased flooding, damage to infrastructure and effects on food production.

Predicted Future Trends

- The evidence suggests that temperatures will rise by around 3°C in the summer and 3.3°C in the winter by the 2080s, and rainfall will decrease by around 23% in summer whilst increasing by about 15% in the winter. The effects of this on the Joint Plan area are likely to include increased flooding, drought, changes to agricultural production and changes to habitats and species. In the short to medium term effects may be less pronounced.
- It is likely that emissions of CO₂ will continue to fall, although this may have a negligible effect on overall changes to the climate.
- Minerals and waste developments can be particularly energy intensive and are likely to contribute to the causes of climate change over which there would be less control without minerals and waste planning policies in place.

Table 7.7: Climatic Factors Indicators

Indicator	Baseline Data (and year)	Source
Emissions of CO ₂ per capita by local authority	See Table 7.4	DECC
Industrial and commercial per capita CO ₂ emissions by Local Authority	See Table 7.5	DECC
Road transport CO ₂ emissions per capita by Local Authority	See Table 7.5	DECC
Land use change CO ₂ emissions per capita by Local Authority	See Table 7.6	DECC
UKCP climate change scenarios	See Table 7.1	UKCP
Mapped extent of Flood Zones under Climate Change as reported in available Strategic Flood Risk Assessments	Data not yet available	NYCC
Allocations requiring exception testing in North Yorkshire SFRA	Data not yet available	NYCC

8 SA Topic/SEA Category – Cultural Heritage and Historic Environment

Heritage Assets

There is a wealth of built and cultural heritage within the Joint Plan Area ranging from castles and abbeys to ancient field systems, bridges and historic parks, as well as numerous important historic buildings and townscapes.

Listed Buildings are statutorily protected in recognition of their architectural or historic significance. According to Historic England 'Listing helps us acknowledge and understand our shared history. It marks and celebrates a building's special architectural and historic interest, and also brings it under the consideration of the planning system so that some thought will be taken about its future.'³⁵

There are three categories of listed buildings. These are:

- Grade 1: Buildings are of exceptional interest, sometimes considered to be internationally important; 2.5% of listed buildings are Grade 1 and include buildings such as the Clifford Tower in York and Fountains Abbey near Ripon.
- Grade 2*: Particularly important, of more than special interest; 5.5% of listed buildings nationally are Grade 2*.
- Grade 2: These buildings are nationally important and of special interest. 92% of all listed buildings are in this class and is the most likely grade for a home owner.

Within the Plan Area there are over 12,000 listed buildings. Of these listed buildings, 40 are on Historic England's 'at risk' register³⁶; although more are on local 'at risk' registers. The main reasons for buildings being at risk are being in remote and inaccessible locations, being replaced by modern agricultural buildings and through lack of repair³⁷.

Conservation areas are designated by local planning authorities; they can include a wide variety of environs, designated for their special architectural and historic interest. They can include areas such as the centres of historic towns, historic suburbs and country houses set in historic parks and gardens. Many conservation areas are the subject of conservation area appraisals. There are a total of 308 Conservation Areas in the Joint Plan Area. Like Listed Buildings, Conservation Areas are designated for their special architectural and historic interest although they do not benefit from statutory protection. Of the 308 Conservation Areas, 7 are identified on Historic England's 'at risk' register.

According to Historic England 'Scheduling is shorthand for the process through which nationally important sites and monuments are given legal protection by being placed on a list or schedule'³⁸. There are a total of 1,614 Scheduled Monuments in the Plan Area, as well as

³⁵ Historic England <https://www.historicengland.org.uk/listing/what-is-designation/listed-buildings/>.

³⁶ Data at August 2016 <https://www.historicengland.org.uk/advice/heritage-at-risk/search-register/> and <https://content.historicengland.org.uk/images-books/publications/har-2015-registers/yo-har-register2015.pdf> <https://www.historicengland.org.uk/advice/heritage-at-risk/search-register/> and <https://content.historicengland.org.uk/images-books/publications/har-2015-registers/yo-har-register2015.pdf>

³⁷ <https://www.historicengland.org.uk/advice/heritage-at-risk/search-register/selection-criteria/>

³⁸ Historic England <https://www.historicengland.org.uk/listing/what-is-designation/scheduled-monuments/>.

many thousands more archaeological sites and features. The North York Moors National Park is particularly significant in terms of archaeological heritage, containing around a third of all Scheduled Monuments in the Yorkshire and Humber region, whilst the City of York has been designated as an Areas of Archaeological Importance³⁹ (one of only 5 nationally). Of the Scheduled Monuments in the Plan Area, 297 are on Historic England’s ‘at risk’ register⁴⁰. Scheduled Monuments are generally at risk from recreational pressure, upgrading access tracks and inappropriate land management such as drainage, arable ploughing and plant growth.

Registered Parks and Gardens are designated for their importance as a planned landscape. There are a total of 29 Registered Parks and Gardens in North Yorkshire and the City of York, and of these 5 are at risk. North Yorkshire also has two Registered Battlefields and one Protected Wreck Site, the Bonhomme Richard⁴¹, off the coast of Filey Bay.

Listed Buildings, World Heritage Site property boundaries and buffer zones, Protected Wrecks, Scheduled Monuments, Registered Parks and Gardens and Battlefields are shown on Historic England’s List for England webmap tool available at <https://www.historicengland.org.uk/listing/the-list/>

Heritage at Risk

The current number of heritage assets ‘at risk’ is shown in Table 8.1.

Table 8.1: Heritage assets ‘at risk’.

District / Borough	Listed Buildings	Scheduled Monuments	Conservation Areas	Registered Historic Parks and Gardens	Registered Battlefields
North Yorkshire (outside the National Parks)	42	221	1	5	2
City of York	0	5	2	0	0
National Parks	5	71	0	0	0

Source – Historic England. (Table calculated at Aug 2016).

There are many other non-designated historic assets which are recorded on the Historic Environment Records of the authorities. Around 45,000 assets in the Joint Plan area are identified on the Historic Environment Records⁴².

Historic sites play a key role in the economy of the region, with hundreds of thousands of visits each year, as shown in Table 8.2.

³⁹ https://www.york.gov.uk/info/20216/archaeology/1318/areas_of_archaeological_importance

⁴⁰ <https://content.historicengland.org.uk/images-books/publications/har-2015-registers/yo-har-register2015.pdf/>

⁴¹ Detailed assessment at <https://historicengland.org.uk/listing/the-list/list-entry/1000080>.

⁴² http://www.heritagegateway.org.uk/gateway/advanced_search.aspx

Table 8.2: Visits to Historic Sites in Yorkshire and Humber region.

Attraction	2009 (thousand visitors)	2010 (thousand visitors)
Castles / forts	446	733
Gardens	401	613
Historic houses	1338	1076
Historic monuments	255	226
Visitor / heritage centres	550	219
Places of worship	1729	1036
Other historic properties	35	378

Source – *Visitor attraction trends in England: Annual report for Heritage Counts (BDRG/English Heritage, 2010)*.

Key Sustainability Issues arising from the baseline

- The Plan area is rich in historic assets;
- Large number of Listed Buildings, which as well as needing to be protected also require minerals for their upkeep;
- The Joint Plan will need to consider the settings of these assets as well as the protection of the assets themselves;
- Whilst most designated assets in the area are not 'at risk' more than a third of the designated historic assets identified as being 'at risk' in the region are in the Plan Area.

Predicted Future Trends

- In the short term there is unlikely to be significant changes to the historic and cultural environment. Over the medium to longer term, the number of designations may increase in various locations across the plan area in line with ongoing assessment;
- The future without a plan would be reliant on the NPPF for ensuring the historic environment is conserved and enhanced to a satisfactory degree as well as other relevant legislation relating to designated historic assets (Areas of Archaeological Importance Act, 1979; Planning (Listed Buildings and Conservation Areas) Act, 1990). This would provide a level of protection for all designated and non-designated sites important to the historic environment.

Table 8.3: Cultural Heritage and Historic Environment Indicators

Indicator	Baseline Data (and year)	Source
Buildings, scheduled monuments, conservation areas, registered parks and gardens, registered battlefields 'at risk' as defined by the Heritage at Risk Register	See Table 8.1	Historic England
Number of visits to historic sites (Yorkshire and Humber)	See Table 12.2	Visit Britain

9 SEA Topic/SA Category – Additional Environmental Issues

Minerals Restoration

According to British Geological Survey's 'Minerals UK' website⁴³ 'the extraction of minerals is a temporary land use'. Once quarrying has finished the land can be recycled or re-used through restoration. In many cases, restoration involves returning the land use to its original use. However, this is not always feasible or desirable. Through creative restoration planning, minerals extraction offers the opportunity to improve the environment in and around quarry sites or to create new land uses'. The same website lists key types of restoration that are feasible on minerals sites, depending on the type of mineral that has been quarried. These include landfill, agriculture, habitat creation, social amenities, housing, flood storage and business or commercial properties.

The 'After Minerals' website features a database of quarry restoration plans for North Yorkshire including a summary of the restoration plans for the 62 minerals extraction sites listed. A review of the databases shows that current restoration plans in North Yorkshire include the following restoration types:

- For sand and gravel sites: agriculture, habitat creation, woodland, landfill, lake / wetland creation, recreation;
- For clay and shale sites: waste infill, agriculture, water bodies;
- For sandstone sites: lakes and wetlands, woodland creation;
- For limestone sites: waste infill, agriculture, woodland / tree planting, habitat creation, lakes and wetlands, grasslands;
- For silica sand: habitat creation, woodland;
- For chalk: agriculture, grassland, waste infill;
- For fluorspar: habitat creation.

Tranquillity

Tranquillity has been mapped for England by the Campaign to Protect Rural England (CPRE). The mapping shows relative levels of higher or lower tranquillity. The mapping is based upon factors which are considered to either contribute to or detract from tranquillity including remote and wild landscapes, streams and rivers and native trees (contributing factors) and urban development, people, power lines and traffic noise (detracting factors).

Figure 9.1 shows tranquillity on a sliding scale from green (most tranquil) to red (least tranquil). This shows that much of the Plan Area, compared to surrounding more urban areas, is relatively tranquil. This is with the exception of York, Harrogate, Scarborough and the market towns, and also the main roads show up as being particularly less tranquil. The most tranquil parts of the Plan Area are the most upland areas of the North York Moors National Park and the Nidderdale AONB. CPRE have ranked North Yorkshire 6th out of 117 counties and unitary authorities in relation to tranquillity⁴⁴, suggesting it is one of the most tranquil parts

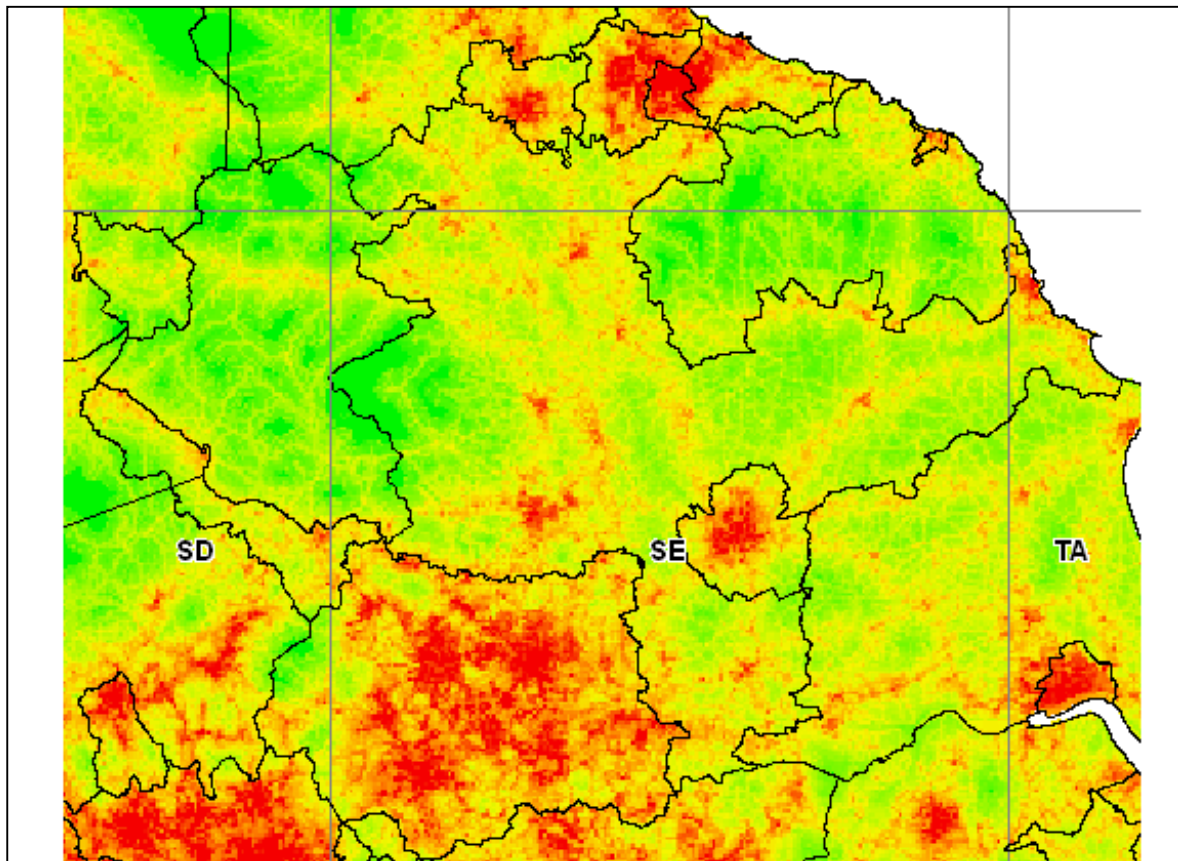
⁴³ <https://www.bgs.ac.uk/mineralsuk/>

⁴⁴ <http://www.cpre.org.uk/resources/countryside/tranquil-places/item/1757-england-fragmented-countryside-ranking-of-counties-and-unitary-authorities>

of the country. However, between the early 1960s and 2007 the percentage of the county that is classed as ‘disturbed by noise and visual intrusion’ has increased from 7.8% to 26.8%⁴⁵.

The factors that contribute to tranquillity in the Plan Area are seeing remote, wild and natural landscapes, seeing deciduous woodland, seeing rivers and streams, seeing the sea and seeing stars at night. Factors that detract from tranquillity in the Plan Area include seeing urban development and signs of human impact and people, hearing noise from transport and seeing power lines and transport infrastructure.

Figure 9.1: Relative tranquillity in the Plan Area



Source – National Tranquillity Mapping Data 2007 developed for Campaign to Protect Rural England and Natural England by Northumbria University. OS Licence number 1000018881.

Geologically Important Sites

On a national scale, many Sites of Special Scientific Interest are designated because of their geological interest. Locally important geological sites may be called either Regionally Important Geological Sites or (using the more recent term) Local Geological Sites.

Within the Plan Area there are 2,747 hectares of geological SSSIs. Of these 72.5% are in favourable condition, 27.5% are in unfavourable recovering condition, 0.23% are in unfavourable no change condition and 5.9% are declining. As 93.8% of the designation in the County is in either favourable, or unfavourable recovering condition, this means that the Public

⁴⁵ <http://www.cpre.org.uk/resources/countryside/tranquil-places/item/1753-englands-fragmented-countryside-yorkshire-and-the-humber-intrusion-statistics>

Service Agreement (PSA) target, which aimed to bring 95 per cent of SSSIs to a target condition of favourable or recovering by December 2010, has not been met for geological and geomorphological SSSIs, for this part of the Joint Plan Area.

In addition to geological SSSIs there are a number of Regionally Important Geological Sites or Local Geological Sites in the Plan Area but at present, apart from those in the Redcar and Cleveland Part of the National Park, mapped information on these is not available.

Marine and Coastal Environment

The Plan Area includes a long stretch of coastline and although the jurisdiction of the planning authorities only extends to the low water mark it is necessary to consider any significant elements of the marine environment that may be affected by the Joint Plan. The 2009 Marine and Coastal Access Act allows for the designation of Marine Conservation Zones (MCZs). MCZs protect a range of nationally important marine wildlife, habitats, geology and geomorphology.

There is one designated and one proposed MCZ on the coastline of the Joint Plan Area, listed below:

- Runswick Bay MCZ – proposed in 2013 and designated in January 2016. An inshore site covering around 68km², located to the north-west of Whitby and extending three nautical miles out to sea.
- Proposed Castle Ground MCZ – proposed in 2013 and currently on hold. A site focused around Scarborough and the coastline to the south of the town.

The Flamborough Head SAC was updated in 2015 and is designated “for the presence of species associated with the chalk and for the site’s location at the southern limit of distribution of several northern species”. It is predominantly a marine designation, but does extend above mean high water around Flamborough Head itself.

A Heritage Coast is a non-statutory designation, managed to conserve the natural beauty and to improve accessibility where appropriate. The North Yorkshire and Cleveland Heritage Coast stretches for 55km from Saltburn (outside of the Plan Area) to Scalby Mills just north of Scarborough (excluding an area around Whitby). A small part of the Flamborough Head Heritage Coast also extends into the Joint Plan Area.

Key messages from the baseline

- While the county of North Yorkshire as a whole is one of the most tranquil in England, outside of the national parks and AONBs tranquillity levels often fall due to transport corridors or when near to settlements.
- The Joint Plan area has a wealth of geological interest.
- Coastal erosion is affecting much of the coastline, in some places significantly.
- Minerals development offers opportunities to create new environments such as habitats or recreational land.

Predicted Future Trends

- Future trends in relation to minerals restoration are very much dependent upon having policies in place to guide this and therefore it is considered that without minerals and waste planning policies enhancements would be less likely to take place. In the short to medium term it is considered that positive effects will continue as the restoration

phase of current planning permissions is reached. In the longer term trends are uncertain as these depend upon the policies of the Joint Plan.

- It is unlikely that tranquillity would improve over the Joint Plan area when considering factors such as increasing population and likely future development rates, although targeted efforts in particular areas may result in localised improvements. Changes are likely to be incremental and therefore in the short to medium term may not be particularly pronounced but may become greater in the longer term. Minerals and waste developments may have localised effects on tranquillity over which there would be less control without minerals and waste planning policies in place.
- It is possible that geological sites identified as declining may continue to do so, although targeted efforts to enhance particular sites may lead to improvements over the Plan area through the short, medium and long term. Minerals and waste developments may have localised effects on geological sites over which there would be less control without minerals and waste planning policies in place.
- Coastal erosion is likely to continue to take place, particularly considering the predicted effects of climate change, and effects are likely to increase over time. Important marine environments may become better protected in the medium term through the potential designation of Marine Conservation Zones. These trends are not largely dependent upon the Minerals and Waste Joint Plan.

Table 9.1: Additional Environmental Issues Indicators

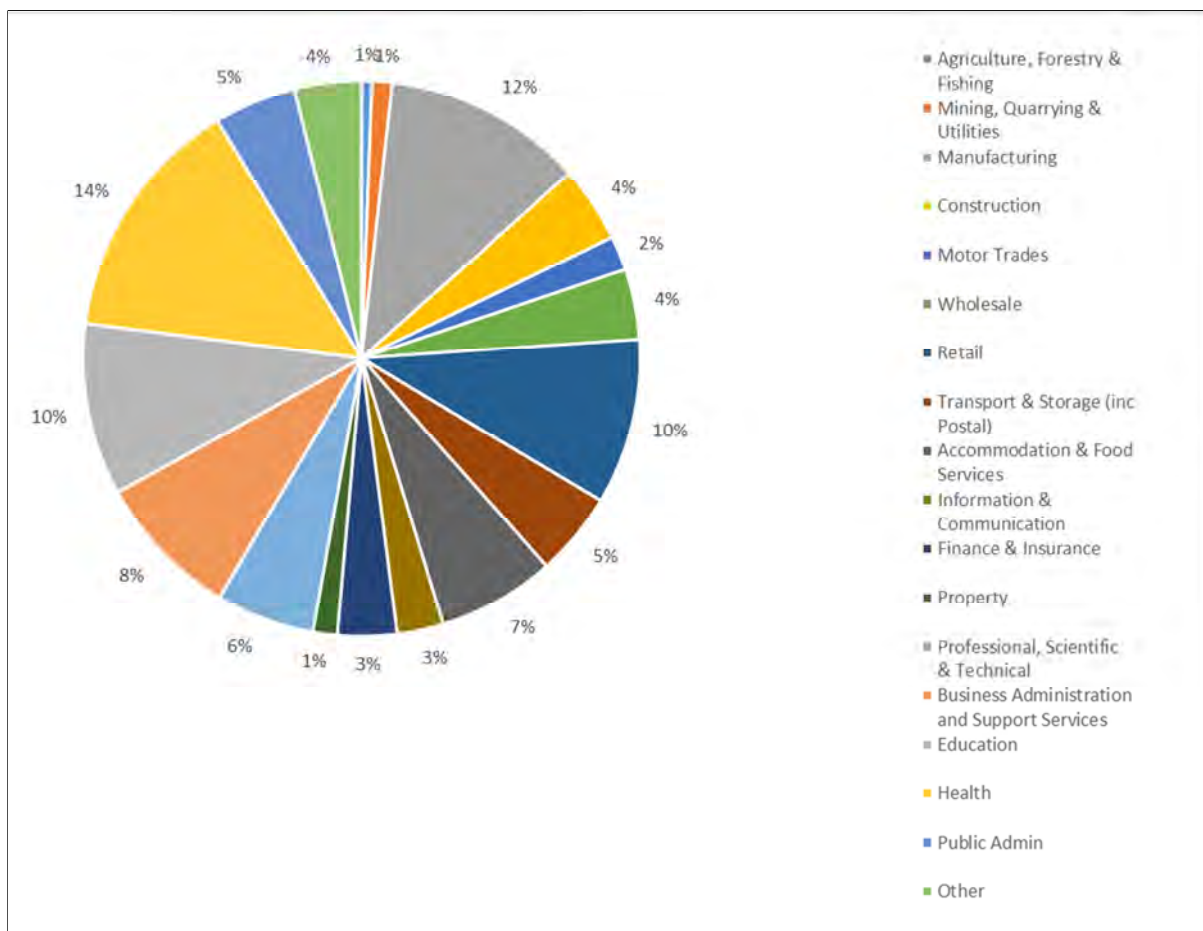
Indicator	Baseline Data (and year)	Source
Percentage of (geological) SSSIs in favourable condition	72.5% (2012)	Natural England
Number of restoration plans approved	Data not available at present	NYCC, NYMNPA and CYC

10 SEA Topic/SA Category – Economy, Employment, Education and Deprivation

Economy and Employment

The charts below show the main industries of North Yorkshire and the City of York, in terms of number of employees within each sector. The main industries in North Yorkshire are health, retail, manufacturing, accommodation and food services and education and within the City of York these are health, retail, transport and storage, education and accommodation and food services. There will be variances across the Plan Area, in the North York Moors National Park, agriculture and other land management activities represent a higher proportion at 10% of employment.

Figure 10.1: Percentage of employees within employment sectors



Source - ONS, Business Register and Employment Survey 2009-2014 (2015).

Employment in the minerals industry in the Joint Plan area (including the Yorkshire Dales and Cleveland) is predominantly at Boulby Potash Mine or within the coal industry. Coal and Potash mining employment figures are not available beyond 2011, but as shown in Table 10.1 total employment across all mineral extraction types shows that employment is in the order of 2,000 individuals. Table 10.2 shows the 2009 ‘baseline’ alongside more recent figures. This is to identify trends and changes since the 2008/2009 recession.

Although the publishers of the data warn that the data should not be used for time series analysis, it provides an indication of the level of employment in the Plan Area compared to

regional and national figures and shows that levels of employment in the minerals sector have remained relatively constant recently, experiencing only minor declines.

Table 10.1: Total employment in the minerals sector

	Joint Plan area			Yorkshire and Humber			England		
	2012	2013	2014	2012	2013	2014	2012	2013	2014
Sand and gravel	306	1,141	433	802	2,170	962	7468	9,494	8,705
Sandstone	416	170	527	696	381	833	1575	1,210	1,839
Limestone	752	54	956	847	1,750	1,026	5600	12,898	7,129
Dolomite	14	1	6	177	230	37	859	1,164	507
Chalk	0	0	0	210	114	269	554	466	597
Clay and shale	5	12	10	62	58	211	614	607	693
Total	1493	1378	1932	2794	4703	3338	16670	25839	19470

Source – Minerals Extraction in Great Britain, 2012 and 2014 (ONS)
<https://www.gov.uk/government/collections/minerals>.

Table 10.2: Total employment in the minerals sector

	Joint Plan area			Yorkshire and Humber			England		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
Coal	793	766	695	1,779	1,804	n/a	4,031	3,856	4,249
Other (inc Potash)	888	872	961	0 ⁴⁶	0	n/a	1,818	1,854	1,990
Total	1681	1638	1656	1779	1804	0	5849	5710	6239

Source – Coal figures from Coal Mining Production and Manpower statistics (2009 to 2011).

Table 10.3: Direct employment in the minerals sector

Mineral	Joint Plan Area			Yorkshire and Humber			England		
	2009	2010	2011	2009	2010	2011	2009	2010	2011
Coal	793	766	695	1,779	1,804	n/a	4,031	3,856	4,249
Other (inc Potash)	758	745	799	0 ⁴⁷	0	n/a	1,488	1,491	1,657
Total	1551	1511	1494	1779	1804	0	5519	5347	5906

Source – Coal figures from Coal Mining Production and Manpower statistics (2009 to 2011).

Table 10.4: Direct employment in the minerals sector

Mineral	Joint Plan area			Yorkshire and Humber			England		
	2009	2013	2014	2009	2013	2014	2009	2013	2014
Sand and gravel	61	62	71	144	138	181	1,982	1,361	1,916
Sandstone	53	44	45	389	219	181	823	487	528

⁴⁶ Boulby mine is in the North East region

⁴⁷ Boulby mine is in the North East region

Mineral	Joint Plan area			Yorkshire and Humber			England		
	2009	2013	2014	2009	2013	2014	2009	2013	2014
Limestone	143	155	169	174	182	195	1,966	1,792	2,425
Dolomite	4	29	3	15	30	11	300	143	101
Chalk	10	0	0	70	51	159	214	221	332
Clay and shale	14	5	40	45	40	128	313	313	399
Total		295	328		660	855		4317	5701

Source – Minerals Extraction in Great Britain, 2012, 2013 and 2014(ONS) (<https://www.gov.uk/government/collections/minerals>).

To provide an indication of the economic activity related to the minerals and waste industry, in 2010/11 six minerals applications were granted planning permission and 16 waste developments were granted permission, and in 2011/12 this was 9 and 21 respectively.

Looking at the economy more generally, North Yorkshire and the City of York generally have a higher number of active enterprises⁴⁸ per 10,000 population than the regional average, as shown in Table 10.5 below, although the total number has declined slightly over recent years.

Table 10.5: Active enterprises per 1,000 population, 2009 - 2011

	2009	2010	2011
North Yorkshire	446	445	439
City of York	321	323	327
Yorkshire and Humber region	317	315	312

Source – ONS, Count of Active Businesses.

The number of small business bank accounts opened provides an indication of the number of business start-ups. Table 10.6 shows the latest data and shows that fewer small business bank accounts were opened in January 2013 compared to the previous year.

Table 10.6: Number of new bank accounts (first current accounts from a small business banking product range) (2013)

	Number of new accounts	Annual change (%)
City of York and North Yorkshire	524	-14.5
North Yorkshire	386	9.5
City of York	138	-28
Craven	36	-40.3
Hambleton	43	-28
Harrogate	115	-40.3
Richmondshire	30	-26.8
Ryedale	35	-7.9
Scarborough	70	-10.3
Selby	57	-28.8

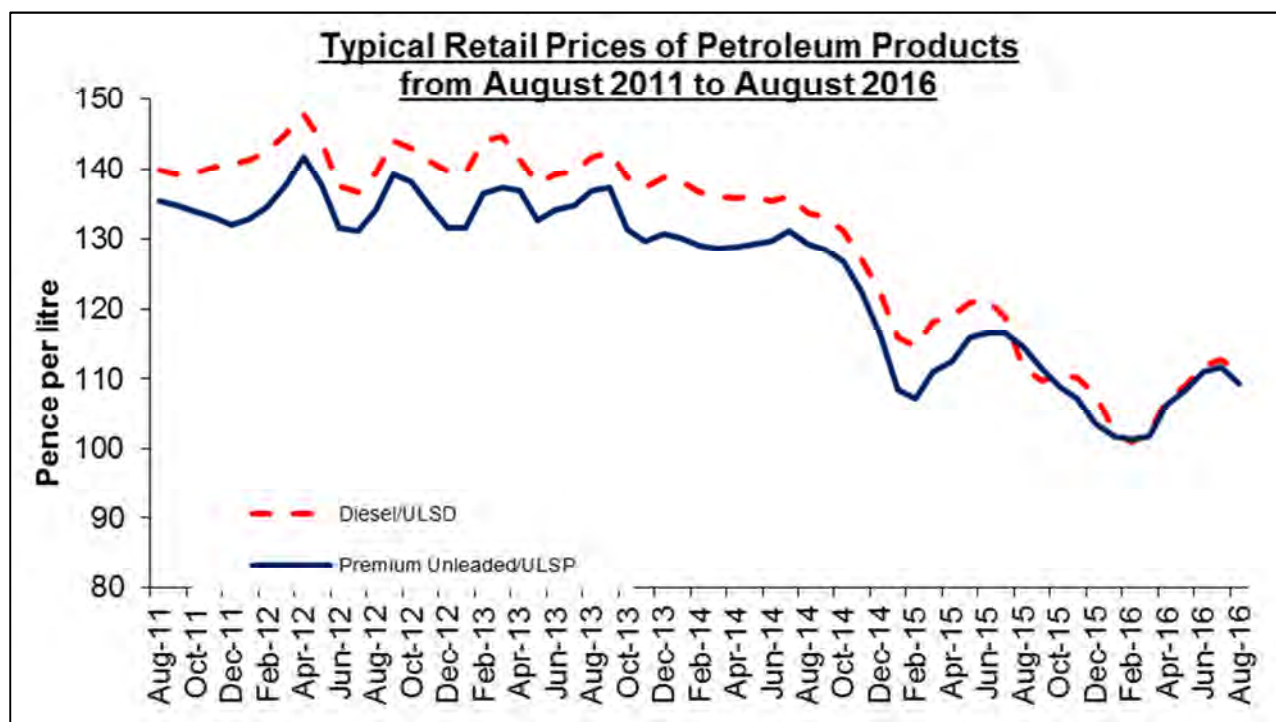
Source: York, North Yorkshire and East Riding LEP - Economic Data File February 2013.

Fuel prices can have a significant effect on the economy, and particularly in relation to minerals and waste which involve the transportation of goods often by road. They also have

⁴⁸ Those which have recorded activity at any point during the year

an impact on the ability of those in remote areas to access services. Figure 10.2 shows that fuel prices have been falling over the past few years.

Figure 10.2: Fuel prices



Source – Typical retail prices of petroleum products 1978 to 2012 (DECC, 2013)

Tourism is an important part of the economy of the Joint Plan Area. Table 10.7 below shows, compared to England, that visitors to North Yorkshire (including the City of York) generally spend less on average than those nationally.

Table 10.7: Amount spent by visitors to North Yorkshire .

	North Yorkshire (% of visitors)	England (% of visitors)
Nothing	83	74
£10 or less	9	13
£10.01 - 20.00	5	7
Greater than £20.01	3	7
Mean (including zeros)	£3.86	£7.46
Mean (excluding zeros)	£22.20	£28.16

Source – <http://naturallengland.tns-global.com/viewtable.aspx>.

Local Enterprise Partnerships (LEP) are partnerships set up between local authorities and businesses to determine economic priorities and lead in job creation and growth. The Joint Plan area is covered by three Local Enterprise Partnerships. Most of the area is covered by the City of York, North Yorkshire and East Riding LEP whilst the area to the south west of North Yorkshire is also covered by the Leeds City Region LEP and a small part of the area in Redcar and Cleveland is covered by Tees Valley Unlimited.

Minerals development in particular can be seen as a potential indicator of activity in the wider economy, though at a local scale may also depend on the specific circumstances at individual

sites. Table 10.8 shows planning applications for minerals and waste in North Yorkshire for 2010/11, 2011/12 and 2014/15.

Table 10.8: Planning Applications (Minerals and Waste) Granted in North Yorkshire.

Year	Minerals	Waste
2010/11	9	21
2011/12	6	16
2014/15	7	10

Source: North Yorkshire County Council, 2012 & 2015. Annual Monitoring Report 2011/12 and 2014/15.

Employment and Unemployment

There are a total of 420,900⁴⁹ economically active people in North Yorkshire and City York, around 49% of the total population and around 59-66% of those aged 16-64, as shown in Table 10.9 below, slightly higher than the regional and national rates.

Table 10.9: Economically Active Rate of 16-64 year olds.

	North Yorkshire %	City of York %	Yorkshire and Humber %	England %
2010	78.9	75.4	75.2	76.3
2011	79.1	79.4	75.0	76.4
2012	80.2	82.5	76.8	77.6
2013	80.3	76.5	77.6	77.8
2014	79.3	76.0	77.7	78.1
2015	81.9	79.8	76.7	78.2

Source: ONS Annual Population Survey (<https://www.nomisweb.co.uk/reports/lmp/gor/contents.aspx>)

Of these, 409,900 are in employment and 10,300 are currently unemployed⁵⁰. Table 10.10 below shows unemployment rates over the past 8 years – North Yorkshire consistently has lower rates of unemployment than the Yorkshire and Humber Region and Great Britain, although there are variances between different parts of the county. Scarborough, Selby and York, although below the regional and national averages, have tended to have higher unemployment rates than other parts of the Joint Plan area. Rates of unemployment in Redcar and Cleveland have consistently been higher than rates in the rest of the plan area and the Great Britain average. Following the national trend, unemployment levels have risen significantly over the past few years.

Table 10.10: Unemployment levels

Area	Unemployment levels ⁵¹ (% of economically active)						
	2009	2010	2011	2012	2013	2014	2015
North Yorkshire	5.6	5.8	7.6	5.4	4.5	4.5	2.0
City of York, North	5.4	6.1	6.6	?	?	?	?

⁴⁹ www.nomisweb.co.uk – (April 2015 – March 2016)

⁵⁰ www.nomisweb.co.uk – (April 2015 – March 2016)

⁵¹ Data relates to the Jan – Dec figure for each year. Note that District and Borough council figures are ONS modelled estimates whereas the other figures are Annual Population Survey (APS) rates. APS rates are comparable to the Government's headline unemployment rate.

Area	Unemployment levels ⁵¹ (% of economically active)						
	2009	2010	2011	2012	2013	2014	2015
Yorkshire and East Riding LEP area ⁵²							
Yorkshire and Humber	8.6	8.8	9.5	9.3	9.0	7.4	6.0
Great Britain	7.7	7.7	8.0	7.9	7.5	6.2	5.2
Craven	4.2	4.8	5.6	5.1	4.7	3.5	2.9
Hambleton	4.5	4.2	5.3	4.5	4.1	3.3	2.6
Harrogate	4.9	5.0	5.0	4.5	3.3	208	2.1
Richmondshire	4.5	4.8	5.9	5.3	4.2	3.2	2.2
Ryedale	3.8	4.4	4.9	5.0	4.1	3.4	2.8
Scarborough	7.9	9.5	7.6	8.7	8.7	7.3	3.4
Selby	7.0	5.9	6.5	5.6	5.4	4.8	4.0
City of York	6.4	6.4	6.1	5.7	5.2	4.6	3.4
Redcar and Cleveland	10.7	12.2	12.5	12.2	11.1	9.4	8.6

Source – ONS Annual Population Survey (<https://www.nomisweb.co.uk/reports/lmp/gor/contents.aspx>)

Table 10.11 below shows that the male claimant rate is significantly higher than female rate, although is still low when compared to the national and regional averages.

Table 10.11: Job seekers allowance claimants

Area	Job Seekers Allowance Monthly Claimants (February 2013) and rate as percentage of all JSA claimants					
	Male	% of claimants	Female	% of claimants	Total	Rate % as percentage of working age population
North Yorkshire	6067	65.5	3190	34.5	9257	2.5
Yorkshire and the Humber Region	113,453	67.3	55230	32.7	168,863	4.9
Great Britain	862,276	65.4	456,594	34.6	1318870	3.8
Craven	419	66.7	209	33.3	628	1.9
Hambleton	612	61.2	382	38.4	994	1.8
Harrogate	1077	67.4	522	32.6	1599	1.6
Richmondshire	368	60.3	242	39.7	610	1.7
Ryedale	449	60.6	292	39.4	741	2.4
Scarborough	42,231	68.8	1012	31.2	3243	4.9
Selby	911	63.2	531	36.8	1442	2.7
City of York	2080	66.8	1032	33.2	3112	2.4

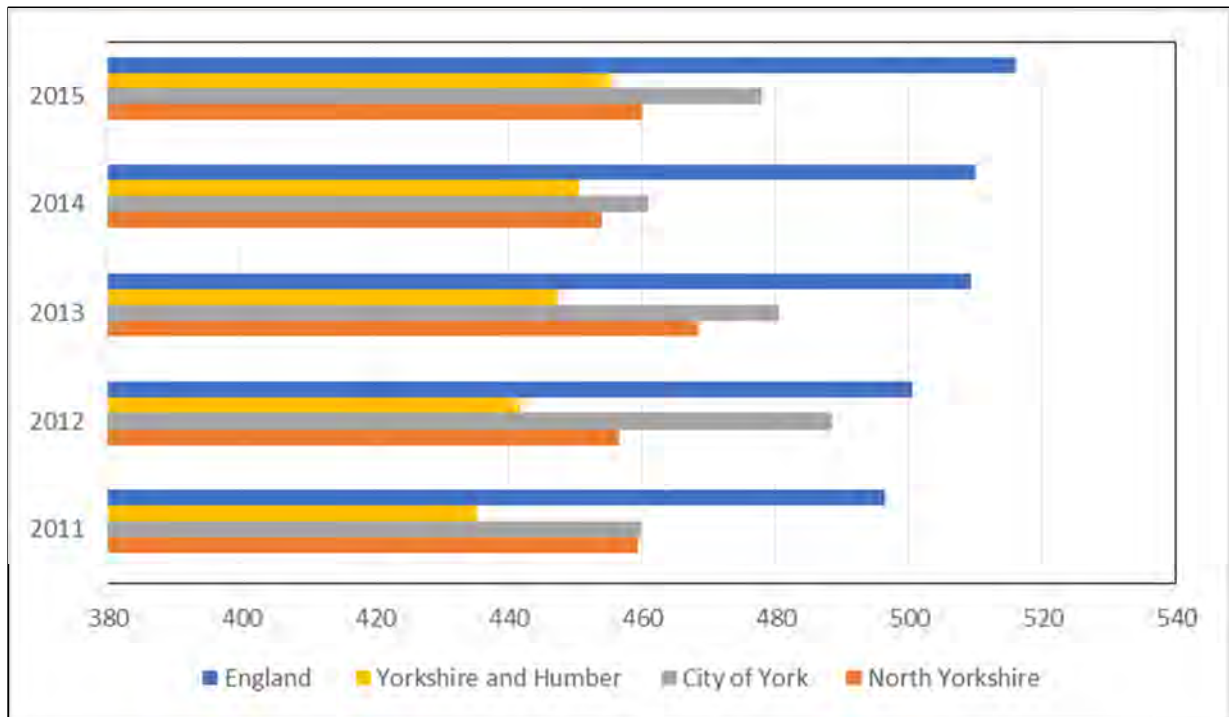
Source – STREAM

For those who work in North Yorkshire and the City of York, average wages are slightly lower than for residents, as shown in Figure 10.3, suggesting that residents commute to higher paid jobs. For City of York, the average wages of residents and those of workers look to be fairly equal. The earnings of residents of North Yorkshire county are on average lower than national earnings although are slightly higher in the City of York. Figure 10.3 shows that over

⁵² The Plan Area plus the part of the Yorkshire Dales National Park in North Yorkshire and the whole of the East Riding of Yorkshire, but excluding the part of the Plan Area in Redcar and Cleveland.

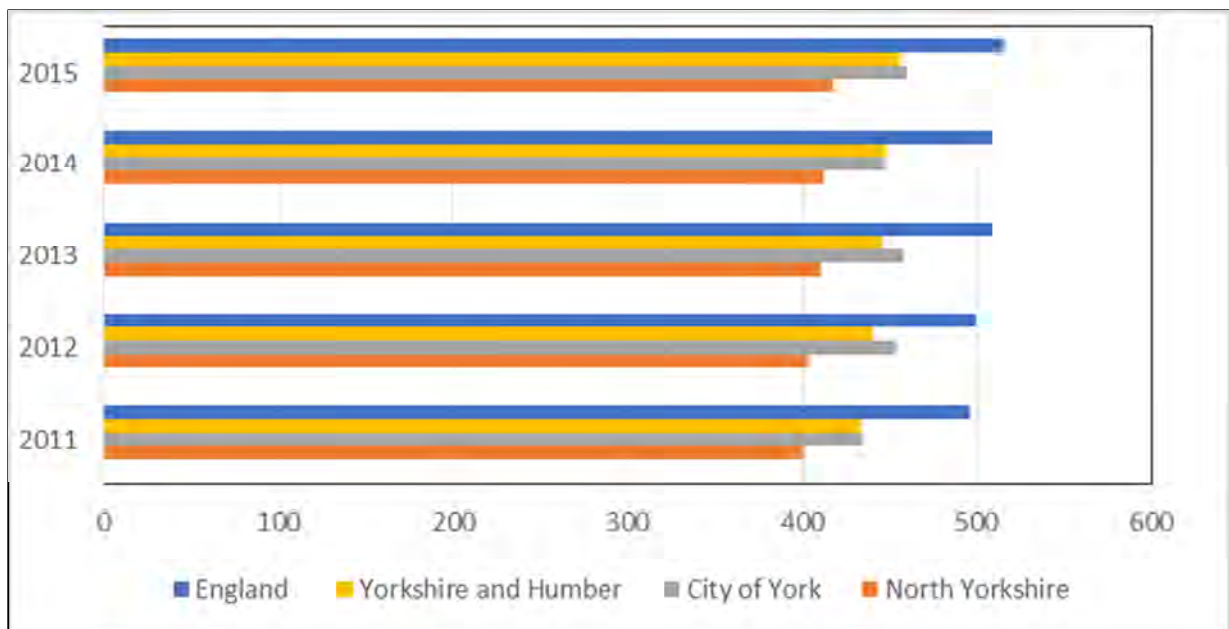
the past five years wages in North Yorkshire and in City of York remain below the national average and are reasonably constant.

Figure 10.3: Average weekly earnings (£, residents)



Source – ONS, Annual Survey of Hours and Earnings – Resident Analysis, 2016

Figure 10.4: Average weekly earnings (£, those employed in the area)



Source – ONS, Annual Survey of Hours and Earnings – Workplace Analysis, 2016

The growth in earnings, of both residents and those employed in North Yorkshire County has been greater than national and regional averages since 2007. Residents of North Yorkshire have seen a growth of 11% compared to 9% regionally and 8% nationally, whilst those who work in the area have seen a growth of 12% compared to 8% in the region and nationally.

The story in the City of York is different however where residents' and workers' earnings have only risen by 3%.

Underemployment

The Office for National Statistics (ONS) defines underemployment as persons 'who want to work more hours' and estimate that nationally, between 2008 and 2012 the number of workers who wanted to work more hours has increased by 980,000 to a figure of 3.1million, or around 1 in 10 of the people in work⁵³.

Across the UK part-time workers were four times more likely to be underemployed than full time workers (in 2012, 24 per cent of part-time workers wanted more hours, compared to 5.5% of full-time workers).

No figures on underemployment are available for the Plan Area, with the most local data available at a regional level. These figures show that the region has moved ahead of UK averages post-recession.

Table 10.12: Underemployment: Regional Trend Contrasted with National Trend

	Pre Recession Averages (2005 to 2008)		Post Recession Averages (2009 to 2012)	
	Total (thousands)	Average underemployment rate (per cent)	Total (thousands)	Average underemployment rate (per cent)
United Kingdom	1,935	6.7	2,828	9.9
Yorkshire and Humber	160	6.7	252	10.6

Source – ONS, 2012 (www.ons.gov.uk/ons/rel/lmac/underemployed-workers-in-the-uk/2012/index.html)

Education

Table 10.13 below provides a summary of educational attainment in North Yorkshire and the City of York, compared to England. This shows that North Yorkshire and the City of York have consistently higher levels of GCSE attainment than England, and that attainment has been improving over recent years. The number of economically active adults in the area with no qualifications is also consistently lower than the regional and national average, and for the City of York is significantly lower.

