



Habitats Regulations Assessment Staffordshire Moorlands Local Plan - Preferred Options

**Prepared on behalf of:
Staffordshire Moorlands District Council**

Date: July 2017

Prepared by:
ClearLead Consulting Limited
The Barn, Cadhay, Ottery St Mary, Devon, EX11 1QT, UK
01404 814273

Contract Number: C0045



Contract No:	C0045
Issue:	3
Author (signature):	V Pearson / H Torr
Project Director (signature):	J Mitchell
Date:	July 2017

Version Control Record				
Issue	Status	Date	Reviewer Initials	Author Initials
1	Draft	22/11/16	JM	VP / HT
2A	Updated with revised plan policies	21/07/17	JRP	VP / HT

This report has been prepared by ClearLead Consulting, Limited. (ClearLead) with all reasonable skill, care and diligence. This report is confidential to the Client named on the front of this report and is protected by copyright for intellectual property. This report has been prepared at the Client's instruction and in accordance with the Services and the Terms agreed between ClearLead and the Client. ClearLead accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known, unless formally agreed by ClearLead beforehand. Any such party relies upon the report at their own risk.

ClearLead disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the Services.

Table of Contents

Glossary.....	4
Executive Summary.....	6
1 Introduction	1
1.1 The need for HRA.....	1
1.2 Who has carried out the HRA?.....	3
1.3 Consultation.....	3
2 The Staffordshire Moorlands Local Plan.....	4
2.1 Introduction	4
2.2 Plan Vision and Objectives.....	4
2.3 Overview of the Plan Area	6
3 Methodology.....	8
3.1 Overview of HRA Process.....	8
3.2 Approach to the HRA	9
3.2.1 Stage 1 Screening for likely significant effects.....	9
3.2.2 Stage 2: Appropriate Assessment	10
4 Descriptions of the European Sites.....	11
4.1 Introduction	11
4.2 Peak District Moors (South Pennine Moors Phase 1) SPA.....	11
4.3 South Pennine Moors SAC	12
4.4 Peak District Dales SAC	13
4.5 Cannock Chase SAC.....	14
5 Screening of the Emerging Local Plan.....	15
5.1 Introduction	15
5.2 Results of Draft Site Allocations Screening	15
5.3 Results of Policies and Selected Site Allocations Screening	16
5.4 Conclusions of the Screening of the Emerging Local Plan Policies and Allocation Sites	22
6 Appropriate Assessment: increased water demand.....	23
6.1 Introduction	23
6.2 Assessment of Effects Alone and In-Combination.....	23
6.2.1 Potential Effects Relating to Water Demand on Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC and Peak District Dales SAC.....	23

6.2.2	Conclusions	25
7	Appropriate Assessment: increased traffic on air quality.....	27
7.1	Introduction	27
7.2	Background	27
7.3	Assessment of Effects Alone and In-Combination.....	28
7.3.1	Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC	28
7.3.2	Peak District Dales SAC	30
7.4	Conclusions	30
8	Appropriate Assessment: increased recreational pressure.....	32
8.1	Introduction	32
8.2	Background	32
8.3	Assessment of Effects Alone and In Combination	33
8.3.1	Peak District Moors (South Pennine Moors Phase 1) SPA, South Pennine Moors SAC and Peak District Dales SAC	33
8.3.2	Summary and Conclusions.....	37
9	Appropriate Assessment: urban effects	38
9.1	Introduction	38
9.2	Background	38
9.2.1	Cat predation	39
9.2.2	Effects of dogs.....	39
9.2.3	Localised recreational pressure	40
9.2.4	Localised effects from construction on air quality and water quality	40
9.2.5	Fires.....	40
9.2.6	Fly-tipping / litter	41
9.3	Assessment of Effects Alone and In Combination	41
9.3.1	Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC	41
9.3.2	Peak District Dales SAC	43
9.4	Summary and Conclusions.....	44
10	Summary, Mitigation and Conclusions	45
10.1	Screening Results	45
10.2	Appropriate Assessment.....	45
10.3	Mitigation.....	46
10.4	Overall Conclusions of the HRA	47