Table 10.13: Qualification at NVQ2 and above -GCSE level - % of 15 year olds achieving 5+ A*-C (and equivalent)

Year	North Yorkshire	City of York	Yorkshire and the Humber	England
2006	66.1	69.8	60.7	63.2
2007	67.8	70.0	60.9	63.8
2008	68.5	75.3	61.6	63.4
2009	67.8	77.6	63.3	64.9
2010	68	77.6	64.1	66.9
2011	72.1	76.9	66.2	69.3

⁵³ Office for National Statistics, 2012 www.ons.gov.uk/ons/rel/lmac/underemployed-workers-in-the-uk/2012/index.html

Year	North Yorkshire	City of York	Yorkshire and the Humber	England
2012	74.2	79.8	68.5	71.7
2013	77.5	80.3	69.3	72.4
2014	73.2	82.5	70	73.2
2015	75.4	81.1	70.1	73.4

Source – ONS Qualification (<https://www.nomisweb.co.uk/reports/lmp/la/contents.aspx>)

Table 10.14 below shows that the percentage of economically active adults with no qualifications is generally lower in the Plan Area than for the Yorkshire and Humber region or for England, and that this has been decreasing over recent years.

Table 10.14: Percentage of economically active adults with no qualifications

Year	North Yorkshire	City of York	Yorkshire and Humber region	England
2007	8.6	7.4	10	9.2
2008	7.2	5.6	8.8	8.8
2009	7	5.4	8.2	7.9
2010	7.4	5	7.7	7.1

Source – ONS, Annual Population Survey

Table 10.15 below shows the percentage of people qualified to at least level 4⁵⁴. This shows that in the Plan Area people are generally better qualified than the regional and national average although this has declined notably in recent years, in line with the regional and national averages. Qualification levels vary across the local authority areas, with Harrogate, Hambleton and the City of York having the highest proportion of people with higher level qualifications.

Table 10.15: Percentage of people with level 4 or higher qualifications⁵⁵

	2007	2008	2009	2010
North Yorkshire	33.93	34.7	31.29	29.35
North Yorkshire and York	36.94	37.23	32.63	30.78
Craven	30.22	37.60	48.5	29.02
Hambleton	41.4	35.05	29.45	29.41
Harrogate	38.65	40.21	34.07	38.73
Richmondshire	25.50	27.35	25.14	23.40
Ryedale	30.80	33.1	29.87	26.14
Scarborough	28.36	28.66	24.62	23.13
Selby	33.18	31.9	29.35	25.77
City of York	45.38	44.91	36.32	34.73
England	35.56	33.64	28.67	28.31
Yorkshire and Humber	30.62	30.24	25.04	23.84

Source – www.streamlis.org.uk

In North Yorkshire, 29.5% of residents volunteered at least once a month in 2008, and in the City of York for the same year it was 23%. This is higher than the regional and national

⁵⁴ Higher National Certificate / Certificate of Higher Education level or equivalent

⁵⁵ NB – this is the only data available at borough level. More recent data does not allow a comparison across North Yorkshire.

volunteering rates of 22.8% and 22.3% respectively⁵⁶. In 2012, 76,719 volunteer hours were provided in the National Park alone undertaking a range of activities including practical conservation tasks, information services, data inputting and also voluntary rangers. The value of this volunteering alone equates to £1,171,500.

Deprivation

Indices of deprivation measure of range of factors which can contribute to or detract from the quality of life of an area including employment, crime, access to services and health. Each local authority area in the country is ranked according to its overall level of deprivation – the lower the figure the higher the level of deprivation. Although most parts of the Plan Area are closer to the least deprived areas nationally, within the rural parts of the county a key factor in deprivation is related to difficulty of access to services whereas within the more urban areas issues such as crime and poorer education are more significant.

Table 10.16: Indices of deprivation 2010 and 2015

Local authority	Ranking	
	2010	2015
Craven	241	250
Hambleton	265	245
Harrogate	283	289
Richmondshire	261	225
Ryedale	200	184
Scarborough	83	90
Selby	236	254
City of York	244	270
Redcar and Cleveland	271	78
North Yorkshire	129	-

Source – *English Indices of Deprivation: Local Authority Summaries 2010 and 2015* (DCLG, 2011 and 2015). Districts, Boroughs and Unitaries are ranked out of 354, North Yorkshire is ranked out of 149.

Key messages from the baseline

- Since the economic downturn unemployment has fallen across the county;
- In Yorkshire as a whole more than 1 in 10 people feel that they are underemployed;
- The minerals sector is a significant employer directly supporting approximately 2,000 jobs;
- Business appears to be ‘holding up’ following the down turn with only modest falls in active enterprises across the Plan Area (and growth in the number of active enterprises in City of York) although this data is limited to data up to 2011;
- Wage levels in the Plan Area are lower than England as a whole;
- Fuel prices are falling nationally, which could have positive impacts on businesses and rural communities in such a large economic area;

⁵⁶ Source: Stream website
([http://www.streamlis.org.uk/\(S\(rfvqlzu3jahqn3xh0rvyuvj\)\)/code/MasterFrame/MasterFrame.aspx?type=WhatInfo](http://www.streamlis.org.uk/(S(rfvqlzu3jahqn3xh0rvyuvj))/code/MasterFrame/MasterFrame.aspx?type=WhatInfo))

- Outdoor recreation brings income to many rural areas, though less money is spent outdoors by North Yorkshire people than the rates for England as a whole. Heritage assets are also popular tourist destinations;
- The Plan Area has generally better than average educational attainment levels;
- The Plan Area is generally one of the least deprived areas in the country, though Scarborough and some parts of City of York rank significantly higher on the indices of deprivation than the rest of the Joint Plan area.

Predicted Future Trends

- If the UK economic recovery is sustained, employment levels are expected to improve in the short term, though the historic pattern of boom and bust in the economy means that there are considerable doubts over whether this will be sustained in the longer term.
- Secondary education GCSE pass levels are likely to continue to be ahead of the England average into the long term, though the gains of recent years may be difficult to emulate due to the higher baseline level (which is already high)⁵⁷. Meanwhile, the percentage of those attaining higher qualifications, which declined slightly in recent years, is likely to grow again as the longer scale national trend (2003 to 2011) shows significant growth in numbers⁵⁸. However, in the medium to long term too much depends on trends in the economy;
- While most of the Plan Area is relatively prosperous, pockets of deprivation continue to exist. Whether these places continue to suffer deprivation depends on factors such as state of the economy, wage levels and other factors such as housing costs. Nationally, the longer scale trend in relative poverty after housing costs has declined only slightly since the mid 1990s⁵⁹, so it is expected that in the short to long term deprivation, at least in terms of relative poverty, may well endure.

Table 10.17: Economy, Employment, Education and Deprivation Indicators

Indicator	Baseline Data (and year)	Source
Economically active rate of 16 to 64 year olds	See Table 10.9	ONS
Number of new bank accounts (first current accounts from a small business banking range)	See Table 10.6	LEP
Unemployment rate	See Table 10.10	ONS
Gross median weekly earnings of residents and people who work within the area	See Figures 10.3 and 10.4	ONS
Number of minerals and waste planning applications	See Table 10.8	NYCC, CYC, NYMNPA

⁵⁷ In 2013 Ofqual recorded a 1.3 percent decline in the pass rate at A to C nationally, though explained this as being attributable to the age profile of the cohort for that year. See Ofqual, 2013. A brief explanation of summer 2013 GCSE results [URL: <http://webarchive.nationalarchives.gov.uk/20141031163546/http://ofqual.gov.uk/files/2013-08-22-brief-summary-of-summer-2013-gcse-results.pdf>]

⁵⁸ Universities UK, 2012. Patterns and Trends in UK Higher Education 2012 [URL: <http://www.universitiesuk.ac.uk/highereducation/Documents/2012/PatternsAndTrendsInUKHigherEducation2012.pdf>]

⁵⁹ Joseph Rowntree Foundation, 2013. Relative and Absolute Poverty over Time [URL: <http://data.jrf.org.uk/data/relative-absolute-time/>]

11 SEA Topic/SA Category – Population and Human Health

Population

The population of the Plan Area was 782,080 in 2011⁶⁰. Table 11.1 shows the population change in different parts of the Plan Area between 2001 and 2011. Increases have been seen across the area with the exception of the North York Moors National Park which has seen a decrease.

Table 11.1: Population change in the plan area 2001 – 2011

	2001	2011	% change
North Yorkshire	569,660	598,400	+5%
City of York	181,094	198,100	+9.4%
North York Moors National Park	23,939	23,380	-2.3%

Source: Census

Population change is not evenly spread across the county council area and Table 11.2 below shows that recently the population of some parts of the county have been increasing whilst others, particularly those more rural areas, have been decreasing.

Table 11.2: Population change in North Yorkshire and City of York

	2011	2012	2013	2014	2015	% change
Craven	55,400	55,400	55,500	55,600	55,800	+0.2%
Hambleton	89,100	89,700	89,900	89,200	90,000	+3.6%
Harrogate	157,900	158,600	158,200	157,200	157,000	+0.6%
Richmondshire	52,000	53,900	53,900	52,700	52,500	+2.1%
Ryedale	51,800	52,100	52,200	52,655	53,000	-0.6%
Scarborough	108,800	108,600	108,200	108,000	107,900	-0.6%
Selby	83,400	84,100	84,700	85,300	86,900	+5.2%
City of York	197,800	200,000	202,400	204,400	206,800	+8.3%

Source: 2011 to 2015 data ONS mid-year estimates. 2011 data from the Census

Population projections suggest that North Yorkshire's population will increase by around 4% by 2021 to 627,900 and that the City of York's population will increase by around 6.4% to 212,600⁶¹.

The average age of residents in North Yorkshire is 43, although this is higher in some parts of the county, particularly in Craven and Ryedale. In the City of York the average age of residents is 40 which is closer to the England and Yorkshire and Humber averages of 39. At 9.7% in North Yorkshire and 8.4% in the City of York there is a higher proportion of people aged 75 or over in the Plan Area than the regional and national average of 7.8%. However, the City of York also has a relatively high proportion of 15-19 and 20-24 year olds, due to the presence of two universities. It is projected that there will be a further rise in the proportion of people in the older age groups and a fall in the proportion of people in younger age groups in the future. Table 11.3 shows the proportion of population in each age group for North Yorkshire and City of York compared to the regional and national proportions, which

⁶⁰ 2011 Census. This is the sum of the population of the North York Moors National Park and the City of York plus an estimate of the population of the North Yorkshire County Council area outside of the two National Parks.

⁶¹ Interim Census Based Subnational Population Projections (ONS, 2012)

demonstrates the relatively large number of older people and lower proportion of younger people.

Table 11.3: Proportion of population in age groups, 2011

% of population	North Yorkshire and City of York	Yorkshire and Humber	England
0-14	15.9	17.6	17.7
15-29	18.2	21.7	20.0
30-44	18.3	19.7	20.6
45-59	20.9	18.3	19.4
60-74	17.4	14.9	14.6
75+	9.3	7.8	7.7

Source – Census

North Yorkshire is sparsely populated with a population density of around 74 residents per km². In the North York Moors National Park this is considerably sparser with around 16 residents per km², and in the City of York the population density is considerably higher.

The percentage of the population of North Yorkshire from black and minority ethnic groups is 5.6%⁶². This is lower than the regional proportion of 14.2%. Within the county, Harrogate and Richmondshire have higher proportions of 8.3% and 6.6% respectively, whilst Ryedale and Hambleton have lower proportions of 3.8% and 3.7% respectively. The City of York has a slightly higher proportion of black and minority ethnic groups at 9.8% although this is still lower than the regional proportion. The proportion of black and minority ethnic groups living in the North York Moors National Park is significantly lower than regional proportion at around 3%.

Population projections are set out in Table 11.4 below. Population projections are important factors in setting planning policies for minerals and waste, and will be examined in more detail as part of the plan making process.

Table 11.4: Population Projections

	2010	2013	2014	2018	2023	2028	2033
North Yorkshire	593	599	602	611	625	637	647
City of York	197	202	203	208	213	219	225
Yorkshire and the Humber	5,247	5,348	5,382	5,514	5,669	5,814	5,946
England	52,213	53,563	54,018	55,767	57,829	59,709	61,421

Source – ONS and CLG, 2012

The table above shows an increasing population across both North Yorkshire and the City of York with an increase of 9% and 14% respectively until 2033. This shows that the projected growth in the City of York is likely to be significantly above that for North Yorkshire as well as regional (13%) and national (17%) growth projected across the same timeframe.

⁶² 2011 Census

Households and Housing

There are a total of 340,146 households in North Yorkshire and the City of York, an increase of 8.2% since 2001, slightly greater than the national increase of 7.9%⁶³. Average household size is 2.3 persons per house in Yorkshire and the Humber, and data for the Plan Area suggests a similar rate (2.2 in the North York Moors National Park and 2.3 in North Yorkshire and the City of York).

Household growth in the plan area is related to population growth, household size and house building trends. Consequently, percentage growth of households will be influenced differently across the Plan Area depending on these factors. Interim household projections for the next 10 years are shown in Table 11.5 although these only address trends relating to natural change and migration and do not factor in planning policy decision-making.

Table 11.5: Interim Household Projections

	2011	2014	2018	2021
England	22,102	22,765	23,655	24,307
City of York	84	86	89	91
North Yorkshire	258	263	270	276

Source – CLG, 2013

Over 16,000 houses have been completed in the City York and North Yorkshire since 2003, and as would be expected, the majority have been built in the more urban parts of the Plan Area namely City of York, Selby and Harrogate districts. As a result of the economic downturn in recent years, house building has slowed, as shown in Table 11.6. It should be noted that data for 2009 is incomplete and values are missing for 2011 and 2012).

Table 11.6: Number of houses completed in the City York and North Yorkshire

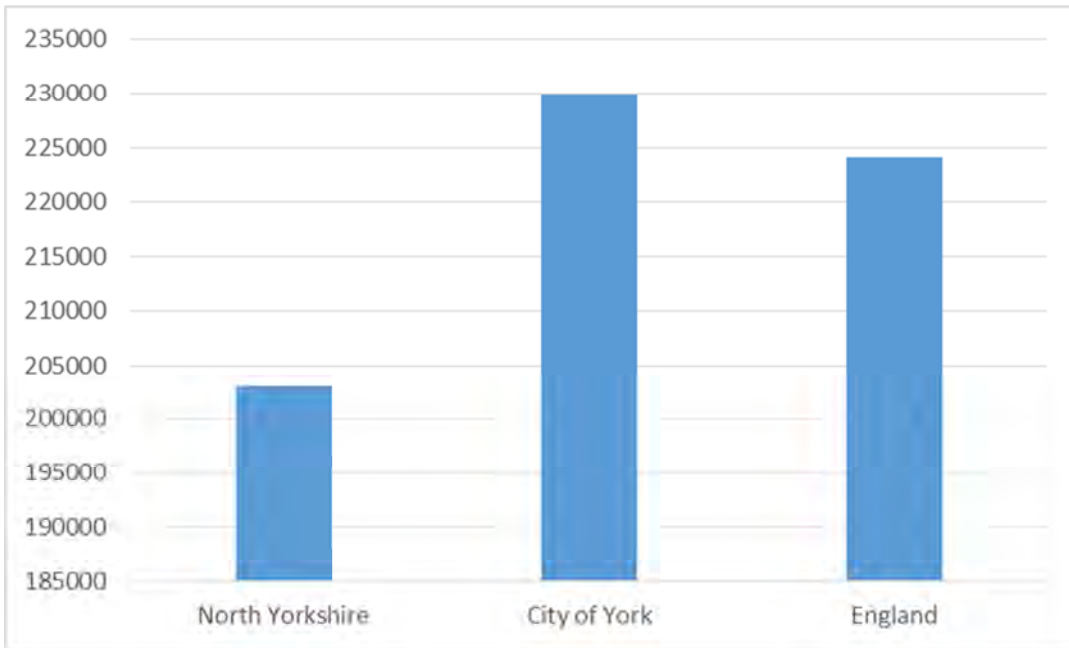
Year	Houses completed
2003	2,126
2004	1,731
2005	1,793
2006	2,345
2007	3,939
2008	2,019
2009	939 (incomplete data)
2010	1,460
2011	?
2012	?
2013	1,380
2014	1,400
2015	1,930
2016	2,520
Total	23,582

Source - <https://www.gov.uk/government/statistics/uk-house-price-index-summary-june-2016>

⁶³ Census, 2001 and 2011

Average house prices in the Joint Plan area are generally higher than the national average, as shown in Figure 11.1 below. House prices between January-June 2016 in the Joint Plan area are generally higher than the English average of £224,100. In some parts of the Plan Area house prices can be considerably higher – the average in the North York Moors National Park in 2013 was £249,896 compared to the National Average of £167,353⁶⁴. It is important to clarify that the historical trend with regard to house prices is one that has been rising although uncertainty remains with regard to future direction.

Figure 11.1: Average house prices (2016)

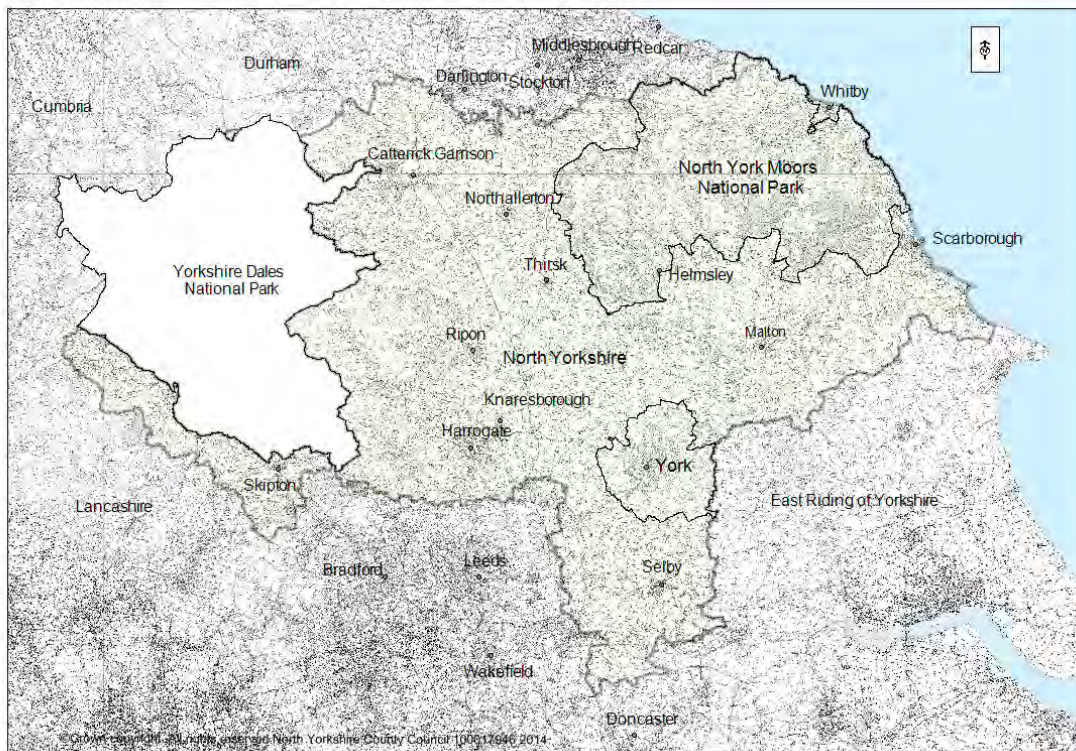


Source – City of York and North Yorkshire data – Land Registry

Figure 11.2 below is a map of the entire Plan Area, from which can be see the locations where all development, including housing, is distributed.

⁶⁴ North York Moors National Park House Price Survey (North York Moors National Park Authority, 2014)

Figure 11.2: Map showing built up areas



Health and Wellbeing

Life expectancy at birth in the Plan Area is higher than the regional and national averages, as set out in Table 11.7. This varies across North Yorkshire and is higher in Craven, Hambleton, Richmondshire and Ryedale than in those districts and boroughs with more urban areas, with life expectancy in Scarborough falling slightly below the national, but not regional average.

Table 11.7: Life expectancy at birth

	Male		Female	
	1991 1993	2012 2014	1991 1993	2012 2014
North Yorkshire	74.6	80.4	79.6	84.0
City of York	74.2	80.1	79.9	83.5
Craven	74.1	81.0	79.9	84.6
Hambleton	75.3	81.3	79.8	85.2
Harrogate	74.8	81.1	79.3	84.3
Richmondshire	73.9	81.4	78.8	83.5
Ryedale	75.5	80.0	80.6	83.4
Scarborough	74.5	78.2	79.9	83.0
Selby	74.4	79.7	78.9	83.7
Yorkshire & Humber	73.1	78.7	78.6	82.4
England	73.69	79.55	79.12	83.20

Source – ONS, life expectancy at birth and at age 65, England and Wales, 1991 - 1993 to 2012 - 2014 (2015)

North Yorkshire has a higher mortality rate per 1,000 populations (9.9) than both the regional and national averages (9.2 and 8.9 respectively)⁶⁵. However, this is most likely to be due to the relatively high number of older people living within the county.

Table 11.8: Mortality rate

	All Deaths
North Yorkshire	9.9
Craven	11.3
Hambleton	9.4
Harrogate	9.6
Richmondshire	8.2
Ryedale	10.2
Scarborough	8
Selby	8.5
Yorkshire & Humber	9.2
England	8.9

Source - ONS, 2012, all deaths (rate per 1,000 people)

Table 11.9 below shows that, with the exception of Scarborough borough, rates of mortality relating to coronary heart disease in all parts of the City of York and North Yorkshire were lower than the regional average for the period 2005 to 2010. In relation to incidences of cancer, North Yorkshire and the City of York as a whole are below the national and regional levels of incidences per 100,000 people, although the rates vary considerably amongst the districts and boroughs, with Richmondshire in particular having a high rate. There does not appear to be any correlation with the how rural or urban an area is. Mortality for respiratory disease is generally lower than England as a whole.

Table 11.9: Coronary Heart Disease (all ages) 2005 to 2010 / Incidences of Cancer / Deaths from Respiratory Disease

	Standardised mortality ratio for coronary heart disease, 2005 to 2010	Incidences of cancer per 100,000 people, 2008	Standardised mortality ratio for deaths from respiratory diseases (all ages) 2006 2010
North Yorkshire	105.98	352.75	-
City of York	93.66	387.27	90.3
North Yorkshire and York	103	360.35	-
Craven	98.91	322.62	81.1
Hambleton	97.01	359.45	70.4
Richmondshire	101.28	422.68	75.3
Ryedale	110.47	361.01	90.5
Scarborough	121.44	343.82	98.2
Selby	101.07	346.76	98.9
England	100	382.14	100

⁶⁵ ONS 2012

	Standardised mortality ratio for coronary heart disease, 2005 to 2010	Incidences of cancer per 100,000 people, 2008	Standardised mortality ratio for deaths from respiratory diseases (all ages) 2006 2010
Yorkshire and the Humber	112.77	391.74	-

Source – www.streamlis.org / Public Health England, 2011, Small Area Indicators for Joint Strategic Needs Assessment

Deaths on the roads are particularly an issue in North Yorkshire which has an extensive network of rural roads. The Table 11.10 below shows that over 400 people are killed or seriously injured on the roads between 2010 and 2011 and Table 11.11 shows that the rate is significantly higher in Ryedale and Richmondshire.

Table 11.10: Road Accident Casualties (Killed and Seriously Injured)

	Number of people killed or seriously injured
2010	491
2011	454

Source: STREAM / North Yorkshire Joint Strategic Needs Assessment

Table 11.11: Road Accident Casualties, Killed or Seriously Injured) casualties per resident population, rate per 100,000, 2010-12

	Number of people killed or seriously injured
North Yorkshire	78.6
Craven	82.9
Hambleton	95.2
Harrogate	67.9
Richmondshire	101.3
Ryedale	116.3
Scarborough	61.6
Selby	62.6

Source: North Yorkshire Joint Strategic Needs Assessment 2014/15

Within the Joint Plan area residents generally describe their health as good or very good, with 82% of North Yorkshire residents and 81% of North York Moors National Park residents reporting this in the 2011 census. Table 11.12 below shows that, with the exception of Scarborough, there are relatively fewer people claiming Employment and Support Allowance (ESA) and Incapacity Benefit in North Yorkshire and City of York.

Table 11.12: Number and proportion of population claiming ESA and Incapacity Benefit (February 2016)

Area Name	ESA and Incapacity Benefit claimants,	ESA and Incapacity Benefit claimants (% of working age population)
Craven	1,280	3.9
Hambleton	1,970	3.7
Harrogate	3,520	3.7
Richmondshire	1,040	3.1
Ryedale	1,220	3.9
Scarborough	5,090	8.0
Selby	2,150	4.0

City of York	5,440	4.0
Redcar and Cleveland	6,900	8.2
Yorkshire and The Humber	229,030	6.8
Great Britain	2,478,740	6.2

Source – NOMIS, undated. Labour Market Profiles

The provision of spaces for recreation plays an important role in keeping people active and healthy. As well as rights of way there are numerous open spaces and parks throughout the Plan Area (see also section 11). The City of York has over 480 hectares of parks and open spaces. Part of the reason for the designation of the North York Moors National Park is for providing opportunities for the understanding and enjoyment of the Park’s special qualities and at 1,436sq km is therefore an important asset in supporting healthy lifestyles. Further discussion on recreation and leisure is provided in Section 11 below.

Key messages from the baseline

- There are many sparsely populated parishes and most settlements are relatively small. However City of York is a significant city with a population of over 206,900 in the heart of the Plan Area;
- All districts within the Plan Area have population estimates of over 50,000. The largest settlements outside of the City of York are, Harrogate and Scarborough, each with population estimate of 157,000 and 107,900 respectively. Most people, however, live outside of rural settlements;
- Population of the Plan Area as a whole is increasing and is expected to continue to rise, but at a lower rate than the region as a whole;
- North Yorkshire as a whole has a higher proportion of older people than the regional and nationally averages. However a younger population profile can be found in the City of York. In the future older people will form a larger proportion of the population;
- Most districts and the City of York receive a net inflow of new residents, though there is a net outflow in Craven; Harrogate and Richmondshire receive the most new residents;
- Life expectancy is increasing in all Districts in North Yorkshire, but there are significant geographical variations in both male and female life expectancy within the County; recent figures (2012-2014) show that Scarborough is the only district with lower male and female life expectancy than England as a whole;

Predicted Future Trends

- It is likely that there will be a continuation of current trends in the short to medium term in relation to population and households. Population and household growth is projected to grow across the Joint Plan area although this is identified to be unevenly spread. Longer term effects on growth are likely to be influenced by social trends as well as strategic planning and house building rates, which vary within each authority both in terms of quantum and timescales for delivery. This may also affect settlement patterns and the locations people live and may have an impact on the urban/rural household split.
- Peoples’ health in the Joint Plan Area is also likely to continue, in line with the existing trends over the short, medium and long-term of the Joint Plan. It is anticipated that life expectancy will continue to increase and that the general health of the population remains generally good. External influences on health in the medium to long term will be in line with improving / access to medical treatment as well as continuing implementation of safety schemes (such as road safety). The NPPF (Section 8:

Promoting Healthy Communities) would also be a default position for ensuring consideration for health and safety should plans or applications be taken forward.

Table 11.13: Population and Human Health Indicators

Indicator	Baseline Data (and year)	Source
Incapacity benefit claimants as percentage of working age population	See Table 11.12	NOMIS/STREAM
Mortality rate from coronary heart disease	See Table 11.8	STREAM
Road accident casualties	See Table 11.10	STREAM
Life expectancy at birth	See Table 11.7	ONS
All age respiratory diseases	See Table 11.9	Public Health England

12 SEA Topic/SA Category - Recreation and Leisure

Recreational Activities

As mentioned above access to the natural environment is important for peoples' health and wellbeing, and a key aim in the Natural Environment White Paper. A Natural England survey of visits to places outdoors shows that in North Yorkshire (including City of York) almost half of the population visit outdoors places once a week, greater than the England average, and most of these visit the countryside, as shown in Table 12.1. Where towns and cities are referred to, outdoors means the open spaces in these places.

Table 12.1: Places visited 'outdoors'

	North Yorkshire (% of visitors)	England (% of visitors)
Town or city	25	38
Seaside resort or town	14	6
Other seaside coastline	4	4
Countryside	58	52

Source - <http://naturalengland.tns-global.com/viewtable.aspx> <http://naturalengland.tns-global.com/viewtable.aspx>

As well as the countryside, heritage attractions are important tourism destinations in the Joint Plan Area. Section 8 identifies historic assets in the Plan Area and Table 12.2 below shows that heritage assets are important visitor attractions.

Table 12.2: Visitors to heritage assets in North Yorkshire and City of York

Attraction	Number of visitors (000s)						
	2009	2010	2011	2012	2013	2014	2015
Castles / Forts	436	408	406	373	430	456	460
Gardens	371	300	398	420	433	483	455
Historic Houses	445	560	610	445	591	596	547
Historic Monuments / Archaeological Site	222	194	198	177	200	213	228
Visitor / Heritage centres	157	244	207	218	308	343	360
Places of worship (still in use)	815	445	442	150	586	618	150
Other historic properties	349	343	351	330	348	372	376

Source: VisitBritain Visit England. Annual Surveys of Visits to Visitor Attractions: Trends in England: Annual Report for Heritage Counts <https://www.visitbritain.org/annual-survey-visits-visitor-attractions>

North Yorkshire County Council is responsible for managing the longest public rights of way network in England at over 10,000km. The Yorkshire Dales and North York Moors National Park Authorities manage approximately 4,000km through an agency agreement with the County Council. This network provides routes into some of the finest landscapes and countryside in Britain. The North York Moors National Park has 2,300km of right of way as well as 65,000 hectares of open access land⁶⁶.

⁶⁶ North York Moors National Park Management Plan (North York Moors National Park Authority, 20162)- <http://www.northyorkmoors.org.uk/about-us/how-the-authority-works/management-plan>.

Figure 12.1 below shows the distribution of public rights of way in the Joint Plan area. Figure 12.2 shows the National Cycle Network across the Joint Plan area.

Figure 12.1: Public Rights of Way

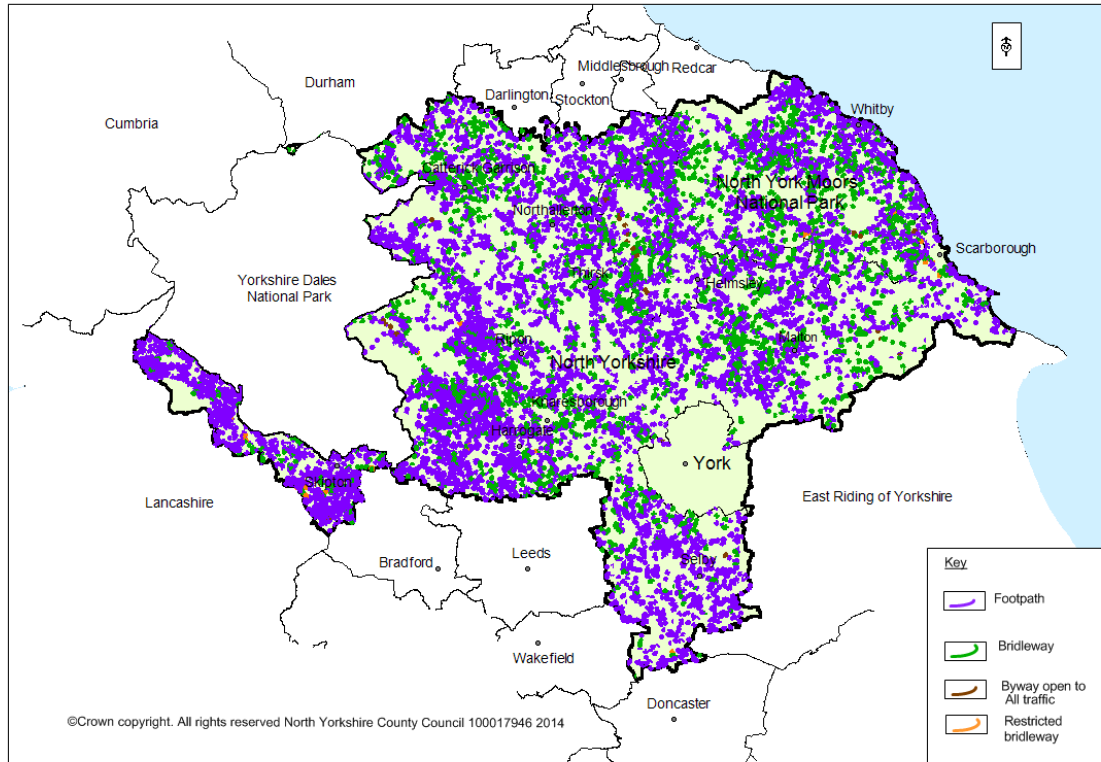
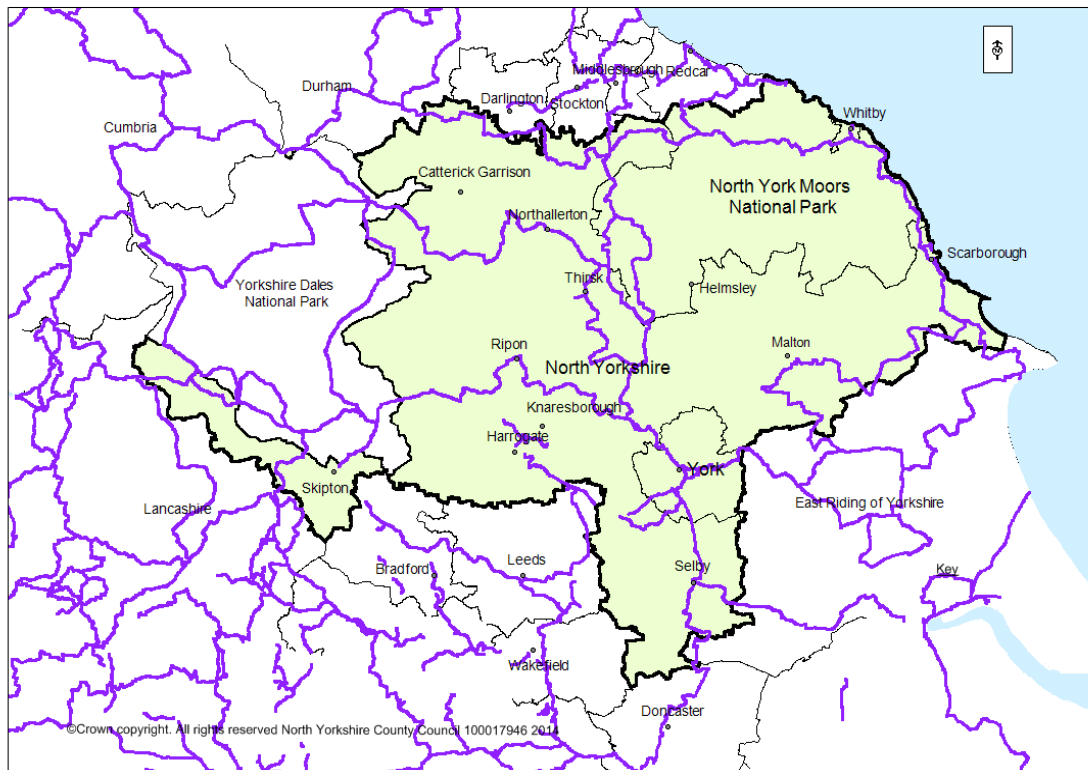


Figure 12.2: Sustrans National Cycle Network Routes



Natural England maintain a web map of open access land and coastal access land. This is available at <http://www.openaccess.naturalengland.org.uk/>

The second statutory purpose of National Parks is to ‘Promote opportunities for the understanding and enjoyment of the special qualities of the Park by the public’ The North York Moors baseline shows that within the National Park the main activities people undertake are long walks, visiting country pubs, visiting the beach and short walks. Ease of use of rights of way has been improving over recent years. The Casual User Survey showed that in 2011 96% of visitors to the Park states that they had enjoyed their visit. Visitor numbers have however been declining in recent years, with a drop of around 6% since 2007⁶⁷.

The world famous heritage of York, including the Minster and City Walls, makes it a popular visitor destination for people from across the globe.

Key sustainability issues arising from the baseline

- The Plan Area provides many opportunities for recreation and leisure including the North York Moors National Park and an extensive network of rights of way.
- The natural environment and heritage are key attractions.

⁶⁷ Scarborough Tourism Economic Activity Monitor reports 2008 – 2012 (Global Tourism Solution (UK) Ltd)

Predicted Future Trends

- The Joint Plan area has good access to a variety of recreation and leisure opportunities that attracts people from within and outside of the Joint Plan Area, which is likely to sustain for the duration of the plan.
- The opportunities offered in relation to the natural and historic environment, such as the rights of way access and availability of historic places and buildings, is extensive and unlikely to change from its current form in the short, medium or long term.
- External influences on recreational and leisure in the medium to long-term would be as a result of strategic planning at local authority level in line with the NPPF. Any plans or programmes would need to consider their relationship and influence on recreation and leisure, as per national planning policy, prior to their development to ensure that these are retained or sufficiently provided for the benefit of the population.

Table 12.3: Recreation and Leisure Indicators

Indicator	Baseline Data (and year)	Source
Visitor days to the North York Moors National Park	10.2million visitor days (2010)	STEAM reports
Number of visitors to historic attractions	See Table 12.2	VisitEngland

13 SEA Topic/SA Category - Communities

Access to Services and Facilities

Accessibility to important facilities and services varies significantly across the Joint Plan Area. As would be expected, the more rural parts of the plan area have poorer access to services and facilities compared to the more urban parts. Some of the predominantly rural parts of the Joint Plan Area are in the worst 10% of areas nationally in terms of access to GPs, primary schools, post offices and convenience stores. In the North York Moors National Park the number of villages with a general store has declined from 44% in 1989 to 28% in 2012, and the number with a Post Office service has declined from 63% to 29% over the same period⁶⁸. There are 20 household waste recycling centres in North Yorkshire, all of which accept commercial waste for a charge, and 2 in York.

Broadband and Communications

In the past access to broadband has been variable, particularly in rural areas. Due to a project called Superfast North Yorkshire, as of August 2015, 28% of the premises will be connected to a fibre enabled broadband. Superfast North Yorkshire is also working to identify harder to reach areas, such areas have incurred greater than expected engineering challenges. A minimum of 2mbps will be available to premises in all these harder to reach areas. Full details are available at www.superfastnorthyorkshire.com.

Crime

Table 13.1 below shows that only 10% of the total incidences of criminal damage (including arson) occurring in the Yorkshire and Humber region, between 2010-13 were in North Yorkshire and City of York, suggesting that crime is not particularly widespread in the area. This is reflected in the perception of crime statistics which shows that far fewer people in North Yorkshire and City of York consider anti-social behaviour to be a problem in their local area when compared to regional and national levels. Scarborough and Selby have the highest rates in the Plan Area, but these are still below national and regional averages.

Table 13.1: Criminal damage (including arson) – offences between April to March and percentage who think anti-social behaviour is a problem in their area (2008 and 2016)

	Number of criminal damage offences			% who think that anti social behaviour is a problem in their area	
	2010/11	2011/12	2012/13	2008	2016
Craven	400	380	262	9.5	5.69
Hambleton	722	668	539	8.8	5.70
Harrogate	1295	1119	1022	9.3	6.34
Richmondshire	356	306	265	7.2	4.87
Ryedale	350	317	223	10.8	5.28
Scarborough	1579	1240	1236	16.3	12.55
Selby	640	560	513	14.5	7.18

⁶⁸ State of the Park Report (North York Moors National Park Authority, 2012) and Annual Monitoring Report 2014 (<http://www.northyorkmoors.org.uk/planning/framework/Final-AR-2014.pdf>)

	Number of criminal damage offences			% who think that anti social behaviour is a problem in their area	
	2010/11	2011/12	2012/13	2008	2016
City of York	2477	2073	1854	11.3	8.13
Yorkshire and Humber	76,262	68,641	59,371	22.52	22.52
England	652,587	584,660	493,620	20.71	20.71

Source: ONS Neighbourhood Statistics and STREAM

Fly tipping is the illegal deposit of waste on land contrary to Section 33(1)(a) of the Environmental Protection Act 1990. The types of waste fly tipped range from 'black bag' waste to large deposits of materials such as industrial waste, tyres, construction material and liquid waste. Fly tipping is a significant blight on local environments; a source of pollution; a potential danger to public health and hazard to wildlife. It also undermines legitimate waste businesses where unscrupulous operators undercut those operating within the law. Local councils and the Environment Agency (EA) both have a responsibility in respect of illegally deposited waste. Local councils deal with most cases of fly tipping on public land, whilst the EA investigates and enforces against the larger, more serious and organised illegal waste crimes.

Table 13.2 below shows that within the Plan area Scarborough and City of York would appear to be locations where fly tipping is reported most frequently by local authorities.

Table 13.2: Fly tipping Incidents reported by Local Authorities in North Yorkshire county and City of York council.

	Number of fly tipping incidents		
	2012 13	2013 14	2014 15
Craven	86	92	119
Hambleton	184	203	237
Harrogate	349	337	308
Richmondshire	126	65	88
Ryedale	74	75	133
Scarborough	3,939	3799	2148
Selby	482	446	564
City of York	1034	466	1138
Redcar and Cleveland	2,424	2724	2676

Source: Defra Flycapture data in Defra, 2013. Fly tipping Incidents and Actions Reported by Local Authorities in 2012-15

Key messages from the baseline

- Access to services is generally poor in the rural parts of the Plan area whilst the urban areas have a wide range of services and facilities;
- The most remote parts of the Plan area have little or poor access to broadband and mobile phone coverage;
- Crime and the perception of crime are not widespread issues.

Predicted future trends

- It is likely that the current variation in accessibility to services between rural and more urban areas will continue in the short term, however there is more uncertainty regarding medium term and long term trends. It is likely that rural areas will continue to have poorer access to services such as post offices, schools and GP surgeries however it is possible that improved access to broadband and an increase in services available online, will contribute to re-addressing the balance between accessibility in rural and urban areas in relation to certain services (e.g. online grocery shopping). These trends are largely not dependent upon the Minerals and Waste Joint Plan.
- It is likely that access to broadband and communications will continue to improve in the short term, medium term and long term led by technological advances and a shift to online businesses/services. These trends are largely not dependent upon the Minerals and Waste Joint Plan.
- It is reasonable to assume that crime will continue to remain relatively low in the short term (compared to national and regional averages), however levels of crime in the medium term and long term are more uncertain as these will be determined by a number of external influences including the economy, governance and the law enforcement system. These trends are largely not dependent upon the Minerals and Waste Joint Plan.

Table 13.3: Communities Indicators

Indicator	Baseline Data (and year)	Source
Flytipping incidents (by local authority)	See Table 13.2	Defra / STREAM
Anti-social behaviour incidents	See Table 13.1	ONS / STREAM

14 SEA Topic/SA Category – Material Assets and Resources

Waste

The Waste Framework Directive (2008/98/EC) was originally developed in 1975 and provides the legislative framework for the collection, transport, recovery and disposal of waste. The Directive requires all EU Member States to:

- take the necessary measures to ensure that waste is treated and disposed of correctly;
- set targets for re-use and recycling; and
- draw up binding national programmes for waste prevention.

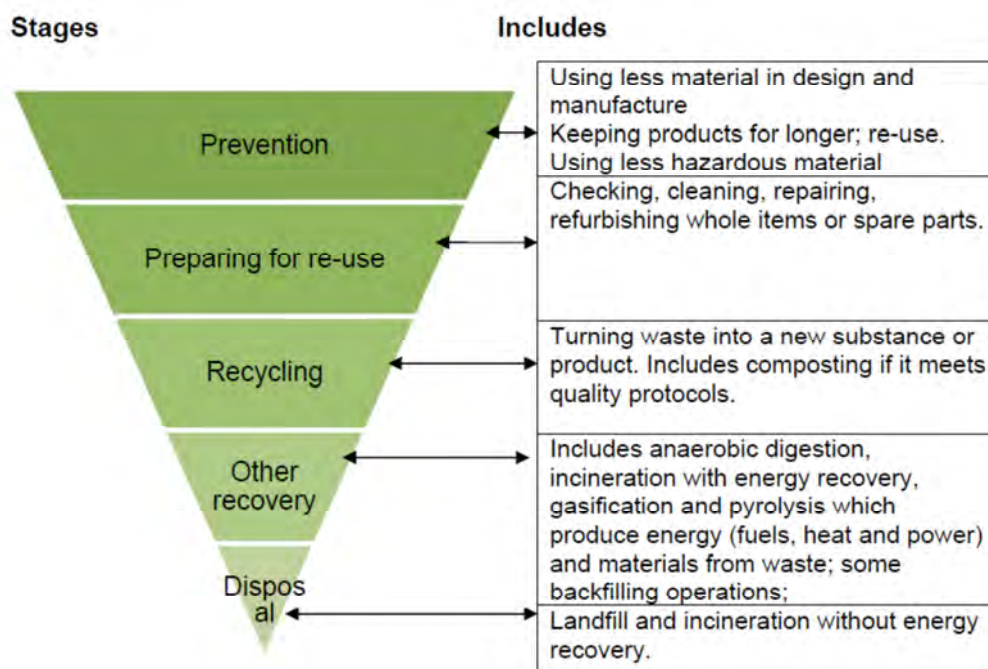
The Directive introduced the concept of the ‘waste hierarchy’ (see Figure 14.1) which places five categories of waste management in their order of priority: prevention, preparing for re-use, recycle, recovery and disposal. This concept continues to be a guiding theme for waste policy at all levels and places greater emphasis upon preventing the production of waste at source as a way of reducing the necessity to deal with it after disposal, as this offers the greatest environmental gains. With regard to the Minerals and Waste Joint Plan, a key concern is ensuring that this set of priorities is central to development of policy and proposals for specific waste management facilities.

The Waste Framework Directive set targets for waste treatment in member states, including:

- Recycle 50% by weight of household waste by 2020; and
- Recycle 70% by weight of construction, demolition and excavation waste by 2020.

The Directive places greater emphasis upon the implementation of the waste hierarchy concept than its predecessor (the 2006 Waste Framework Directive), stating that the member states must apply the hierarchy as a ‘priority order’ throughout waste management legislation and policy. Annex I and II of the Waste Framework Directive define what is disposal and what is recovery of waste.

Figure 14.1: Waste hierarchy, as presented in the Waste Management Plan for England December 2013



Waste is generated from a variety of sources in the plan area, including from households, businesses, agriculture, construction and industrial uses.

In 2014/15 a total of 300,704 tonnes of household waste were produced in North Yorkshire. Table 14.1 shows changes in the amounts of waste produced over the past few years⁶⁹. This shows that total levels of waste produced have been declining. Whilst there is no specific data for the North York Moors National Park, most of this is covered by North Yorkshire data (with the exception of the small part of the Park in Redcar and Cleveland).

Table 14.1: Production of household waste (tonnes)

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	% change
North Yorkshire	306,687	305,778	301,267	298,470	303,436	300,704	-0.9%
City of York	106,290	102,460	90,321	86,308	85,595	89,876	4.7%
Plan Area	412,977	408,238	391,588	384,778	389,031	390,580	3.8%

Source – North Yorkshire County Council and City of York Council data

Table 14.2 below shows the proportion of household waste which has been reused, recycled or composted compared to the proportion which has been landfilled. In line with the principles of the waste hierarchy, the York and North Yorkshire Waste Management Strategy has set targets to recycle or compost 45% of household waste by 2013 and to recycle or compost 50% of household waste by 2020, and to divert 75% away from landfill by 2013.⁷⁰

⁶⁹ Tables 14.2 includes waste arising in the Yorkshire Dales and North York Moors National Parks within the County of North Yorkshire. Both National Parks fall within the County Council's remit as Waste Management Authority. Hence, It is not currently practicable to disaggregate the arisings data to relate only to the part of the Plan Area. (<http://m.northyorks.gov.uk/CHttpHandler.ashx?id=21198&p=0>).

⁷⁰ <http://www.letstalklessrubbish.com/index.aspx?articleid=17204>

Table 14.2: Management of household waste

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Craven						
Reused, recycled, composted (%)	36.8	43.0	43.3	43.4	42.6	42.1
Hambleton						
Reused, recycled, composted (%)	45.3	44.0	46.3	45.2	46.9	47.7
Harrogate						
Reused, recycled, composted (%)	31.2	33.0	35.3	34.6	40.3	41.3
Richmondshire						
Reused, recycled, composted (%)	43.0	42.0	43.2	41.6	41.4	37.7
Ryedale						
Reused, recycled, composted (%)	51.9	51.0	51.9	52.0	52.7	48.1
Scarborough						
Reused, recycled, composted (%)	39.5	40.0	40.1	40.9	38.8	40.7
Selby						
Reused, recycled, composted (%)	38.9	43.0	43.0	43.3	42.9	43.8
North Yorkshire						
Reused, recycled, composted (%)	44.3	45.1	46.2	45.7	46.9	48.2
Landfilled (%)	58.3	56.7	54.1	54.6	48.5	52.5
Recovery of heat and power (%)	0.03	0.03	0.03	0	4.97	1.39
City of York						
Reused, recycled, composted (%)	43.26	45.1	46.4	46.1	43.6	42.5
Landfilled (%)	56.7	54.5	55.1	53.9	56.4	53.6
Recovery of heat and power (%)	0	0	0			

Source – North Yorkshire County Council, City of York Council data (figures may not add up) and letsrecycle (<http://www.letsrecycle.com/councils/league-tables/>).

The total amount of Local Authority Collected Waste (which includes all waste collected by the local authority, not just household waste) has also declined in North Yorkshire over recent years from 352,116 tonnes in 2009/10 to 326,304 tonnes in 2014/15. Most Local Authority Collected Waste from the Redcar and Cleveland part of the National Park that isn't reused, recycled or composted is sent to Haverton Hill energy from waste plant, in Stockton-on-Tees borough, and is only sent to landfill when the plant is not operational.

Arisings of commercial and industrial waste (C&I waste), construction, demolition and excavation (CD&E) waste, agricultural waste and hazardous waste in the sub-region⁷¹ are shown in Table 14.3 below. C&I waste arisings have remained relatively constant in North

⁷¹ North Yorkshire County Council and City of York, including the parts of the two National Parks in North Yorkshire

Yorkshire over recent years⁷². The vast majority of this waste arises in the North Yorkshire County Council area, with very low amounts arising in the National Park.

Table 14.3: Arisings of C&I, CD&E, Agricultural and Hazardous Waste

Waste Stream	Waste arisings 2014 (tonnes)
C&I Waste	322,872
CD&E	820,705
Agricultural	33,786
Hazardous	33,143

Source – North Yorkshire Sub-Region Waste Arisings and Capacity Requirements Update Report (Urban Vision / 4Resources, September 2016).

In relation to Low Level (Non-Nuclear) Radioactive Waste, the Waste Arising and Capacity Requirements report estimates that the total amount arisings in the Joint Plan area is not currently likely to exceed 50m³ per year⁷³.

Landfill is the predominant method of waste management in the Plan area, but amounts of waste sent to landfill have been decreasing over recent years. There are 19 landfill sites in the North Yorkshire part of the Joint Plan area and one in the City of York area. There are no landfill sites in the North York Moors National Park as waste from within the Park is largely managed elsewhere in North Yorkshire or in the Tees Valley as explained above.

There are six sites which capture and utilise landfill gas for electricity generation in North Yorkshire with a total capacity of 9.8MW. In 2011/12 63,121MWh, 61,692MWh in 2012/13 and 56,449MWh in 2013/14 of electricity was generated from these facilities⁷⁴. In addition the Allerton Waste Recovery Park (AWRP) project which was granted planning permission in 2013 but is not yet operational, has a 27 MW capacity, 24 MW of which will be proposed to be exported to the national grid.

The official biogas map shows that a number of agricultural and industrial Anaerobic Digestion facilities are present in the Plan Area. The official biogas plant map can be viewed in a web map format at <http://www.biogas-info.co.uk/index.php/ad-map.html>.

In North Yorkshire, composted household waste between 2010 and 2015 average between 20-22%. In 2013/14 22.1% of household waste was composted, falling to 20.7% in 2014/15⁷⁵.

⁷² Urban Mines, Projection of Commercial & Industrial Waste Arisings in Yorkshire & Humber to 2026, November 2009 ([http://www.lgyh.gov.uk/Library/EditorDownloads/Projection%20of%20Commercial%20Industrial%20Waste%20Arisings%20n%20Yorkshire%20to%202026%20\(REY%20Nov%202009\).pdf](http://www.lgyh.gov.uk/Library/EditorDownloads/Projection%20of%20Commercial%20Industrial%20Waste%20Arisings%20n%20Yorkshire%20to%202026%20(REY%20Nov%202009).pdf))

⁷³ North Yorkshire Sub-Region Waste Arisings and Capacity Requirements Update Report (Urban Vision / 4Resources, September 2016).

⁷⁴ Authority Monitoring Report (North Yorkshire County Council, 2015 (http://www.northyorks.gov.uk/media/21198/Authoritys-monitoring-report-2014-15/pdf/Authority_s_monitoring_report_2014-15.pdf)

⁷⁵ NYCC Waste Management Data

More detail on waste arisings and capacity is contained in the Waste Topic Papers, the Waste Arisings and Capacity Requirements reports and the Waste Technical Papers of the three authorities.

Minerals

Generally, the geology of North Yorkshire is comprised of sedimentary rocks including the western-dominating Carboniferous Limestone which overlies the Upper Carboniferous Millstone Grit. Millstone Grit is also exposed in the west of the county, which gives rise to the uplands of the Yorkshire Dales and the North Pennines. To the east of the Millstone Grit exposures the Permian Magnesian Limestone and Triassic mudstones and sandstones are exposed (these underlie the lower-lying Vale of York). North-east Yorkshire is dominated by the Hambleton Hills and the North York Moors – the whole of this area comprises of mudstones and sandstones of Jurassic age, with the sandstone forming the main scarp slope around the edges of hills and mudstones forming the lower ground. The Vale of Pickering is underlain by the Jurassic Kimmeridge Clay, which gives way to the Speeton Clay and white limestone of the chalk which forms the Yorkshire Wolds in the south-east of the County.⁷⁶

The following minerals are the main ones present in the Joint Plan Area⁷⁷:

- sand and gravel;
- crushed rock;
- silica sand;
- brick clay;
- coal;
- potash and salt;
- building stone;
- secondary and recycled materials; and
- oil and gas.

Aggregates

Aggregates are materials which are used in the construction industry for purposes such as making concrete, mortar or asphalt for roadstone, drainage or bulk filling. In the Joint Plan Area the aggregates mined are limestone, chalk and crushed rock. There are two broad forms of aggregate in the Joint Plan Area – sand and gravel and crushed rock. Long term average sales for sand and gravel and crushed rock over the past 14 years being 2.1 million and 3.4 million tonnes respectively, are shown in Table 14.4 below. This average is below the apportionment of 4.63 million tonnes per year which was set at a regional level, but above the 10 years average sales, which is the method recommended by the NPPF⁷⁸. This is shown for

⁷⁶ http://www.naturalengland.org.uk/ourwork/conservation/geodiversity/englands/counties/area_ID41.aspx
http://www.naturalengland.org.uk/ourwork/conservation/geodiversity/englands/counties/area_ID41.aspx

⁷⁷ For up to date list of site by district see- North Yorkshire County Council Mineral Core Strategy Evidence Paper 2: Mineral Specific Evidence (August 2016)

⁷⁸ The NPPF replaced Minerals Planning Policy 1: Planning for Minerals 2006 (MPS1) in March 2012 and requires Mineral Planning Authorities to plan for an adequate and steady supply of aggregate to the construction industry.

each individual authority and for the Plan Area as a whole. Sales from the North York Moors, which were comparatively small, ceased following the closure of both aggregates quarries. There are no operational aggregates quarries in the City of York area. Crushed rock mainly supplies markets in the Plan Area and the rest of the Yorkshire and Humber with smaller proportions going to the north east and north west. Much of the sand and gravel produced stays within the Plan Area, although over a third goes to the north east region, with smaller amounts supplying markets in west and south Yorkshire.

Table 14.4: Historic sales Million tonnes of aggregate from Mineral Product Association (MPA) in the Joint Plan Area 2006 – 2015

	Sand and Gravel sales (mt)				Crushed rock sales (mt)			
	NYCC	NYMNP	CYC	Total	NYCC	NYMNP	CYC	Total
2006	2.7	0	0	2.7	3.8	0.1	0	3.9
2007	2.7	0	0	2.7	4.3	0.1	0	4.4
2008	2.3	0	0	2.3	3.8	0	0	3.8
2009	1.7	0	0	1.7	2.6	0	0	2.6
2010	1.6	0	0	1.6	2.9	0	0	2.9
2011	1.7	0	0	1.7	1.9	0	0	1.9
2012	1.6	0	0	1.6	2.4	0	0	2.4
2013	1.5	0	0	1.5	2.8	0	0	2.8
2014	1.7	0	0	1.7	3.4	0	0	3.4
2015	1.7	0	0	1.7	3.7	0	0	3.7
Average	1.9	0	0	1.9	3.2	0	0	3.2

Source: North Yorkshire Sub-region Local Aggregate Assessment, Second Review September 2016 North Yorkshire Authority Monitoring Report 2014/15 and North Yorkshire County Council Mineral Core Strategy Evidence Paper 2: Mineral Specific Evidence (August 2016)⁷⁹

For the NYCC area, sales of sand and gravel are split into northwards and southwards distribution areas, reflecting the markets supplied by different parts of the county, and building sand. Historic sales are shown in Table 14.6 below.

Table 14.5: Sales of landwon sand and gravel for NYCC split into distribution areas

	Northwards distribution area (mt)	Southwards distribution area (mt)	Building sand (mt)
2009	0.89	0.83	0.07
2010	0.67	0.88	0.09
2011	0.75	0.87	0.11
2012	0.57	0.89	0.12
2013	0.50	0.87	0.12
2014	0.66	0.99	0.07
2015	0.58	1.03	0.13
7 yr average	0.76	0.91	0.10
7 yr average as % of total	43%	51%	6%

Source: North Yorkshire Sub-region Local Aggregate Assessment, 2016.

Total reserves of aggregates at the end of 2014 and 2015 are shown in Table 14.7 below. (Reserves relate to the amount of material permitted for extraction at sites with a valid

⁷⁹ Yorkshire and Humber RAWP, 1998 – 2009 and NYCC 2010, 2011, 2012, 2013, 2014 and 2015 minerals survey

planning permission). All reserves in the Plan Area are located within the NYCC area. Reserves have declined over the past decade – in 2011 the NYCC area had 16.24mt of sand and gravel in reserves and 97.7mt of crushed rock in reserves respectively.

Table 14.6: Aggregate Reserves at end 2014 and 2015

	Sand and Gravel (mt)		Crushed rock (mt)	
	2014	2015	2014	2015
NYCC	16.9	19.5	98.6	95.4

Source: North Yorkshire Sub-region Local Aggregate Assessment, Second Review September 2016, North Yorkshire Authority Monitoring Report 2014/15 and North Yorkshire Authority Monitoring Report 2014/15 and North Yorkshire County Council Mineral Core Strategy Evidence Paper 2: Mineral Specific Evidence (August 2016)⁸⁰

For NYCC, sand and gravel reserves can be split between the two distribution areas and building sand, as shown in Table 14.7 below.

Table 14.7: Sand and Gravel reserves in NYCC, by distribution area, 2006 – 2015

	Northwards distribution area (mt)	Southwards distribution area (mt)	Building sand (mt)	Total (mt)
2006	10.44	9.15	3.26	22.85
2007	9.75	7.75	3.15	20.65
2008	8.84	8.11	3.07	20.02
2009	9.20	7.50	1.69	18.42
2010	8.53	7.84	1.60	17.98
2011	7.78	6.97	1.49	16.24
2012	6.6	7.1	1.0	14.6
2013	6.98	10.71	0.94	18.63
2014	6.78	9.36	0.78	16.91
2015	6.18	12.42	0.86	19.46

Source: North Yorkshire Sub-region Local Aggregate Assessment, Second Review September 2016, North Yorkshire Authority Monitoring Report 2014/15 and North Yorkshire Authority Monitoring Report 2014/15 and North Yorkshire County Council Mineral Core Strategy Evidence Paper 2: Mineral Specific Evidence (August 2016)

Based upon 10 year average sales (as required by the NPPF) landbanks, in terms of years of supply, are shown in Table 14.9. There are no landbanks within the North York Moors National Park and the City of York as there are no reserves in these areas. In the past landbanks were calculated based upon apportionments in the Regional Spatial Strategy and, more recently, based upon 7 year average sales (as advised by the Yorkshire and Humber Regional Aggregates Working Party). The total years of landbanks for sand and gravel have remained relatively the same from 2006 (8.7 years) to 2015 (8.0 years). For crushed rock the total years of landbanks has increased from 22.7 years in 2006 to 25.4 years in 2015 (The NPPF requires landbanks of 7 years for sand and gravel and 10 years for crushed rock).

⁸⁰ NB – Information is only available at the NYCC level and not for CYC

Table 14.8: Aggregate Landbanks at 2014 and 2015 based upon 10 year average

	Sand and Gravel (years)		Crushed Rock (years)	
	2014	2015	2014	2015
NYCC	6.9	8.0	26.7	25.4
NYMNP	-	-	-	-
CYC	-	-	-	-

Source: North Yorkshire Sub-region Local Aggregate Assessment, Second Review September 2016, North Yorkshire Authority Monitoring Report 2014/15 and North Yorkshire County Council Mineral Core Strategy Evidence Paper 2: Mineral Specific Evidence (August 2016).

The sand and gravel landbanks can also be split between the two distribution areas and building sand, as shown in Table 14.9 below. At the end of 2015 the landbank in the northwards distribution area was below 7 years level, but was above it in the southwards distribution area. The landbank of building sand was around 7 years (the NPPF requires landbanks of at least 7 years for sand and gravel).

Table 14.9: Sand and gravel landbanks in the NYCC area 2014-2015

	Northwards distribution area (years)	Southwards distribution area (years)	Building sand (years)
2014	6.2	7.7	6.7
2015	5.6	10.2	7.5

Source: North Yorkshire Sub-region Local Aggregate Assessment, Second Review September 2016 and North Yorkshire Authority Monitoring Report 2014/15.

Secondary Aggregates

Secondary aggregates are the by-products of other processes which can be used as aggregates. Secondary aggregates are only sourced from within the NYCC part of the Plan Area. Table 14.10 shows the volume of sales of secondary and recycled aggregates produced over the past ten years. The amount produced has generally stayed around the same over this period. Secondary aggregates in the Plan Area have historically been sourced from Drax, Eggborough, Ferrybridge and Gale Common power stations and spoil from Kellingly Colliery.⁸¹

Table 14.10: Sales of secondary aggregates

	Ash			Colliery Spoil Sales (mt)
	Pulverised Fuel Ash (mt)	Furnace Bottom Ash (mt)	Total Ash (mt)	
2002	0.87	0.305	1.174	0.82
2003	0.909	0.378	1.287	0.67
2004	0.979	0.367	1.346	0.48
2005	0.97	0.35	1.32	0.41
2006	1.02	0.4	1.42	0.24

⁸¹ Kellingly and Ferrybridge have both recently closed and therefore will not continue to be sources of aggregate and spoil.

	Ash			Colliery
2007	0.97	0.41	1.38	0.08
2008	0.652	0.318	0.97	0.15
2009	0.635	0.202	0.837	0.012
2010	0.826	0.228	1.054	0.005
2011	0.968	0.302	1.27	0.01
2012	1.681	0.34	2.023	0.02
2013	0.87	0.31	1.18	0.05
2014	0.86	0.28	1.14	0.03

Source: NYCC Authority Annual Monitoring Report 2011/2012 and 2014/2015 - YHRAWP and NYCC Survey 1999 – 2013

Recycled aggregates arise from various sources including from Construction, Demolition and Excavation Waste (CDEW), which is produced during construction and demolition of buildings, structures and civil engineering works. Other forms of recycled aggregate include asphalt planings from resurfacing roads and railway track ballast. Recycled aggregates, once processed, have generally been used for less demanding applications such as fill, where they mainly compete with crushed rock. Specific data on production or sales is not available.

Non-aggregates

There are several other minerals which are quarried in the Plan Area, but these are generally produced in much smaller quantities than aggregates and coal. The other minerals include building stone, clay, silica sand, onshore gas, potash and salt. The potash mine at Boulby is the UK's only potash mine⁸², and also produces large quantities of salt. Table 14.12 provides data summarising, for the most recent year available, how much of each mineral is produced in the Yorkshire and Humber region, compared with production in the Plan Area and, where applicable, the percentage share North Yorkshire provides compared with the regional figure.

There has been no regional figure for aggregate minerals published for 2010 and 2011 due to the Regional Aggregate Working Party not collecting data for this period, so the table is based on the last year that data was compiled for the region, which was 2009.

Table 14.11: Non-aggregate minerals production

Mineral Type	Yorkshire and Humber Region (mt)	Plan Area Production (mt)	% of regional total originating from within the Plan area	Notes
Deep Mined Coal	3.31	1.62	48.90%	2011 data ⁸³
	3.42	2.0	58.5%	2012 data ⁸⁴

⁸² Although in 2015 planning was granted for a new mine near Whitby.

⁸³ UK Minerals Yearbook 2011 – Statistical data to 2010 (British Geological Survey, 2012) (<https://www.bgs.ac.uk/downloads/browse.cfm?sec=12&cat=132>)

⁸⁴ UK Minerals Yearbook 2013 – Statistical data to 2012 (British Geological Survey, 2013) (<https://www.bgs.ac.uk/downloads/browse.cfm?sec=12&cat=132>)

Mineral Type	Yorkshire and Humber Region (mt)	Plan Area Production (mt)	% of regional total originating from within the Plan area	Notes
Clay	1.05 (2009) ⁸⁵	-	-	121 thousand tonnes extracted for construction use ⁸⁶ . 127,000 thousand tonnes clay was extracted during 2012 ⁸⁷
Silica Sand	0.075 (2008) ⁸⁸	c. 0.030	c. 40%	The two silica sand sites in the Yorkshire and Humber Region, according to BGS production at this site was around 0.03mt per annum ⁸⁹ . North Yorkshire County Council minerals survey indicates that 0.027mt was extracted in 2013, this rose to 0.034mt in 2014.
Building stone ⁹⁰	0.141	No published data available	-	
Oil and gas	28 Active gas wells Tonnage not available	0.019 (2008) ⁹¹		Six active onshore gas wells including one in North York Moors National Park and 2 active sites for coal mine methane extraction in the County.
		0.0055 (2014)	9.5%	

⁸⁵ UK Minerals Yearbook 2009 (British Geological Survey, 2009)

⁸⁶ Annual Mineral Raised Enquiry Report (ONS 2012)

⁸⁷ NYCC minerals survey carried out in 2013

⁸⁸ Regional figure includes silica sand used for other industrial uses and agriculture, horticulture and leisure uses only (i.e. excludes uses for glass manufacture and foundry uses). North Yorkshire figure published in UK Minerals Yearbook 2008 (British Geological Survey, 2008)

⁸⁹ BGS Mineral Resource Information in Support of National, Regional and Local Planning: North Yorkshire (comprising North Yorkshire, Yorkshire Dales and North York Moors National Parks and City of York 2006).

⁹⁰ UK Minerals Yearbook 2008 (British Geological Survey, 2008)

⁹¹ Department of Environment and Climate Change 2008/09 data. Figures do not include coal mine methane sites.

Mineral Type	Yorkshire and Humber Region (mt)	Plan Area Production (mt)	% of regional total originating from within the Plan area	Notes
Potash ⁹² (rock salt as a by-product)	1	1	100%	There is only one site producing potash in the UK, Boulby Mine

Source – United Kingdom Minerals Yearbook 2008, 2009, 2010 and 2015 and Yorkshire and Humber Regional Aggregates Working Party Annual Report 2009; BGS 2006-2015; DECC

It is also noteworthy that planning permission has recently been granted for shale gas extraction at Kirby Misperton. Whilst no gas is presently being extracted it can be assumed that in the period of the Plan this will contribute to the Plan Area’s gas extraction total.

Following the closure of the Selby Coalfield in 2004, Kellingley Colliery, near Knottingley, was the only active mine in North Yorkshire County and worked permitted reserves in the eastern part of Selby District. The majority of the coal has been sold to power stations in the area. The colliery closed at the end of 2015. Table 14.13 below shows the output of coal in the Plan Area over between 2005-2014.

Table 14.12: Coal production

Year	Coal Production (mt)
2005	1.96
2006	2.10
2007	1.77
2008	1.15
2009	0.98
2010	1.49
2011	2.28
2012	2.00
2013	1.56
2014	1.58

Source – UK Coal

Energy

Emissions associated with energy use have been considered in the section of this baseline on climatic factors.

Energy use in North Yorkshire and City of York was 11,559GWh in 2011 and 11,186GWh in 2014⁹³. Of this, 7,561 / 7,192GWh of gas was consumed and 3,998 / 3,974GWh of electricity was consumed, split between domestic and commercial use in 2011 / 2014 as shown in Table 14.14 below. This shows that the Plan Area is responsible for 1.5% of Great Britain’s gas consumption and 1.4% of Great Britain’s electricity consumption. While the figures are low in

⁹² North Yorkshire County Council Mineral Core Strategy Evidence Paper 2: Mineral Specific Evidence (August 2016)

⁹³ This is just gas and electricity and does not include solid fuel and oil which are used in many off-grid areas

proportion to the sizeable area of North Yorkshire and City of York this figure is not particularly surprising given the particularly rural nature of many parts of the Plan Area.

Table 14.13: Energy consumption in the Plan Area, 2014 (Gas)

	Gas consumption ⁹⁴		
	Total gas consumption (GWh) ⁹⁵	Total domestic gas consumption (GWh)	Total commercial gas consumption (GWh)
North Yorkshire	5497	2880	2617
City of York	1695	1070	624
North Yorkshire & City of York	7,192	3,951	3,241
Great Britain	495,656	307,832	187,824

Source - Sub-national Energy Consumption Statistics (DECC)

Table 14.14: Energy consumption in the Plan Area, 2014 (Electricity)

	Electricity consumption ⁹⁶		
	Total electricity consumption (GWh)	Total domestic electricity consumption (GWh)	Total commercial electricity consumption (GWh)
North Yorkshire	3,137	1,173	1,960
City of York	837	323	515
North Yorkshire & City of York	3,974	1,500	2,474
Great Britain	295,325	109,170	186,155

Source - Sub-national Energy Consumption Statistics (DECC)

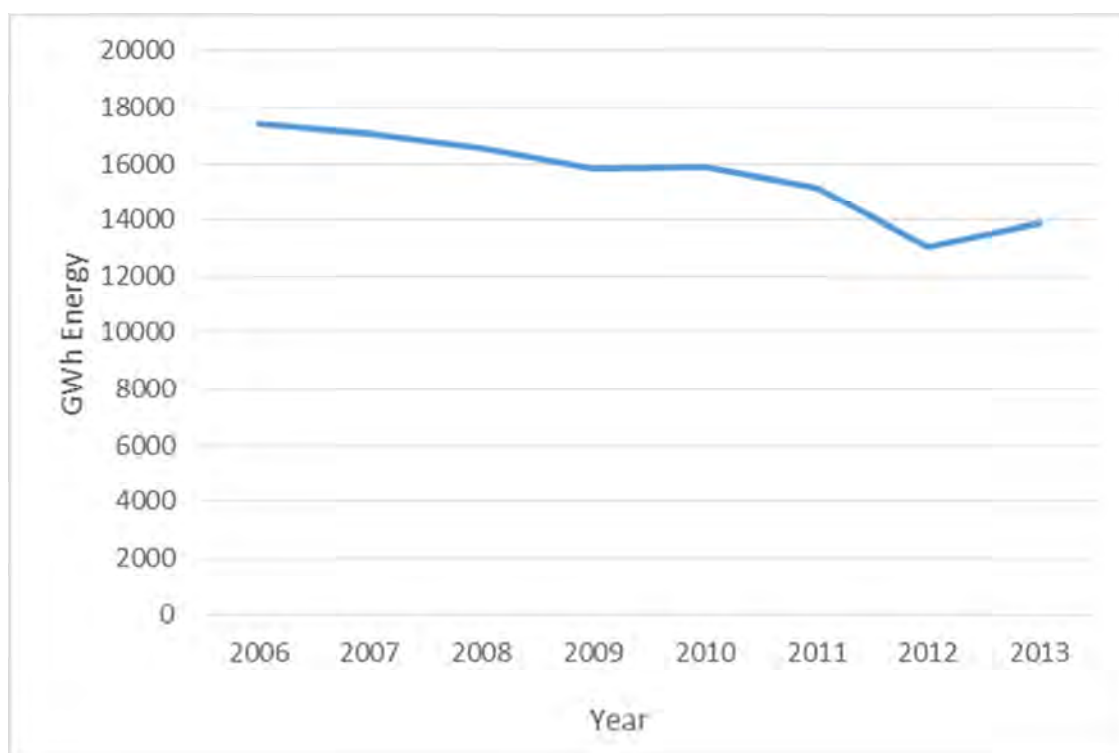
Figure 14.2 shows that total energy use in the Plan Area has declined over recent years, and 2013 consumption levels were 25% lower than 2006 levels.

⁹⁴ Last revised stats added 4 February 2016 (<https://www.gov.uk/government/statistical-data-sets/gas-sales-and-numbers-of-customers-by-region-and-local-authority>)

⁹⁵ GWh (Gigawatt Hour)

⁹⁶ Last revised stats added 4 February 2016 (<https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics-2005-to-2011>)

Figure 14.2: Energy use in North Yorkshire and City of York 2006 – 2013



Source - DECC

Average domestic energy consumption per consumer in the Plan Area is shown in Table 14.15 below. This shows that domestic gas consumption per consumer is slightly higher than the regional and national average for most of the plan area with the exception of the more urban areas where it is slightly lower. Table 14.16 shows that electricity consumption is generally higher than the national and regional average across most of the plan area with the exception of the City of York and Redcar and Cleveland which are the most urban areas (although only the more rural parts of the latter are within the plan area). Average commercial use per consumer is generally lower than the national average apart from in Selby and in Redcar and Cleveland where the figures are likely to be influenced by large industrial uses in these districts.

Table 14.15: Average energy consumption 2014

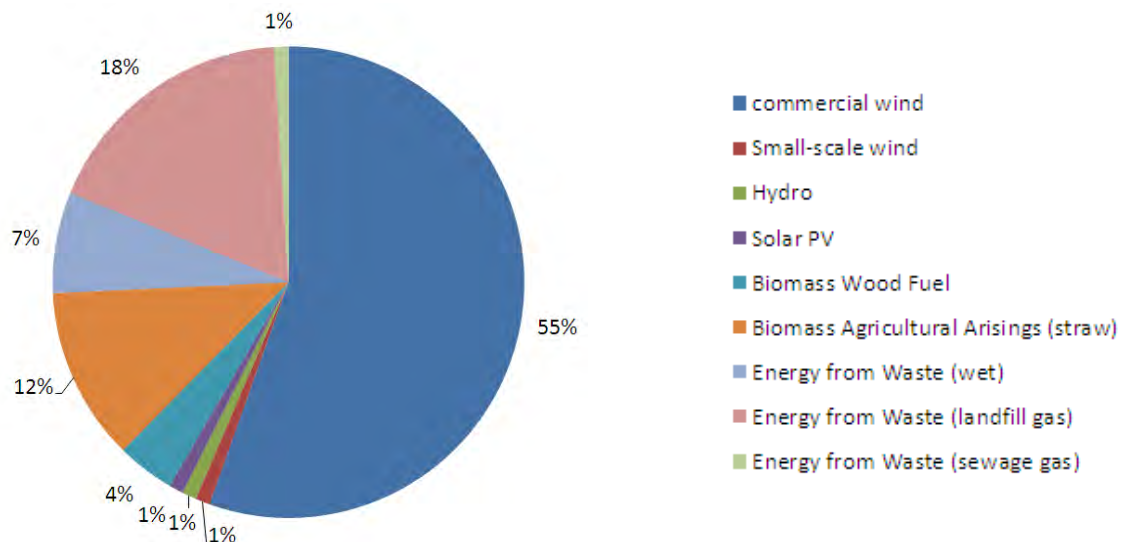
	Average domestic gas consumption (kWh per consumer)	Average commercial gas consumption (kWh per consumer)	Average domestic electricity consumption (kWh per consumer)	Average commercial electricity consumption (kWh per consumer)
Craven	14,618	421,483	4,366	43,453
Hambleton	14,243	1,014,336	4,437	57,495
Harrogate	15,810	501,304	4,358	62,891
Richmondshire	14,724	614,865	4,483	49,415
Ryedale	13,781	1,518,403	4,490	56,217
Scarborough	13,202	772,033	3,652	53,077
Selby	13,665	5,145,442	4,264	80,571
City of York	13,760	613,455	3,676	69,399

	Average domestic gas consumption (kWh per consumer)	Average commercial gas consumption (kWh per consumer)	Average domestic electricity consumption (kWh per consumer)	Average commercial electricity consumption (kWh per consumer)
Redcar and Cleveland	12,985	802,547	3,372	236,195
Yorkshire and Humber region	13,656	877,194	3,679	84,134
Great Britain	13,246	705,903	3,954	76,391

Source – *Sub-national Gas Consumption Statistics 2013-14 and Sub-national Electricity Consumption Statistics 2013-14, DECC*

As well as using less energy, the use of renewable energy in place of fossil fuels is a means of reducing greenhouse gas emissions. In rural areas, renewable energy can also provide a reliable and more cost-efficient source of energy for properties which are off-grid. Whilst comprehensive data on the amount of renewable energy generated in the Plan Area is not available it is known that 10MW of renewable energy was generated in the City of York in 2010 and a total of 1,068kW has been approved in the National Park since 2006. In North Yorkshire, 36.5MW of renewable energy capacity has been installed in energy from waste facilities. The chart below shows installed renewable energy capacity, in MW, for each technology type. This shows that wind energy makes up the largest proportion of renewable energy capacity, followed by energy from waste from landfill gas and biomass from agricultural arisings⁹⁷.

Figure 14.3: Installed renewable energy capacity by technology (2011)



Source – *Low Carbon and Renewable Energy Capacity in Yorkshire and Humber (AECOM, 2011)*

⁹⁷ Note that ground source heat pumps and solar water heating are not shown because they make a less than 1% contribution to overall capacity.

Key messages from the baseline

- The Plan Area has economically important areas of minerals, including aggregates such as crushed rock, sand and gravel and silica sand; energy minerals such as deep mined coal; and non-aggregate building stone;
- Most deposits of waste in North Yorkshire are dealt with in landfill sites, while the waste deposits managed via recycling and treatment are below regional and national rates;
- The percentage of household waste recycled, reused and composted has risen in recent years, with North Yorkshire as a whole recycling more than the national average; though more waste is not recycled than is.
- There is significant variation between district levels of recycling: within the Plan Area the highest household rates of re-use / recycling composting are in Ryedale, the lowest rates are in Richmondshire.
- Energy consumption is generally higher than average

Predicted Future Trends

- In relation to waste, the following likely future trends have been identified⁹⁸:
 - Arisings of Local Authority Collected Waste are expected to increase over the period to 2040;
 - Commercial and Industrial waste arisings are predicted to remain relatively constant over the next decade;
 - Construction, Demolition and Excavation waste arisings are linked to development and therefore should there be an economic recovery it is likely that arisings would increase;
 - There would be an increase in hazardous waste arisings in the medium and longer term with the development of the Allerton Waste Recovery Park facility;
 - It is possible that arisings of Low Level Non-Nuclear Radioactive Waste will increase;
 - There is likely to be a decrease in the amount of waste going to landfill, particularly with the development of the Allerton Waste Recovery Park facility.
- In relation to minerals supply, the Plan will have a significant influence over this although it is reasonable to assume that provision would be likely to come forward without the Plan albeit in a less co-ordinated way and with impacts on other areas of sustainability more likely. These effects would become more pronounced over time.
- It is reasonable to assume that energy use within the Plan area will continue to decline whilst the amount of installed renewable energy capacity will continue to increase throughout the short, medium and long term. These trends are largely not dependent on the Minerals and Waste Joint Plan.

⁹⁸ See North Yorkshire Waste Evidence Paper at www.northyorks.gov.uk/mwevidence

Table 14.16: Material Assets and Resources Indicators

Indicator	Baseline Data (and year)	Source
Total waste received by waste facilities by category ('household, industrial and commercial', 'inert/construction and demolition', 'hazardous' and 'unknown')	See Table 14.3	Environment Agency
Waste Management method of household waste arisings	See Table 14.2	NYCC
Number of anaerobic digestion plans	11 industrial CHP plants in Plan Area ⁹⁹	www.biogas-info.co.uk
Number / type / area of Minerals Safeguarding Areas defined in Plan	Not yet available	
Reserves of primary land won aggregate and crushed rock	See Figure 14.7	Local Aggregate Assessment
Sales of secondary aggregate in the North Yorkshire sub-region	See Figure 14.11	Local Aggregate Assessment
Installed renewable energy capacity by type	See Figure 14.4	

⁹⁹ www.biogas-info.co.uk – accessed 22.09.16

15 SEA Topic/SA Category – Transport

Transport Infrastructure

The Plan Area contains a number of strategic transport routes. This is significant for minerals and waste planning as both of these activities involve the transportation of large amounts of material. The A1(M) is the main road route, crossing the centre of the county in a north-south direction. There are a number of A-roads linking the main settlements within the Plan Area and linking the Plan Area with towns and cities beyond its boundaries.

York is a major hub in the rail network and the main east coast rail line passes through York and proceeds northwards through the Plan Area towards Darlington. There are also some branch lines linking settlements within the Plan area including the York to Scarborough line, the Leeds to Harrogate line, the Thirsk/Northallerton to Teesside line and the Esk Valley line.

There are no commercial airports in the Plan Area, the nearest being Leeds Bradford to the south and Durham Tees Valley to the north. Robin Hood Airport in Doncaster is also within easy reach of the Plan Area.

There are also no major shipping ports in the Plan area, the nearest being Teesport to the north and Hull to the south. There is also an inland port at Goole, just outside the Plan Area.

Figure 15.1 shows the strategic rail and road network in the Plan area and Figure 15.2 shows the inland waterways network with the potential for freight movement.

Figure 15.1: Strategic Road and Rail Network in the Plan Area

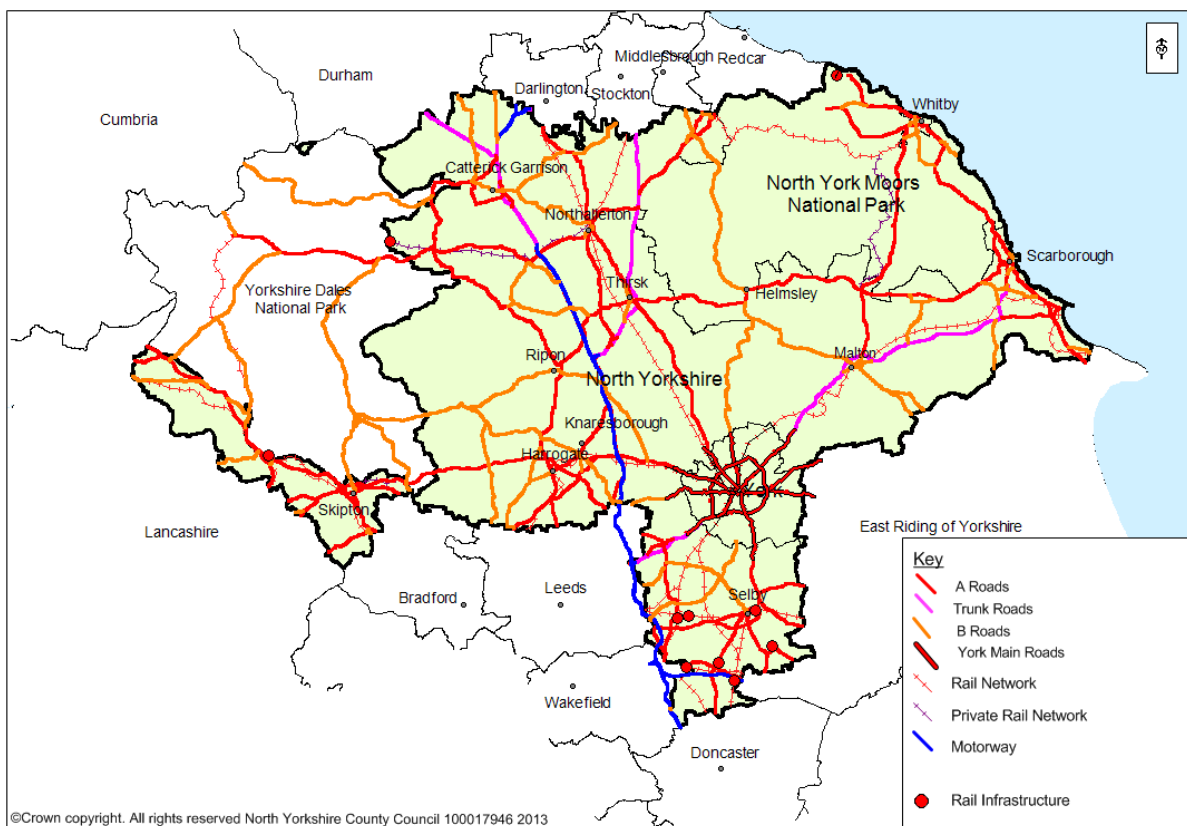
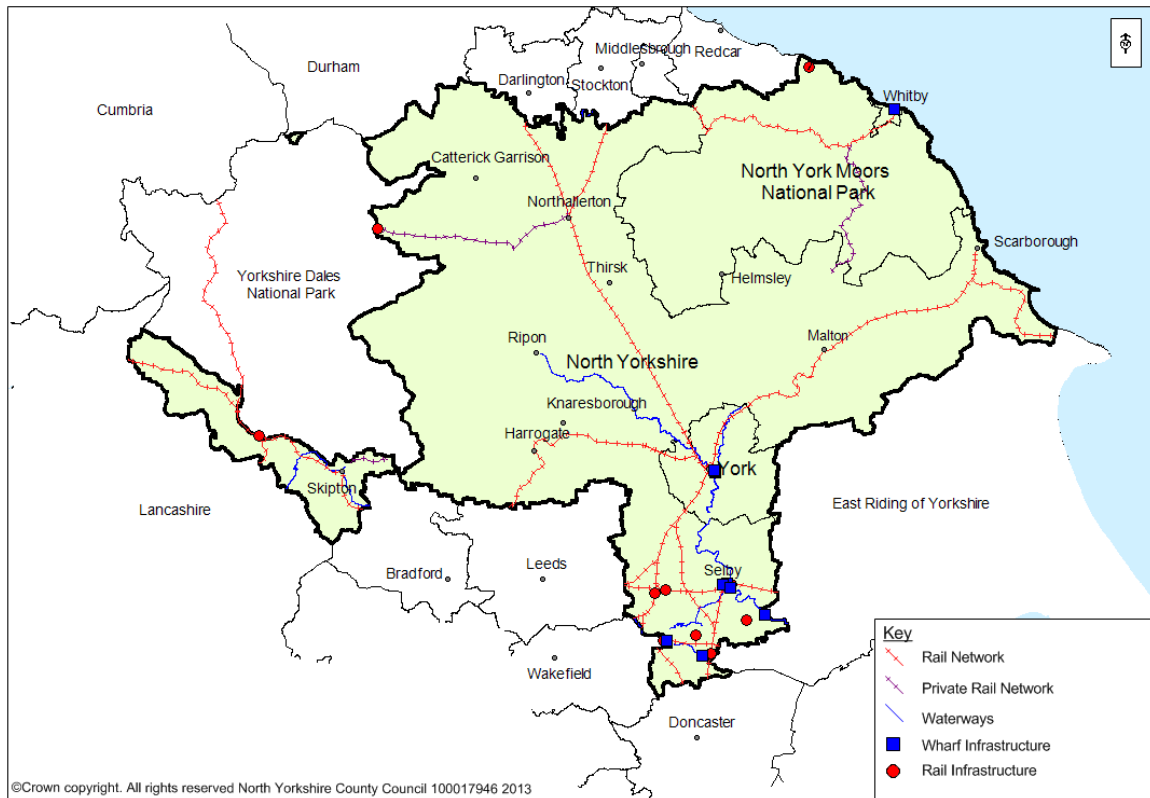


Figure 15.2: Inland waterways network with potential for freight movement.



Figure 15.3 shows a map of rail infrastructure and wharves.

Figure 15.3: Rail infrastructure and wharves



The Timber Freight Quality Partnership provides a map of timber transport routes. These may indicate where timber related freight may be used, which in combination with minerals and waste traffic may lead to impacts on the road network. A web map is available at <http://timbertransportforum.gaist.co.uk/#/PublicMainPage>

Transport Usage

In North Yorkshire 17% of households have no car, compared to 26% in the City of York. In the North York Moors National Park only 11% of households have no car. This shows that, as would be expected, in the more rural parts of the Plan area car use is greater. Since 2001 the number of households with no car has declined suggesting that less use is being made of other forms of transport and/or that more people are able to access the services and facilities they need.

Table 15.1 shows the changes in transport miles over recent years in North Yorkshire. This shows that miles for pedal cycles have decreased recently whilst miles for buses & coaches, light goods vehicles and all HGVs have increased. HGVs are particularly relevant to the minerals and waste industry as this is a major form of transportation for many operators. Total / All motor vehicle miles in North Yorkshire have reduced by 2% over the past decade. HGV use has declined by 7% since 2006 although the major decrease has been since 2007, reflecting the economic downturn although it has been steadily increasing since 2012.

Table 15.1: Transport use in North Yorkshire (thousand vehicle miles)

	2009	2010	2011	2012	2013	2014	2015
Pedal Cycles	4,250	4,227	3,977	4,003	3,912	3,627	3,655
Motorcycles	25,775	23,601	24,885	23,721	24,575	25,902	25,391
Cars	2,597,957	2,571,775	2,594,645	2,520,172	2,559,521	2,590,100	2,613,061
Buses & Coaches	23,931	24,803	25,189	25,087	24,944	25,258	25,576
Light Goods Vehicles	433,541	432,002	444,060	447,767	471,658	487,688	521,460
All HGVs	353,902	354,444	352,846	350,873	363,497	367,545	382,689
All Motor Vehicles	3,435,108	3,406,642	3,441,639	3,367,570	3,444,204	3,496,477	3,568,159

Source – DfT Traffic Counts¹⁰⁰

Table 15.1 shows that in 2001 around half of the residents of the Plan Area travelled to work by car, although this had fallen significantly in 2011. The numbers of people cycling to work or catching the bus or train in the City of York is far greater than in North Yorkshire, although this is as would be expected as rural areas tend to have fewer public transport services and roads and topography that are not conducive to cycling. It is noteworthy that this table does not add up to 100% because it includes those who work from home and those who are not in work.

¹⁰⁰ <http://www.dft.gov.uk/traffic-counts/area.php?region=Yorkshire+and+The+Humber&la=North+Yorkshire>

Table 15.2: Mode of transport for travel to work

	Percentage of people using different modes of transport for travel to work																	
	Passenger in Car/Van		Cycle		Bus/Coach		Drive		Motorcycle		Taxi		Train		Metro/Light Rail/Tram		Walk	
	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
City of York	5.5	3.0	12.04	7.4	7.23	4.7	48.18	30.1	1.75	0.6	0.5	0.3	1.54	1.6	0.07	0.1	14.95	11.7
North Yorkshire	6.07	3.5	2.83	1.5	3.43	2.0	56.6	39.6	0.81	0.4	0.38	0.2	1.35	1.3	0.06	0.1	14.21	9.1

Source – ONS 2001 and 2011 Census

Key messages from the baseline

- The most significant transport corridors run north to south and include the A1, A19 and East Coast mainline.
- There are no airports and relatively few stretches of in the area. However three airports lie within close range of the County, and there are major seaports nearby on the Tees and Humber

Predicted future trends

- The Joint Plan Area currently has good strategic transport links and these existing links are unlikely to change from their current form in the short term, medium term and long term. It is likely that new/improved transport links will also be established in the medium and long term for example, the HS2 high speed rail network.
- Minerals and waste developments generally involve transportation of large quantities of mineral/waste products via either road or rail and may contribute to an increase in HGV vehicle miles in the short term as the Plan Area continues to recover from the recent economic downturn. Should economic growth continue in the medium and long term, it is likely that transport usage, particularly HGV use will also continue to increase. Minerals and waste developments are likely to have localised or in some cases wider effects on transport usage and infrastructure, over which there would be less control without minerals and waste planning policies in place.

Table 15.3: Transport Indicators

Indicator	Baseline Data (and year)	Source
Motor vehicle traffic (vehicle miles) by local authority	See Table 15.1	DfT
Proportion of residents who walk or cycle, at least once per month, for utility purposes (for reasons other than recreation, health, training or competition) by local authority	See Table 15.2	DfT

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Volumes I and II can be downloaded from: www.northyorks.gov.uk/mwsustainability

Appendix I: Justification for Sustainability Appraisal Objectives

Proposed sustainability objective	Proposed sub objectives	Key issues and justification for the objective
Environment		
<p>1. Protect and enhance biodiversity and geodiversity and improve habitat connectivity</p>	<ul style="list-style-type: none"> - Protect and enhance designated nature conservation sites and protected species; - Contribute to the suitable protection of trees, woodlands and forests; - Avoid damage to designated geological assets and create new areas of geodiversity value; - Seek to contribute to national targets for biodiversity, including for national and local priority species and habitats; - Seek to contribute to local targets for geodiversity; - Preserve the integrity of habitat networks and increase the connectivity between habitats; - Maximise the potential for the creation of new habitats; - Minimise the spread of invasive species; 	<p>The Plan Area has a large number of internationally, nationally and locally designated ecological sites and national and regionally important geological sites. These sites need to be protected, and where possible enhanced and protected from the effects of climate change. Additionally, there is important biodiversity outside of these areas which needs to be protected, such as internationally protected species and ancient woodland. Often these habitats are fragmented and isolated, and invasive species can be a problem. Nonetheless, many habitats are delivering important ecosystem services.</p> <p>The Plan Area should help deliver the national biodiversity targets outlined in the Natural Environment White Paper and National Biodiversity Strategy, as well as district BAPs. Planning Authorities also have a series of obligations in relation to protected sites and species under international and national legislation.</p> <p>Minerals and waste development has the potential to have a detrimental impact on biodiversity and designated sites through, for example, land take and associated habitat</p>

	<ul style="list-style-type: none"> - Provide opportunities for people to access the natural environment; - Protect and manage ancient woodland; - Appropriately manage and enhance PAWS. 	<p>loss/fragmentation; and changes in pattern of human activity and associated disturbance or damage. Nevertheless, it is also recognised that minerals and waste sites can incorporate opportunities for biodiversity and can in some cases be restored after use to include features of benefit to biodiversity.</p>
<p>2. Enhance or maintain water quality and improve efficiency of water use</p>	<ul style="list-style-type: none"> - Ensure that Water Framework Directive status objectives for surface and groundwater are not compromised by maintaining or improving upon ecological and chemical status; - Prevent unsustainable levels of ground and surface water abstraction; - Avoid wasting water. 	<p>Human activity, including minerals and waste development can put the county’s water resource under pressure, and in some places Catchment Abstraction Management Plans limit the further licensing of water abstraction. Processes such as minerals and waste processing can make significant demands on water demand, while at the same time waste water must be managed appropriately to prevent damage to water quality.</p> <p>Local Planning Authorities have a public duty placed on them to have regard to River Basin Management Plans, which represent the principal mechanism for achieving the European Water Framework Directive.</p> <p>In terms of water quality, the picture is mixed across the major catchments of the Plan Area, with the percentage of rivers at poor biological status ranging from 12 per cent in the Swale, Ure, Nidd and Upper Ouse catchment to 44 per cent in the Derwent. However the demanding status objectives of the Water Framework Directive should see all of the water bodies in the plan area reach good or high</p>

		<p>status in 2027. There are also a number of designated nature conservation sites, such as the River Derwent SAC, that are sensitive to changes in water quality.</p>
<p>3. Reduce transport miles and associated emissions from transport and encourage the use of sustainable modes of transportation</p>	<ul style="list-style-type: none"> - Encourage more sustainable transport modes; - Reduce the impact of transporting minerals by road on local communities; - Reduce vehicle emissions due to mineral and waste movements; - Encourage proximity between minerals and waste sites and markets; - Safeguard or deliver valuable infrastructure that may contribute to modal shift; - Promote active travel and sustainable commuting; - Improve congestion. 	<p>Transporting waste and minerals by road has a number of impacts on the environment and local communities. In particular, it can have a detrimental impact on amenity through noise and vibration, air quality, greenhouse gas emissions and highway safety. The Plan Area currently has four Air Quality Management Areas and one close to being declared.</p> <p>In some areas there is a lack of public transport, while other areas such as York have good public transport and cycling networks.</p> <p>Circulatory disease rates are generally lower than the region-wide rate, however, Scarborough is significantly above the region-wide rate. Active travel can play a key role in reducing risk of cardiovascular disease, and minerals and waste facilities may be able to encourage their employees to engage in more active travel through their design.</p> <p>There is therefore a need for a modal shift to more sustainable transport modes where possible, and a need to promote proximity to markets.</p>

<p>4. Protect and improve air quality</p>	<ul style="list-style-type: none"> - Reduce all emissions to air from new development; - Reduce the causes and levels of air pollution in Air Quality Management Areas and seek to avoid new designations; - To minimise dust and odour; - Support cleaner technology for minerals and waste development; - Avoid locating development in areas of existing poor air quality where it could result in negative impacts on the health of future occupants/users; - Seek to avoid adding to pollutant deposition at sensitive habitats. 	<p>On the whole air quality in the Plan Area is good. There are however a number of urban areas that may have problems with pollution because of car emissions and there are 4 Air Quality Management Areas (AQMA) in the Plan Area, at the Inner Ring Road, (York), Butcher Corner (Malton), Bond End (Knaresborough) and Skellgate (Ripon). A fourth area, the A661 Woodlands Junction in Harrogate, remains close to being declared as an AQMA. As a response to poor air quality in the city centre, York is aiming to become a 'low emission city'.</p> <p>An increase in emissions in relation to the transportation and management of waste, as well as the potential for odours, may impact on air quality. This will be particularly important where receptors such as human or sensitive ecological communities exist. For instance, several European designated habitats exceed their 'critical loads' for nitrogen and sulphur deposition. Upland habitats, such as those found in the North York Moors are particularly vulnerable.</p> <p>European legislation such as the Air Quality Framework Directive regulates air quality.</p>
<p>5. Use soil and land efficiently and safeguard or enhance their quality</p>	<ul style="list-style-type: none"> - Reduce the permanent loss of best and most versatile agricultural land; - Conserve and enhance soil resources and quality; 	<p>Much of the land in the Plan Area comprises land with an Agricultural Land Classification of Grades 1, 2 or 3. However, soils in the upland areas such as the North York Moors are not of high agricultural quality. Nonetheless, throughout the Plan Area agriculture is an important sector</p>

	<ul style="list-style-type: none"> - Promote good land management practices on restored land; - Reduce the amount of derelict, contaminated, degraded and vacant/underused land; - Recover nutrient value from biodegradable wastes (e.g. compost, biodigestate); - Minimise land taken up by minerals and waste development; - Seek to utilise brownfield land for waste development where possible. 	<p>of the economy.</p> <p>Minerals facilities in particular have less flexibility over their location, which may lead to loss of fertile soils. However, restoration may offer opportunities to restore soils.</p> <p>Contaminated land sites can be found in the plan area, such as in York, which would require remediation if developed.</p>
<p>6. Reduce the causes of climate change</p>	<ul style="list-style-type: none"> - Reduce emissions of greenhouse gases; - Reduce CO₂ from minerals and waste development through use of energy efficient and low and zero carbon design and adoption of efficient plant and processes; - Maximise the generation and use of renewable energy in appropriate locations; - Prevent the loss of embodied energy by promoting the use of recycled, recyclable and secondary resources; - Promote carbon storage through appropriate land management; 	<p>Per capita CO₂ emissions where industry and commerce, domestic and transport services are combined show marked variation across the plan area, with York having the lowest ‘tonnes per capita’ (5.6 in 2010) and Selby having more than double the amount (12.7).</p> <p>Increasing levels of minerals and waste development, and associated traffic needs, have the potential to increase greenhouse gas emissions. Similarly, certain waste management techniques generate greenhouse gas emissions such as methane and carbon dioxide. However, moving waste up the waste hierarchy is an important part of the Government’s Carbon Plan.</p> <p>Minerals extraction and processing is an energy intensive process, so it is considered better to utilise secondary</p>

	<ul style="list-style-type: none"> - Adhere to the principles of the energy hierarchy¹. 	<p>resources where possible in order to offset future extraction levels.</p> <p>Ensuring energy is recovered from residual waste where it is not possible to manage it higher up the waste hierarchy, as well as using energy more efficiently, and generating it from renewable sources will have a significant role in tackling climate change and will also increase energy security.</p>
<p>7. Respond and adapt to the effects of climate change</p>	<ul style="list-style-type: none"> - Plan and implement adaptation measures for the likely effects of climate change; - Ensure 'sustainable adaptation' is planned for²; - Ensure that minerals and waste developments are not susceptible to effects of climate change - Ensure that minerals and waste developments do not hinder adaptation to climate change 	<p>Climate change is expected to have a significant impact on the Plan Area. The predicted effects on the County include hotter summers, more frequent drought conditions and increased incidences of extreme weather events, such as storms and short-duration, high-intensity rainfall, which will have serious implications for flash flooding. It will therefore be imperative to ensure that both the built and natural environment is adapted to the consequences of climate change.</p> <p>While adapting to climate change can protect a</p>

¹ The energy hierarchy is analogous to the waste hierarchy in that it shows a sequence of preferred approaches to obtaining energy. Broadly this can be shown as three steps, in order of preference: 'Reduce' the amount of energy required in the first place (for instance through good design); 'Re-use' waste energy such as heat (e.g. through combined heat and power technology); and 'recycling' (which means the provision of energy that has some processing applied – e.g. renewable energy to meet demand or the extracting of energy from waste). CABE (2011), Thinking Differently – The Energy Hierarchy.

² Sustainable Adaptation has been defined by Natural England. According to Natural England 'It is important that any adaptation action is sustainable. This means that any response by society should not actually add to climate change, cause detrimental impacts or limit the ability or other parts of the natural environment society or business to carry out adaptation elsewhere' (Natural England, undated. Sustainable Adaptation [URL: <http://www.naturalengland.org.uk/ourwork/climateandenergy/climatechange/adaptation/sustainable.aspx>]).

		development from climate change, it can have unforeseen consequences if it prevents adaptation elsewhere or exacerbates climate change by utilising energy intensive processes. Adaptation therefore needs to be 'sustainable adaptation'.
8. Minimise the use of resources and encourage their re-use and safeguarding	<ul style="list-style-type: none"> - Safeguard and use minerals resources wisely; - Encourage the re-use of primary materials; - Promote the efficient use of resources throughout the lifecycle of a development, including construction, operation and decommissioning of minerals and waste infrastructure. 	<p>Large volumes of minerals are extracted from the plan area each year, with 1.7 million tonnes of sand and gravel and 1.9 million tonnes of crushed rock sold from the plan area in 2011, and even higher rates extracted prior to the economic downturn. Such resources are ultimately finite, so it accords with sustainability to seek to encourage re-use and recycling of minerals where possible.</p> <p>The built infrastructure that accompanies minerals and waste development also consumes materials in the form of construction materials and water and energy during their operating life.</p> <p>Many types of development also have the potential to sterilise minerals resources. Therefore it is important that key resources are safeguarded.</p>
9. Minimise waste generation and prioritise management of waste as high up the waste hierarchy as practicable	<ul style="list-style-type: none"> - Use less materials in design and processing; - Re-use materials where possible; - Encourage recycling; - Recover residual resources (e.g. through 	<p>The Waste Framework Directive ensures that the Waste Hierarchy must be embedded in national policy. PPS10 requires the Local Plan to adopt the Waste Hierarchy.</p> <p>Managing waste high up the waste hierarchy reduces pressure on primary resources thereby sustaining them for</p>

	<p>anaerobic digestion or energy recovery);</p> <p>- Support 'recycling on the go'³.</p>	<p>longer term use.</p> <p>This 'lifecycle thinking' extends to almost all products which are destined to become waste at the end of their life. By seeking to reuse or recycle these products, or prevent their use in the first place, the environmental impact of disposal is avoided for longer periods of time. The Government's Waste Review promotes lifecycle thinking in relation to waste management. Household waste re-used, recycled and composted has grown in recent years and is above 45 per cent in both North Yorkshire and York. However the majority of waste collected by local authorities in the Plan Area still ends up in landfill, and only small quantities of residual waste are recovered as heat and power.</p>
<p>10. Conserve or enhance the historic environment and its setting, cultural heritage and character</p>	<p>- Protect and enhance those elements, including setting, which contribute to the significance of:</p> <ul style="list-style-type: none"> ➤ World Heritage Sites; ➤ Scheduled Monuments; ➤ Archaeological Features; ➤ Listed buildings; ➤ Historic parks and gardens; ➤ Historic battlefields; ➤ Conservation Areas; ➤ Landmark monuments. 	<p>The Plan Area contains a wealth of historic assets including 1 World Heritage Site, 5 historic battlefields, over 14,000 Listed Buildings, 1,605 Scheduled Monuments, around 45,000 records in the Plan area's Historic Environment Records, 40 Registered Parks and Gardens and 327 Conservation Areas.</p> <p>English Heritage's Heritage at Risk Register highlights that a number of historic assets in the Plan Area are endangered due to neglect, decay or pressure from development. Specifically, two registered battlefields, 360</p>

³ 'Recycling on the go' is promoted by the Government's Waste Policy Review. It represents recycling on the street and in public places.

	<ul style="list-style-type: none"> - Provide appropriate protection for archaeological features in areas of potential development; - Protect the wider historic environment from the potential impacts of proposed development and the cumulative impacts; - Improve access to, and enjoyment of, the historic environment where appropriate; - Preserve and enhance local culture. 	<p>Scheduled monuments, 47 listed buildings, three Conservation Areas and five registered parks and gardens are included on this register.</p> <p>Some areas are richer in historic assets than others. For instance a third of Scheduled Monuments in Yorkshire and Humber are in the North York Moors National Park.</p> <p>Minerals and waste development and ancillary works, such as the construction of roads, screening/soil bunds, processing and storage areas, has the potential to have a detrimental impact on buildings and sites of cultural, architectural and archaeological heritage. In particular, the long-term setting and character of historic monument, archaeological landscapes or listed buildings can be affected by minerals or waste sites located in close proximity to heritage assets.</p>
<p>11. Protect and enhance the quality and character of landscapes and townscapes</p>	<ul style="list-style-type: none"> - Conserve and enhance the natural beauty and cultural heritage of the North York Moors National Park; - Conserve and enhance the setting of designated landscapes, including those outside of the Plan area; - Protect and enhance the natural beauty of Areas of Outstanding Natural Beauty; - Protect and enhance local 	<p>The Plan Area contains 1 National Park, 2 AONBs are wholly contained in the Plan Area (a further 2 include small parts within the Plan Area). There are also 2 stretches of Heritage Coast within the plan area and North Yorkshire is considered amongst the most tranquil places in England.</p> <p>There are 327 conservation areas within the Plan Area, and the City of York contains a particular concentration of Listed Buildings - around 2,000 grade I and II* and II.</p> <p>Minerals and waste development has the potential to have a significant impact on the physical character of a local</p>

	<p>landscape/townscape character and quality, local distinctiveness and sense of place;</p> <ul style="list-style-type: none"> - Protect the setting of important townscapes; - Protect the purposes and ‘positive use’⁴ of the Green Belt; - Protect coastal landscape and seascape character; - Protect and improve tranquillity levels and reduce sources of intrusion, such as light pollution; - Co-locate waste facilities with complementary industrial facilities where possible to reduce dispersed visual intrusion; - Preserve, enhance and complement architectural character and complexity. 	<p>area. For instance, townscapes can be affected by the presence of large urban facilities, while rural character may be affected by waste development that is industrial in form, or minerals development that changes topography either during operational or restoration phases.</p>
Economic		
<p>12. Achieve sustainable economic growth and create and support jobs</p>	<ul style="list-style-type: none"> - Increase the level and range of employment opportunities, particularly in deprived areas; - Encourage stable economic growth through 	<p>The ratio of active enterprises per 10,000 people gives an indication of economic activity. In North Yorkshire the ratio has declined slightly between 2009 and 11, while in York it has risen slightly, though both areas perform better than</p>

⁴ The National Planning Policy Framework defined 5 purposes to the Green Belt and also recommends that local planning authorities should ‘plan positively to enhance the beneficial use of the Green Belt’.

	<p>provision of an adequate, sustainable and steady supply of minerals;</p> <ul style="list-style-type: none"> - Promote conditions which enable sustainable local economic activity and regeneration and encourage creativity and innovation; - Capture value from waste streams by creating saleable products from them; - Promote a low carbon economy; - Support existing employment drivers and create new ones. 	<p>the region, and some districts perform better than other districts. However, in accordance with national and regional trends, the proportion of the county’s population who are claiming Jobseekers Allowance has risen and then stayed at relatively high levels by recent historical standards since 2009. Despite these relatively good figures, the economic downturn means that it is important that measures are taken to promote growth.</p> <p>Underemployment is an issue too. In Yorkshire as a whole more than 1 in 10 people feel they are underemployed.</p> <p>Levels of deprivation are generally low (although Scarborough is ranked 83rd in the most deprived areas, and parts of York feature in top 20% of most deprived communities). However, gross weekly earnings in the Plan Area remain below the national average. In some areas, for instance the National Park, there is a high reliance on seasonal and low paid jobs.</p> <p>New opportunities in the low carbon economy, as promoted by Coalition Government policy (e.g. the Local Growth White Paper), exist where materials can be prepared for re-use or recycled.</p>
<p>13. Maintain and enhance the viability and vitality of local communities</p>	<ul style="list-style-type: none"> - Provide opportunities to boost tourism; - Promote job creation, training and volunteer opportunities through sustainable site 	<p>The plan area contains a wealth of vibrant communities. However, it is understood that many smaller communities have been affected by loss of facilities such as pubs, general stores and post offices, or services such as public transport. The economic downturn has also taken its toll</p>

	<p>restoration;</p> <ul style="list-style-type: none"> - Contribute to sustainable and affordable housing through the provision of locally sourced and recycled construction materials. 	<p>on some small businesses.</p> <p>In larger settlements too there are challenges. York has so far weathered the economic downturn relatively well, though there have been shop closures and the loss of some key businesses. Elsewhere there are some communities that perform less well.</p> <p>Many communities in the plan area are attractive to visitors and generate visits from local, national and even international visitors. This can help sustain a range of businesses. It will be important for development generated by the JMWP to complement rather than conflict with tourism.</p>
Social		
<p>14. Provide opportunities to enable recreation, leisure and learning</p>	<ul style="list-style-type: none"> - Provide opportunities to enable the enjoyment and understanding of the special qualities of the National Park; - Promote recreation in the countryside and AONBs, consistent with the wider social, economic and environmental facets; - Provide opportunities for lifelong learning; - Contribute to networks of multifunctional green infrastructure. 	<p>Parts of the Plan Area provide a location for a range of recreational activities. For instance, the North York Moors National Park is a key destination for walkers, cyclists, and participants in a range of other sports and pastimes ranging from gliding to landscape painting. Other recreational resources include the AONBs, the coast, sports facilities and the rights of way network, particularly national and regional trails, parks and historic parks and gardens and historic properties. While it is difficult to determine exactly why people choose to engage in such activities in these places, many (though not all) forms of recreation tend to take place in attractive environments. Many attractive environments rely on the support of</p>

		<p>volunteers who may gain valuable skills from helping manage recreational assets.</p> <p>Minerals development can, through restoration, form a basis for new recreational activity, for instance by linking in to wider networks of green infrastructure.</p>
<p>15. Protect and improve the wellbeing, health and safety of local communities</p>	<ul style="list-style-type: none"> - Minimise the impact of nuisances associated with minerals and waste development, such as noise pollution and severance; - Reduce traffic accidents; - Reduce health inequalities; - Promote healthy living, offer opportunities for more healthy lifestyles and improve life expectancy; - Improve levels of wellbeing; - Increase access to the public rights of way network and the wider countryside; - Ensure the safety and security of local people and visitors; - Ensure that pollution does not pose unacceptable risks to health. 	<p>Life expectancies in North Yorkshire are longer than both national and regional averages. In addition, levels of obesity and average mortality rates for cancer and circulatory diseases are generally below regional averages. The one exception is within the borough of Scarborough, which has sub-average figures for both male life expectancy and coronary heart disease. The relatively high levels of deprivation experienced in the borough compound this.</p> <p>Minerals and waste development has the potential to have a detrimental impact on health through, for example, impacting on air quality and may impact on wellbeing through effects on visual amenity or from noise. Safety may also be affected by increased traffic or unsecurely fenced sites.</p> <p>There is, however an opportunity for minerals and waste development sites to increase health and wellbeing if they are restored to attractive environments where active recreation can take place.</p>
<p>16. Minimise flood risk</p>	<ul style="list-style-type: none"> - Ensure that the location and design of new 	<p>While some minerals development is 'water compatible'</p>

<p>and reduce the impact of flooding</p>	<p>development has regard to the potential risk, causes and consequences of flooding;</p> <ul style="list-style-type: none"> - Promote opportunities for sustainable flood alleviation; - Reduce the number of people and properties at risk of flooding. 	<p>according to the NPPF, other minerals development falls into the 'less vulnerable' to flood risk category, and some hazardous waste facilities are considered 'highly vulnerable'. The NPPF promotes a sequential approach to location, where development should be guided to the locations at lowest risk of flooding.</p> <p>Significant parts of the Plan Area, particularly along the river corridors and in the south, fall within the functional floodplain. In addition surface water flooding and groundwater flooding may present a risk to development. Historic records of flooding exist over wide areas, including in York.</p> <p>Catchment Flood Management Plans highlight opportunities for managing flood risk. The use of Sustainable Drainage Systems (SUDs) as alternative drainage solutions can help reduce flooding. There may also be opportunities to use certain types of former minerals development as flood storage.</p>
<p>17. Address the needs of a changing population in a sustainable and inclusive manner</p>	<ul style="list-style-type: none"> - Support the development of resource efficient housing; - Support shortened supply chains for building materials; - Enable the community to contribute to and have influence in decision making 	<p>The population of the plan area is changing. Increasing population and longer lifespans will increase demand for housing. However, housing affordability is an issue, with affordable housing being in short supply in many areas.</p> <p>A growth in housing numbers will increase demand for construction products. Through re-using and recycling construction wastes the JMWP can make a contribution to</p>

	<ul style="list-style-type: none">- Improve public access to facilities enabling sustainable waste management- Support community led waste management schemes- Reduce social exclusion	<p>resource efficient and affordable housing.</p> <p>New and existing households, an ageing population and the higher cost of travel may increase demand for easier to access community waste facilities and services.</p> <p>Inclusion in decision making is a core part of the 'guiding principles of sustainable development', which include 'promoting good governance'.</p>
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Appendix II: Plans, Policies, Programmes, Strategies and Initiatives Review

This document contains a list of policies, plans, programmes, strategies and initiatives (PPPSIs) relevant to the Minerals and Waste Joint Plan (the 'Joint Plan') for North Yorkshire, the City of York and the North York Moors. The PPPSIs have been compiled and represent the policy context to the Sustainability Appraisal at the time of print - May, 2013. The PPPSIs will be updated and amended before production of the final Sustainability Appraisal Report.

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Key Objectives, targets and indicators relevant to the Joint Plan and SA	Implications for the Joint Plan	Implications for SA
INTERNATIONAL/EUROPEAN CONTEXT		
Environmental PPPSIs		
Biodiversity, Flora and Fauna		
Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)		
The Convention aims to ensure conservation of wild flora and fauna species and their habitats. Transposed and implemented in the UK through the Wildlife and Countryside Act (1981). Key requirements: <ul style="list-style-type: none"> ➤ Promotion of national policies for the conservation of wild flora, wild fauna and natural habitats; ➤ Integration of the conservation of wild flora and fauna into national planning, development and environmental policies; ➤ Promotion of education and dissemination of information on the need to conserve species of wild flora and fauna and their habitats. 	The Joint Plan policies should conserve and enhance biodiversity.	The SA will need to consider biodiversity in the SA Framework and objectives.
Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979) amended 1985, 1988		
Aims to conserve terrestrial, marine and avian migratory species on a global scale. Transposed	The Joint Plan policies	The SA will need to consider

<p>and implemented in the UK through the Wildlife and Countryside Act (1981) and Countryside and Rights of Way Act (2000). Parties to the Convention should endeavour to provide immediate protection for specified migratory species.</p>	<p>should conserve and enhance biodiversity.</p>	<p>biodiversity, including migratory species, in the SA Framework and objectives.</p>
<p>EU Birds Directive (2009/147/EC)</p>		
<p>Bans activities which directly threaten birds and requires the protection of habitats via the Special Protection Area designations. Updates and amends the earlier 1979 Directive and transposed through a range of national legislation, including the Wildlife and Countryside Act and the Habitats Regulations.</p>	<p>Direct minerals and waste developments to locations where there is less potential to lead to loss of species or important habitat.</p>	<p>Consider the effects of policies on bird species and habitats. The HRA will also help ensure that significant effects are not likely to occur to special protection areas or Annex I birds present at SPA sites.</p>
<p>RAMSAR Convention on Wetlands of International Importance, especially waterfowl habitat (1971)</p>		
<p>The convention on wetlands, signed in Ramsar, Iran is an intergovernmental treaty which provides the framework for national action and international co-operation for the conservation and wise use of wetlands and their resources.</p> <p>The convention makes the following commitments:</p> <ul style="list-style-type: none"> ➤ Signatories will designate wetland sites to be included in the list of wetlands of international importance and promote conservation and wise use of these. ➤ Under the Convention there is an obligation for contracting parties to include wetland conservation considerations in their national land-use planning. ➤ Contracting parties have also undertaken to establish nature reserves in wetlands and they are also expected to promote training in the fields of wetland research, management and stewardship. 	<p>The Joint Plan must account for areas that are designated wetland sites.</p>	<p>The SA should include objectives on protecting / enhancing biodiversity and protecting designated areas. In order to be consistent with Government Planning Policy, significant effects on Ramsar sites will be considered in both this SA and the accompanying Habitats Regulations Assessment.</p>
<p>UN Convention on Biological Diversity (1992)</p>		
<p>Aims to conserve biological diversity through various species and habitat protection measures. UK Biodiversity Action Plan and its successor, the UK Post 2010 Biodiversity Framework, were produced in response to this convention, listing UK priority habitats and species.</p> <p>The Convention establishes three main goals: the conservation of biological diversity; the</p>	<p>The Joint Plan policies should conserve and enhance biodiversity. The Joint Plan policies</p>	<p>The SA will consider biodiversity in accordance with the guidance. SA Framework should seek</p>

sustainable use of its components, and; the fair and equitable sharing of the benefits from the use of genetic resources.	should conserve and enhance biodiversity.	to conserve and enhance biodiversity.
EU Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC, 1992)		
<p>Member states are required to take legislative and administrative measures to maintain and restore natural habitats and wild species at a favourable conservation status in the community.</p> <ul style="list-style-type: none"> ➤ Requires assessment of the impact and implications of any plan or project that is likely to have a significant impact on a designated site. ➤ A coherent European network of special areas of conservation shall be set up under the title Natura 2000. ➤ Article 10 states that member states 'where they consider it necessary' should use land use planning in particular to encourage management of feature of the landscape which are of major importance for wild flora and fauna, with a view to improving the ecological coherence of the Natura 2000 network. 	The Joint Plan policies to support overall objectives and requirements of the Directive.	The SA will consider the impacts of the Joint Plan on habitats. The requirements of the Directive should be reflected in the SA Framework.
EU Biodiversity Strategy to 2020: 'Our Life Insurance, Our Natural Capital' (2011)		
<p>The Strategy builds on the EU's headline 2050 vision that: <i>"By 2050, European Union biodiversity and the ecosystem services it provides – its natural capital – are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human wellbeing and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided."</i></p> <p>It presents a 2020 headline target which states: <i>'Halting the loss of biodiversity and the degradation of ecosystem services by the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss'.</i></p>	The Joint Plan policies to support overall targets of the Strategy.	The SA will need to ensure that biodiversity and ecosystem services are maintained and restored.
Water and Soil		
European Nitrates Directive (91/676/EEC)		
Reduce water pollution caused or induced by nitrates from agricultural sources, and prevent further such pollution. Member States are required to establish nitrate vulnerable zones if nitrate levels are above certain thresholds, review them every four years, and implement action programmes to improve them.	The Joint Plan policies to support overall objectives and requirements of the Directive.	Check that the requirements of the Directive are reflected in the SA Framework.
EU Directive on the Protection of Groundwater against Pollution and Deterioration (2006/118/EC)		
This 'daughter directive' of the Water Framework Directive recognises that groundwater is a valuable natural resource which should be protected from deterioration and chemical pollution. This	There is a need to consider how minerals development	SA Framework should include objectives that relate

<p>is considered to be particularly important for groundwater dependent ecosystems and for the use of groundwater in water supply for human consumption. The Directive establishes specific measures to prevent and control groundwater pollution, including criteria for the assessment of good groundwater chemical status and criteria for the identification and reversal of significant and sustained upward trends.</p>	<p>may impact on the quality of groundwater in the Joint Plan area.</p>	<p>to ground water quality.</p>
<p>EU Urban Waste Water Directive (91/271/EEC)</p>		
<p>The Urban Wastewater Directive's objective is to protect the environment from the adverse effect of urban waste water discharges and discharges from certain industrial sectors. Member states are required to designate sensitive areas (sensitive water bodies) and identify hydraulic catchment areas. The Directive specifies minimum specifications for water treatment according to size of agglomerations of development.</p>	<p>The Joint Plan will need to ensure policies and allocations are deliverable, taking account of the requirements of the Directive.</p>	<p>SA will need to consider the extent that options will place cumulative pressures on water bodies.</p>
<p>EU Bathing Water Directive (2006/7/EC)</p>		
<p>Sets stringent standards for bathing water quality along with requirements relating to beach management and public information. All bathing waters are to be 'sufficient' by 2015.</p>	<p>Ensure that minerals and waste developments will not compromise bathing water quality.</p>	<p>Impacts on bathing waters should be considered as part of the assessment of policies in terms of impact upon the natural environment.</p>
<p>EU Floods Directive (2007/60/EC)</p>		
<p>The Directive's aim is to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity. The Directive requires Member States to first carry out a preliminary assessment by 2011 to identify the river basins and associated coastal areas at risk of flooding and establish flood risk management plans focused on prevention, protection and preparedness by 2015. Transposed and implemented in the UK through the Flood and Water Management Act 2010.</p>	<p>The Joint Plan should ensure that managing flooding in relation to development is accounted for in a way consistent with local flood risk management strategies and catchment scale plans including River Basin Management Plans.</p> <p>The Directive should be carried out in coordination with the Water Framework Directive and take into account long-term</p>	<p>SA objectives should aim to contribute to reducing and managing flood risk. In addition, a Strategic Flood Risk Assessment is being prepared to support minerals and waste allocations.</p>

	developments, such as climate change.	
European Water Framework Directive (2000/60/EC)		
Enhance waterways and wetlands throughout Europe through: sustainable use; reduction of ground pollution; lowered flood and drought effects; and protection and restoration of the aquatic ecosystem. Requires all inland surface and coastal waters to reach 'good status' by 2015. Requires 'good groundwater status' by 2015.	Nitrate vulnerable zones have been identified in Selby, Hambleton, Ryedale, Harrogate, the southernmost area of the North York Moors and areas surrounding the City of York. This should be reflected in the Joint Plan policies.	SA objectives should aim to contribute to enhancement of waterways and wetlands in the Plan area. In addition, a WFD assessment is being prepared to support minerals and waste allocations.
Marine Strategy Framework Directive (2008/56/EC)		
The Directive aims to protect the marine environment, prevent its deterioration and restore it where practical, while using marine resources sustainably. Achieve good environmental status in Europe's seas by 2020.	Ensure that minerals and waste developments will not harm the marine environment.	Should be considered as part of the assessment of policies in terms of impact upon the natural environment.
Air		
Directive on Ambient Air Quality and Cleaner Air for Europe – 'The Air Quality Framework Directive' (2008/50/EC)		
The Directive merges four directives and one European Council decision into a single directive on Air Quality. It sets air quality objectives, including limit value and exposure related objectives. It requires that where levels of pollutants are exceeded air quality plans are established and that information on air quality is made publicly available. Standards for air quality are listed for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter, lead, benzene and carbon monoxide in ambient air.	The Joint Plan policies should support overall objectives and requirements of the Directive.	The SA should include objectives for air quality and ensure that the requirements of the Directive are reflected in the SA Framework.
Climatic Factors		
United Nations Framework Convention on Climate Change Paris Accord: COP21 (2015)		
Sets a legally binding international agreement to avoid dangerous climate change by restricting global warming to well below 2 degrees Celsius. The agreement will come into force in 2020.	The Joint Plan should seek to reduce greenhouse gases.	SA should seek to reduce greenhouse gases and seek to promote adaptation to climate change.
Additional Environmental Issues		
Integrated Pollution Prevention and Control Directive (The IPPC Directive 2008/1/EC)		

<p>The Directive sets out common rules on permitting for industrial and agricultural installations. This ensures that installations must comply with certain obligations, including: use all appropriate pollution prevention measures; prevent all large scale pollution; prevent, recycle or dispose of waste in the least polluting way possible; use energy efficiently; ensure accident prevention and damage limitation.</p>	<p>The Joint Plan policies to support overall objectives and requirements of the Directive.</p>	<p>The SA should include objectives for waste management and ensure that the requirements of the Directive are reflected in the SA Framework.</p>
<p>EU Seventh Environmental Action Programme</p>		
<p>Has a range of Priority Objectives, including 3 thematic objectives to be pursued as a priority:</p> <ul style="list-style-type: none"> ➤ Protecting, conserving and enhancing the Union’s natural capital; ➤ Turning the Union into a resource-efficient, green and competitive low carbon economy; ➤ Safeguarding the Union’s citizens from environment related pressures and risks to health and wellbeing. 	<p>The Joint Plan policies to support the primary areas of the action plan.</p>	<p>Ensure that the requirements of the Directive are reflected in the SA Framework.</p>
<p>European Strategic Environmental Assessment Directive (2001/42/EC)</p>		
<p>Ensure that environmental consequences of certain plans and programmes are identified and assessed during their preparation and before their adoption. Integrate environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. No specific targets relevant to the Joint Plan.</p>	<p>The Joint Plan policies to support overall objectives and requirements of the Directive.</p>	<p>The SA, which incorporates SEA, will need to be undertaken in a way which meets the requirements of the Directive.</p>
<p>European Environmental Impact Assessment Directive (2011/92/EU) as amended by Directive 2014/52/EU</p>		
<p>The Directive sets out the when an Environmental Impact Assessment should be undertaken, which topics should be considered, how alternatives should be considered, how it should be consulted on and how it should be presented, including through an Environmental Statement and Non-Technical Summary.</p>		
<p>Social PPSIs</p>		
<p>Population and Human Health</p>		
<p>Environmental Noise Directive (2002/49/EC)</p>		
<p>The END aims to “define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to the exposure to environmental noise”.</p>	<p>The Joint Plan will have to comply with Noise Action Plans.</p>	<p>The SA objectives should address noise reduction.</p>
<p>Aarhus Convention (Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, 1998)</p>		
<p>This United Nations Economic Commission for Europe (UNECE) convention establishes a number</p>	<p>The Production of</p>	<p>Production of a Sustainability</p>

<p>of rights of the public (citizens and their associations) with regard to the environment. Public authorities (at national, regional or local level) are to contribute to allowing these rights to become effective.</p> <ul style="list-style-type: none"> ➤ The right of everyone to receive environmental information that is held by public organizations; ➤ Public authorities are obliged to actively disseminate environmental information in their possession; ➤ The right to participate from an early stage in environmental decision-making; ➤ The right to challenge, in a court of law, public decisions that have been made without respecting the two aforementioned rights or environmental law in general. 	<p>Statement of Community Involvement (SCI) will ensure public participation in the Joint Plan.</p>	<p>Report in consultation with relevant organisations in accordance with Government Guidance and the Statement of Community Involvement.</p>
<p>Cultural Heritage</p>		
<p>European Convention on the Protection of Archaeological Heritage (Revised) (Valetta Convention, 1995)</p>		
<p>The new text makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. It is concerned in particular with arrangements to be made for co-operation among archaeologists and town and regional planners in order to ensure optimum conservation of archaeological heritage. This convention aims for the recognition and protection of archaeological and heritage assets.</p> <p>Article 5 states: “Each party undertakes to seek to reconcile and combine the respective requirements of archaeology and development plans by ensuring that archaeologists participate in planning policies designed to ensure well-balanced strategies for the protection, conservation and enhancement of sites of archaeological interest”.</p>	<p>The Joint Plan should take account of preserving archaeological heritage.</p>	<p>Archaeological sites can be potentially damaged through development. The Joint Plan should take account of preserving archaeological heritage. Archaeological heritage should be considered in the SA Framework.</p>
<p>UNESCO World Heritage Site Convention (1972)</p>		
<p>The Convention sets out a definition of ‘cultural heritage’ including monuments, groups of buildings and sites in Article 1; and a definition of ‘natural heritage’, including natural features, geological and physiographical formations and natural sites in Article 2.</p>	<p>The Joint Plan needs to recognise the status of, and seek to protect, cultural and natural heritage. World Heritage sites are particularly important.</p>	<p>SA needs to ensure both cultural and natural heritage issues are tested by the SA Framework.</p>
<p>Landscape</p>		
<p>European Landscape Convention (Florence Convention) (2004)</p>		
<p>The ELC defines landscape as: “An area, as perceived by people, whose character is the result of the action and interaction of</p>	<p>This convention has been translated into different UK</p>	<p>SA should include objectives which relate to the protection</p>

<p>natural and/or human factors.” (Council of Europe 2000).</p> <p>The definition applies to the whole territory of states including all urban and periurban landscapes, towns, villages and rural areas, the coast and inland areas. It applies to ordinary or even degraded landscape as well as those areas that are outstanding or protected.</p> <p>Key targets include:</p> <ul style="list-style-type: none"> ➤ raising awareness of the value of landscapes among all sectors of society, and of society's role in shaping them; ➤ the identification and assessment of landscapes, and analysis of landscape change, with the active participation of stakeholders; ➤ setting objectives for landscape quality, with the involvement of the public; ➤ the implementation of landscape policies, through the establishment of plans and practical programmes. 	<p>legislation which the Joint Plan should take account of.</p>	<p>and enhancement of landscape.</p>
<p>Cross-Cutting PPPSIs</p>		
<p>Material Assets</p>		
<p>EU Directive on the Incineration of Waste (2000/76/EC)</p>		
<p>The aim of the Directive is to prevent or limit as far as practicable the negative effects on the environment, in particular, pollution by emissions to air, soil, surface water and groundwater, and the resulting risks to human health, from incineration and co-incineration of waste. This aim shall be met by stringent operational conditions and technical requirements, through setting emission limit values for waste incineration and co-incineration plants within the Community and also through meeting the requirements of the Waste Directive 75/442/EEC.</p>	<p>Government guidance (PPS10) states that Waste Planning Authorities should work on the assumption that the relevant pollution control regime will be enforced and that they should not concern themselves with the control of processes. However, the Joint Plan and supporting documents will need to ensure any incineration of waste is located and designed/constructed in ways not likely to affect the environment and amenity.</p>	<p>The SA should ensure that incineration of waste is not directed by policy or allocation to locations likely to pose risks to the environment and human health and that opportunities to recover waste heat are maximised.</p>

<p>EU Directive on the Management of Waste from Extractive Industries (2006/21/EC) – ‘The Mining Waste Directive’ (European Commission, 2006)</p>		
<p>The Directive provides a regulatory framework that reflects the risks of environmental harm/impact on human health arising from the management of waste from the extractive industries. Article 4 of the Directive imposes a general objective on Member States to ensure protection of the environment and human health.</p> <p>Implemented in the England and Wales via the Environmental Permitting Regulations (2010).</p> <p>Minimum supplementary requirements include:</p> <ul style="list-style-type: none"> ➤ operators to address the category of the waste facility, the amount of waste likely to be generated, its characteristics, and the method of management; ➤ permits and conditions for waste facilities to secure environmental and safety measures; ➤ for waste facilities which present a significant accident hazard, the development of a major-accident prevention policy (similar to the provisions in the Seveso II Directive); ➤ the drawing up of closure plans to ensure that the land affected by the waste facility is restored to a satisfactory state; and ➤ operators to provide a financial guarantee (or equivalent) to ensure that sufficient funds are available to rehabilitate the land affected by a waste facility to a satisfactory state in the event that an operator defaults on its closure obligations. 	<p>The Joint Plan should provide an appropriate framework for managing waste from extractive industries.</p>	<p>Consider inclusion of objectives to protect the environment and human health from extractive waste disposal.</p>
<p>EU Landfill Directive (99/31/EC)</p>		
<p>The Directive's overall aim is to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any risk to human health, from the landfilling of waste.</p> <p>The Directive sets targets to reduce the amount of biodegradable municipal waste landfilled.</p> <p>These targets are: By 2013 to reduce biodegradable municipal waste landfilled to 50% of that produced in 1995 and by 2020 to reduce biodegradable municipal waste landfilled to 35% of that produced in 1995.</p>	<p>The Joint Plan policies to support overall objectives and requirements of the Directive.</p>	<p>The SA should include objectives for waste management and ensure that the requirements of the Directive are reflected in the SA Framework.</p>
<p>EU Waste Framework Directive (2008/98/EC)</p>		
<p>The Directive replaces the previous 2006 Waste Framework Directive, which in turn had replaced the original Directive 75/442/EEC. It lays down measures to protect the environment and human health by preventing or reducing the adverse impacts of generation and management of waste.</p> <p>The Directive establishes the priority order of the waste hierarchy as being a) prevention, b) preparing for re-use, c) recycling, d) other recovery, e.g. energy recovery, and d) disposal.</p>	<p>The Joint Plan will need to ensure that adequate facilities are planned for to ensure the objectives and targets of the Directive can be delivered.</p>	<p>Check that the requirements of the Directive are reflected in the Sustainability Framework and ensure that opportunities to drive waste management up the waste</p>

<ul style="list-style-type: none"> ➤ By 2020 the preparing for re-use and the recycling of waste materials such as at least paper, metal, plastic and glass from households shall be increased to a minimum of 50 per cent by weight. ➤ By 2020 the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute for other materials, of non-hazardous construction waste should be increased to a minimum of 70 per cent by weight. 		<p>hierarchy are identified.</p>
<p>European Directive Energy Performance of Buildings (2002/91/EC)</p>		
<p>To promote the improvement of the energy performance of buildings within the community, taking into account outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness. By 2020, all new buildings are 'nearly zero-energy buildings'.</p>	<p>The Joint Plan policies to support overall objectives and requirements of the Directive.</p>	<p>Ensure that the requirements are reflected in the Sustainability Appraisal Framework.</p>
<p>Renewables Directive (2009/28/EC)</p>		
<p>This Directive builds upon a previous directive which set targets for renewable energy production. The Directive requires each member state to increase its share of renewable energies - such as solar, wind or hydro in the EU's energy mix to raise the overall share from 8.5% today to 20% by 2020. A 10% share of 'green fuels' in transport is also included within the overall EU target. Each Member state should increase its share of renewables by 5.5% on 2005 levels. For the UK this is an increase from 1.3 to 15%.</p>	<p>The Joint Plan should encourage the production of renewable energy.</p>	<p>The SA should explore opportunities to increase uptake of renewable energy technologies in minerals and waste development.</p>
<p>EU Transport White Paper – Roadmap to a Single European Transport Area (2011)</p>		
<p>Sets out the Commission's roadmap of 40 initiatives for the next decade to build a competitive transport system that will increase mobility, remove barriers in key areas and fuel growth and employment. The proposals will reduce Europe's dependence on imported oil and cut carbon emissions in transport 60% by 2050.</p>	<p>No specific targets however the general implications are to encourage sustainable transport.</p>	<p>The SA should consider the White Paper's objectives in relation to: national government policy; binding commitments in other EU policy areas that can affect transport policy, such as in environmental policy; and any aspirations for local transport policy.</p>
<p>Closing the Loop: An EU Action Plan for the Circular Economy (2015)</p>		
<p>States that "the transition to a more circular economy, where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste</p>	<p>Plan should seek to facilitate a circular</p>	<p>SA should help support the overall approach to achieving</p>

<p>minimised, is an essential contribution to the EU's efforts to develop a sustainable, low carbon, resource efficient and competitive economy". The Action Plan sets actions relating to different parts of the economy associated with different phases in product lifecycles. In terms of this plan the most relevant areas are actions for waste management, including for preventing overcapacity in the management of residual waste; and boosting the market for secondary raw materials and water re-use. It also highlights priority areas for intervention, including for plastics, food waste, critical raw materials, construction and demolition waste, biomass and bio-based products and innovation.</p>	<p>economy.</p>	<p>a circular economy and recognise risks associated with under and overcapacity in waste treatments.</p>
<p>Sustainable Development</p>		
<p>Rio +20 'Future we Want' – Outcome Document (2012)</p>		
<p>Sets out a 'common vision' to 'renew our commitment to sustainable development, building on the declarations made at The Johannesburg Declaration on Sustainable Development, and to ensure the promotion of economically, socially and environmentally sustainable future for our planet and for present and future generations'. Recognises and emphasises the critical roles of a number of components of sustainable development including sustainable agriculture, the key role that ecosystems play in maintaining water quality, renewable energy and energy efficiency, sustainable transport, health, reducing, re-using and recycling waste. It also recognises the role of minerals extraction and acknowledges that mining activities should 'maximize social and economic benefits, as well as effectively address[ing] negative environmental and social impacts'.</p>	<p>The Joint Plan policies to support overall objectives.</p>	<p>Check that the commitments are reflected in the Sustainability Appraisal Framework.</p>
<p>United Nations Transforming our World: the 2030 Agenda for Sustainable Development (Sustainable Development Goals) (2015)</p>		
<p>Establishes 17 Sustainable Development Goals and 169 targets to be implemented by all countries acting in collaborative partnership.</p> <p>The goals of most relevance to the Joint Plan are as follows:</p> <p>Goal 1. End poverty in all its forms everywhere</p> <p>Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p> <p>Goal 3. Ensure healthy lives and promote well-being for all at all ages</p> <p>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p> <p>Goal 5. Achieve gender equality and empower all women and girls</p> <p>Goal 6. Ensure availability and sustainable management of water and sanitation for all</p> <p>Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all</p> <p>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive</p>	<p>The Joint plan should seek to promote sustainable development.</p>	<p>The SA should seek to embody all the sustainable development goals of relevance to minerals and waste planning.</p>

<p>employment and decent work for all Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation Goal 10. Reduce inequality within and among countries Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable Goal 12. Ensure sustainable consumption and production patterns Goal 13. Take urgent action to combat climate change and its impacts Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development</p>		
<p>European Sustainable Development Strategy (ESDS) – European Commission (2006)</p>		
<p>Achieving sustainable development requires economic growth that supports social progress and respects the environment. The strategy argues that in the long term economic growth, social cohesion and environmental protection must go hand in hand. The main aims of the strategy are (there are no specific targets):</p> <ul style="list-style-type: none"> ➤ To limit climate change and increase the use of clean energy; ➤ To address threats to public health; ➤ To manage natural resources more responsibly; ➤ To improve the transport system and land-use management. 	<p>The Joint Plan policies should provide a sustainable spatial vision and reflect the aim of this strategy.</p>	<p>The SA will consider long term sustainability in accordance with guidance on this issue.</p>

Key Objectives, targets and indicators relevant to the Joint Plan and SA	Implications for the Joint Plan	Implications for SA
NATIONAL CONTEXT		
Environmental PPPSIs		
Biodiversity, Flora and Fauna		
The Wetland Vision for England (Environment Agency , 2008)		
<p>The Vision aims to conserve, enhance and recreate the wetland capacity of catchments, secure the long term sustainable management of wetlands, provide a better understanding of the functions and value of wetland assets and the need to maintain their services as part of a sustainable solution to the effects of flooding, pollution and climate change. Key desired outcomes include: helping to maintain or achieve favourable condition for wetland SSSIs, adopting an integrated approach to river basin and flood risk management planning and the conservation of wetlands.</p>	<p>Ensure that wetland areas are protected and enhanced, and consider opportunities for the creation of new wetlands.</p>	
The UK Post-2010 Biodiversity Framework (Defra, 2012)		
<p>The Framework is the UK Government's succession to the UK BAP (1992-2012) and is the result of a change in strategic thinking following the publication of 'Strategic Plan for Biodiversity 2011–2020' and its 20 'Aichi targets', agreed at Nagoya, Japan in October 2010, and the launch of the new EU Biodiversity Strategy (EUBS) in May 2011. The Framework demonstrates how the UK contributes to achieving the 'Aichi targets', and identifies the activities required of country biodiversity strategies to achieve the Aichi targets.</p>	<p>The Joint Plan needs to have regard to the emerging City of York Biodiversity Action Plan and district level Biodiversity Action Plans in North Yorkshire.</p>	
England Biodiversity Strategy Climate Change Adaptation Principles (Defra, 2008)		
<p>Sets out the main adaptation principles that are appropriate to conserving biodiversity at a time of climate change. The key principles are:</p> <ul style="list-style-type: none"> ➤ Maintain and increase ecological resilience. ➤ Accommodate change. ➤ Integrate action across all sectors. ➤ Develop knowledge and plan strategically. ➤ Take practical action now. <p>Under each principle a set of adaptation priorities is presented.</p>	<p>The Joint Plan should minimise impacts upon recognised environmental assets and, where possible, increase ecological resilience.</p>	<p>SA should contain objectives which seek to minimise impacts upon recognised environmental assets and seek opportunities to build resilience to climate change.</p>
Climate Change and Biodiversity Adaptation: The Role of the Spatial Planning System (Natural England, 2009)		
<p>The aim of this report is to identify the role the planning system could play in helping biodiversity</p>	<p>The Plan should minimise</p>	<p>SA should contain objectives</p>

<p>adapt to climate change.</p>	<p>impacts upon recognised environmental assets.</p>	<p>which seek to minimise impacts upon recognised environmental assets.</p>
<p>Natural Environment and Rural Communities Act (2006)</p>		
<p>Section 40 of the Act places a new biodiversity duty on public bodies which includes local authorities. The implications of this Act are that biodiversity must be integrated and delivered in all aspects of infrastructure, finance, development control and forward planning.</p>	<p>The implications for the Joint Plan are that biodiversity must be integrated and delivered through the Plan. The Joint Plan should seek to conserve and enhance Local Wildlife Sites and Local Nature Reserves and to give proper consideration to biodiversity outside designated areas.</p>	<p>The SA Framework will aim to ensure that the Joint Plan delivers biodiversity through its policies. The SA objectives should seek to conserve and enhance Local Sites and Local Nature Reserves and to give proper consideration to biodiversity outside designated areas.</p>
<p>UK National Ecosystem Assessment (2011)</p>		
<p>The UK National Ecosystem Assessment (UKNEA) provides a comprehensive overview of the state of the natural environment in the UK and a new way of estimating our national wealth. The key messages of the UKNEA are:</p> <ul style="list-style-type: none"> ➤ The natural world, its biodiversity and its constituent ecosystems are critically important to our wellbeing and economic prosperity, but are consistently undervalued; ➤ Ecosystems and ecosystem services, and the ways people benefit from them, have changed markedly in the past 60 years, driven by changes in society; ➤ The UK's ecosystems are currently delivering some services well, but others are still in long-term decline; ➤ The UK population will continue to grow, and its demands and expectations continue to evolve. This is likely to increase pressure on ecosystem services; ➤ Actions taken and decisions made now will have consequences far into the future for ecosystems, ecosystem services and human well-being; ➤ A move to sustainable development will require an appropriate mixture of regulations, technology, financial investment and education, as well as changes in individual and societal behaviour and adoption of a more integrated approach to ecosystem management. <p>In 2014 The National Ecosystem Assessment Follow On identified a role for Strategic</p>	<p>The Joint Plan should recognise where it may contribute to ecosystem services.</p>	<p>The SA should contribute to the delivery of ecosystem services. In particular, baseline information on Natural Capital should inform the baseline and assessment of policies should consider if policies or sites might better deliver ecosystem services.</p>

<p>Environmental Assessment, namely:</p> <p>“Strategic Environmental Assessment and Environmental Impact Assessment are key tools for embedding ecosystem knowledge into planning processes. Using ecosystem knowledge in appraisal will: - Help to provide a more comprehensive analysis of environmental impacts and potential problems; - help identify critical factors which may facilitate or hinder the embedding of the ecosystem services framework”.</p>		
<p>Conservation of Habitats and Species Regulations (2010)</p>		
<p>The original Conservation (Natural Habitats &c) Regulations, 1994 transposed the EU Habitats Directive (described above) into national law. The Conservation of Habitats and Species Regulations, 2010 consolidate the various amendments to the original regulations and include new provisions to implement parts of the Marine and Coastal Access Act, 2009.</p> <p>Part 102 (1) of the Regulations States:</p> <p>“Where a land use plan: a) is likely to have a significant effect on a European site or European offshore marine site (either alone or in combination with other plans or projects), and b) is not directly connected with or necessary to the management of the site, the ‘plan making authority’ for that plan must, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site’s nature conservation objectives”.</p> <p>The Regulations were recently amended by the Conservation of Habitats and Species (Amendment) Regulations 2012, which more fully integrates the requirement of the Birds Directive by requiring efforts to avoid pollution or deterioration of habitats for wild birds outside of specific designated areas.</p>	<p>The Joint Plan will be subject to Habitats Regulations Assessment, and if significant effects are likely, appropriate assessment of its implications for European Sites. This will mean that the Joint Plan cannot be enacted in a form which may damage a European Site without demonstrating ‘imperative reasons of overriding public interest.</p>	<p>The SA must have regard to the findings of the Habitats Regulations Assessment.</p>
<p>Wildlife and Countryside Act (1981) ‘as amended’</p>		
<p>Transposes the Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979) and the EU Birds Directive (1979) into national law. Has been amended by the Countryside and Rights of Way Act (2000).</p> <p>Provides for the notification of Sites of Special Scientific Interest (SSSI) and measures for their protection and management. Also for Special Protection Areas under the Birds Directive. Sets out the legal offences / penalties for killing or harming species listed in annexes. Prohibits agricultural or forestry land on moorland / heathland in national parks which has been such for 20 years or more</p>	<p>The Joint Plan needs to include policy to ensure adequate protection of SSSIs through the planning system and to ensure listed species are not harmed or killed as a result of development.</p>	<p>The SA Framework needs to give due emphasis to nationally designated SSSIs and species.</p>

<p>and requires surveying authorities to keep up-to-date definitive maps of Public Rights of Way. Section 28 of the Act imposes a duty on a number of bodies including local planning authorities to take reasonable steps, consistent with the proper exercise of its functions, to further the conservation and enhancement of SSSIs.</p>		
<p>Government Forestry and Woodlands Policy Statement (Defra, 2013)</p>		
<p>Protect, improve and expand England’s forests and woodlands whilst realising the social and environmental benefits of these assets and improving the governance of woodlands through simplification of governance structures.</p> <ul style="list-style-type: none"> ➤ Protect trees, woods and forests through prioritisation of tree and plant health and the focus of funding on research into tree disease. ➤ Improve woodland assets by driving economic growth and benefitting people and nature. Economic growth will be driven by a range of measures such as increasing woodland, reducing regulations and exploiting economic opportunities. People and communities will benefit from an increase of community involvement, local access and improvement of woodlands for societal benefit. In addition, wildlife and the natural environment will benefit through restoration of woodlands, implementation of the Natural Environment White Paper and Biodiversity 2020, production of an open habitat strategy and encouragement of LNPs. ➤ Expand the woodland resource through increased tree planting, development of the voluntary carbon market and reducing burdens on landowners who want to plant woodland. ➤ Realise woodlands’ value through the creation of new market opportunities. ➤ Create strong and resilient governance and structures through simplification and lessening governmental intervention. 	<p>Develop plan policies in line with national guidance.</p>	<p>Ensure Sustainability Appraisal objectives recognise these issues.</p>
<p>Biodiversity 2020 (Defra, 2011)</p>		
<p>Vision – By 2050 our land and seas will be rich in wildlife, our biodiversity will be valued, conserved, restored, managed sustainably and be more resilient and able to adapt to change, providing essential services and delivering benefits for everyone.</p> <p>More specifically, the 2020 Mission outlined in the Strategy, states: “Our mission is to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people”. Specific ‘outcomes’ are then cited for ‘habitats and ecosystems on land (Outcome 1), marine habitats, ecosystems and fisheries (Outcome 2), species (Outcome 3) and people (Outcome 4). These outcomes include the delivery of the targets stated in the Natural Environment White Paper (see below).</p>	<p>The MWJP should ensure that minerals and waste developments do not hinder achievement of the objectives.</p>	<p>SA objectives need to cover effects on biodiversity.</p>

The Natural Choice – Securing the Value of Nature (Natural Environment White Paper (Defra, 2011))		
<p>The main themes are protecting and improving our natural environment, growing a green economy and reconnecting with nature. By 2020:</p> <ul style="list-style-type: none"> ➤ 90% of priority wildlife habitats in recovering or favourable condition; ➤ Increase in at least 200,000 hectares of priority habitats; ➤ 50% of SSSI to be in favourable condition and at least 95% in favourable or recovering; ➤ At least 17% of England will be managed to safeguard biodiversity; ➤ At least 15% of degraded ecosystems that are important to climate change adaptation or mitigation will be restored. ➤ By 2030 reduce peat use to zero. ➤ By 2015 achieve good ecological status for 32 per cent of water bodies. 	<p>Policies should enable minerals and waste developments to contribute to or not hinder achievement of these targets.</p>	<p>SA objectives need to cover effects on priority habitats.</p>
Water and Soil		
Safeguarding our Soils – A Strategy for England (Defra, 2009)		
<p>A Strategy to safeguard and protect England’s irreplaceable and fundamental natural resource, soil, which provides many essential functions for life.</p> <p>The strategy sets out how the government will:</p> <ul style="list-style-type: none"> ➤ value soils in the planning system; and ➤ prevent pollution of soils, and deal with the historic legacy of contaminated land. 	<p>Policies need to reflect the need to protect and improve soil.</p>	<p>The SA will need to address the protection of soils.</p>
DEFRA Countryside Stewardship, 2015		
<p>“Provides financial incentives for land managers to look after their environment to look after their environment through activities such as:</p> <ul style="list-style-type: none"> ➤ conserving and restoring wildlife habitats ➤ Flood risk management ➤ Woodland creation and management” 	<p>The Plan should promote restoration of sites</p>	<p>The SA may highlight restoration opportunities that align with surrounding grant schemes or that, themselves, may attract grant aid.</p>
Water White Paper - Water for Life (Defra, 2011)		
<p>Sets out the priorities for Government policy on water in England. The White Paper addresses several areas:</p> <ul style="list-style-type: none"> ➤ Water and the natural environment –where priorities for ‘tackling water pollution’ and ‘tackling over abstraction’, are set out; ➤ Water and the green economy –with priorities including ‘supporting growth and innovation’; 	<p>The Joint Plan should contribute to this White Paper’s objectives.</p>	<p>The SA Framework should support the efficient use of water and seek to reduce water pollution.</p>

<ul style="list-style-type: none"> ➤ Water and You – with priorities including ‘changing the way we value water’ 		
<p>Groundwater Protection: Policy and Practice (GP3) (Environment Agency, 2012)</p>		
<p>Sets out the aims and objectives and policy approach for protecting and managing groundwater in England and Wales. Seeks to balance the threat to the groundwater supply with the benefits of a proposed development or activity. Local Planning Authorities to consider groundwater protection objectives when drawing up Local Development Documents.</p>	<p>Groundwater objectives should be reflected in the development of the MWJP.</p>	<p>Ensure that the Joint Plan protects and manages groundwater.</p>
<p>Flood and Water Management Act (2010)</p>		
<p>The Flood and Water Management Act provides for better, more comprehensive management of flood risk for people, homes and businesses, helps safeguard community groups from unaffordable rises in surface water drainage charges and protects water supplies to the consumer.</p> <ul style="list-style-type: none"> ➤ Part 1 of the Act requires the Environment Agency to develop a national strategy for flood and coastal erosion risk. It also requires all lead flood authorities in England to develop and maintain, apply and monitor a strategy for flood risk in their area. ➤ Schedule 3 introduces standard for the design, construction, maintenance and operation of new rainwater drainage systems and introduces an approving body (generally the local authority). ➤ Amends section 106 of the Water Industry Act, 1991 to make the right to connect surface water run off to public sewers conditional on the approval of the drainage system by the approving body. 	<p>The Joint Plan will need to be integrated with flood risk strategy for the Plan Area and not conflict with formally designated features that affect flood risk.</p>	<p>The SA should ensure flood risk is addressed through analysis of the supporting evidence provided by the Strategic Flood Risk Assessment.</p> <p>Strategic Flood Risk Assessment will need to provide guidance on SUDS for use in the SA.</p>
<p>Marine and Coastal Access Act (2009)</p>		
<p>The Act seeks to ensure clean, healthy, safe, productive and biologically diverse oceans and seas. It introduces new systems for delivery of coastal objectives including for planning, nature conservation, fisheries and for improving public access to the coast. Policies should ensure that minerals and waste developments do not harm the marine environment or coastal access.</p>	<p>Policies should ensure that minerals and waste developments do not harm the marine environment or coastal access.</p>	<p>SA objectives need to cover protecting the marine environment and maintaining coastal access.</p>
<p>HM Government UK Marine Policy Statement (2011)</p>		
<p>The Marine Policy Statement, together with future Marine Plans, form a new plan led system for marine activities. It sets out a UK Vision for the marine environment as being for ‘clean, healthy, safe, productive and biologically diverse oceans and seas’. It also sets out a number of high level marine objectives, grouped around the following themes:</p>	<p>Policies should ensure that minerals and waste developments do not harm the marine environment.</p>	<p>SA objectives need to cover protecting the marine environment.</p>

<ul style="list-style-type: none"> ➤ Achieving a sustainable marine economy. ➤ Ensuring a strong, healthy and just society. ➤ Living within environmental limits. ➤ Promoting good governance. ➤ Using sound science responsibly. <p>Section 1.3 affirms that the MPS and marine planning systems will sit alongside and interact with existing planning regimes across the UK. (The two planning systems will physically overlap with marine plan areas extending up to the level of mean high water spring tides while terrestrial planning boundaries generally extend to the mean low water spring tide.) A number of key issues are identified where there is overlap between terrestrial and marine planning regimes, such as effect of development on seascape, air quality, noise, ecology etc.</p>		
Water Environment (Water Framework Directive) Regulations, 2003		
<p>Implements the Water Framework Directive in England via measures such as requiring the Environment Agency to set environmental objective for river basin districts. Requires public bodies, when exercising their functions, to have regard to relevant River Basin Management Plans and gives the Environment Agency powers to request information from public bodies on how they are adhering to the regulations.</p>	<p>The Joint Plan policies and sites should not prevent status objectives in River Basin Management Plans from being achieved</p>	
National Standards for sustainable drainage systems (DEFRA, 2011)		
<p>Sets out the requirements for the design, construction, operation of SUDS, including the judging criteria of SUDS Approval Bodies. It also states that ‘the Local Planning Authority could set local requirements for planning permission that have the effect of more stringent requirements than these national standards’.</p>	<p>SUDs should be integrated into minerals and waste development as a priority where practicable.</p>	<p>SA and SFRA should promote the integration of SUDS into minerals and waste development.</p>
Air		
HM Government Air Quality Standard Regulations (2010)		
<p>Transposes into English law the requirements of several air quality directives, including 2008/50/EC. Sets standards to improve air quality and reduce the impact of air pollution on human health and ecosystems.</p>	<p>The Joint Plan policies and text should support improved air quality.</p>	<p>SA Framework to include appropriate air quality objective / indicators.</p>
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland Volume 1 (2007) and Volume 2 (2011)		
<p>The Air Quality Objectives are a statement of government policy intentions or targets. The primary objective is to make sure that everyone can enjoy a level of ambient air quality in public places with a requirement for local authorities to undertake a local air quality review on 8 identified air pollutants</p>	<p>Consider how the Joint Plan policies can support the objectives and targets</p>	<p>Consider sustainability objectives that aim to minimise air pollution.</p>

<p>and for prediction of levels in the future. Air Quality Management Areas (AQMAs) can be established where it is expected that targets will not be met.</p> <p>Targets include:</p> <ul style="list-style-type: none"> ➤ Sulphur dioxide 125ug/m3 (24 hour mean) not to be exceeded more than 3 times a year. ➤ Particles (PM10) 40ug/m3 (annual mean). ➤ Particles (PM2.5) 25ug/m3 (annual mean). ➤ Nitrogen oxide 40ug/m3 (annual mean). <p>The Strategy also sets out objectives for sulphur dioxide and oxides of nitrogen for the protection of ecosystems: Nitrous oxides 30ug/m3 (annual average), Sulphur dioxide 20ug/m3 (annual average). However these objectives only apply in certain defined areas consistent with the Air Quality Directive.</p>	<p>of the Air Quality Strategy.</p>	<p>Particular attention should be given to Air Quality Management Areas.</p>
<p>Climatic Factors</p>		
<p>Climate Change Risk Assessment (Defra, 2012)</p>		
<p>The Climate Change Risk Assessment (CCRA) is the first-ever comprehensive assessment of potential risks and opportunities for the UK arising from climate change. The CCRA represents a key part of the Government’s response to the Climate Change Act 2008, which requires a series of assessments of climate risks to the UK, both under current conditions and over the long term.</p> <p>Key messages which will need to be addressed are:</p> <ul style="list-style-type: none"> ➤ The global climate is changing and warming will continue over the next century; ➤ The UK is already vulnerable to extreme weather, including flooding and heat waves; ➤ Flood risk is projected to increase significantly across the UK; ➤ UK water resources are projected to come under increased pressure; ➤ There are health benefits as well as threats related to climate change, affecting the most vulnerable groups in our society; ➤ Sensitive ecosystems are likely to come under increasing pressure; ➤ Some changes projected for the UK as a result of climate change could provide opportunities for agriculture and other businesses, although not outweighing the threats; ➤ Despite the uncertainties related to future climate change and its impacts, the evidence is now sufficient to identify a range of possible outcomes that can inform adaptation policies and planning. <p>The next assessment is due in 2017.</p>	<p>The Joint Plan needs to ensure that consideration for climate change is at the heart of the document.</p>	<p>The Sustainability Appraisal should ensure that climate change is factored into the assessment process.</p>

<p>Key findings of the CCRA as they relate to the Joint Plan area and its minerals and waste focus is considered in the baseline of this report.</p>		
<p>Climate Change Adaptation by Design (Town and Country Planning Association, 2007)</p>		
<p>This document sets out the context for climate change and the reasons adaptation is needed and can help reduce the risks of potential effects of climate change The document sets out 3 spatial scales for adaptation:</p> <ul style="list-style-type: none"> ➤ Conurbation or catchment scale. ➤ Neighbourhood scale. ➤ Building scale. <p>There are four key areas which need to be understood and planned for:</p> <ul style="list-style-type: none"> ➤ Managing high temperatures. ➤ Managing flood risks. ➤ Managing water resources and water quality. ➤ Managing ground condition. 	<p>The Joint Plan will need to ensure that the predicted impacts of climate change are considered alongside the need for minerals and waste development.</p>	<p>Adaptation to climate change should be considered in the Sustainability Appraisal's objectives.</p>
<p>The Carbon Budget Order (HM Government, 2011)</p>		
<p>Puts in a maximum level for net UK carbon emissions as defined in the UK net carbon account (as defined in section 27 of the Climate Change Act. The carbon budget for 2023 to 2017 is 1,950 million tonnes of carbon dioxide equivalent. This figure is 50% below 1990 levels of CO₂. Section 13 of the Climate Change Act commits the Secretary of State to prepare policies and proposals to meet the carbon budget.</p>	<p>Minerals and waste activity should seek to reduce carbon emissions</p>	<p>The SA should seek to reduce carbon emissions</p>
<p>The Carbon Plan (DECC, 2011)</p>		
<p>The Carbon Plan sets out how the UK will achieve decarbonisation within the framework of our energy policy: to make the transition to a low carbon economy while maintaining energy security, and minimising costs to consumers, particularly those in poorer households. Relevant targets:</p> <ul style="list-style-type: none"> ➤ By 2050, the Government expects industry to have delivered its fair share of emission cuts, achieving reduction of up to 70 per cent from 2009 levels. ➤ Over the next decade we need to continue reducing emissions from electricity generation through increasing the use of gas instead of coal, and more generation from renewable sources. ➤ By the end of 2013 the Government will develop a comprehensive Waste Prevention Programme and work with businesses and other organisations on a range of measures to 	<p>The Joint Plan will need to support the aims of the Carbon Plan.</p>	<p>The SA objectives should seek to drive down carbon emissions and help achieve carbon budgets by driving waste up the waste hierarchy, supporting low carbon built infrastructure, shorter freight networks and the switch to rail and considering the carbon implications of energy</p>

<p>drive waste reduction and re-use.</p> <ul style="list-style-type: none"> ➤ The Government endorse the Freight Transport Association led Logistics Carbon Reduction Scheme target of an 8% reduction in emissions between 2010 and 2015. 		minerals policy.
Climate Change Act (2008)		
<p>This Act provides a legal framework for ensuring that Government meets its commitments to tackle climate change. The Act requires that emissions are reduced by at least 80% by 2050, compared to 1990 levels.</p>	<p>The Joint Plan will need to help deliver and support this Act.</p>	<p>The SA ensure it is in line with is Act and through analysis assess how it will help to meet Carbon reduction targets.</p>
National Adaptation Programme (Defra, 2013)		
<p>This will address the risks set out in the UK Climate Change Risk Assessment.</p>	<p>The Joint Plan should take into account this programme</p>	<p>Ensure the SA takes into account this programme</p>
Planning for Climate Change – Guidance for Local Authorities (Town and Country Planning Association, 2012)		
<p>This guide has been produced for local communities in order for action on climate change to be galvanised locally as well as nationally. Local authorities, communities, private sector practitioners, LEPs and LNPs should work together to implement changes in spatial planning that can contribute to tackling climate change and reap the economic benefits of renewable energy, sustainable transport and flood resilience.</p>	<p>The Joint Plan should take into account this guidance.</p>	<p>The SA objectives should seek to encourage working partnerships within local areas in order to tackle climate change.</p>
Additional Environmental Issues		
Control of Pollution Act (1974) and amending acts		
<p>The Control of Pollution Act 1974 requires waste disposal authorities to make adequate arrangements for the disposal of waste. Makes disposal of controlled waste a licensed activity and the disposal of ‘poisonous, noxious or polluting’ waste beyond the terms of a license.</p> <p>Allows the production of heat and electricity from waste by disposal authorise subject to restrictions.</p> <p>Makes the intentional pollution of water an offence and gives local authorities the power to serve notice on persons to restrict nuisance noise.</p>	<p>The Joint Plan should ensure that policies restrict noise and water pollution and where other disposal options are unfeasible seek to recover the energy from waste.</p>	<p>The SA Framework should incorporate objectives consistent with the Act.</p>
Model Procedures for the Management of Contaminated Land (Defra/Environment Agency) CLR11 (2004)		
<p>The Model Procedures for the Management of Land Contamination report, CLR 11, has been developed to provide the technical framework for applying a risk management process when dealing with land affected by contamination. The process involves identifying, making decisions on</p>	<p>The Joint Plan should ensure that contaminated land is managed in</p>	<p>The SA should consider the management of contaminated land when</p>

<p>and taking appropriate action to deal with land contamination in a way that is consistent with government policies and legislation within the UK.</p>	<p>compliance with the technical framework.</p>	<p>assessing policies.</p>
<p>HM Government Environmental Permitting Regulations (2010, amended 2012)</p>		
<p>The regulations provide details on the when activities that may cause pollution need to apply for a permit in order to be authorised and provides restrictions to minimise damage to the environment and human health. They build on the earlier 2007 Environmental Permitting Regulations which in turn combined the Pollution Prevention and Control and Waste Management Licensing Regulations.</p>	<p>Plan policies to contribute to achieving said objectives.</p>	<p>Check that the objectives are reflected in the Sustainability Appraisal Framework.</p>
<p>HM Government Environment Act (1995)</p>		
<p>Sets out National Park purposes which are to ‘Conserve and enhance the natural beauty, wildlife and cultural heritage of the Park’ and ‘Promote opportunities for the understanding and enjoyment of the special qualities of the Park by the public’, along with a duty in pursuing these to ‘seek to foster the economic and social wellbeing of local communities.’</p>	<p>Ensure that minerals and waste development does not undermine National Park purposes.</p>	<p>Consider effect on National Park purposes as part of the assessment of policies.</p>
<p>HM Government Environmental Protection Act (1990)</p>		
<p>This Act of Parliament defines the fundamental structure and authority for waste management and control of emissions into the environment. This includes regulating and licensing the acceptable disposal of controlled waste, the identification and compulsory remedial action for contaminated land.</p> <p>The EPA 1990 sets out a wide range of environmental legislation and is the primary act that controls the management of waste. Part II of the Act deals with waste management, in particular</p> <p>The key duties and powers of local authorities are set out in:</p> <ul style="list-style-type: none"> ➤ Section 33 – makes it an offence to treat, keep or dispose of controlled waste without a waste management licence. ➤ Section 34 – relates to a statutory Duty of Care for all those who handle and produce waste to ensure that it is managed, recovered and disposed of safely and in accordance with the Duty of Care regulations. ➤ Section 34-44 – details specific requirements in relation to the Waste Management Licensing system for waste treatment and disposal facilities. ➤ Sections 41-61 – relates to the responsibilities of waste collection and disposal authorities. A duty for Waste Disposal Authorities to pay recycling credits and provide for one or more places 	<p>The Plan needs to ensure consideration for minimising emissions as well as planning for environmentally benign waste management.</p>	<p>The SA should ensure thorough analysis that the issue of emissions control and impacts of contaminated land are considered.</p>

<p>where residents can deposit their household waste free of charge were introduced in this section.</p>		
<p>Red Tape Challenge – Environment Theme Proposals (Defra, 2012)</p>		
<p>In response to the UK Government’s Red Tape Challenge ‘crowd sourced’ comments and inbox submissions, views from a sounding board of environmental organisations and business along with a separate panel of businesses have been considered by Defra. The result is that of 255 regulations, 132 will be improved, 70 will be kept as they are and 53 obsolete regulations will be removed. The document lists the proposed changes.</p>		<p>The SA baseline, including the review of PPPSI will need to be kept under review to reflect the changes proposed when they are implemented.</p>
<p>Geological Conservation Review, held by the Joint Nature Conservation Committee (1977 onwards)</p>		
<p>The aim of the Geological Conservation Review Series is to provide a public record of the features of interest and importance at localities already notified or being considered for notification as 'Sites of Special Scientific Interest' (SSSIs).</p>	<p>The Joint Plan must be aware of SSSIs within North Yorkshire and seek to protect and enhance them.</p>	<p>The SA objectives should seek to protect and enhance SSSIs.</p>
<p>UK Geodiversity Action Plan: A framework for enhancing the importance and role of geodiversity</p>		
<p>Sets out a framework for geodiversity action across the UK and contains the following objectives relevant to the Joint Plan:</p> <ul style="list-style-type: none"> ➤ Objective 2: To increase recognition of our geodiversity in international, national, regional and local environmental and planning development policies and legislation; ➤ Objective 3: To demonstrate the relevance and benefit of including geodiversity across our work in relation to the natural and built environment and the role that geodiversity plays in sustainable development; ➤ Objective 4: To advocate and support development design and restoration that incorporates and enhance our geodiversity; ➤ Objective 6: To conserve and manage our geodiversity through appropriate recognition at international, national and local levels; ➤ Objective 7: To maintain and enhance our biodiversity through the management of sites, areas and wider landscapes. 	<p>The Joint Plan should look for opportunities to integrate geodiversity in minerals site management and restoration.</p>	<p>The SA objectives should seek to enhance geodiversity.</p>
<p>Economic PPPSIs</p>		
<p>Local Growth White Paper – Realising Every Place’s Potential (BIS, 2010)</p>		

<p>Key themes:</p> <ul style="list-style-type: none"> ➤ Shifting power to local communities and businesses; ➤ Promoting efficient and dynamic markets and increasing confidence to invest; and ➤ Focused investment. 	<p>Ensure that minerals and waste developments support these objectives where relevant.</p>	<p>SA objectives need to consider effects on the local economy and investment.</p>
<p>Defra Rural Statement (2012)</p>		
<p>The Rural Statement outlines the Government’s commitment to rural England. It ‘reflects their vision of successful rural businesses and thriving communities in a living, working countryside, and is based around three key priorities’; economic growth, rural engagement and quality of life.</p> <p>Included in the Statement is a commitment to ‘Rural Proofing’, which ‘requires policy-makers to consider the rural impacts of their policies and programmes and, where necessary, to make adjustments to achieve equally effective and successful outcomes for individuals, communities and businesses in rural areas’.</p>	<p>The Joint Plan policies should support the vision of the Rural Statement.</p>	<p>A Rural Proofing exercise will be undertaken on the SA Framework.</p>
<p>Social PPSIs</p>		
<p>Population and Human Health</p>		
<p>By all Reasonable Means: Inclusive Access to the Outdoors for Disabled People (CA 215 - Countryside Agency⁵, 2005)</p>		
<p>The report provides authorities with information on how to assess the needs of people with mobility problems, and to determine which routes should have priority for improved access for such people. The report provides authorities with information on how to assess the needs of people with mobility problems, and to determine which routes should have priority for improved access for such people.</p>	<p>The report provides authorities with information on how to assess the needs of people with mobility problems, and to determine which routes should have priority for improved access for such people.</p>	<p>The report provides authorities with information on how to assess the needs of people with mobility problems, and to determine which routes should have priority for improved access for such people.</p>
<p>Countryside and Rights of Way Act (2000)</p>		
<p>The Countryside and Right of Way Act 2000 extends the public's ability to enjoy the countryside whilst also providing safeguards for landowners and occupiers. It creates a new statutory right of access and modernises the rights of way system as well as giving greater protection to SSSIs,</p>	<p>Check that the objectives are reflected in the sustainability appraisal</p>	<p>The SA should seek to promote access to the countryside along with</p>

⁵ The Countryside Agency was a legacy body of Natural England.

<p>providing better management arrangements of Areas of Outstanding Natural Beauty and strengthening wildlife enforcement legislation.</p>	<p>framework.</p>	<p>wildlife protection.</p>
<p>Healthy Lives, Healthy People: Our Strategy for Public Health in England (Department of Health, November 2010)</p>		
<p>The white paper outlines the Government’s commitment to protecting the population from serious health threats; helping people live longer, healthier and more fulfilling lives; and improving the health of the poorest. Amongst the white paper’s multiple goals is a commitment to:</p> <ul style="list-style-type: none"> ➤ Designing communities for active ageing and sustainability; making active ageing the norm rather than the exception; promoting community ownership of green spaces; and improving access to land so that people can grow their own food ➤ The paper recognises the influence of the environment on communities and individuals, including: pollution, air quality, noise, access to green spaces, transport, good quality food and social inclusion. 	<p>The Joint Plan policies should look for opportunities to contribute to community health, such as through the reduction of risk from climate change or the provision of green infrastructure.</p>	<p>SA objectives should seek to improve the health of communities.</p>
<p>NHS Heat wave Plan for England (2015)</p>		
<p>Defines 4 levels of preparedness to protect public health from extreme heat and heat waves.</p> <p>Defines high risk groups and also long term measures to aid cooling, including:</p> <p>“Environmental action: (eg increase trees and green spaces; external shading; reflective paint; water features) other infrastructure changes (eg porous pavements)”</p>	<p>The Joint Plan should consider that built infrastructure supported by the Joint Plan is capable of providing a healthy working environment taking account of climate change and contributes to reducing carbon emissions, particularly if vulnerable groups are affected.</p>	<p>SA will need to ensure adaptation to climate change objective includes preparedness to hot weather events where vulnerable groups may be affected.</p>
<p>Mental Wellbeing Impact Assessment: A toolkit for wellbeing (New Economics Foundation, 2011)</p>		
<p>The report defines mental wellbeing in terms of emotional resources, cognitive resources, social skills and meaning and purpose. Mental Wellbeing Impact Assessment aims to identify the specific influence of a project or development on mental wellbeing. To do this it asks whether a proposed development has a positive or negative effect on ‘core protective factors’ for mental wellbeing, these being: enhancing control, increasing resilience and community assets; facilitating participation and</p>		<p>SA will need to ensure that, through its embedded health impact assessment, mental wellbeing and the factors that contribute to it is a</p>

<p>promoting inclusion.</p>		<p>consideration in the appraisal of policy.</p>
<p>Guide to Rural Proofing: National Guidelines (DEFRA, 2013).</p>		
<p>Establishes the importance of rural proofing policies and defines a number of issues for rural communities, including:</p> <ul style="list-style-type: none"> ➤ lack of access to markets due to distance and cost; ➤ low broadband speeds; ➤ mobile phone ‘not spots’; ➤ lack of access to business skills development; ➤ lack of access to hubs of innovation; ➤ lack of access to finance; ➤ Limited public transport; ➤ More older people; ➤ Services like waste collection are more expensive to deliver. 	<p>Plan should consider rural issues</p>	<p>SA should consider rural issues and SA Framework has already been rural proofed. However, assessors will continue to monitor rural issues and seek to address them through the assessment.</p>
<p>Cultural Heritage</p>		
<p>Ancient Monuments and Archaeological Areas Act (1979)</p>		
<p>Defines archaeological sites of national importance, such as ancient monuments and areas of archaeological importance, which are to be protected. Section 2 of the Act applies to the control of works affecting ancient monuments, making an offence of:</p> <ul style="list-style-type: none"> ➤ any works resulting in the demolition or destruction of or any damage to a scheduled monument; ➤ any works for the purpose of removing or repairing a scheduled monument or any part of it or of making any alterations or additions thereto; ➤ any flooding or tipping operations on land in or under which there is a scheduled monument. <p>Section 35 of the Act describes the circumstances where offences may occur due to operations in areas of archaeological importance.</p>	<p>The importance of protecting archaeological assets should be recognised.</p>	<p>SA should include an objective to protect and enhance the historic environment. Archaeology should be recognised as an important element of the historic environment.</p>
<p>White Paper: Heritage Protection for the 21st Century (DCMS, 2007)</p>		
<p>The proposals in this White Paper reflect the importance of the heritage protection. They are based around three core principles:</p> <ul style="list-style-type: none"> ➤ developing a unified approach to the historic environment; 	<p>The Joint Plan will need to consider heritage issues within policy formulation.</p>	<p>The SA should take heritage issues and assets into account within the SA Framework.</p>

<ul style="list-style-type: none"> ➤ maximising opportunities for inclusion and involvement; and ➤ supporting sustainable communities by putting the historic environment at the heart of an effective planning system. 		
<p>UK Government’s Statement on the Historic Environment for England (2010)</p>		
<p>The Vision: That the value of the historic environment is recognised by all who have the power to shape it; that Government gives it proper recognition and that it is managed intelligently and in a way that fully realises its contribution to the economic, social and cultural life of the nation. A number of commitments are made, including:</p> <ul style="list-style-type: none"> ➤ Ensure that all heritage assets are afforded an appropriate and effective level of protection, while allowing, where appropriate, for well managed and intelligent change. 	<p>Policies within the Joint Plan should be sensitive to the cultural, architectural and archaeological heritage of North Yorkshire.</p>	<p>SA should include an objective to protect and enhance the historic environment.</p>
<p>Planning PPSIs</p>		
<p>National Planning Policy Framework (DCLG, 2012)</p>		
<p>The National Planning Policy Framework sets out the Government’s planning policies for England and how these are expected to be applied. It replaces all previous planning policies set out in Planning Policy Statements (PPSs) and Planning Policy Guidance (PPGs), though PPS10 is temporarily retained. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.</p> <p>At the heart of the planning system is a presumption in favour of sustainable development. The NPPF recognises that there are three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:</p> <ul style="list-style-type: none"> ➤ an economic role – ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements; ➤ a social role – providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community’s needs and support its health, social and cultural well-being; and ➤ an environmental role – contributing to protecting and enhancing our natural, built and historic environment; and, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to 	<p>The NPPF sets out the requirements for the Joint Plan. This is the main reference terms of national planning policy and procedure, which should be adhered to.</p>	<p>The NPPF reiterates the need to be compliant with the SEA regulations during the production of a Joint Plan.</p> <p>It sets out the parameters for planning in the future. It also sets out a definition for sustainable development and what it means in the NPPF.</p>

<p>a low carbon economy.</p>		
<p>National Planning Practice Guidance (2014)</p>		
<p>This guidance supplements the National Planning Policy Framework with more detailed guidance by topic. Key topic sections of relevance to this plan include: Conserving and Enhancing the Historic Environment, Flood Risk and Coastal Change, Health and Wellbeing, Minerals, Natural Environment, Noise, open space, sports and recreation facilities, public rights of way and local green space, strategic environmental assessment and sustainability appraisal, waste.</p>	<p>The Joint Plan will be produced in a way consistent with this guidance.</p>	<p>The SA will seek to improve the sustainability of the plan in a way that is consistent with the guidance.</p>
<p>Localism Act (2011)</p>		
<p>The Localism Act gives greater powers to councils and neighbourhoods and more control over housing and planning decisions. The five key measures intended to decentralise power are:</p> <ul style="list-style-type: none"> ➤ Community Rights. ➤ Neighbourhood planning. ➤ Housing. ➤ General power of competence. ➤ Empowering cities and other local areas. <p>The Act also amends the Planning and Compulsory Purchase Act to include a ‘duty to co-operate in relation to sustainable development’.</p> <p>According to Government, the effect of the Act will be to:</p> <ul style="list-style-type: none"> ➤ Give more freedom and flexibility to local government. ➤ Give new rights and powers to local communities, making it easier for them to improve local services and save important local facilities. ➤ Reform the planning system, putting more power in local peoples' hands. ➤ Ensure that housing decisions are taken locally. <p>The Localism Act contains provisions intended to simplify and clarify the planning system, including the abolition of regional strategies, a duty to cooperate (for neighbouring local authorities over planning issues), neighbourhood planning and the community right to build.</p>	<p>The Joint Plan will have to ensure that the Joint Plan is locally evidenced and feeds in local aspirations for housing and growth. There will be greater emphasis on joint working and the policies adopted with the removal of regional government.</p>	<p>The SA will need to ensure that it uses up-to-date local evidence to support its analysis.</p>
<p>Planning and Compulsory Purchase Act (2004)</p>		
<p>Sets out the legal framework for the production of local development documents.</p>	<p>The Joint Plan will need to be produced in accordance with the Act.</p>	<p>Need to integrate SA into the Joint Plan preparation process set out in the 2004</p>

		Act.
Planning Act (2008)		
This Act introduced a new stream-lined system for decisions on applications to build nationally significant infrastructure projects (NSIPs) in England and Wales, alongside further reforms to the town and country planning system and the introduction of a Community Infrastructure Levy (CIL).	The Joint Plan will need to take account of the considerations within the Act. LAs will also be able to apply the CIL.	No specific implications for SA
Town and Country Planning (Local Planning) Regulations (England) (2012)		
Describes the Duty to Co-operate with a number of public bodies, sets out the proposed submission documents and sets out procedures for the production of a Local Plan	The Joint Plan will need to be produced in accordance with the Act.	An SA will need to be submitted with the Plan
Cross-Cutting PPPSIs		
Material Assets		
Government Review of Waste Policy in England 2011 (Defra, 2011)		
<p>Sets out the vision for waste: 'We need to move beyond our current throwaway society to a 'zero waste economy' in which material resources are re-used, recycled or recovered wherever possible, and only disposed of as the very last resort'.</p> <p>Re-iterates the need to use the waste hierarchy as the basis for decision making in waste management; with 'prevention' as the most preferable option, followed by 'preparing for re-use', 'recycling', 'other recovery', and finally disposal.</p> <p>The review also identifies the important role local authorities play in remediating landfill sites and capturing methane from them.</p> <p>The Review will continue to assess progress against EU targets including:</p> <ul style="list-style-type: none"> ➤ EU Landfill Directive Targets on the Diversion of biodegradable municipal waste from landfill in 2013 and 2020. ➤ Waste Framework Directive target that 50 per cent of waste from households is recycled by 2020. ➤ Waste Framework Directive target to recover at least 70 per cent of construction and demolition waste by 2020. <p>The Review also sets out a series of policy directions, including:</p> <ul style="list-style-type: none"> ➤ That the Government will promote life cycle thinking in all waste policy and management 	The Joint Plan policies should ensure waste moves up the waste hierarchy.	<p>The SA objectives should ensure waste moves up the waste hierarchy and that life cycle thinking should be applied (in as much as the MWJP can influence this).</p> <p>The Review also makes links with the National Ecosystems Assessment and the SA will need to be mindful of the 'ecosystems approach' to sustainable waste management.</p>

<p>decisions.</p> <ul style="list-style-type: none"> ➤ The Government will help local communities develop fit for purpose local solutions for collecting and dealing with household waste. ➤ Work with local authorities on a Business Waste Commitment to develop the recycling services offered to SMEs. ➤ Government sees Anaerobic Digestion as offering a positive solution to food waste and will publish a strategy on this. It will also remove other barriers to energy from waste facilities by ensuring information is available and readily understood. ➤ The Government will maintain landfill tax as the key driver to meeting landfill targets for 2013 and 2020. ➤ In 2012 the Government will consult on introducing a restriction on the landfilling of wood waste, with the aim of diverting it up the waste hierarchy. ➤ Local communities should be involved from the earliest stage in planning for infrastructure. 		
<p>National Planning Policy for Waste, 2014</p>		
<p>Seeks to:</p> <ul style="list-style-type: none"> ➤ Deliver ‘sustainable development and resource efficiency, including provision of modern infrastructure, local employment opportunities and wider climate change benefits, by driving waste management up the waste hierarchy’; ➤ Ensuring that waste management is considered alongside other spatial planning concerns, such as housing and transport; ➤ Provide ‘a framework in which communities and businesses are engaged with and take more responsibility for their own waste, including by enabling waste to be disposed of or, in the case of mixed municipal waste from households, recovered in line with the proximity principal’; ➤ Help ‘secure the re-use, recovery or disposal of waste without endangering human health and without harming the environment’; ➤ Ensure ‘the design and layout of new residential and commercial development and other infrastructure (such as safe and reliable transport links) complements sustainable waste management, including the provision of appropriate storage and segregation facilities to facilitate high quality collections of waste’. <p>Appendix B contains locational criteria for waste.</p>	<p>Waste development should deliver sustainable development in line with the National Planning Policy.</p>	<p>The SA and Site Identification Methodology should be consistent with the way in which sustainable development is defined in the National Planning Policy, including the locational criteria set out in the document.</p>
<p>Waste Management Plan for England (DEFRA, 2013)</p>		
<p>Sets out the Government’s work towards a zero waste economy. As such it seeks to implement the</p>	<p>Waste development should</p>	<p>The SA will need to ensure</p>

<p>mandatory requirements of Article 28 of the revised Waste Framework Directive and Schedule 1 of the Waste Regulations, 2011.</p> <p>In the main the document sets out a number of subsidiary plans and strategies to promote sustainable waste management: For instance, the National Planning Policy for Waste, the Quality Action Plan, the Strategy for Hazardous Waste Management in England and the Waste Prevention Programme , The Anaerobic Digestion Strategy and Action Plan and the Government Guidance on Energy from Waste.</p> <p>It also includes a commitment to the proximity principal by stating that: “The network must enable waste to be disposed of, or be recovered, in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health”.</p>	<p>deliver sustainable development in line with the Waste Management Plan for England. The Proximity Principal is particularly relevant.</p>	<p>the proximity principal is applied and that Government Objectives outlined in the Plan and its subsidiary plan are met.</p>
<p>The Waste (England and Wales) Regulations 2011, amended 2012</p>		
<p>Requires businesses to apply the waste management hierarchy, introduces a two-tier system for waste carrier and broker registration, and excludes some categories of waste from waste controls.</p>	<p>The Joint Plan should be consistent with these regulations.</p>	<p>The SA should seek to promote the waste management hierarchy.</p>
<p>DEFRA, 2013. Quality Action Plan: Proposals to promote high quality recycling of dry recyclates</p>		
<p>This Action Plan includes objectives, including to:</p> <ul style="list-style-type: none"> ➤ ‘Make things as easy as possible for residents and businesses to improve the quantity and quality of the materials they put out for recycling’ ➤ Make down-cycling the least attractive recycling option and only to take place as a last resort’. <p>The Action Plan includes actions for Material Recovery Facilities to monitor outputs of materials via a code of practice and fro WRAP to introduce a voluntary system for grading the quality of the main material streams.</p>	<p>The plan should plan for sufficient infrastructure to enable closed loop and high quality recycling (e.g. through planning for Materials Recovery Facilities where appropriate, particularly where they can increase the quality of recyclate).</p>	<p>The SA should look for opportunities to increase the quality of recyclate and derive greater value from recycling.</p>
<p>The Hazardous Waste (England and Wales) Regulations 2005, amended 2009</p>		
<p>These regulations set out the regime for the control and tracking of the movement of hazardous waste for the purpose of implementing the Hazardous Waste Directive (91/689/EC).</p>	<p>The Joint Plan should be consistent with these regulations.</p>	<p>The SA will need to ensure that hazardous waste is disposed of in a safe manner.</p>
<p>A Strategy for Hazardous Waste Management in England (DEFRA, 2010)</p>		
<p>Sets out 6 principals for the environmentally sound management of hazardous waste. Paraphrased,</p>	<p>The plan should take</p>	<p>The SA should promote the 6</p>

<p>these are:</p> <ul style="list-style-type: none"> ➤ Hazardous waste should be managed in accordance with the EU waste hierarchy (taking account of the need for health and safety and the best overall environmental outcome; ➤ Look to the market for the development of hazardous waste infrastructure which implements the hierarchy for the management of hazardous waste and meets the needs of the UK to ensure that the country as a whole is self sufficient in hazardous waste recovery in England, and the proximity principle is met”; ➤ “Reduce our reliance on landfill for hazardous waste which should only be used where, overall, there is no better recovery or disposal option”; ➤ No mixing or dilution of different categories of hazardous waste or mixture with other waste; ➤ “Hazardous organic wastes that cannot be re-used, recycled or recovered shall be subject to destruction using best available techniques, with energy recovery for all appropriate treatments. No hazardous organic wastes shall be landfilled unless the requirements of the landfill directive are met”; ➤ End reliance on the use of Landfill Directive waste acceptance criteria derogations (that were previously used to enable hazardous waste to be landfilled). 	<p>account of the 6 principals.</p>	<p>principals. An SA sub objective will be added ‘Is hazardous waste managed sustainably?’</p>
<p>Waste Strategy for England (2007)</p>		
<p>The Strategy aims to:</p> <ul style="list-style-type: none"> ➤ Break link between waste growth and economic growth. ➤ Emphasise waste prevention and re-use; increase diversion of non-municipal waste from landfill. ➤ Invest in infrastructure needed to divert waste from landfill. ➤ Increased recycling of resources and recovery of energy. ➤ Meet and exceed Landfill Directive diversion targets (2010, 2013 and 2020) for biodegradable municipal waste. ➤ Net reduction in global greenhouse gas emissions from waste management of at least 9.3m tonnes of CO2 compared to 2006. ➤ Recycling and composting of household waste (at least 40% by 2010, 45% by 2015 and 50% by 2020. ➤ Recovery of municipal waste (53% by 2010, 67% by 2015 and 75% by 2020. 	<p>Ensure sufficient suitable land is made available for waste management facilities to achieve the targets.</p> <p>Maximise recycling of resources and recovery of energy from residual waste.</p>	<p>The SA should ensure that it identifies opportunities to manage waste higher up the waste hierarchy and ensure that environmental benefits arise from waste management.</p>
<p>Energy from Waste: a guide to the debate (DEFRA, 2011)</p>		
<p>Establishes that energy from waste is better than landfill for residual waste treatment, provided that residual waste has a high renewable content and plant is efficient enough at turning waste to energy</p>	<p>Plan should consider relevance of higher renewable content energy</p>	<p>SA should promote relevance of higher renewable content energy</p>

	from waste in preference to landfill but should recognise that this is a lower level of the waste hierarchy that can support rather than compete with recycling.	from waste in preference to landfill but should recognise that this is a lower level of the waste hierarchy that can support rather than compete with recycling.
Agricultural Waste Regulations (2006)		
Implements the Waste Framework Directive and Landfill Directive for the agricultural sector. The Regulations define most agricultural and horticultural wastes as controlled waste and extend the system of licences to apply to the burying and burning of such wastes. Also requires producers of wastes to comply with the Duty of Care and Hazardous Waste Regulations.	The Joint Plan will need to plan for appropriate provision for agricultural waste streams that take place off farm and allow movement up the waste hierarchy.	SA will need to promote proximity of waste facilities to potential sources of waste.
Anaerobic Digestion Strategy and Action Plan (Defra, 2011)		
The Government is moving towards a zero waste economy and to increase energy from waste from anaerobic digestion where waste cannot be prevented. Anaerobic digestion can provide a means to deal with organic waste and avoiding GHG emissions associated with disposal to landfill. The digestate will provide organic fertiliser and soil conditioner for agricultural land use. Based on current information, a potential of anaerobic digestion for heat and electricity has been estimated to be between 3 and 5 Terawatt hours by 2020.	The Joint Plan should recognise the role that anaerobic digestion (AD) can play in dealing with organic wastes.	SA should recognise the role that anaerobic digestion can play in dealing with organic wastes and review any environmental constraints affecting AD.
Strategy for the Management of Solid Low Level Radioactive Waste from the Non-Nuclear Industry: draft strategy (DECC, 2010)		
Draft document for a UK strategy 'for the management of solid LLW arising from non-nuclear industry and is aimed at non-nuclear industry waste producers, the environment agencies and waste planning bodies'. The strategy is intended to: <ul style="list-style-type: none"> ➤ provide guidance and background on this type of waste to enable planning authorities to make informed decisions on planning applications; ➤ clarify the respective roles of waste producers, the environment agencies, planning authorities and the NDA; ➤ ensure that waste producers and regulators are fully aware of how the regulatory framework should be applied to LLW. 	The Joint Plan should take account of non-nuclear industry radioactive waste disposal requirements. No specific targets for local planning authorities.	SA will need to ensure LLW is planned for in a safe, environmentally acceptable and cost effective manner.

<p>A draft strategy was produced in 2010 and consulted on between December 2010 and March 2011. The consultation outcome was then published in December, 2012.</p>		
<p>Waste Prevention Programme for England (Defra, 2013)</p>		
<p>This programme sets out the roles and actions for Government, businesses and other groups and individuals to reduce the amount of waste produced in England. The aim of the programme is to: <i>“improve the environment and protect human health by supporting a resource efficient economy, reducing the quantity and impact of waste produced whilst promoting sustainable economic growth.”</i></p>	<p>The Joint Plan should support the Government’s programme in encouraging waste prevention and moving the plan area towards a more resource efficient economy.</p>	<p>The SA should ensure that it identifies opportunities to manage waste higher up the waste hierarchy.</p>
<p>DEFRA, 2013. Quality Action Plan: Proposals to promote high quality recycling of dry recyclates</p>		
<p>This Action Plan includes objectives, including to:</p> <ul style="list-style-type: none"> ➤ ‘Make things as easy as possible for residents and businesses to improve the quantity and quality of the materials they put out for recycling’ ➤ ‘Make down-cycling the least attractive recycling option and only to take place as a last resort’. <p>The Action Plan includes actions for Material Recovery Facilities to monitor outputs of materials via a code of practice and fro WRAP to introduce a voluntary system for grading the quality of the main material streams.</p>	<p>The plan should plan for sufficient infrastructure to enable closed loop and high quality recycling (e.g. through planning for Materials Recovery Facilities where appropriate, particularly where they can increase the quality of recyclate).</p>	<p>The SA should look for opportunities to increase the quality of recyclate and derive greater value from recycling.</p>
<p>The UK Low Carbon Transition Plan (HM Government, 2009)</p>		
<p>Sets out the UK Government’s five-point plan to tackle transition to a low carbon economy:</p> <ul style="list-style-type: none"> ➤ Protect the public from the immediate risk of climate change. ➤ Prepare for climate change that will inevitably take place in the future. ➤ Limit the severity of future climate change through an international climate agreement. ➤ Build a low carbon economy in the UK through the cutting of emissions, maintaining secure energy supplies, maximising economic opportunities and protecting the most vulnerable. ➤ Support individuals, communities and businesses to play their part. 	<p>Consider how the Joint Plan policies can support the objectives and targets of the white paper.</p>	<p>Ensure the energy policy goals are reflected in Sustainability Appraisal Framework.</p>
<p>The UK Renewable Energy Roadmap Update 2012 (DECC, 2012)</p>		
<p>This roadmap aims to meet the UK’s target of 15% of all energy to come from renewable sources by 2020. This target was set by the European Directive for Renewable Energy.</p>	<p>The Joint Plan will need to incorporate policies that will help to promote renewable</p>	<p>The SA should incorporate renewable energy as an issue for the whole plan area</p>

<p>The main aim is to set the UK on a path to decarbonise the production of energy within the UK, alongside nuclear and carbon capture and storage, contribute to the security of energy supplies in the UK through reductions in demand for fossil fuels and gas imports and to allow business opportunities and enable the UK to restructure into a low-carbon economy. The strategy aims to achieve the 15% renewable energy production through 8 renewable technologies: onshore wind; offshore wind; marine energy; biomass electricity; biomass heat; ground and air source heat pumps; renewable transport.</p>	<p>energy and meet the targets set.</p>	<p>and include this within the SA framework regarding the use and generation of energy.</p>
<p>UK Bioenergy Strategy (DECC, 2012)</p>		
<p>The strategy sets out the Coalition Government’s approach to securing the benefits of bioenergy for the future UK energy mix. It recognises that bioenergy has a role to play in reducing the cost of decarbonising the UK’s energy mix and meeting the renewable energy targets for 2020. However, the strategy recognises the need to assess sustainability issues associated with biomass, such as: its actual contribution to carbon reductions; the price of sustainably-sourced biomass; the relationship between bioenergy and other land uses; and the impacts on air quality, biodiversity and water resources. The strategy includes specific aims with regard to bioenergy development.</p> <p>Future policy should consider:</p> <ul style="list-style-type: none"> ➤ wood and energy crops as a carbon reduction option in some circumstances; ➤ the sustainable scale of bioenergy deployment (between 8-11% by 2020); ➤ the impact of growth of the bioenergy sector in other sectors; ➤ impact on food production. <p>A low-risk energy pathway for several areas, including:</p> <ul style="list-style-type: none"> ➤ wastes (use of end of life materials for energy); ➤ heat (use of biomass to provide low carbon heat for buildings and industry); ➤ transport (some biofuels may offer a cost effective contribution to reducing carbon emissions from road transport). 	<p>The Joint Plan should support the sustainable use of different types of renewables technologies within the MWJP where suitable.</p>	<p>The SA should support the use of renewable technologies in analysis.</p>
<p>Microgeneration Strategy (DECC, 2011)</p>		
<p>The objectives of this strategy fall into two core principles:</p> <ul style="list-style-type: none"> ➤ Provision of financial incentives to support growth of local, small-scale renewable energy generation, provided as the Feed-in Tariff and the Renewable Heat Incentive. ➤ Identification of other non-financial barriers to small-scale renewables deployment. 	<p>The Joint Plan should support the use of different types of renewable energy technologies within the</p>	<p>The SA should support the use of renewable technologies in analysis.</p>

	MWJP where suitable.	
Energy Bill (DECC, 2012)		
<p>The Government aims to further its objectives to meet the UK’s decarbonisation and renewable targets, at least cost to consumers. The Government aims to ensure continued secure energy supplies whilst creating the right conditions for markets and private investment, through greater regulatory certainty and clarity. It will do this:</p> <ul style="list-style-type: none"> ➤ through its programme of Electricity Market Reform (EMR); ➤ through strengthening the regulatory framework by further clarifying the role of the regulator, Ofgem; ➤ and through establishing an Office for Nuclear Regulation (ONR). <p>The Government is committed to achieving its climate change and renewables targets, including a 34 per cent reduction in its CO₂ emissions by 2020 (relative to 1990); at least an 80 per cent reduction by 2050 (relative to 1990 levels); and ensuring that by 2020, 15% of the energy consumed in the United Kingdom comes from renewable sources.</p>	<p>The Joint Plan should encourage and promote the use of sustainable and renewable forms of energy.</p>	<p>The SA should include sustainable and renewable energy objectives within the framework.</p>
Strategy for Sustainable Construction (BERR, 2008)		
<p>The strategy is a joint industry and Government initiative intended to promote leadership and behavioural change, as well as delivering benefits to both the construction industry and the wider economy. It sets and commits to higher standards to help achieve sustainability in specific areas. These cover issues such as procurement, design, innovation, climate change, biodiversity, waste and materials.</p> <p>In relation to materials, the strategy states that the materials used in construction should have the least environmental and social impact as is feasible both socially and economically. It includes a specific target of 25% of products used in construction projects to be from schemes recognised for responsible sourcing.</p>	<p>The Joint Plan should seek to promote sustainable management of construction waste and local sources of building stone as well as high standards of design for minerals and waste infrastructure.</p>	<p>The SA objectives should seek to promote sustainable construction.</p>
CEEQUAL (Civil Engineering Environmental Quality Assessment and Award Scheme)		
<p>This programme is an assessment and awards scheme for improving sustainability in civil engineering and public realm projects. It aims to deliver improved project specification, design and construction and to demonstrate the commitment of the civil engineering industry to environmental quality and social performance.</p>	<p>Reference should be given to the developing voluntary standards for sustainable construction. Policy mechanisms to promote sustainable construction</p>	<p>Ensure there are sustainability objectives to minimise the environmental impact, especially energy and water efficiency, of buildings and infrastructure.</p>

	could be included.	
BREEAM (Building Research Establishment Environmental Assessment Method)		
These programmes set the standards for development schemes to attain, so minimising their environmental impact, in particular through the implementation of energy and water efficiency techniques and technologies.	Reference should be given to the developing voluntary standards for sustainable construction. Policy mechanisms to promote sustainable construction could be included.	Ensure there are sustainability objectives to minimise the environmental impact, especially energy and water efficiency, of buildings.
World Class Places: The Government's Strategy for Improving Quality of Places (2009)		
<p>This publication lays out the government's approach to improving quality of place. Vision: To ensure all places are planned, designed and developed to provide everyone, including future generations, with a decent quality of life and fair chances.</p> <p>Objectives:</p> <ul style="list-style-type: none"> ➤ Strengthen leadership on quality of place at the national and regional level. ➤ Encourage local civic leaders and local government to prioritise quality of place. ➤ Ensure relevant government policy, guidance and standards consistently promote quality of place and are user-friendly. ➤ Put the public and community at the centre of place-shaping. ➤ Ensure all development for which central government is directly responsible is built to high design and sustainability standards and promotes quality of place. ➤ Encourage higher standards of market-led development. ➤ Strengthen quality of place skills, knowledge and capacity. 	Provision of locally appropriate building stone can make a significant contribution to improving quality of place.	The SA will need to take consideration of the principles of creating quality places and use it within analysis.
Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen (White Paper) (Department for Transport, 2011)		
<p>The white paper's vision is for 'a transport system that is an engine for economic growth, but one that is also greener and safer and improves quality of life in our communities'.</p> <ul style="list-style-type: none"> ➤ The white paper also sets out the Government's commitment to sustainable transport choices through Local Transport Plans, active travel, reducing carbon emissions and tackling congestion. ➤ A key focus of the white paper is on devolving decision making and prioritisation to a local level. It states the priority for local transport is to 'encourage sustainable local travel and economic growth by making public transport and cycling and walking more attractive and 	The Joint Plan should, through spatial decisions and policy, seek to support the white paper.	The SA objectives should focus on reducing impacts of transport from minerals development and on opportunities to enhance sustainable transport opportunities.

<p>effective, promoting lower carbon transport and tackling road congestion’</p>		
<p>Low Carbon Transport: A Greener Future (Department for Transport, 2009)</p>		
<p>This document is a key component of the UK Low Carbon Transition Plan with an aim to harness the full potential of low carbon technology across all transport modes. Vehicles will be vastly more fuel efficient by 2022. This will be delivered through advances in the efficiency of the internal combustion engine. Alongside this, ultra-low emissions vehicles will have made their transition on to the mass market. The strategy is expected to reduce CO₂ emissions by 7 million tonnes of CO₂ a year for 2020.</p>	<p>The Joint Plan should encourage and promote the use of sustainable transport modes.</p>	<p>The SA should include sustainable transport objectives within the framework.</p>
<p>Low Emissions Strategies: Using the planning system to reduce transport emissions, Good Practice Guidance (Defra, 2010)</p>		
<p>Low emission strategies provide a package of measures to help mitigate the transport impacts of development. They complement other design and mitigation options, such as travel planning and the provision of public transport infrastructure</p> <p>The main benefit of low emission strategies is to reduce transport emissions by accelerating the uptake of low emission fuels and technologies in and around a new development, and to promote modal shift away from car travel. The approach may also contribute towards achieving local government performance targets; provide local economic benefits; help to streamline planning decisions; and contribute to wider sustainable development goals.</p>	<p>The Joint Plan may consider Low Emission Strategies if appropriate.</p>	<p>The SA should take consideration of the aims and objectives within the SA framework</p>
<p>Expanding and Improving the Rail Network (Department for Transport, 2012)</p>		
<p>Aims:</p> <ul style="list-style-type: none"> ➤ To reduce the costs of running rail services so that above inflation fare increases can end. ➤ Improve rail services by taking into account passenger opinion and by bringing together industry leaders to improve leadership and cooperation. ➤ Upgrade rail tracks and stations. ➤ Electrify the most important railway routes to cut down on CO₂ emissions. ➤ Introduce the Crossrail service. ➤ Increase capacity on the Thameslink route. ➤ Replace the Intercity 125 High Speed Trains with faster, higher capacity, more comfortable and more environmentally friendly services. ➤ Upgrade major lines and stations. ➤ Encourage franchise bidders to invest in the rail network. ➤ Encourage local people and organisations to develop the community rail programme. 	<p>The Joint Plan should consider the need to include policies to support and encourage the use of alternative transport modes.</p>	<p>Consider the inclusion of objectives that address the importance of providing clean air.</p> <p>Consider the inclusion of objectives that encourage the use of sustainable transport modes, and seek to reduce the need to travel.</p> <p>Consider the inclusion of objectives to reduce carbon</p>

		emissions.
National and regional guidelines for aggregates provision in England, 2005–2020 (DCLG, 2009)		
Revised national and regional guidelines for aggregates provision in England for the period 2005 to 2020 inclusive. The document also indicates how the guidelines should be taken into account in the planning process, and outlines arrangements for future monitoring and review.	The Joint Plan will have to take into account the apportionment for aggregates when making strategic decisions for aggregate provision.	The SA Framework will encourage an adequate and steady supply of minerals.
Guidance on the Managed Aggregate Supply System (DCLG, 2012)		
<p>Sets out the requirements of Local Aggregate Assessments, which assess supply and demand options for aggregates and assess economic and environmental opportunities and constraints that might influence the situation. Mineral Planning Authorities may, if they intend to prepare joint plans, prepare joint local aggregate assessments.</p> <p>Aggregate Working Parties will monitor LAAs and advise on their adequacy in terms of whether they are meeting local or national needs.</p> <p>Mineral Planning Authorities should seek to maintain a landbank of at least 7 years for land-won sand and gravel and 10 years for crushed rock, based on the past 10 years average sales.</p>	The Joint Plan will need to be informed by a LAA and will need to facilitate maintenance of appropriate landbanks.	The SA will need to ensure that delivery of the LAA through the MWJP, and the maintenance of appropriate landbanks does not breach environmental limits and that allocations contribute to sustainability objectives.
Managing aggregates supply in England (BGS, 2008)		
Compares a set of aggregates supply scenarios for England compared to the current supply sources which displays imbalances across the nation (which is due to the uneven distribution of minerals resources). Recognises that the system of long-term planning of minerals supply allows for the future planning of infrastructure, biodiversity and the life-cycle of land.	The Joint Plan will need to take into account the effect of planning of minerals supply on the future restoration of minerals sites.	The SA will encourage life cycle thinking around the restoration of minerals sites.
The Future of Food and Farming: Challenges and Choices for Global Sustainability (Government Office for Science, 2011)		
<p>Aims to explore the pressures on the global food system between now and 2050 and identify the decisions that policy makers need to take today and in the five years ahead, to ensure that a global population rising to 9 billion or more can be fed sustainably. It identifies a number of actions, several of which are relevant to this the Joint Plan.</p> <p>The report does not specifically set targets; rather it favours broad recommendations and presents a series of key priorities for policy makers. Of relevance are:</p>	The Joint Plan should have regard to the findings of this report.	SA should support sustainable food production, e.g. through restoration of sites or supporting the transformation of waste to biodigestate for use as

<ul style="list-style-type: none"> ➤ 'work on the assumption that there is little new land for agriculture' (and in contrast to land conversion, the restoration of degraded agricultural land can be an important means of increasing food supply) ➤ 'Include the environment in food sector economics (which recognises that the food system is dependent on wider ecosystem services' ➤ 'Waste in all areas of the food system must be minimised'. 		<p>fertiliser.</p>
<p>Agricultural Land Classification: protecting the best and most versatile agricultural land (Natural England Technical Information Note TIN049, second edition, December 2012)</p>		
<p>This note sets out guidance on the protection of the best and most versatile agricultural land. It states that where significant development of agricultural land is unavoidable, poorer quality land should be used in preference to that of higher quality, except where this would be inconsistent with other sustainability considerations.</p> <p>The Agricultural Land Classification gives a high grading to land which allows more flexibility in the range of crops that can be grown (its 'versatility') and which requires lower inputs. Defra should be consulted on applications for mineral working if the after use is agriculture or where the loss of high quality agricultural land will be 20 ha or more.</p>	<p>The Joint Plan should consider the importance of Best and Most Versatile Land.</p>	<p>The SA should consider the importance of best and most Versatile Land.</p>
<p>Uplands Policy Review (Defra, 2011)</p>		
<p>Aims to support hill farmers deliver public goods from the uplands and support sustainable upland communities.</p>	<p>The Joint Plan should not compromise these aims and should support them where possible.</p>	<p>The SA social and economic objectives should support these aims.</p>
<p>Sustainable Development</p>		
<p>UK Sustainable Development Strategy "Securing the Future" (ODPM 2005) UK Strategic Framework</p>		
<p>The Strategic Framework has a set of overarching principles sets out a series of principles agreed between the UK Government and the Devolved Administrations. These principles will form the basis for policy in the UK. For a policy to be sustainable it must respect all five of these principles:</p> <ul style="list-style-type: none"> ➤ Living within environmental limits; ➤ Ensuring a strong, healthy and just society; ➤ Achieving a sustainable economy; ➤ Promoting good governance; 	<p>The Joint Plan policies should support the aims of the Strategic Framework and provide a sustainable spatial vision. Provide sustainable spatial policies.</p>	<p>The Strategic Framework will provide guidance and inform the whole SA process.</p> <p>Incorporate relevant indicators into monitoring where appropriate.</p>

<ul style="list-style-type: none"> ➤ Using sound science responsibly. 		
<p>Mainstreaming Sustainable Development: the Government’s vision and what this means in practice (Defra 2011)</p>		
<p>Builds on Securing the Future and sets out the refreshed vision of the Coalition Government for sustainable development and what this means in practice.</p> <p>Sets out key areas where the Government will take action. These are:</p> <ul style="list-style-type: none"> ➤ Sustainable development in government; ➤ Green economy; ➤ Action to tackle climate change; ➤ Protecting and enhancing the natural environment; ➤ Fairness and improving wellbeing; ➤ National and international sustainable development; ➤ Building a Big Society; ➤ Business planning; ➤ Operations and procurement commitments; ➤ Transparency and public accountability. <p>No specific targets for the Joint Plan, however the vision and actions for the Department for Communities and Local Government for a low carbon and eco-friendly economy are implemented via other national plans and guidance, particularly the National Planning Policy Framework.</p>	<p>Although there are no specific targets relevant to this plan, several areas for action can be supported by the Joint Plan. These include 'building a big society', 'protecting and enhancing the natural environment', 'action to tackle climate change' and 'green economy'.</p>	<p>The Sustainability Appraisal will need to recognise the Government’s vision and the SA objectives will also need to be consistent with it.</p>
<p>English National Parks and the Broads – UK Government Vision and Circular (Defra, 2010)</p>		
<p>Key outcomes for the next 5 years are:</p> <ul style="list-style-type: none"> ➤ A renewed focus on achieving the Park Purposes; ➤ Leading the way in adapting, and mitigating climate change; ➤ A diverse and healthy natural environment, enhanced cultural heritage and inspiring lifelong behaviour change towards sustainable living and enjoyment of the countryside; ➤ Foster and maintain vibrant, healthy and productive living and working communities; ➤ Working in partnership to maximise the benefits delivered. 	<p>The Joint Plan will need to ensure that the approach to minerals and waste development maintains these aims for National Parks.</p>	<p>The SA objectives will need to provide for making these considerations specifically in relation to the North York Moors National Park.</p>

Key Objectives, targets and indicators relevant to the Joint Plan and SA	Implications for the Joint Plan	Implications for SA
REGIONAL/SUB-REGIONAL CONTEXT		
Environmental PPPSIs		
Biodiversity, Flora and Fauna		
Trees, woodlands, forests...and people – A Regional Forestry Strategy for the North East of England (Forestry Commission, 2005)		
<p>Our trees, woodlands and forests will:</p> <ul style="list-style-type: none"> ➤ Be accessible and promote social well-being for the region's people and visitors; ➤ Provide a healthy and diverse environment; ➤ Be recognized, promoted, invested in and cherished as key regional resources; ➤ Be a sustainable economic resource. <p>Policies for minerals and waste developments should be consistent with aims for accessing and protecting woodlands.</p>	<p>The Joint Plan should take this strategy into consideration in Plan development.</p>	<p>The SA Framework should include consideration of the effects of the policies on trees and woodlands, including access to them.</p>
North Yorkshire and York Local Nature Partnership Strategy – (2013)		
<p>The LNP Strategy has a series of objectives based around 4 themes:</p> <ul style="list-style-type: none"> ➤ Habitats and Species: we will conserve, restore and create natural assets and create natural sites and strengthen natural corridors for species movement; ➤ Economy: we will develop connections between nature and the local economy; ➤ People and communities: we will increase access to nature to improve public health and increase engagement with local communities on nature projects; ➤ Climate change: we will strengthen climate change mitigation and adaptation through natural solutions. <p>The LNP has selected 7 rural landscape priority areas in North Yorkshire: Craven Lowlands; River Swale Landscape Project; River Ure Landscape Project; Selby Landscape Project; Howardian Hills AONB; Vale of Pickering Landscape Project; and North York Moors National Park and Coast.</p>	<p>The Joint Plan should take consideration of the plan.</p>	<p>The SA should be informed by the emerging priorities from the LNP in terms of sub-objectives and targets</p>
Water and Soil		
Water Resources Management Plan 2010-2035 (Yorkshire Water, 2014)		
<p>The Plan incorporates future pressures on supply and demand driven by predicted changes to the climate. It also incorporates future changes to the Yorkshire population, housing, future water use and metering trends.</p>	<p>The Joint Plan should promote resource efficiency.</p>	<p>This should be included for consideration in the baseline and analysis.</p>

<p>The Plan provides a response to development and growth within Yorkshire that is balanced and sustainable, whilst maintaining a minimum level of service of no more than one hosepipe ban per 25 years, in line with the Yorkshire Water Drought Plan. It takes into account future greenhouse gas emissions, the potential impact of abstraction on the environment and the volume of water lost through leaks.</p> <p>At the draft stage there is a forecast surplus in the East Surface Water Zone (covering Whitby and a small part of the North York Moors National Park) and a forecast deficit in the Grid Surface Water Zone (covering the rest of the Joint Plan area).</p> <p>The Plan was published in spring 2014.</p>		
<p>Esk and Coast Catchment Abstraction Management Strategy (Environment Agency, 2013) Derwent Catchment Abstraction Management Strategy (Environment Agency, 2013) Aire and Calder Catchment Abstraction Management Strategy (Environment Agency, 2013) Don and Rother Catchment Abstraction Management Strategy (Environment Agency, 2013) Swale, Ure, Nidd and Upper Ouse Catchment Abstraction Management Strategy (Environment Agency, 2013) Tees Catchment Abstraction Management Strategy (Environment Agency, 2013) Wharfe and Lower Ouse Catchment Abstraction Management Strategy (Environment Agency, 2013)</p>		
<p>Set out the policy basis for the abstraction of water to protect the environment and ensure a supply of water in the rivers – no specific objectives but consideration must take account of impacts on Natura 2000 sites and water flows.</p>	<p>Ensure that policies in the Joint Plan are consistent with this approach to water abstraction. Effects on N2K sites will be tested through the Habitats Regulations Assessment.</p>	<p>The SA Framework will need to include consideration of the effects of the Joint Plan on water resources.</p>
<p>Esk and Coastal Streams Catchment Flood Management Plan (Environment Agency, 2010) Derwent Catchment Flood Management Plan (Environment Agency, 2010) Ouse Catchment Flood Management Plan (Environment Agency, 2011) Tees Catchment Flood Management Plan (Environment Agency, 2009) River Aire Catchment Flood Management Plan (Environment Agency, 2010) Don Catchment Flood Management Plan (Environment Agency, 2010) Hull and Coastal Streams Catchment Flood Management Plan (Environment Agency, December, 2010) River Lune Catchment Flood Management Plan (Environment Agency, 2009) Ribble Catchment Flood Management Plan (Environment Agency, December, 2009)</p>		
<p>CFMPs aim to promote sustainable approaches to managing flood risk. Sets out policies in relation</p>	<p>Policies should be</p>	<p>The SA Framework should</p>

<p>to channel maintenance, improving flood warning service and promoting land management to reduce flood risk downstream.</p> <p>The catchments in CFMPs are divided up into sub areas, and each sub area is allocated a headline policy approach taken from 6 possible policy approaches. These are:</p> <ul style="list-style-type: none"> ➤ Policy Option 1 – Areas of little or no flood risk where we will continue to monitor and advise (areas that fall under this option are: Skelton Beck, Halnaby Beck, Upper Ribble and Hodder and Wath Beck and Carrs); ➤ Policy Option 2 – Areas of low to moderate flood risk where we can generally reduce existing flood management actions (Gypsey Race); ➤ Policy Option 3 - Areas of low to moderate flood risk where we are generally managing existing flood risk effectively (Loftus and Skinningrove, Holbeck and Hovingham, Rural Esk, Catterick, Ripon, Knaresborough and Wetherby, Wharfe Foothills, Cock and Oak Beck, Middle Ure and Lower Dunsforth, Potto and Swainby, Lower Don, Upper Derwent and Sea Cut, East and West Ayton, Rye and Derwent); ➤ Policy Option 4 – Areas of low, moderate or high flood risk where we are already managing the flood risk effectively but where we may need to take further actions to keep pace with climate change (Rye and Derwent, Lower Derwent and the Wolds; Lower Esk, Boroughbridge, Tidal Ouse and Wharfe, Rural Lune); ➤ Policy Option 5 – Areas of moderate to high flood risk where we can generally take further action to reduce flood risk (Guisborough, Filey, Wiske and Cod Beck, York, Wharfe Rural Towns; Tees Mid Catchment, Skipton Wenning Sub catchment, Eastern Tees); ➤ Policy Option 6 – Areas of low to moderate flood risk where we will take action with others to store water or manage run off in locations that provide overall flood risk reduction or environmental benefits; (Middle Tees, Derwent Uplands, Ouse Uplands, Ouse Washlands; Aire Headwaters, Lower Aire, Upland Headwaters [Derwent], Sleightholmedale, Costa Beck). 	<p>consistent with aims to reduce flood risk.</p>	<p>include consideration of the effects of the Joint Plan on flood risk.</p>
<p>Humber River Basin Management Plan 2015Northumbria River Basin Management Plan (Environment Agency, 2015</p>		
<p>The RBMP implements the environmental objectives of the Water Framework Directive (WFD).</p> <p>According to the RBMP: “The purpose of a river basin management plan is to provide a framework to protecting and enhancing the benefits provided by the water environment. To achieve this, and because water and land resources are closely linked, it also informs decisions on land use planning.”</p>	<p>Plan should be compliant with the Water Framework Directive and help support the goals of the RBMP. The Humber RBMP States that:</p> <p>“Local Government</p>	<p>SA should help support the goals of the RBMP and help ensure the plan implements the WFD.</p>

<p>The RBMP contains the following:</p> <ul style="list-style-type: none"> ➤ Baseline classification of water bodies (deterioration from the baseline is not permitted, except in very special circumstances); ➤ Statutory objectives for protected areas (including for water bodies used for drinking water, bathing, commercial shellfish harvesting and those that sustain the most precious wildlife species and habitats) ➤ Statutory objectives for water bodies (the plan sets out legally binding objectives for each water quality element in every water body, including an objective for the water body as a whole. The default objective is good status by 2021, however less stringent objectives have been set in some cases) ➤ Summary programme of measures to achieve statutory objectives (including the types of action and who needs to do this to achieve the statutory objectives). <p>Most of the Plan Area is in the Humber RBMP. The northernmost part of the Plan Area also falls into the Northumbria River Basin Management Plan.</p>	<p>considers the impact on water quality in their preparation of spatial plans, decisions on spatial planning, development management, new buildings and infrastructure”.</p> <p>In particular the following measures to achieve the objectives of the RBMP have been identified for Local Planning Authorities:</p> <p>Physical Modifications: Local government consider impact on hydromorphology when preparing spatial plans and local flood risk management plans, decisions on development management, new buildings and infrastructure</p> <p>Managing pollution from waste water: Local government considers the impact on water quality in their preparation of spatial plans, decisions on spatial planning, development management, new buildings and infrastructure</p> <p>Managing pollution from</p>	
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	<p>towns, cities and transport: Local government uses planning conditions, legal agreements and enforcement powers under the Town and Country Planning Act 1990 to prevent or stop pollution from developments, roads and other infrastructure.</p> <p>Local government makes sure that new developments address potential pollution problems by using sustainable drainage systems to manage surface water</p> <p>Local government considers urban diffuse pollution pressures when developing spatial plans</p> <p>Changes to natural flow and level of water: Local government commissions water cycle studies to inform spatial planning decisions around local water resources.</p> <p>Manage pollution from rural areas: Local government uses planning conditions, legal agreements and</p>	
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	<p>enforcement powers under the Town and Country Planning Act 1990 to prevent or stop pollution from rural developments, roads and other rural infrastructure.</p> <p>Local government considers the impact of pollution when preparing spatial plans, minerals and waste plans and making decisions on development management, new rural buildings and rural infrastructure.</p>	
<p>River Tyne to Flamborough Head Shoreline Management Plan (North East Coastal Authorities Group, 2007)</p>		
<p>Supports national aims:</p> <ul style="list-style-type: none"> ➤ To reduce the threat of flooding and coastal erosion to people and their property; and ➤ To deliver the greatest environmental, social and economic benefit, consistent with the Government's sustainable development principles. <p>Sets out headline flood defence plans for individual policy units. Headline policies are one of 5 policy options:</p> <ul style="list-style-type: none"> ➤ Hold the Line. ➤ Managed Realignment. ➤ Advance the Line. ➤ Retreat. ➤ Hold the Line on a Retreated Alignment. 	<p>The Joint Plan should be consistent with these aims and the headline policies as they apply to specific areas.</p>	<p>The SA Framework should include consideration of the effects of the Joint Plan on the coastal area.</p>
<p>Climatic Factors</p>		
<p>Climate Change Action Plan for the North East (Sustaine, 2008)</p>		
<p>Overview of the action that needs to be taken in north east England in order to tackle climate</p>	<p>The Joint Plan should</p>	<p>The SA Framework should</p>

<p>change. Themes include:</p> <ul style="list-style-type: none"> ➤ Communication, education and awareness raising; ➤ Adaptation; and ➤ Mitigation. 	<p>contribute towards mitigating climate change and help in adaptation where possible.</p>	<p>ensure that the contribution of the Joint Plan to mitigating and adapting to climate change are considered.</p>
<p>Tees Valley Climate Change Strategy 2010 – 2020 (Tees Valley Climate Change Partnership, undated)</p>		
<p>Contains various detailed measures to mitigate and adapt to climate change to reduce CO₂ emissions across the Tees Valley by 20% by 2020.</p>	<p>Ensure that the MWJP contributes towards reducing CO₂ emissions and does not exacerbate the transboundary effects of climate change.</p>	<p>The SA framework should ensure that the contribution of the MWJP to mitigating and adapting to climate change are considered.</p>
<p>Additional Environmental Issues</p>		
<p>Environmental Limits in Yorkshire and Humber: a discussion Paper by Yorkshire and Humber Environment Forum for Yorkshire and Humber (2007)</p>		
<p>3 types of environmental limits are discussed under one rationale: “One Planet Living”:</p> <ul style="list-style-type: none"> ➤ Limits of the natural environment to support itself. ➤ Limits on the capacity of the natural environment to support humanity. ➤ Limits on the ability of the human habitat to cope with environmental change. <p>Main principles of living within environmental limits:</p> <ul style="list-style-type: none"> ➤ Making space for environmental capital. ➤ Ecosystem functions. ➤ Water and Flood management. ➤ Renewable energy and waste management. ➤ Social and cultural functions. ➤ Reducing pollution and waste in the round. ➤ Reducing all pollution outputs. ➤ Turning pollutants into resources. ➤ Increasing the environments capacity to process pollution. ➤ Reducing consumption of environmental capital. <p>Need to understand environmental asset to know how to manage it / the situation:</p> <ul style="list-style-type: none"> ➤ The technical ‘holding’ limit that must be maintained to avoid further environmental degradation. 	<p>Consideration of the principles set out by this discussion paper.</p>	<p>The SA should consider the findings and understand the principles of the environmental limits discussion to apply it within analysis.</p>

<ul style="list-style-type: none"> ➤ The political/ cultural limit that is deemed by society to be an acceptable level of environmental impact. ➤ The restorative limit that enables environmental conditions to improve and risks to society to reduce. 		
<p>National Character Area Profiles (Natural England, 2012)</p>		
<p>According to Natural England, “NCA profiles are guidance documents which will help to achieve a more sustainable future for individuals and communities. The profiles include a description of the key ecosystem services provided in each character area and how these benefit people, wildlife and the economy. They identify potential opportunities for positive environmental change and provide the best available information and evidence as a context for local decision making and action”.</p>	<p>The Joint Plan should seek to protect and enhance landscape character and ecosystem services.</p>	<p>SA should promote the Statements of Environmental Opportunity in NCA Profiles.</p>
<p>Tees Valley Green Infrastructure Strategy (Tees Valley Joint Strategy Unit, 2008)</p>		
<p>To develop by 2021 a network of green corridors and green spaces that:</p> <ul style="list-style-type: none"> ➤ Enhances the quality of place for existing and future communities and potential investors; ➤ Provides an enhanced environmental context for new development, regeneration projects and housing market renewal, and produces high quality design and developments; ➤ Creates and extends opportunities for access regeneration, and enhancement of biodiversity, and; ➤ Provides a buffer against the effects of climate change. <p>The Joint Plan should be consistent with ensuring that opportunities for green infrastructure can be created.</p>	<p>The Joint Plan should be consistent with ensuring that opportunities for green infrastructure can be created.</p>	<p>The SA Framework should include consideration of the effects of the MWJP the provision of green infrastructure.</p>
<p>Leeds City Region Green Infrastructure Strategy (Leeds City Region Local Enterprise Partnership, 2010)</p>		
<p>The Leeds City Region has produced the Green Infrastructure Strategy to ensure that future growth is underpinned and supported by high quality green infrastructure. As such, the strategy sits alongside the other core city region initiatives such as Housing & Regeneration, Employment & Skills, Transport and Economic Drivers and Innovation, to drive sustainable economic growth. No targets stated. However means by which the Strategy’s four strategic objectives are stated. Of relevance to minerals and waste planning are:</p> <ul style="list-style-type: none"> ➤ Objective 1: To promote sustainable growth and economic development by: - improving the quality of the local environment for communities and businesses; - realising opportunities 	<p>The Joint Plan should include for quality open space to support the economic, social and environmental benefits of green infrastructure.</p>	<p>The SA should assess the policies for their contribution to green infrastructure as a means of achieving multiple objectives.</p>

<p>for new businesses, skills and jobs to meet the increasing demand generated by green infrastructure;</p> <ul style="list-style-type: none"> ➤ Objective 2: To adapt to and mitigate climate change by: - enabling the region to be more resilient to flooding and higher urban temperatures and contributing to mitigating climate change by lowering the region’s carbon footprint; ➤ Objective 3: To encourage healthy living and wellbeing by: - increasing the quality and accessibility of natural greenspace; - increasing the use of green infrastructure assets by local people; - improving the quality and health of the urban and rural environment; and - enhancing rights of way and cycling networks; ➤ To improve biodiversity by: - increasing the area and quality of land regarded as being of high biodiversity value; and –improving habitat connectivity to address issues of fragmentation and isolation of vulnerable species. 		
<p>Tees Valley Geodiversity Action Plan (Tees Valley Wildlife Trust, 2011)</p>		
<p>Vision statements:</p> <ul style="list-style-type: none"> ➤ To have all information on geological and geomorphological sites and resources in one accessible place; ➤ To work with all LAs to ensure that all sites of geodiversity importance in the Tees Valley are protected and that geodiversity is featured within all relevant LA plans; ➤ To ensure that all sites designated for their geodiversity value are managed in a way that best conserves the geodiversity, biodiversity and archaeological value; ➤ To increase appreciation and understanding of the importance of geodiversity within the Tees Valley by the wider community; and ➤ That Tees Valley RIGS group continues to build upon its existing partnerships and creates new links to help deliver the many aspects of the GAP. <p>Consideration needs to be given to protecting sites of geodiversity importance where transboundary impacts may occur.</p>	<p>The Joint Plan should consider the action plan.</p>	<p>The SA Framework needs to include consideration of the effects of the Joint Plan on important geological assets.</p>
<p>Draft East Inshore and East Offshore Marine Plan (DEFRA, 2013)</p>		
<p>Whilst the Plan is a draft and the Inshore Plan mostly covers the coastline to the south of the Joint Plan area there may be elements that are relevant to the Joint Plan and therefore it has been included. The East Offshore plan extends further northwards. Of relevance to the Joint Plan are the following elements:</p> <ul style="list-style-type: none"> ➤ The broad support for gas extraction, including this being a priority over competing uses; ➤ Where a licence exists for aggregates extraction other competing proposals should not be 	<p>The Joint Plan will need to consider any implications of these policies on planning for minerals in the Joint Plan area.</p>	<p>The SA needs to consider whether there are any implications arising from the Plan on these objectives.</p>

<p>permitted.</p> <ul style="list-style-type: none"> ➤ The North East Inshore and Offshore Plans will cover the marine area adjoining the Joint Plan area and are yet to be drafted. 		
Economic PPSIs		
Leeds City Region Strategic Economic Plan (2016 to 36)		
<p>Brings together the public and private sectors and partners in government, education and the third sector – working to a common vision,. The shared vision for Leeds City Region is: "To be a globally recognised economy where good growth delivers high levels of prosperity, jobs and quality life for everyone".</p> <p>To achieve our vision for Leeds City Region, the Economic Plan focuses on four strategic priorities for creating sustainable economic growth:</p> <ul style="list-style-type: none"> ➤ deliver upwards of 35,000 additional jobs and an additional £3.7 billion of annual economic output by 2036;. ➤ become a positive, above average contributor to the UK economy; seek to exceed the national average on high level skills and to become a NEET(not in employment, education or training)-free City Region; and. <p>make good progress on Headline Indicators of growth and productivity, employment, earnings, skills and environmental sustainability.</p> <p>Outcomes:</p> <ul style="list-style-type: none"> ➤ GVA growth of 2.6% per year in the period to 2030. ➤ Creating 60,000 jobs and returning the City Region to pre-recession employment by 2016. ➤ Balancing economic growth with a substantial and continued decrease in carbon emissions. 	<p>The Joint Plan will need to consider the aspirations of the Leeds City Region on policy development.</p>	<p>The SA needs to consider the priorities and outcomes of the LCR plan in its framework and analysis for cross boundary impacts.</p>
Tees Valley Unlimited Business Plan 2011 – 2015 (Tees Valley Unlimited, 2011)		
<p>Objectives:</p> <ul style="list-style-type: none"> ➤ Develop infrastructure and place to enable economic development. ➤ Support sector development and enterprise. ➤ Develop the workforce within the Tees Valley. ➤ Promote the Tees Valley economy. ➤ Secure investment to meet our economic development needs. <p>Policies for minerals and waste will need to recognise the interdependence between the economy of the Tees Valley and North Yorkshire.</p>	<p>Policies for minerals and waste will need to recognise the interdependence between the economy of the Tees Valley and North Yorkshire.</p>	<p>The SA Framework needs to include consideration of the effects of the Joint Plan on local economies.</p>
Economic and Inward Investment Plan (York, North Yorkshire and East Riding Local Enterprise Partnership, 2013)		

<ul style="list-style-type: none"> ➤ Profitable and ambitious small and micro businesses; ➤ A global leader in food manufacturing, agri-tech and biorenewables; ➤ Inspired people; ➤ Successful and distinctive places; and ➤ A well-connected economy. 	<p>Policies for minerals and waste will need to support the North Yorkshire and York economy.</p>	<p>The SA Framework needs to include consideration of the effects of the Joint Plan on local economies.</p>
<p>Leeds City Region Employment and Skills Strategy (Leeds City Region, 2010)</p>		
<p>Leeds City Region Employment and Skills Strategy presents a vision to promote ‘effective employer and public investment that will drive growth, innovation and enterprise in the Leeds City Region’. The Strategy includes 5 strategic priorities:</p> <ul style="list-style-type: none"> ➤ To improve skills and boost employment in selected key sectors. ➤ To increase employer and individual skills investment across the city region. ➤ To enable those out of work to compete in the labour market by ensuring they have the necessary skills. ➤ To promote better information for learners, employers, colleges, universities and training providers to make more informed decisions. <p>To create an aspirational and innovative enterprise culture.</p>	<p>Though not directly relevant to spatial planning the Joint Plan should look for opportunities to make the jobs generated by waste sites accessible to local communities.</p>	<p>SA objectives should ensure sustainable employment and skills are properly considered</p>
<p>Social PPSIs</p>		
<p>Cultural Heritage</p>		
<p>Economic Impact of Heritage in Yorkshire and Humber (Yorkshire and Humber Environment Forum, March 2010)</p>		
<p>The principal purpose of the study is to provide evidence to underpin the role of heritage in the emerging “Yorkshire and the Humber Strategy”. To meet this challenge, the study is presented in three parts.</p> <ul style="list-style-type: none"> ➤ Part I – Understanding the Economic Impacts of Heritage - through the qualitative consideration of case studies. ➤ Part II – Measuring the Economic Impact of Heritage - a quantitative assessment of the overall economic impact of historic assets. ➤ Part III – Maximising the Economic Impact of Heritage - sign-posting where the best potential may be for heritage assets to have the greatest economic impacts in the years ahead. <p>No targets but key recommendations:</p> <ul style="list-style-type: none"> ➤ <i>make better use of post-industrial revolution heritage;</i> ➤ <i>build upon historic events</i> such as the St Ledger horse race and York Mystery Cycle to 		<p>The SA should take account of the recommendations and balance them with other SA considerations.</p>

<p>increase heritage tourism;</p> <ul style="list-style-type: none"> ➤ <i>promote groups of assets</i> which can be very powerful in attracting visitors from outside the region; encourage LAs and other stakeholders to <i>consider the opportunities heritage can provide as a core;</i> <i>renaissance/regeneration theme in a town</i> to ensure heritage assets are providing the greatest input to economic growth they can; ➤ <i>promote the region as a heritage holiday destination;</i> ➤ help building owners think through the potential to <i>re-use heritage buildings</i> for holiday let accommodation; ➤ use the current property market slow-down to <i>develop awareness of opportunities and best practice</i> with heritage buildings; ➤ provide guidance on the type of office environment that can be provided in heritage buildings and the issues/cost involved; ➤ develop a closer and more supportive relationship with Conservation Officers; and ➤ <i>to ensure that heritage is considered at the outset of site.</i> 		
<p>Historic Environment Strategy for Yorkshire and the Humber Region 2009-2013 (Yorkshire and the Humber Historic Environment Forum, 2008)</p>		
<p>This Strategy aims to harness enthusiasm for the historic environment, providing a framework for its management and providing a basis to guide regional policy and decision making.</p> <p>Aims:</p> <ul style="list-style-type: none"> ➤ broaden awareness and understanding and change the way organisations perceive and value the historic environment, clarifying and emphasising why it matters; ➤ providing a framework to support, guide and inform the development of regional and local policy; ➤ giving a clear direction for activity and outlining priorities to secure the effective management of our historic environment in the future. 	<p>The Joint Plan should take consideration of the Strategy in planning for heritage issues and assets.</p>	<p>The SA should take consideration of the anticipated outcomes within the SA Framework.</p>
<p>Landscape</p>		
<p>North Yorkshire and Cleveland Heritage Coast – Management Plan 2015-2020 (North Yorkshire and Cleveland Coastal Forum)</p>		
<p>Implements the national objectives for Heritage Coasts:</p> <ul style="list-style-type: none"> ➤ To conserve, protect and enhance the natural beauty of the coasts, including their terrestrial, littoral and marine flora and fauna, and their heritage features of architectural, historical and archaeological interest; 	<p>The Joint Plan should contribute towards protecting and enhancing the coastal environment.</p>	<p>The SA Framework should ensure that effects of the Joint Plan on the coastal environment are considered.</p>

<ul style="list-style-type: none"> ➤ To facilitate and enhance their enjoyment, understanding and appreciation by the public by improving and extending opportunities for recreational, educational, sporting and tourist activities that draw on and are consistent with, the conservation of their natural beauty and the protection of their heritage features; ➤ To maintain and improve (where necessary) the environmental health of inshore waters affecting heritage coasts and their beaches; ➤ To take account of the needs of agriculture, forestry and fishing, and of the economic and social needs of the small communities on these coasts; 		
<p>Additional Social Issues</p>		
<p>2009-2014 Culture Strategy, York and North Yorkshire Cultural Partnership (2009)</p>		
<p>The strategy seeks to extract the essence of what makes York and North Yorkshire culturally renowned and celebrate, develop and grow</p>		
<p>Cross-Cutting PPPSIs</p>		
<p>Material Assets</p>		
<p>Let's Take it from the Tip – Yorkshire and Humber Regional Waste Strategy (Yorkshire and Humber Regional Assembly, 2003)</p>		
<ul style="list-style-type: none"> ➤ Reduce waste production and increase re-use, recycling and composting. ➤ Manage residual waste in the most sustainable way. <p>Targets relevant to the Joint Plan include:</p> <ul style="list-style-type: none"> ➤ Achieve statutory targets for recycling and composting household waste and diverting biodegradable municipal waste from landfill; ➤ Municipal waste management strategies and new waste disposal contracts should be evaluated using best practicable environmental option, sustainability appraisal and health impact assessment. 	<p>Policies for waste should reflect these principles.</p>	<p>The SA framework should include consideration of the extent to which the MWJP will meet these aims and targets.</p> <p>While not a 'municipal waste strategy' the assessment of the Joint Plan is being undertaken in a way which incorporates health impact assessment. BPEO assessment, although still relevant at a project level, is an assessment process against which a series of objectives are established to evaluate which option has the least environmental</p>

		impact. This is considered to be incorporated into sustainability appraisal by assessing options against environmental sustainability objectives.
Yorkshire and Humber Waste Position Statement 2016 (Yorkshire and Humber Waste Planning Authorities, 2016)		
The Statement has been produced to assist with coordination in strategic planning for waste by waste planning authorities (WPAs) in the Yorkshire & Humber (Y&H) area.	The Plan should have regard to the Statement	The SA should have regard to the statement
Low Carbon and Renewable Energy Capacity in Yorkshire and Humber Final Report (LGYH, 2011)		
<p>The objectives of the study were:</p> <ul style="list-style-type: none"> ➤ Provide an assessment of the potential for low carbon and renewable energy across the region; ➤ Provide a common and robust evidence base on the potential for renewable energy to inform and support policy making by individual local authorities in the region; ➤ To identify strategic delivery actions, for each of the four sub regions to tackle strategic barriers and facilitate deployment of renewable energy opportunities. <p>By 2025 the region has the potential to install 5,500 MW of renewable energy capacity, including 13% from energy from waste. Waste CHP has the potential to deliver 70 MW of capacity in York and North Yorkshire.</p>	The MWJP should support opportunities to derive energy from residual waste that cannot be recycled or re-used. There may also be opportunities to support other renewable energy technologies such as on minerals and waste built infrastructure or through the restoration of sites.	SA framework should seek to promote opportunities for renewable energy in line with the study.

Key Objectives, targets and indicators relevant to the Joint Plan and SA	Implications for the Joint Plan	Implications for SA
LOCAL CONTEXT		
Environmental PPPSIs		
Biodiversity, Flora and Fauna		
Biodiversity Audit and Action Plan (CYC, 2013)		
<p>The initial 'City of York Biodiversity Audit' in 1996 was commissioned by the then English Nature and City of York Council as a first step towards implementing Government policy at the local level and was essentially a review of the City's known wildlife resource. This audit has formed the basis of conserving sites of nature conservation interest in York since it was produced.</p> <p>A new Biodiversity Audit for York has been completed (2010) and this identifies new potential Sites of Importance for Nature Conservation (SINC) and assesses these alongside existing ones to see if they have sufficient value to be designated as a SINC. This has been accepted as part of the evidence base for the former LDF.</p>	<p>The Joint Plan requires up to date and comprehensive information about local biodiversity which can be sourced, in part, from this audit and action plan.</p>	<p>Incorporate relevant biodiversity objectives and indicators into Sustainability Framework.</p>
Craven, Hambleton, Harrogate, Richmondshire, Ryedale, Scarborough and Selby Biodiversity Action Plans		
<p>Includes lists of priority species and habitats that should be conserved and where possible enhanced through the planning system.</p>	<p>Policies on protection and enhancement of biodiversity (including BAP priorities) and geodiversity need to be included.</p> <p>Baseline data and on-going monitoring of biodiversity needed to inform planning process.</p>	<p>Include specific reference to BAP priority species and habitats in SA Framework objectives and indicators. Systems for collecting and managing baseline and monitoring data needed.</p>
North York Moors Biodiversity Action Plan 2013 – 2017 (North York Moors National Park Authority)		
<p>Contains objectives in relation to various habitats and species, set out in Habitat Action Plans or Species Action Plans</p>	<p>The Joint Plan should aim to protect important habitats and species.</p>	<p>The SA Framework should include consideration of the effects on important habitats and species.</p>
Water and Soil		

<p>Strategic Flood Risk Assessment (CYC, 2013) North Yorkshire Draft Strategic Flood Risk Assessment North east Yorkshire Strategic Flood Risk Assessment (2010) Hambleton District Strategic Flood Risk Assessment (2006) North west Yorkshire Strategic Flood Risk Assessment (2010) Selby Level 1 and Level 2 Strategic Flood Risk Assessment (2008, 2010 and 2015 respectively).</p>		
<p>These Strategic Flood Risk Assessments assess the different levels of flood risk in the Joint Plan area and provide maps of this information. They recognise the increasing threat of global warming and explain how climate change could increase flood risk due to more intense rainfall, and sea level rise.</p> <p>These studies provide concise information on flood risk issues to aid planners in the preparation of Development Plans and in the assessment of future planning applications. Minerals and waste sites should be guided to areas at lowest risk of flooding through a process called the sequential test.</p>	<p>The Joint Plan needs to ensure policies minimise flood risk to people and property.</p>	<p>The SA should incorporate flood risk into its objectives as a major sustainability consideration for the city.</p>
<p>Ouse Flood Risk Management Strategy (Environment Agency, 2010)</p>		
<p>The Ouse Flood Risk Management Strategy focuses on the River Ouse and the rivers and streams which join it. The strategy puts the spotlight on people, properties and land at risk from flooding along the River Ouse between Linton Lock to the North West of York and Boothferry Bridge to the SE of Selby and the River Wharfe between the A64 bridge at Tadcaster and where it joins with the Ouse at Wharfe's mouth.</p> <p>The primary objective of the study is to identify the preferred ways of managing flood risks in the long term, over the next 100 years. The strategy adopts targets based on both national and local objectives. These targets reflect not only flood risk management objectives but also relevant wider issues and concerns including the environment, sustainability and climate change.</p>	<p>Ensure that the key actions and targets of the flood risk strategy are taken into account when developing the policies in the Joint Plan.</p>	<p>Incorporate any relevant targets and indicators into the development of the Sustainability Framework</p>
<p>Climatic Factors</p>		
<p>Green Streets: The Neighbourhood Carbon Footprint of York (CYC, October 2009)</p>		
<p>The aim of the study is to determine the carbon footprint of York residents and show how this varies throughout the city. It builds upon a 2002 study to assess the ecological footprint of York. The study identifies those York neighbourhoods that have the greatest potential to reduce their carbon footprint. There are no directly relevant targets to the MWJP.</p>	<p>The Joint Plan should seek to reduce the carbon footprint of minerals and waste development.</p>	<p>The SA should seek to reduce the carbon footprint of minerals and waste development.</p>
<p>York Low Emission Strategy (CYC, 2012)</p>		

<p>The LES vision will be delivered through a series of measures aimed at achieving the following objectives:</p> <ul style="list-style-type: none"> ➤ to raise public and business awareness and understanding of emissions; ➤ to minimise emissions to air from new developments by encouraging highly sustainable design and the uptake of low emission vehicles; ➤ to minimise emissions to air from vehicles by encouraging eco-driving, optimising vehicle maintenance and providing to use low emission vehicles and fuels; ➤ to lead by example by minimising emissions from council buildings; ➤ to encourage inward investment by providers of low emission technology, fuels and support services; ➤ to maximise sustainable transport and reduce localised air quality breaches through traffic demand management, smart travel planning, and potentially regulatory control. <p>Overall vision: 'To transform York into a nationally acclaimed low emission city' - where the population, and the business and development community particular are aware of their impact on the environment and health and play an active role in reducing all emissions in the city .</p>	<p>The Joint Plan will need to make provision to help achieve and deliver this strategy.</p>	<p>The SA should include the indicators and baseline information to help determine analysis and objectives.</p>
<p>Climate Change Strategy and Action Plan for York 2010-15 (CYC, 2010)</p>		
<p>The Climate Change Framework is the overarching document that will enable York to accelerate actions to reduce carbon emissions across the city. It demonstrates the actions already on-going and highlights the key areas the city needs to begin to drive forward for coordinated action to tackle climate change.</p> <p>Key aims:</p> <ul style="list-style-type: none"> ➤ to reduce York's CO₂ and other GHGs in line with government and local targets; ➤ to coordinate CO₂ and other GHG reduction initiatives across York; ➤ to coordinate actions to better prepare York for future climate change; ➤ to make full use of the potential for low carbon, renewable, localised sources of energy generation; ➤ to raise awareness and understanding of climate change throughout the Without Walls Partnership, City of York Council, and within communities, businesses and organisations; ➤ contribute to the city's Sustainable Community Strategy. ➤ to reduce greenhouse gas emissions across York and better prepare and adapt York's communities and businesses for the likely impacts associated with climate change. <p>Targets:</p>	<p>The aims of this strategy should be reflected in the Joint Plan.</p>	<p>The aims and targets should be incorporated into the SA framework and climate change should be a specific SA objective.</p>

<ul style="list-style-type: none"> ➤ Reduce CO₂ emissions by 40% by 2020 (based on a 2005 baseline) and 80% by 2050 (based on a 1990 baseline). ➤ Reduce the average residents' carbon footprint from 12.61 tonnes in 2006 by 80% to 3.36 tonnes by 2050 (based on a 2006 baseline). ➤ City of York Council and the Without Walls Partnership to have in place by 2050 effective measures that will better prepare York communities, businesses, organisations and vital infrastructure from the effects of a changing climate. <p>To exceed the following renewable energy targets of:</p> <ul style="list-style-type: none"> ➤ 39MW of installed renewable electricity capacity. ➤ 15MW of installed renewable heat capacity by the year 2020. ➤ 40MW of installed renewable electricity. ➤ 18MW of installed renewable heat capacity by the year 2031. 		
<p>Adapting to Climate Change in the North York Moors National Park – Assessment of Risks and Opportunities (North York Moors National Park Authority, 2011)</p>		
<p>The purpose of this report is to assess what effects the projected climate change may have on the NYM and operation of the park authority. The main climate change impacts for the NYM are expected to be:</p> <ul style="list-style-type: none"> ➤ Flooding of infrastructure and habitats, with a significant impact on the economy. ➤ Drought, which will affect flora and fauna. ➤ Coastline changes. ➤ Increased moorland fire risk. ➤ Cumulative effects on agricultural production. ➤ Cumulative effects on conditions for biodiversity. ➤ Change in composition of native woodland. ➤ Increased occurrence of disease in wildlife. <p>The current actions to address these projected impacts include:</p> <ul style="list-style-type: none"> ➤ The Slowing the Flow Project (aimed at reducing flooding of communities along the Pickering Beck). ➤ Ensuring new infrastructure is resistant to flooding. ➤ Fire management plans. ➤ Developing climate change resilience at the landscape scale. ➤ Provision of all-weather visitor facilities. ➤ Management and monitoring of habitats for certain species of flora and fauna. 	<p>The aims of this strategy should be reflected in the Joint Plan.</p>	<p>The aims and targets should be incorporated into the SA framework and climate change should be a specific SA objective.</p>

<ul style="list-style-type: none"> ➤ Restoration and re-vegetation of peat bogs. 		
<p>Delivering on Climate Change (North Yorkshire County Council’s Climate Change Strategy, 2009)</p>		
<p>Objectives:</p> <ul style="list-style-type: none"> ➤ County Council plays a leading role in supporting a reduction in the contribution which North Yorkshire makes to climate change. ➤ County Council works with people, communities and other organisations in North Yorkshire to develop an effective response to the current and predicted future changes in climate. ➤ County Council seeks to ensure maximum value for money and efficiency savings from actions taken in response to climate change. <p>There are seven key priority areas across three cross cutting themes:</p> <ul style="list-style-type: none"> ➤ Strategy, monitoring and target setting. ➤ The built environment. ➤ Transport. ➤ Health and care services. ➤ Business. ➤ Land management. ➤ Citizen engagement. <p>The cross cutting themes are:</p> <ul style="list-style-type: none"> ➤ Energy. ➤ Waste. ➤ Water. 	<p>The aims of this strategy should be reflected in the Joint Plan.</p>	<p>The aims and targets should be incorporated into the SA framework and climate change should be a specific SA objective.</p>
<p>Additional Environmental Issues</p>		
<p>Contaminated Land Strategy, Environmental Protection Unit (CYC, Adopted July 2001, revised January 2016)</p>		
<p>Key Objectives:</p> <ul style="list-style-type: none"> ➤ to provide a framework for the identification, prioritisation, assessment, determination and remediation of contaminated land and to reduce the risks posed to human health and the environment; ➤ to provide information to the Environment Agency for the national report on contaminated land; ➤ to put into practice the ‘suitable for use’ and ‘polluter pays’ principles to ensure suitable remediation is carried out; ➤ to provide a greater understanding for the need to investigate and remediate contaminated 	<p>Ensure that the main targets and indicators are taken into account when developing Joint Plan policies.</p>	<p>Incorporate any relevant targets into Sustainability Framework.</p>

<ul style="list-style-type: none"> ➤ land; ➤ to improve internal and external communications with regard to contaminated land; and ➤ to inform land owners, the general public and stakeholders of the council's intentions in relation to contaminated land by the publication of this strategy document. 		
<p>Your Dales Rocks: Local Draft Geodiversity Action Plan 2006-2011 (North Yorkshire Geodiversity Partnership, 2006)</p>		
<p>The draft Action Plan aims to:</p> <ul style="list-style-type: none"> ➤ record, conserve and where practicable, enhance geodiversity within the project area; ➤ increase public awareness of, and involvement in, conserving geodiversity; ➤ contribute to the conservation of geodiversity on a national and international scale; ➤ create, maintain and support the North Yorkshire Geodiversity Partnership RIGS group, and to work with other relevant RIGS organisations. 	<p>The Joint Plan should support geodiversity.</p>	<p>SA objectives should seek to contribute to the objectives of the action plan where relevant.</p>
<p>Economic PPSIs</p>		
<p>Reaching Further: York's Economic Strategy 2016 – 2020 (CYC, 2016)</p>		
<p>The Vision</p> <p>The York Economic Strategy 2016 to 2020 sets out a clear and achievable economic vision for York and focuses on eight essential objectives to address key challenges in the city:</p> <ul style="list-style-type: none"> ➤ deliver the York Central Enterprise Zone ➤ deliver a Local Plan that supports a high value economy ➤ take practical steps to develop and retain talent in the city ➤ drive university and research-led business growth in key sectors ➤ lobby for investment in key transport networks ➤ use local business rate freedoms to drive high value growth ➤ make a fresh loud statement on cultural and visual identity ➤ bring people and businesses together in creative low-cost ways 	<p>The Joint Plan should support the strategy through policy and delivery.</p>	<p>The SA should use the themes, priorities and indicators in scoping and analysis of the policies.</p>
<p>Social PPSIs</p>		
<p>Population and Human Health</p>		
<p>Rights of Way Improvement Plan for North Yorkshire (NYCC, 2007)</p>		
<ul style="list-style-type: none"> ➤ Meet the present and likely future needs of the public. ➤ Provide for exercise and other forms of open air recreation and enjoyment of North Yorkshire. 	<p>Ensure that the key actions and targets of the improvement plan are taken</p>	<p>The SA Framework should promote accessibility and active travel opportunities.</p>

<ul style="list-style-type: none"> ➤ Meet the accessibility of local rights of way to blind or partially sighted persons and others with mobility problems. ➤ Contribute to the Government's four shared transport priorities which are central to the Local Transport Plan for North Yorkshire. These are reducing congestion, improving air quality, enhancing accessibility and improving safety. <p>A successor Rights of Way Improvement Plan is currently being drafted.</p>	<p>into account when developing the policies in the LDF.</p>	
<p>Rights of Way Improvement Plan for Redcar and Cleveland Borough Council (2007)</p>		
<p>Vision that the ROWIP will:</p> <ul style="list-style-type: none"> ➤ Provide a safe and enjoyable recreational and educational resource that is accessible and attractive to residents of the Borough and visitors to the area. ➤ Contribute to the local economy by supporting tourism and other business activities related to countryside access through making the Borough a good destination for walking, cycling and horse riding. ➤ Facilitate and encourage access to the countryside in order to deliver quality of life and health benefits to all sectors of the community. ➤ Protect and improve the network of urban rights of way for local journeys to schools, shops, local services and green spaces. <p>The MWJP should be consistent with the provision of rights of way and sensitive to any cross boundary implications for access that may arise from minerals and waste policies.</p>	<p>The Joint Plan should be consistent with the provision of rights of way and sensitive to any cross boundary implications for access that may arise from minerals and waste policies.</p>	<p>The SA Framework should include consideration of the effects on rights of way.</p>
<p>City of York Rights of Way Improvement Plan 2006-2011 (draft)</p>		
<p>This report is a requirement of the Countryside and Rights of Way Act 2000 and looks to evaluate to what extent local rights of way meet the present and future needs of the public; the extent to which rights of way offer opportunities for exercise and other outdoor recreation and the accessibility of the rights of way to the blind/partially sighted and people with mobility problems.</p> <p>The ROWIP's Statement of Action is split down into 6 Aims:</p> <ul style="list-style-type: none"> ➤ Aim 1: To ensure the council's rights of way network is open, well maintained and easy to use. ➤ Aim 2: To provide an accurate, up to date and easily available Definitive Map and Statement for the whole city. ➤ Aim 3: To provide a more connected network of access for all users. ➤ Aim 4: To improve the provision of information about the council's rights of way network 	<p>Ensure that the key actions and targets of the improvement plan are taken into account when developing the policies in the LDF.</p>	<p>Incorporate any relevant targets and indicators into the development of the sustainability framework.</p>

<p>and to promote the benefits that its use can bring.</p> <ul style="list-style-type: none"> ➤ Aim 5: To work more closely with landowners, user groups and volunteers to manage and enhance the current PROW network and Wider Network of Access. ➤ Aim 6: To improve the network to make it easier to use for everyone especially those with mobility problems and visual impairment. 		
<p>Healthier Lives: NHS North Yorkshire and York's Strategic Plan 2010-2015 (May 2010)</p>		
<p>We aim by 2015 the people of North Yorkshire and York will support individuals to have healthier lifestyles.</p> <p>Our mission is to:</p> <ul style="list-style-type: none"> ➤ reduce health inequalities; ➤ empower individuals to manage their own health. <p>The goals for the next five years are:</p> <p>Goal 1: Comprehensive services for our ageing population. Goal 2: Reduction in health inequalities. Goal 3: Improved health and well-being of the population through the promotion of healthy lifestyles. Goal 4: Clinically and financially sustainable healthcare system. Goal 5: Highest quality care in the right settings. Goal 6: Strong partnerships focused on the individual.</p>	<p>Ensure that any relevant targets and indicators are taken into account when developing LDF policies.</p>	<p>Incorporate relevant health indicators into the development of the SA Framework.</p>
<p>North Yorkshire Health Joint Strategic Needs Assessment 2012 (NYCC, 2012)</p>		
<p>The Joint Strategic Needs Assessment aims to provide a high level analysis of the current and future health and wellbeing needs of the individuals and communities within North Yorkshire. It will be used to ensure that the Health and Wellbeing strategy is based on need.</p> <ul style="list-style-type: none"> ➤ Access to services, service availability and social isolation were recurrent themes identified by groups and individuals during the JSNA engagement process. ➤ Across the life course, there are challenges at every stage including child poverty, inequitable educational attainment, fuel poverty and social isolation. ➤ Health inequalities within North Yorkshire and within each District do exist. The gap in life expectancy between the least and most deprived communities across North Yorkshire is around 6.3 years and 4.6 years in males and females respectively. Within some districts, the gap is as high as 9.6 years. Fourteen of the eighteen areas in North Yorkshire which are the most deprived fifth of England are in Scarborough District. 	<p>The Joint Plan policies will ensure that minerals and waste development limit the adverse impacts they potentially have on health and provide access to open space for health and wellbeing through restoration policies.</p>	<p>SA framework includes an objective for health and also incorporates a Health Impact Assessment.</p>

<p>North Yorkshire Joint Health and Wellbeing Strategy 2013-2018 (NYCC, undated)</p>		
<p>The Joint Health and Wellbeing Strategy aims to tackle the health and wellbeing needs of the people of North Yorkshire identified within the Joint Strategic Needs Assessment. It is not a detailed plan, but sets out where the Health and Wellbeing Board would like North Yorkshire to be in terms of health and wellbeing and identifies approaches and priorities for all partners to take into account when developing their own strategies. Priorities include:</p> <ul style="list-style-type: none"> ➤ Ill health prevention by encouraging healthy lifestyles and behaviours. ➤ Encouraging healthy and sustainable communities through economic development and encouragement to make use of leisure facilities and the nearby countryside. ➤ Focussing on vulnerable groups of people in order to focus interventions on those where the biggest impact can be made. These groups include: people with long-term health conditions; children and young people; those with emotional health and wellbeing issues; and people living with deprivation. 	<p>The Joint Plan policies will ensure that minerals and waste development limit the adverse impacts they potentially have on health and provide access to open space for health and wellbeing through restoration policies.</p>	<p>SA Framework includes an objective for health and also incorporates a Health Impact Assessment.</p>
<p>Craven Open Space, Sport and Recreation Assessment (CDC, 2004) Hambleton Open Space, Sport and Recreation Supplementary Planning Document (HDC, 2011) Harrogate Provision for Open Space, Sport and Recreation Supplementary Planning Document (HBC, 2015) Ryedale Open Space, Sport and Recreation Study (RDC, 2007) Scarborough Urban Area Community, Environment and Economy Development Plan Document – section 7: Open Space, Sport and Recreation (SBC, 2011) Selby District Recreation Open Space Strategy (SDC, 2006) York Open Space, Sport and Recreation Study (CYC, 2008)</p>		
<p>The Open Space, Sport and Recreation studies and planning documents outline the proposed local standards for open space.</p> <p>Although Planning Policy Guidance 17 has been replaced by the National Planning Policy Framework, these studies and documents, prepared under PPG17 are useful to refer to and use as a sound evidence base in conjunction with the NPPF. The Open Space, Sport and Recreation documents assess open spaces of public value which offer important opportunities for sport and recreation.</p>	<p>The Joint Plan should ensure that provision and access to open space is considered as part of the development plan.</p>	<p>SA should seek to increase access to good quality green spaces through the SA Framework.</p>
<p>Community Safety Plan, Safer York Partnership, 2014-2017 (CYC, undated 2015)</p>		
<p>The priorities of the Crime and Disorder Reduction Partnership are based upon the Community Safety Strategy for York and it is the product of both multi-agency data analysis of crime and</p>	<p>The SA should consider the implications from the</p>	

<p>disorder intelligence, as well as information and community consultation conducted through the Police Safer Neighbourhood Teams. The Plan covers the period 2014-2017.</p>	<p>strategy on the Joint Plan policies.</p>	
<p>North Yorkshire Police and Crime Plan 2013 – 2016 (North Yorkshire Police Authority, 2014)</p>		
<p>The purpose of the strategy is to provide an overview that sets out the direction and focus for priority areas; safer neighbourhoods; safer roads; safeguarding our communities and stronger partnerships; and providing a sustainable North Yorkshire Police by making sure the impact on local policing services of budget cuts is minimised.</p>	<p>Transposed into local Community Safety / Crime and Disorder Strategies, which should inform Joint Plan policies. Designing out crime from site restorations will be important in some situations.</p>	<p>Targets/Indicators in Local Community Safety Strategies/Crime and Disorder Strategies should inform SA Framework.</p>
<p>Cultural Heritage</p>		
<p>Fountains Abbey and Studley Royal World Heritage Site Management Plan 2009 – 2014 (National Trust and English Heritage, 2009)</p>		
<p>The Management Plan provides a framework for the holistic and sustainable management of the site. It balances the interests of conservation and access to conserve the cultural significance of Fountains Abbey and Studley Royal.</p> <p>The key management issues for 2009-14 are: ‘sustainable management’; ‘conservation of the historic and natural environment’; ‘access, enjoyment and understanding’ and ‘local community links and partnerships’.</p>	<p>The Joint Plan needs to ensure appropriate protection of the World Heritage Site.</p>	<p>SA Framework should maintain the quality and local distinctiveness of the World Heritage Site.</p>
<p>Landscape</p>		
<p>York Greenbelt Appraisal 2003 and Technical Paper (CYC, 2011 / 2013)</p>		
<p>The Appraisal examines the policy context surrounding the greenbelt. It then draws on this analysis to define the purpose of York’s greenbelt, before going on to indicate in map form where its most valuable components lie.</p> <p>The Appraisal identifies:</p> <ul style="list-style-type: none"> ➤ Strays. ➤ Green Wedges. ➤ Extensions to the Green Wedges. ➤ River Corridors. ➤ Areas retaining the rural setting of the City. ➤ Village Settings. 	<p>Site allocations should be informed by this evidence.</p>	<p>The SA should use this as baseline and constraints to analyse the policies and allocation of sites.</p>

➤ Areas preventing coalescence.		
<p>Craven Landscape Character Appraisal (CDC, 2002) Hambleton Landscape and Settlement Character Assessment (HDC, 2016) Harrogate Landscape Character Assessment (HBC, 2004) Hambleton & Howardian Hills Landscape Partnership Area Character Assessment (2007) North Yorkshire Landscape Character Assessment (NYCC, 2011) Scarborough Landscape Appraisal (SBC, 2013) Selby Landscape Character Assessment (SDC, 1999) York Landscape Appraisal (CYC, 1996) Reading the Past in Today's Landscape: North Yorkshire, York and Lower Tees Valley Historic Landscape Characterisation</p>		
<p>In order to understand more about the landscapes that form the plan area and manage landscape change within the plan area, several landscape character assessments (LCAs) have been carried out which include North Yorkshire County, the North York Moors, the City of York and many of the North Yorkshire districts. LCAs aim to identify landscape character types and areas and develop strategies for their management.</p>	<p>Policies should consider effects on landscape character.</p>	<p>The SA should use this as baseline and seek to conserve and enhance landscape character.</p>
<p>Forest of Bowland AONB Management Plan 2014 – 2019 Howardian Hills AONB Management Plan 2014 – 2019 Nidderdale AONB Management Plan 2014 – 2019 North Pennines AONB Management Plan 2014 – 2019</p>		
<p>The documents identify the important features of the AONBs and sets out guidance and objectives on the ways in which these features can be protected, restored and enhanced. They do not contain land use policies but deal with good management practice of the area.</p>	<p>Ensure that policies and supporting text relating to the Forest of Bowland AONB emphasise the importance of the landscape designation.</p>	<p>Ensure environmental protection of the AONB.</p>
<p>Planning PPSIs</p>		
<p>Craven, Hambleton, Harrogate, Richmondshire, Ryedale, Scarborough and Selby Local Development Frameworks / Local Plans</p>		
<p>District and borough Local Development Frameworks provide the detailed strategy for all other local spatial planning (housing, retail, etc.) within the Plan Area.</p>	<p>The Joint Plan policies will be consistent with district and borough LDF policies.</p>	<p>SA Framework will reflect the district and borough's LDF objectives and indicators.</p>
<p>Local Plans and Minerals and Waste Plans of adjoining planning authorities</p>		
<p>Together these plans provide the detailed strategy for all elements of planning (including housing,</p>	<p>The Joint Plan policies will</p>	<p>SA Framework will reflect the</p>

<p>retail, etc.) within areas that are adjacent to the Plan Area.</p>	<p>be consistent with neighbouring LDF policies.</p>	<p>neighbouring areas' LDF objectives and indicators.</p>
<p>North York Moors Core Strategy and Development Policies (North York Moors National Park Authority, 2008)</p>		
<p>Objectives:</p> <ul style="list-style-type: none"> ➤ Conserve and enhance the natural environment and the biological and geological diversity of the Park. ➤ Reduce the causes of and assist in adaptation to the effects of climate change. ➤ Promote prudent and sustainable use of natural resources. ➤ Secure high quality new development that takes account of and enhances the unique landscape character, settlement pattern and building characteristics of the 9 landscape character areas in the Park. ➤ Preserve and enhance historic assets. ➤ Promote sustainable design and efficient energy use in new buildings. ➤ Support tourism and recreation industry by ensuring that development contributes to the local economy and provides opportunities for enjoying the Park's special qualities. ➤ Strengthen and diversify the local economy by supporting a range of opportunities for employment and training particularly in sustainable locations. ➤ Maintain and foster vibrant local communities where young people have an opportunity to live and work and consolidate the role of settlements. ➤ Ensure that a range of new housing is provided including housing to meet local needs and affordable housing that will remain affordable and available to local people in perpetuity. ➤ Support the provision and retention of key community facilities and services throughout the area. ➤ Reduce the need to travel and facilitate alternative, more sustainable modes of travel to the private car and minimise the environmental impact of transport. ➤ Facilitate access to services and facilities. 	<p>The Joint Plan should contribute towards meeting these objectives.</p>	<p>The SA framework should include consideration of the effects of the Joint Plan on the various objectives of the NYM Core Strategy and Development Policies.</p>
<p>City of York Local Plan (ongoing)</p>		
<p>The 'Local Plan' sets strategic priorities for the whole city, forms the basis for planning decisions and must be reviewed at regular intervals to keep it up to date. Preferred Sites have been published in 2016.</p>	<p>The Joint Plan should be consistent with this plan.</p>	<p>The SA framework should consider the emerging plan.</p>
<p>The Yorkshire and Humber Plan: Regional Spatial Strategy to 2026 (retained greenbelt policies for York) (DCLG, 2008)</p>		
<p>Although the regional spatial strategy for Yorkshire and The Humber has been revoked, parts of the greenbelt policies in this strategy for York have been retained until completion and adoption of a local plan for the city which will take into account protection and enhancement of the greenbelt.</p>	<p>Policies and sites should consider the greenbelt policies.</p>	<p>The SA should use this as baseline and seek to conserve and enhance the</p>

<p>The retained parts of the green belt policies in the RSS are stated in the SEA post adoption statement and are as follows: :</p> <p>“Policy Y1: York Sub Area Policy Plans, strategies, investment decision and programmes for the York sub area should: 1. In the City of York LDF, define the detailed boundaries of the outstanding sections of the outer boundary of the York Green Belt about 6 miles away from York City Centre and the inner boundary in line with policy YH9C. 2. Protect and enhance the nationally significant historical and environmental character of York, including its historic setting, views of the Minster and important open areas”</p> <p>And “Policy YH9: Green Belts The detailed inner boundaries of the Green Belt around York should be defined in order to establish long term development limits that safeguard the special character and setting of the historic city”</p>		<p>greenbelt surrounding York.</p>
<p>Cross-Cutting PPSIs</p>		
<p>Material Assets</p>		
<p>Let’s Talk Less Rubbish: A Municipal Waste Management Strategy for City of York and North Yorkshire 2006-2026 (2006)</p>		
<p>This Strategy has the following objectives, to enable us to achieve this vision:</p> <p>Reduce the amount of waste produced in York and North Yorkshire so as to make us one of the best performing areas in the country by:</p> <ul style="list-style-type: none"> ➤ Promotion of the value of waste as a natural and viable resource, through re-using, recycling and composting. ➤ Maximising opportunities for re-use of unwanted items and waste by working closely with community and other groups. ➤ Maximising the recovery of materials and/or energy from waste that is not re-used, recycled or composted. <p>The Partnership aims to achieve the following targets, as a minimum:</p> <ul style="list-style-type: none"> ➤ Recycle or compost 40% of household waste by 2010. ➤ Recycle or compost 45% of household waste by 2013. ➤ Recycle or compost 50% of household waste by 2020. ➤ Divert 75% of municipal waste from landfill by 2013. 	<p>The Joint Plan should incorporate policies which aim to achieve the targets.</p>	<p>The SA should take consideration of the objectives and targets in the SA Framework.</p>

Tees Valley Joint Waste Management Strategy – Headline Strategy (Tees Valley Local Authorities, 2008)		
Principles: <ul style="list-style-type: none"> ➤ To reduce waste generation. ➤ To be achievable and affordable. ➤ To work towards zero landfill. ➤ To minimise the impact on climate change. ➤ To have an accountable and deliverable structure. ➤ To contribute towards economic regeneration. 	The Joint Plan, particularly waste policies, should help to deliver these aims.	The SA Framework should include consideration of the effects of the Joint Plan on meeting these waste aims.
York Renewable Energy Study (AMEC, 2014)		
Provides an evidence base for City of York Council regarding the potential renewable energy generation options available within the City. It builds on a previous study carried out in 2010 by AEA, reviewing the findings of this work and expanding upon the range of technologies considered.	The Joint Plan should incorporate provision for resource efficiency and renewable energy provision.	The SA should understand and use the potential identified as the basis for analysis of policies and sites.
Redcar and Cleveland Local Transport Plan 2011 – 2021 (2011)		
Goals: <ul style="list-style-type: none"> ➤ Reduce carbon emissions. ➤ Support economic growth. ➤ Promote equality of opportunity. ➤ Contribute to better safety, security and health. ➤ Improve quality of life and a healthy natural environment. 	The Joint Plan should be attuned to cross boundary transport impacts of policies.	The SA Framework should include consideration of the effects on transport patterns.
North Yorkshire Local Transport Plan 4 (2016)		
The LTP sets out the priorities for transport provision from 2016 to 2045. It seeks to deliver 5 key objectives, namely: <ul style="list-style-type: none"> ➤ Economic growth – contributing to economic growth by delivering reliable and efficient transport networks and services; ➤ Environment and climate change – managing the adverse impact of transport on the environment; ➤ Road safety – Improving road and transport safety; ➤ Access to services – Improving equality of opportunity by facilitating access to services; ➤ Healthier travel – promoting healthier travel opportunities. 	Plan should not conflict with the aims of LTP4	SA should assess impacts of minerals and waste development on the transport system.
City of York Local Transport Plan 3 2011-2021 (CYC, 2011)		

<p>This third transport plan sets out five themes with objectives:</p> <ul style="list-style-type: none"> ➤ Providing quality alternatives. ➤ Improving strategic Links. ➤ Encouraging behavioural Change. ➤ Tackling transport emissions. ➤ Enhancing public streets and spaces. <p>The LTP3 vision over the next 20 years is:</p> <ul style="list-style-type: none"> ➤ to enable everyone to undertake their activities in the most sustainable way and to have a transport system that: ➤ has people walking, cycling and use public transport more; ➤ makes York easier to get around with reliable and sustainable links; ➤ enables people to travel in safety, comfort and security, whatever form of transport they use; ➤ provides equal access to opportunities for employment, education, training, good health and leisure for all; and ➤ addresses the transport-related climate change and local air quality issues in York. 	<p>The main targets of the strategy should be reflected in the development of Joint Plan policies.</p>	<p>These objectives should be incorporated into the objectives and indicators of the SA Framework to ensure consistency.</p>
<p>North Yorkshire Gypsy and Traveller Accommodation Assessment (North Yorkshire Strategic Housing Partnership, 2008)</p>		
<p>To understand the accommodation needs of our communities the North Yorkshire Gypsy & Traveller Accommodation Assessment (GTAA) was commissioned and the results published in August 2008. The purpose of this research was to assist Local Authorities within North Yorkshire to develop a Gypsy and Traveller Accommodation Strategy.</p> <p>The research estimated that there are about 888 Gypsy Traveller households living across the sub region. Our Gypsy and Traveller communities live both in bricks and mortar and on sites, 11 of which are owned by local authorities and 4 of which are in private ownership</p>		<p>The SA should be aware of the locations of traveller sites.</p>
<p>York and North Yorkshire Strategic Housing Market Assessment (North Yorkshire Strategic Housing Partnership, 2011)</p>		
<p>The purpose of the SHMA, as explored in more detail in the context of Government guidance; within the main report, is two-fold:</p> <ul style="list-style-type: none"> ➤ to provide a SHMA undertaken in accordance with Government guidance; and ➤ to assist in supporting the Council to fulfil their strategic housing role in planning for housing investment that meets the needs of the community. <p>This document identifies that City of York will likely have an average household increase of 850</p>	<p>The Joint Plan needs to consider the likely requirements for provision of housing when considering supply of minerals.</p>	<p>The SA should use this in the baseline and analysis of the Policies.</p>

<p>households per annum. It also identifies that in order to address the backlog and future housing need, 790 affordable homes per annum are required.</p>		
<p>North Yorkshire Local Investment Plan 2011-2021 (North Yorkshire Strategic Housing Partnership, June 2011)</p>		
<p>The purpose of this Plan is to showcase the huge potential that can be unlocked through investment in housing in North Yorkshire. It forms the business case and development prospectus for future investment through a place-based approach. This is vital in a time of increasing austerity and cuts to public sector funding when monies need to be targeted effectively and deliver key outcomes and value for money.</p> <p>The LIP supports the following Vision:</p> <p>“To make North Yorkshire and York an inclusive place where communities are sustainable and residents can have fair access to decent affordable homes and effective support when they need it”.</p> <p>It is committed to the delivery of the five key strategic priorities set out in the North Yorkshire Housing Strategy:</p> <ul style="list-style-type: none"> ➤ Enabling the provision of more affordable homes. ➤ Maintaining and improving the existing housing stock. ➤ Delivering community renaissance. ➤ Improving access to housing services. ➤ Reducing homelessness. 		<p>The SA needs to understand the cross boundary effects of policies in conjunction with North Yorkshire approach.</p>
<p>North Yorkshire Housing Strategy and Action Plan 2010-2015 (NYCC, 2010)</p>		
<p>Sets strategic priorities for housing growth and delivery from 2015 to 2021 and covers York, North Yorkshire and East Riding LEP area.</p> <p>Key target is to deliver 1600 affordable homes per year.</p>	<p>The Joint Plan needs to consider demand from the construction sector to plan for a ‘steady and adequate supply’ of key minerals.</p>	<p>The SA needs to consider the need for affordable housing and the generation of construction waste.</p>
<p>Sustainable Development</p>		
<p>Craven Sustainable Community Strategy 2016 – 2019</p>		
<p>This strategy sets out the priorities and principles for Craven to make the district a place where people want to live and work, now and in the future. The priorities are:</p> <ul style="list-style-type: none"> ➤ Enterprising Craven - facilitating economic growth across Craven ➤ Resilient Communities - creating sustainable communities across Craven 	<p>The Joint Plan should pay regard to the targets set for housing and access and help provide and contribute towards making the District and the County</p>	<p>The priority areas will be reflected in SA Framework objectives and indicators.</p>

<ul style="list-style-type: none"> ➤ Finacial Sustainability - ensuring a self-sustainable Council 	<p>economically prosperous without detracting from its environment.</p>	
<p>Richmondshire 2021 Sustainable Community Strategy (Richmondshire Local Strategic Partnership, undated)</p>		
<p>Richmondshire’s Community Strategy is based around five themes:</p> <ul style="list-style-type: none"> ➤ Safe Places. ➤ Strong Neighbourhoods. ➤ Healthy Lives. ➤ Prosperous Communities. ➤ Green Living. 	<p>The Joint Plan should pay regard to the targets set for housing and access and help provide and contribute towards making the District economically prosperous without detracting from its environment.</p>	<p>The priority areas will be reflected in SA Framework objectives and indicators.</p>
<p>Harrogate District Sustainable Community Strategy</p>		
<p>Now covered by North Yorkshire Community Plan 2014 - 2017</p>		
<p>Selby District Local Strategic Partnership Sustainable Community Strategy 2010 - 2015 (Selby District Local Strategic Partnership, 2012)</p>		
<p>Priority objectives are</p> <ul style="list-style-type: none"> ➤ Improve outcomes for people living in the most deprived communities in Selby district ➤ Improve outcomes for groups of people most likely to experience poor health and/or struggle to access services; such as the Gypsy and Traveller communities ➤ Improve economic opportunities by supporting the development of a high speed broadband infrastructure. ➤ Encourage all to ‘Live well’ and be healthy; increasing access to sport and cultural activities, countryside and greenspace, improving everyone’s well-being. ➤ Empower communities to do more themselves, giving them the tools they need to inspire community action. 	<p>The Joint Plan should pay regard to the targets set for housing and access and help provide and contribute towards making the District economically prosperous without detracting from its environment.</p>	<p>The priority areas will be reflected in SA Framework objectives and indicators.</p>
<p>Imagine Ryedale (Ryedale Strategic Partnership, 2003)</p>		
<p>Set around the themes of vibrant communities, strong communities, access and communication, health and wellbeing, landscape and environment and developing opportunities.</p>	<p>The Joint Plan should help to take these aims forward.</p>	<p>The SA Framework should include consideration of the effects of the Joint Plan on these aims.</p>
<p>A Community Plan for Hambleton 2006-2011 (Hambleton District Council, 2006)</p>		
<p>Set around the themes of prosperous community, vibrant community, sustainable community, safe</p>	<p>The Joint Plan should help</p>	<p>The SA Framework should</p>

community and healthy community.	to take these aims forward.	include consideration of the effects of the Joint Plan on these aims.
Building a Better Borough – Redcar and Cleveland’s Sustainable Community Strategy 2008 – 2021 (Redcar and Cleveland Partnership, 2008)		
<p>Outcomes:</p> <ul style="list-style-type: none"> ➤ Children and young people to be healthy, stay safe, enjoy and achieve, achieve economic well-being, make a positive contribution; ➤ Healthier communities; ➤ Safer communities; ➤ Stronger communities; and ➤ Sustainable communities (economic prosperity and regeneration, a high quality and sustainable environment, high quality housing to meet the needs of communities, improving skills and education). 	The Joint Plan should not conflict with the achievement of the outcomes.	The SA Framework should include consideration of the effects of the Joint Plan on these outcomes.
Sustainable Community Strategy for the Borough of Scarborough 2010 – 2013 (North Yorkshire Coast Community Partnership, 2010)		
<p>Themes:</p> <ul style="list-style-type: none"> ➤ Quality environments; ➤ Prosperous communities; ➤ Safe and healthy communities; ➤ Inclusive and vibrant communities; and ➤ Accessible communities. 	The Joint Plan should help to take these aims forward.	The SA Framework should include consideration of the effects of the Joint Plan on these aims.
York - a City making History: sustainable Community Strategy 2008-2025		
<p>The purpose of the City of York Council Plan is to:</p> <ul style="list-style-type: none"> ➤ Explain to staff what the Council’s five priorities are and the actions we plan to take to deliver them. ➤ Explain the three core capabilities that we need as an organisation, and to develop in every member of staff. ➤ Demonstrate to Members that we have a clear plan that will deliver the Council’s priorities over the next four years. <p>The Council Plan sets out our priorities for the next four years. There are five priorities:</p> <ul style="list-style-type: none"> ➤ Creating jobs and growth in the economy. ➤ Get York Moving. ➤ Building Stronger Communities. 	The main themes, targets and priorities of the strategy should be reflected in the development of the Joint Plan policies.	Relevant themes, targets and indicators should be used in the development of the SA objectives and indicators.

<ul style="list-style-type: none"> ➤ Protect Vulnerable People. ➤ Protect the Environment. 		
<p>Council Plan 2016 – 2020 (NYCC)</p>		
<p>The Plan sets out a ‘Joint Vision’ to be delivered by partners:</p> <p>‘We want North Yorkshire to be a thriving county which adapts to a changing world and remains a special place for everyone to live, work and visit.’</p> <p>To achieve the approach is:</p> <ul style="list-style-type: none"> ➤ To lead on achieving the vision: <ul style="list-style-type: none"> - making sure that we identify and understand the key issues for people and places in North Yorkshire; - making sure that we have strategies, developed with communities and partners, in place to tackle these; and - making the case for North Yorkshire. ➤ To enable individuals, families and communities to do the best for themselves: <ul style="list-style-type: none"> - supporting empowered communities to provide a range of services for local people that fully utilise all local assets, prevent loneliness and support troubled families, and contribute to healthier lifestyles; and - providing self service facilities and ready access to relevant information – enabling customers to access information, check eligibility, carry out a self-assessment, make appointments, make online payments, and request simple services themselves. ➤ To ensure cost effective and efficient delivery, or commissioning from those who are best placed to deliver, of: <ul style="list-style-type: none"> - services to the most vulnerable people; and - high priority services that enable a thriving county. ➤ To measure our performance, use the measurements to become better at what we do, and tell you how we are doing. <p>Priorities are</p> <ul style="list-style-type: none"> ➤ Facilitate the development of key housing and employment sites across North Yorkshire by 	<p>The vision and priorities should be reflected in the development of the Joint Plan policies.</p>	<p>The vision and priorities should be used in the development of the SA objectives and indicators.</p>

<ul style="list-style-type: none"> ➤ delivering necessary infrastructure investments through partnership ➤ Supporting and enabling North Yorkshire communities to have greater capacity to shape and deliver the services they need and to enhance their resilience in a changing world ➤ Reduce health inequalities across North Yorkshire – by targeting specific communities 		
<p>York City Vision and Community Strategy (Without Walls) 2011-2025 (CYC, 2011)</p>		
<p>Without Walls is the name of a group of people from influential organisations in York who have agreed to work together to achieve a shared vision. The strategy in place to reach the shared vision, called the community strategy, will make sure that the good work done by organisations, partnerships and individuals in the city is brought together in one overall 'grand plan'.</p> <p>There are seven themes to the strategy each with their own objectives and targets that come together to form the city vision. These are:</p> <ul style="list-style-type: none"> ➤ The Safer City. ➤ The Healthy City. ➤ The City of Culture. ➤ The Thriving. ➤ The Inclusive. ➤ The Learning City. ➤ The Sustainable City. 	<p>The main targets of the strategy should be reflected in the development of Joint Plan policies.</p>	<p>These objectives should be incorporated into the objectives and indicators of the SA Framework to ensure consistency.</p>
<p>North Yorkshire Community Plan 2014 -17 (NYSP, 2011)</p>		
<p>Three new priorities have been identified for the period 2014 – 2017. These are:</p> <ul style="list-style-type: none"> ➤ Facilitate the development of key housing and employment sites across North Yorkshire by delivering necessary infrastructure investments through partnership <ul style="list-style-type: none"> - The joint preparation of Infrastructure Delivery Statements for each district. - Support the preparation and implementation of the YNYER Strategic Economic Plan and the Skills Delivery Plan. ➤ Supporting and enabling North Yorkshire communities to have greater capacity to shape and deliver the services they need and to enhance their resilience in a changing world <ul style="list-style-type: none"> - Provide a coherent programme of support for communities, with the aim of developing empowered communities providing a range of sustainable local support and services. - Implement the prevention strategy and the dementia strategy, to support 	<p>The Joint Plan will need to support the Community Plan.</p>	<p>The priority areas will be reflected in SA Framework objectives and indicators.</p>

<p>communities to be resilient against the challenges of dementia and loneliness and isolation.</p> <ul style="list-style-type: none"> ➤ Reduce health inequalities across North Yorkshire <ul style="list-style-type: none"> - Develop a proactive partnership approach to the control of alcohol and tobacco, including responsible licensing, reducing illegal sales, and reducing illicit and counterfeit products. - Support organisations in North Yorkshire to promote a whole-organisation approach to health and wellbeing, including healthy work places and training for workers. 		
<p>North York Moors National Park Management Plan (North York Moors National Park Authority, 2012)</p>		
<p>Aims (summarised):</p> <ul style="list-style-type: none"> ➤ The landscape, historic environment, important habitats and species, coastal and marine environment, rivers and streams will be maintained and enhanced. ➤ Tranquillity and dark skies will be maintained or improved. ➤ Conserve the archaeological and built heritage including removing 65 Scheduled Monuments and 35 Listed Buildings from the At Risk register. ➤ Improve habitat connections including the creation and restoration of 150 hectares of important grassland habitats. ➤ Increase the area of woodland including the planting of 300 hectares of woodland, and initiating the restoration of 600 hectares of Plantation on Ancient Woodland sites. ➤ To: support priority species and habitats; keep the air clean and unpolluted; maintain the 4,100 hectares of blanket peat and soils in order to support wildlife and agriculture; maintain moorland for its distinctive landscape and wildlife; maintain forests in recognition of their multiple benefits; ensure that river and other water resources are of high quality. ➤ Increase opportunities for people to visit the Park and increase awareness of the Park and understanding of its special qualities. ➤ Increase food production within the Park without harming the special qualities. ➤ Manage woodlands sustainably ➤ Support local businesses and employment ➤ Ensure sustainable communities through provision of affordable homes and support for facilities. ➤ Ensure an effective transport system; less use of energy and support renewable energy where this is appropriate to the National Park; and manage waste sustainably. 	<p>The Joint Plan should contribute towards meeting these aims where possible, and should not hinder achievement of these objectives.</p>	<p>The SA Framework should include consideration of the effects of the Joint Plan on these aims.</p>

<p>Recreation and Access Strategy for the North York Moors National Park (North York Moors National Park Authority, 2008)</p>		
<p>Vision: The National Park Authority will encourage everyone to engage with, understand and enjoy the special qualities of the North York Moors by providing, managing and enabling opportunities for outdoor recreation and access in a sustainable way.</p>	<p>The Joint Plan should be consistent with the provision of opportunities for access and recreation in the National Park.</p>	<p>The SA Framework should include consideration of the effects of the Joint Plan on access and recreation in the National Park.</p>
<p>Corporate Fairness and Inclusion Strategy and Single Corporate Equality Scheme (CYC, 2010)</p>		
<p>Below are the main actions that are planned from July 2009 to July 2012. Theme 1 - Know the community; Theme 2 - Leadership, partnership and Commitment; Theme 3 – Engaging with people from the equality strands; Theme 4 – Providing responsive services; Theme 5 – Having a diverse workforce; Theme 6 - Acting in each business area.</p> <p>Fairness and inclusion are about treating people according to their needs to achieve fair results across the full range of services and employment opportunities offered by the council, its partners, outside organisations that work for it, and organisations that the council gives grants to.</p> <p>The aim is to make sure that people do not suffer disadvantage in services and employment as a result of their gender, disability, race, age, religion and belief or sexual orientation.</p>	<p>The Joint Plan should ensure that equality is considered throughout policy development.</p>	<p>The SA should ensure that equality forms part of the assessment process.</p>
<p>Visit York Strategic Plan 2009-2012 (Visit York, 2008)</p>		
<p>Visit York has identified five key objectives that we will use to measure our success:</p> <ul style="list-style-type: none"> ➤ To position York as a leading domestic and international visitor destination. ➤ To generate, support and manage investment in tourism in York and the surrounding area. ➤ To deliver from our activities an enhanced and sustainable return on investment for all our stakeholders. ➤ To operate a commercially successful business and develop the company’s corporate social responsibilities. ➤ To contribute fully to the development of the economy of York and Yorkshire. <p>By 2012 the York tourism sector will see:</p> <ul style="list-style-type: none"> ➤ Total visitor expenditure in excess of £400m (based on >5% growth pa). ➤ Average length of overnight stays sustained at 4 days (2008: 3.9 days). 	<p>The Joint Plan should take into consideration and support the aims and targets of this strategy.</p>	<p>The SA should incorporate the aims and targets within the framework.</p>

<ul style="list-style-type: none"> ➤ York Tourism supporting 12,000 jobs (2008: 10,600 jobs). ➤ A 3% increase in the ratio of visitors who intend to return to York in the next two years (to 86%) based on visitor survey evidence. ➤ £50 m investment in tourism over a three year period by public and private sectors – including investment in training, public realm and events activity as well as capital projects. ➤ 100 York tourism businesses signed up to the Green Tourism Business Scheme. 		
The Education Plan 2005-2008 (CYC, 2005)		
<p>Key Vision – to aspire to excellence, reflecting the local ambition of York to be a world class city in the 21st Century. This will not be achieved unless the people who are educated and live in the city are given the opportunity to become highly motivated, flexible and creative life-long learners.</p> <p>Key Outcomes/Targets:</p> <ul style="list-style-type: none"> ➤ Being Healthy in York. ➤ Staying Safe in York. ➤ Enjoying and achieving in York. ➤ Making a positive contribution in York. ➤ Achieving economic well-being. 	<p>Ensure that the main targets and indicators are taken into account when developing Joint Plan policies.</p>	<p>Incorporate any relevant targets into the Sustainability Framework.</p>
Dream Again: Children's and Young People's Plan 2016-2020 (CYC and YorOK Children's Trust)		
<p>Vision: Children and young people are the heart of our city and of everything we do.</p> <p>A specific responsibility of the YorOK Board is to oversee the production, delivery and review of this Children and Young People's Plan. In discharging this responsibility the Board will formally monitor performance and progress on a quarterly basis, and review annually the extent to which partners have acted in accordance with the Joint Plan.</p>	<p>Ensure that the main targets and indicators are taken into account when developing Joint Plan policies.</p>	<p>Incorporate any relevant targets into the Sustainability Framework.</p>
North Yorkshire's Children and Young People's Plan 2014 – 2017 (NYCC and North Yorkshire Children's Trust)		
<p>The aim of the Plan is to secure good prospects for the children and young people of North Yorkshire. The Key principles of the Plan which are relevant to the Plan are to:</p> <ul style="list-style-type: none"> ➤ Involve children, young people and their families at all stages of planning, delivering and evaluating services; ➤ Resolve families' problems before they escalate by offering early help that develops resilience and self-reliance; ➤ Ensure that the safety and protection of children and young people is everybody's business; 	<p>SA should advocate the needs of children and young people where opportunities arise.</p>	

<ul style="list-style-type: none">➤ Strive for excellence in everything we do;➤ Work in close partnerships, in the best interests of children, young people, and families;➤ Recognise and use the capacity of the voluntary and community sector in enhancing provision and choice;➤ Make sure we can demonstrate the impact we have on the lives of children, young people and families;➤ Spend money wisely and effectively;➤ Celebrate diversity; and➤ Recognise that fun, happiness, and enjoyment of life are also important.		
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Appendix III: Ecosystem Services/Sustainability Objectives Rapid Appraisal

Ecosystem Services

Ecosystem services are defined by DEFRA (2007)⁶ as: *'services provided by the natural environment that benefit people. Some of the ecosystem services are well known including food, fibre and fuel provision and the cultural services that provide benefits to people through recreation and cultural appreciation of nature. Other services of nature are not so well known. These include the regulation of the climate, purification of air and water, flood protection, soil formation and nutrient cycling'*.

The term first became widely known through the Millennium Ecosystem Assessment⁷. The Assessment showed that the state of the natural environment has a direct link to human wellbeing. It also illustrated that damage to ecosystem services can have a significant economic cost. More recently a number of reports have attempted to quantify the value of ecosystem services. Included in these reports is the recent National Ecosystem Assessment for the UK. Some services such as food production have a clear market value. Others (such as the prevention of floods to development by habitats such as nearby flood meadows) may be measured by the benefits that people derive from them, such as the savings that accrue from reduced risk.

The Millennium Ecosystem Assessment divides services into four different categories. Firstly, there are provisioning services, which are broad product categories that can be derived from ecosystems. These include products such as food and medicines. Secondly, there are regulatory services. These recognise that ecosystems are often critical in terms of regulating the conditions that allow us to live and work. They include regulation of water flows, maintenance of air quality and the prevention of erosion. Thirdly, there are cultural services which include a range of non-material benefits that we derive from nature. These are often harder to value objectively, but may be seen as hugely important to our quality of life. They include services such as the recreational value of natural habitats for activities such as walking and cycling, and the inspirational value of landscapes that may be expressed in artistic endeavour. Finally, supporting services are the services upon which other ecosystems services depend, and include soil formation, nutrient cycling and primary production (chiefly through photosynthesis).

The National Ecosystem Assessment

In 2011 the UK Government published The National Ecosystem Assessment (UKNEA). The UKNEA *'represents a first attempt to assess our stocks of natural ecosystem resources, their state and the trends in their development'*⁸.

⁶ Defra, 2007. An Introductory Guide to Valuing Ecosystem Services. Defra, London.

⁷ Millennium Ecosystem Assessment, 2005. Ecosystems and Human Wellbeing: Synthesis. Island Press, Washington DC.

⁸ Watson, R and Albon, S et al. 2011. UK National Ecosystem Assessment: Synthesis of the Key Findings (Defra, London) [URL: <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx>].

Changes in ecosystems can lead to changes in the level of ecosystem services that they deliver. For instance, the replacement of lowland heath with farmland can lead to a flux of carbon dioxide to the atmosphere and the reduction of further capacity to absorb carbon from the atmosphere. The National Ecosystem Assessment provided a snapshot of changes in broad habitat types and summarised their contribution to ecosystem services in a technical report on 'Status and Changes in the UK Ecosystems and their Services to Society: England'⁹. Table ES1 shows the broad habitats studied in the NEA that are also present at significant levels in the North Yorkshire plan area, the direction of change in England (more local data is not yet available) and the importance of that habitat type for delivering ecosystem services¹⁰.

⁹ Defra et al, 2011. UK National Ecosystem Assessment Technical Report [URL: <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx>].

¹⁰ The table should be taken as indicative as importance may vary locally. It should also be noted that the importance of habitats for delivering ecosystem services is partly due to the extent of the habitat and partly due to their structure and functioning. So enclosed farmland, which is very extensive in distribution is amongst the most important habitats for regulating climate change across England, but at a local scale, when equal areas of habitat are compared, enclosed farmland may be of lesser importance (e.g. conversion of semi natural grasslands to arable systems show that 14.29 Mt of carbon was lost to the atmosphere between 1990 and 2006 – see Alonso, I et al, 2012. Natural England Research Report NERR043: Carbon Storage by Habitat: Review of the Evidence of the Impacts of Management Decisions and Condition of Carbon Stores and Sources [URL: publications.naturalengland.org.uk/file/1438141]).

Table ES1: Importance of key broad habitats for delivering ecosystem services

Service group	Final Ecosystem Service	Moorland, Mountain and Heaths	Semi-natural Grasslands	Enclosed Farmland	Woodlands	Freshwaters, Open waters, Wetlands and Floodplains	Urban	Coastal Margins
Provisioning	Crops		→	↑			↗	↘
	Livestock	→	→	→	→			↘
	Fish			→		↓		↘
	Trees, standing vegetation	↘	↗	↗	↑		↗	
	Water supply	→	↘	→	→	↘	→	→
	Wild species diversity	↗	→	↓	↗	↓	↗	→
Cultural	Recreation	↑	↑	↗	↑	↑	↑	↑
	Tourism	↑	↑	↗	↑	↑	→	↑
	Landscapes / seascapes	↑	↑	↑	↑	↗	→	↑
Regulating	Climate	↘	↗	↘	↑	→	↘	↘
	Hazard	→	↘	↘	↗	→	↘	↘
	Disease and pests		↗	↘	→	↘	↘	
	Water quality	↘	→	→	↗	↘	→	
	Soil quality	→	↘	↘	↗	→	↘	→
	Air quality	→	↘	↘	↗		→	→
Importance of broad habitat for delivering the ecosystem service					Direction of change in the flow of the service since 1990			
High	Medium - High	Medium - Low	Low	↑ Improving; ↗ Some improvement; → Improvement and/or deterioration in different locations; ↘ Some deterioration; ↓ deterioration				

Method

In a report to Yorkshire Futures, 'Applying an Ecosystems Services Approach in Yorkshire and the Humber'¹¹, the University of York and URSUS Consulting have attempted to document ecosystem service delivery at a sub-regional level, and describe the relative importance of different ecosystem services provision between sub-regions. The report identifies a number of benefits and challenges in using the ecosystem approach. However, it suggests that ecosystem services are an appropriate topic to be considered by sustainability appraisal. In particular, it states that 'key ecosystem services and indicators measuring their state should be included in the SA/SEA framework so that ecosystem services are fully reflected in the criteria against which policies and options are subsequently appraised'.

Because of the wide ranging variety of services that are provided by ecosystems it is considered that the sustainability objectives in the sustainability appraisal for the Minerals and Waste Joint Plan already promote the enhancement of ecosystem services provision to a large degree (see table ES3). Objectives such as 'to protect and enhance the quality and character of all landscapes and townscapes' have obvious benefits in terms of enabling delivery of a number of 'cultural services', while 'to adapt to the consequences of climate change' is sufficiently broad in scope to encompass a number of 'regulatory services'. What is therefore at issue is whether the sustainability objectives are sufficient in scope and direction to maintain or enhance ecosystem services delivery in the Plan Area. Can they be refined to ensure ecosystem services continue to be delivered into the future? And do any objectives work against ecosystem services and how can this be avoided? To this end it is considered necessary to test the sustainability objectives against the various ecosystem services that are known to be present in the Plan Area. Where objectives clash with ecosystem services, or fail to provide opportunities, this is noted, and wherever necessary, modifications are made to improve the objectives for ecosystem services delivery.

The ecosystem services chosen for the assessment matrix are final ecosystem services sourced from the National Ecosystem Assessment. These were felt to reflect the key ecosystems services in the county. Other reports, including the recent University of York/URSUS report and Natural England's National Character Area Profiles document a range of additional services, however it is felt that the National Ecosystem Assessment's list of final ecosystem services are supported by the most comprehensive evidence base (albeit at a national scale), and are broadly supported by those other more local reports (see table ES2). Supporting services are not included in the assessment as phenomena such as primary production are virtually ubiquitous. While they could be impacted upon by human behaviour (for example as a result of climate change), the scales at which such impacts occur are generally supra-national and difficult to relate to the scope of the plan.

While the National Ecosystem Assessment establishes that broad habitat types can be associated with ecosystem services delivery (though there are often difference in the level of service being delivered by more detailed categories of ecosystem – see table ES2 for further information), it is also necessary to demonstrate that those habitat categories are present in the Plan Area. To achieve this GIS maps of the

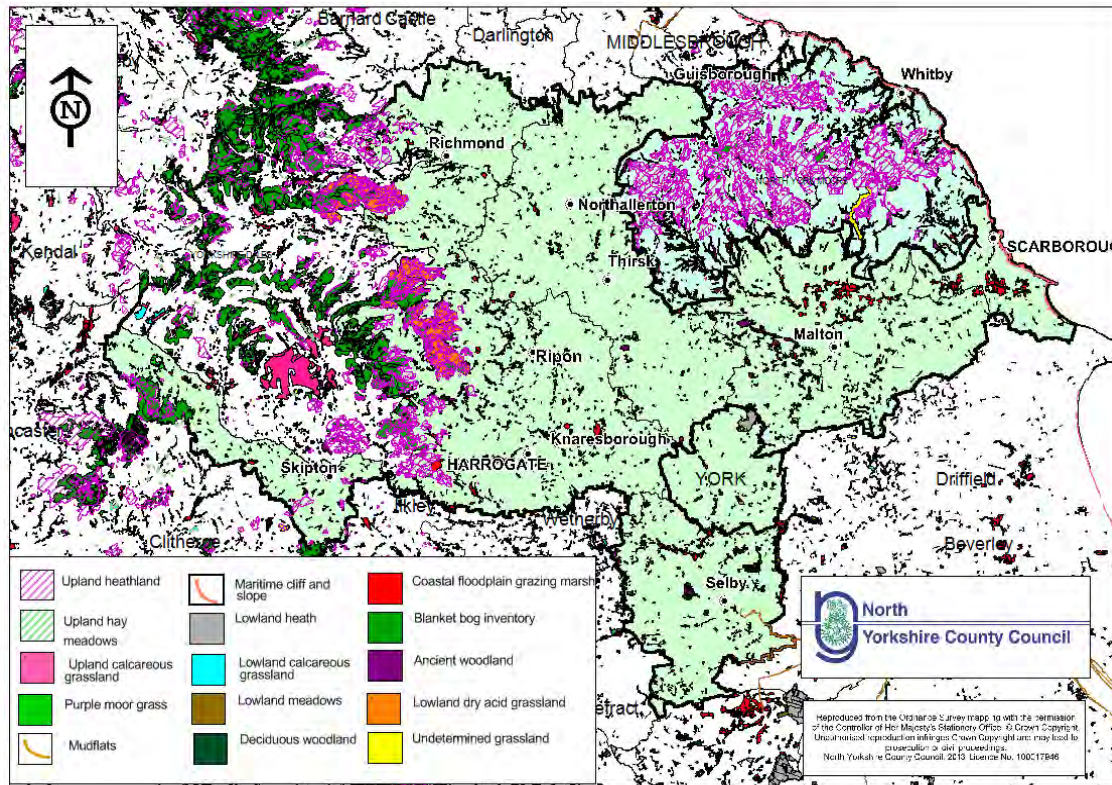
¹¹ University of York, URSUS Consulting, 2010. Applying an Ecosystem Services Approach in Yorkshire and Humber: A report to Yorkshire Futures. Yorkshire Futures, Leeds.

Plan Area have been reviewed for the presence of key habitats that fall into the broader habitat categories. Table ES2 also shows the GIS layers that were used in the assessment.

ES2: Summary of checks that ecosystem services are present

Broad habitat category defined in NEA	Evidence that the habitat is found in plan area	Limitations (e.g. is it considered of relative importance in the Haines – Young report?)
Moorland, Mountain and Heaths	Natural England dataset: blanket bog present; Natural England dataset: upland heathland present; Natural England dataset: lowland heathland present	The list of habitats is not exhaustive
Semi-natural Grasslands	Natural England dataset: upland calcareous grassland present; Natural England dataset: purple moor grass present; Natural England dataset: lowland meadows present; Natural England dataset: lowland calcareous grassland present; Natural England dataset: lowland dry acid grassland present; Natural England dataset: undetermined grassland present;	The list of habitats is not exhaustive
Enclosed Farmland	This habitat is assumed to be present as aerial photographs of the county show it to be dominated by farmland in many areas.	
Woodlands	Natural England dataset: deciduous woodland present; Natural England dataset: ancient woodland present;	The list of habitats is not exhaustive
Freshwaters, Open waters, Wetlands and Floodplains	Natural England Dataset: coastal floodplain grazing marsh	The list of habitats is not exhaustive
Urban	A number of settlements are located within the plan area including larger settlements such as York, Harrogate, Selby and Scarborough.	The list of habitats is not exhaustive
Coastal Margins	Natural England dataset: maritime cliff and slope; Natural England dataset: mudflats	The list of habitats is not exhaustive

Map showing GIS Layers for habitats used in this assessment



At this strategic stage no judgement will be made on the condition of ecosystems and thus their capability of delivering significant ecosystem services, nor will a check be made on the value of ecosystem services to service recipients (who may or may not require the service¹²). The intent is merely to check whether ecosystem services are present and to check whether the SA objectives are likely to further enhance ecosystem services or to detract from them. A matrix (Table ES3) will be used to cross tabulate the compatibility relationship between ecosystems services and the sustainability objectives. Within this table the relationship will be recorded as being:

- + Positive
- 0 Neutral
- Negative
- ? Uncertain

¹² Although ecosystems can deliver valuable services, many services derive their 'value' on the fact that there are 'consumers' for that service. So while upland habits are assumed to deliver cultural services such as recreation, an accessible upland is likely to have a far greater value in this regard than an area of upland with restricted access due to military training.

Following this 'rapid appraisal', broad recommendations for improving the Sustainability Appraisal Framework (objectives, sub objectives or indicators) are made, where needed.

Indicators

The University of York/URSUS Consulting study identifies a number of indicators for ecosystem services. It suggests that some of these indicators measure 'underlying stocks' that make up ecosystems services, such as the population of a particular species or an area of land cover type, while others measure 'pressures' on ecosystems services, such as air quality. Wherever possible indicators associated with sustainability objectives will be reviewed and where appropriate new indicators to monitor 'underlying stocks' will be included. Where necessary, particularly where the relationship between the sustainability appraisal and an ecosystems service is negative, 'pressure' indicators will be considered.

Limitations

The purpose of this exercise is simply to check sustainability objectives to ensure they have sufficient scope and direction to improve ecosystem services delivery. However, at this scoping stage in the sustainability appraisal measures to improve ecosystem services cannot be made. This will be a consideration when sustainability appraisal is actually undertaken.

Another limitation is the nature of the plan being assessed. As a Local Plan, options and policies will be strategic in nature. This will mean that in most cases it will not be possible to relate the location of an ecosystems service to the location of a future development facilitated by the plan. However, as sites are allocated further consideration of ecosystem services will be made.

Despite this, the exercise is seen as a worthwhile exercise as it helps to ensure that the direction of travel of the Joint Plan is not restricted to a path that will damage ecosystem service delivery.

ES3: Sustainability Framework compatibility with Ecosystem Services

Service group	Final Ecosystem Service	SA 1	SA 2	SA 3	SA 4	SA 5	SA 6	SA 7	SA 8	SA 9	SA 10	SA 11	SA 12	SA 13	SA 14	SA 15	SA 16	SA 17
Provisioning	Crops	+		0	+	+												
	Livestock	+	0	0	0	+		?	0	0	0	0	?	0	0	0	0	0
	Fish	+	+	0	0	+	+	?	0	0	0	0	?	0	0	0	+	0
	Trees, standing vegetation	+			0	+	+	?	0	0	0	0	?	0	0	0	+	0
	Water supply	+	+	0	0	0	+	+	0	0	0	0	?	0	0	0	+	0
	Wild species diversity	+	+	0	+	+	+	?	+	0	0	0	?	0	0	0	+	0
Cultural	Recreation	+	+	+	0	0	0	?	0	0	+	+	?	+	+	0	+	0
	Tourism	+	+	+	+	0	0	?	0	0	+	+	?	+	+	0	+	0
	Landscapes/seascapes	+	+	+	0	0	+	?	+	0	+	+	?	0	0	0	+	0
Regulating	Climate	+	0	+	+	+	+	0	+	+	0	0	?	0	0	+	0	+
	Hazard	+	0	0	0	0	+	+	0	0	0	0	0	0	0	+	+	0
	Disease and pests	?	+	+	+	0	+	+	0	0	0	0	0	0	0	+	0	0
	Water quality	+	+	0	0	+	+	0	0	0	0	0	0	0	0	0	+	0
	Soil quality	+	0	0	0	+	0	0	0	0	0	0	0	0	0	0	+	0
Air quality	+	0	+	+	0	+	0	+	+	0	0	0	0	0	0	+	0	+
Contribution made by objective		Potential for Improvement in SA Framework																
Positive +		Neutral 0					Negative -					Uncertain ?						

Conclusions

Assessment of the SA Framework shows that there are no negative incompatibilities between the SA objectives and final ecosystem services. Where positive relationships are not recorded, the compatibility between SA objectives and final ecosystem services is seen to be neutral. However, a number of uncertainties were observed between final ecosystem services and SA objectives 7, and 12.

Objective 7 (Respond to and adapt to the effects of climate change) is seen as uncertain against a number of provisioning and cultural services. This is because it is difficult to predict what adaptation interventions will be necessary and whether they will have deleterious effects on land or water ecosystems. However, it is felt that there are sufficient additional SA objectives to protect land and water ecosystems in the assessment. Previous ecosystem services work undertaken for North Yorkshire County Council on their minerals and waste core strategy sustainability appraisals also introduced an SA sub objective 'ensure sustainable adaptation is planned for'. This should ensure that the climate adaptation is compatible with land and water ecosystems.

Objective 12 'Achieve sustainable economic growth and support jobs' also shows uncertainty when tested against provisioning, cultural and regulating services. This is because economic growth may require more land and resource inputs that may disrupt global ecosystems. However, the inclusion of sub objectives that emphasise sustainability and a low carbon economy, coupled with the fact that objective 12 is balanced by objectives relating to biodiversity, soils, water, landscape and recreation should ensure that any deleterious effects on ecosystems from the pursuit of this objective are fully considered. Nonetheless an indicator 'Number of minerals and waste planning conditions relating to habitat creation' will be added to the SA Framework as a proxy measure of how business is considering ecosystems when new development is proposed.

Appendix IV: Sustainability Appraisal Objectives Comparison

The Sustainability Appraisal Framework proposed in this scoping report presents a series of Sustainability Appraisal Objectives that have been developed following a review of baseline data, objectives from plans and programmes and key sustainability issues. In addition to this, a review of existing SA objectives was undertaken to enable the work undertaken on previous sustainability appraisals to inform the specific SA objectives to be used in this appraisal. The table below sets out the SA objectives that were reviewed by the Joint Plan Authorities and attempts to identify some of the common themes explored.

SEA Topic/broader SA theme that objectives may be relevant to.	SA Headline Objectives North Yorkshire (NYCC) ¹³	SA Headline Objectives North York Moors (NYM) ¹⁴	SA Headline Objectives York ¹⁵	Comments (e.g. does the baseline/PPPs reviews suggest additional factors should be considered?)
Biodiversity	1. To protect and enhance biodiversity and geodiversity.	6. Avoid damage to designated nature conservation sites, protected species and geological assets. Maintain and enhance conditions for biodiversity and avoid irreversible losses.	8. Conserve and enhance biodiversity, geodiversity, flora and fauna for an attractive and accessible natural environment.	<ul style="list-style-type: none"> - All three SA objectives consider both biodiversity and geodiversity; - All three SA objectives seek to enhance biodiversity and existing biodiversity is either 'protected', 'conserved' or 'maintained'. - Geodiversity is included in efforts to maintain/protect/enhance in York and NYCC's SAs, but not in NYM's SA; - York is unique in considering the utility of protecting biodiversity (i.e. 'for an attractive and accessible natural environment'); - The NYM SA references designated sites and protected species; - The PPPs also support the utility of biodiversity and geodiversity as 'ecosystem services'.
Population	14. To support the development of resource efficient and affordable housing.	Broadly covered by objective 14.	1. To meet the diverse housing needs of the population in a sustainable way. 3. Improve education, skills and training for an effective workforce.	<ul style="list-style-type: none"> - Housing is mentioned in two of the three SAs, however, where NYCC references affordable housing York refers to diverse housing needs; - Both NYCC and York insist on housing being sustainable; - Links between these SA objectives and minerals and waste planning are not strong.
Human health	4. To reduce the risk and impact of flooding. 12. To protect and improve the health and safety of local communities.	5. Reduce the risk and level of flooding. 9. Protect and enhance human health.	2. Improve the health and well-being of York's population. 13. Minimise flood risk and reduce the impact of flooding to people and property in York.	<ul style="list-style-type: none"> - All three SAs have objectives about reducing flood risk; - York and NYCC's SA objectives seek to reduce the impact of flooding; - All three SAs have a health objective, with two of the three seeking to 'protect' health and all seeking to 'improve' health; - York refer to wellbeing; - NYCC refers to safety.
Fauna	Covered by objective 1	Covered by objective 6	Covered by objective 8	See biodiversity (above)
Flora	Covered by objective 1	Covered by objective 6	Covered by objective 8	See biodiversity (above)
Soil	2. To limit the irreversible loss of fertile soils and the best and most versatile agricultural land. 9. To protect land and soil resources and manage, restore and re-use unstable, derelict and	Covered in part by objective 8 and in part by objective 2.	9. Use land resources efficiently and safeguard their quality.	<ul style="list-style-type: none"> - Only NYM considers fertile soils and BMV land. - NYCC and York have objectives about land resources, though NYCC specifically refers to land restoration while York refers to safeguarding quality.

¹³ Taken from North Yorkshire's 'Finalised Minerals Core Strategy Interim Sustainability Appraisal Update, July 2012 (Both the Minerals and Waste SA headline objectives were the same, although sub objectives differed).

¹⁴ Taken from the North York Moors National Park Management Plan Sustainability Appraisal.

¹⁵ Taken from York's Local Plan SA Scoping Report.

	contaminated land.			
Water	3. To protect and manage the quality and quantity of groundwater and surface water.	2. Minimise pollution releases to levels that do not damage the natural systems, human health and quality of life.	10. Improve water efficiency and quality.	<ul style="list-style-type: none"> - NYCC refers to both groundwater and surface water. - NYM references minimising pollution. - York is focussed on water efficiency and both York and NYCC refer to water quality. - The PPP review shows that the Water Framework Directive seeks to improve chemical and biological water quality.
Air	5. To protect and improve air quality. 17. To reduce the need to travel and encourage the use of sustainable modes of travel.	Covered by objective 2.	6. Reduce the need to travel and deliver a sustainable integrated transport network. 12. Improve air quality.	<ul style="list-style-type: none"> - Both York and NYCC have separate air quality and transport objectives; - Whilst the air quality objectives are very similar, the transport objectives differ in language with York mentioning 'a sustainable integrated transport network' and NYCC encouraging 'sustainable modes of travel'. - Legislation such as the Air Quality Directive seeks to target improvements to air quality where thresholds are being breached, and such areas do exist in the plan area, therefore any objective should continue to include the words 'improve air quality'.
Climatic factors	6. To minimise contributions to climate change, increase energy efficiency and promote the use of low carbon technologies and energy generated from renewable sources. 7. To adapt to the consequences of climate change.	3. Reduce the causes of climate change. 4. Respond and adapt to the effects of climate change.	7. To minimise greenhouse gases that cause climate change and deliver a managed response to its effects.	<ul style="list-style-type: none"> - Both NYM and NYCC have separate objectives for reducing climate change and adapting to climate change while York combines these into one objective; - NYCC provides more detail in the mitigation objective, including mention of energy efficiency, low carbon technologies and renewable sources. However, such issues could be explored as sub objectives to a shorter headline objective.
Material Assets	16. To ensure the prudent use of natural resources and encourage the re-use and safeguarding of existing resources.	8. Use and re-use resources in a sustainable way.	11. Reduce waste generation and increase level of re-use and recycling.	<ul style="list-style-type: none"> - All three SAs have similar objectives, though York's SA objective seems more confined to management of waste rather than sustainable management of resources as a whole (which is broader than waste management, encompassing things like the water, land and energy footprint of minerals or waste products); - NYCC's objective includes references to safeguarding resources; - The PPP review has highlighted the importance of the 'waste hierarchy' to the management of wastes.
Cultural heritage	8. Conserve, enhance and improve access to the historic assets of the county.	7. Protect and conserve the archaeological and historical resource including landscapes and the built environment.	14. Conserve and enhance York's historic environment, cultural heritage, character and setting.	<ul style="list-style-type: none"> - All three objectives are similar though there seems to be some crossover between this objective and landscape objectives for both NYM and York; - Two of the three objectives refer to enhancing the historic environment, while only one refers to improving access to it.
Landscape	15. To protect and enhance the quality and character of all landscapes and townscapes.	1. Conserve and enhance the natural beauty and cultural heritage of the park.	15. Protect and enhance York's natural and built landscape.	<ul style="list-style-type: none"> - All three objectives seek to enhance landscapes and both York and NYCC explicitly refer to townscapes; - Character is mentioned in the NYCC objective while 'natural beauty and cultural heritage' is the preferred terminology for NYM; - The European Landscape Convention (ELC) suggests that 'all landscapes matter' not just iconic or conventionally beautiful landscapes.
Other Social	13. To improve access to basic goods, services and amenities and reduce social exclusion.	10. Protect and enhance access to key community facilities and services, leisure and recreation opportunities and access to the countryside.	5. Help deliver equality and access to all.	<ul style="list-style-type: none"> - There is some variation in approaches to social objectives; - Two objectives focus on access to services and amenities; - Terms that equate to addressing inclusivity and socio-economic mobility are common to all objectives though there is no consistency in language ('social exclusion', 'local needs', 'access to all').

		11. Ensure that local needs are met locally wherever possible.		
Economic	10. To promote growth of a sustainable and diverse economy. 11. To maintain high levels of employment and a healthy labour market.	13. Achieve sustainable economic growth. 14. Maintain and enhance the viability and vitality of local communities.	4. Create jobs and deliver growth of a sustainable and inclusive economy.	- All three SAs seek to promote sustainable economic growth; - NYCC seek to ensure a diverse economy while York seek an 'inclusive economy'; - NYCC has a separate objective pertaining to creating employment, while York include employment in the same objective as economy. This illustrates that there is little need for two separate objectives for economy and employment; - However, NYM have a separate objective that looks to enhance the viability and vitality of communities.
Special Qualities	-	12. Provide opportunities to enable the enjoyment and understanding of the special qualities of the Park.	-	- This objective deals with an issue that is unique to the National Park.

Contact us

Minerals and Waste Joint Plan Team Planning Services, North Yorkshire County Council, County Hall, Northallerton, North Yorkshire, DL7 8AH

Tel: **01609 780780**

Email: **mwjointplan@northyorks.gov.uk**