Separate Annexes Document

Annex A: Correspondence

Annex B: Detailed Information about European Sites

Annex C: Figures

Annex D: Detailed Findings of Screening

Annex E: Traffic Assessment

Glossary

Appropriate Assessment (AA)	<p>An Appropriate Assessment (AA) is part of the Habitats Regulations Appraisal (HRA) process. It is required when a plan or project potentially affecting a Natura / European site:</p> <ul style="list-style-type: none"> • Is not directly connected with, or necessary to the management of the site for nature conservation, and • Is likely to have a significant effect on the site (either alone, or in combination with other plans or projects). <p>An AA is necessary to determine the potential effects of a plan or project upon the integrity of a Natura / European site; specifically, it should provide, and analyse sufficient information to allow a competent authority to ascertain whether the plan or project will not adversely affect the site's integrity.</p>
Development Plan	The statutory framework for planning decisions, including the adopted Local Plan and Neighbourhood Plans.
DPD (Development Plan Document)	A document containing local planning policies or proposals which form part of the Development Plan, and which has been subject to independent examination.
Habitats Regulations Assessment (HRA)	An assessment in accordance with the Habitats Regulations (The Conservation of Habitats and Species Regulations 2010 as amended) to ascertain the significance of potential impacts of a plan on relevant European sites. The assessment determines whether the plan would adversely affect the integrity of the sites in terms of its nature conservation objectives. Where negative effects are identified, other options should be examined to avoid any potential for damaging effects.
In-Combination Effects	Where policies, plans or projects might affect European sites in combination with each other resulting in an In-Combination Effect.
Local Plan	The plan for the future development of the local area.
NPPF (National Planning Policy Framework)	Published in March 2012, the National Planning Policy Framework (NPPF) sets out the Government planning policies for England and how these are expected to be applied. The NPPF consolidates and replaces most previous planning policy guidance from Government. The NPPF is supported by the National Planning Practice Guidance (NPPG).
Policies Map	A map accompanying the Local Plan showing areas of protection and identifying locations for land use and development proposals.
SA (Sustainability Appraisal)	A systematic process required by the Planning and Compulsory Purchase Act 2004 and incorporating the requirements of the SEA Directive, aimed at appraising the social, environmental and economic effects of plan strategies and policies and ensuring that they accord with the objectives of sustainable development.

Special Area of Conservation	Under the Habitats Directive ¹ ; Special Areas of Conservation (SAC) are designated in order to ensure that natural habitat types listed in the directive's Annex I and the habitats of the species listed in its Annex II are maintained or, where appropriate, restored to a favourable conservation status in their natural range. SPAs are part of the Natura 2000 network of European sites.
Special Protection Area	Under the Wild Birds Directive ² . Special Protection Areas (SPAs) are designated according to scientific criteria such as '1% of the population of listed vulnerable species' or 'wetlands of international importance for migratory waterfowl'. SPAs are part of the Natura 2000 network of European sites.

¹ Council Directive 94/43/EEC on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive')

² Council Directive 79/409/EEC on the conservation of wild birds. The 'Wild Birds' Directive.

Executive Summary

Staffordshire Moorlands District Council ('the Council') is preparing its Local Plan, identifying land for future development to help deliver the objectives set out in the Council's adopted Core Strategy (March 2014).

The Local Plan must be subjected to Habitats Regulations Assessment (HRA), a parallel process which commences at an early stage in plan preparation.

This report presents the findings of the HRA of the emerging Staffordshire Moorlands Local Plan – Preferred Options July 2017.

HRA screening of first draft Local Plan Preferred Options policies identified a number of Likely Significant Effects (LSEs) in relation to the following:

- Effects from increased water demand on the South Pennine Moors Phase 1 Special Protection Area (SPA) and Special Area of Conservation (SAC) and Peak District Dales SAC;
- Effects from increased traffic on air quality on the South Pennine Moors Phase 1 SPA and SAC and Peak District Dales SAC;
- Increased recreational pressure on the South Pennine Moors Phase 1 SPA and SAC and Peak District Dales SAC; and
- Urban effects on the South Pennine Moors Phase 1 SPA and SAC and Peak District Dales SAC.

The Appropriate Assessment stage of HRA has been undertaken to evaluate the potential for the 'screened in' Local Plan policies to result in adverse effects on the European sites as listed above.

In June 2017, the HRA was able to conclude that the Local Plan Preferred Options will not result in any adverse effects on the European sites in relation to water demand, and increased recreational pressure both alone and in combination with growth in neighbouring areas. The HRA is also able to conclude at this stage (July 2017) that the Local Plan Preferred Options alone will not result in an adverse effect on European sites in relation to air quality.

An In Combination Effects assessment in relation to traffic and air quality will be undertaken in July / August 2017 and the HRA Report will be updated to accompany the next iteration of the Local Plan.

Potential adverse effects in relation to urban effects were identified. On the basis of the precautionary principle, it was concluded that the proposed allocation at **Waterhouses (WA004)** could result in an adverse effect on the Peak District Dales SAC due to the risk of pollution arising from construction activities.

The HRA identified that **Policies SS8 and SS9 Larger and Smaller Villages Area Strategies** (as drafted June 2017) could potentially result in adverse effects on the Peak District Dales SAC, Peak District Moors (South Pennine Moors Phase 1) SPA and the South Pennine Moors SAC if development occurred within 500m of these European sites. These policies (as drafted at June 2017) could also result in an adverse effect on the Peak District Moors (South Pennine Moors Phase 1) SPA if development occurred on land which is functionally linked to the SPA.

The following mitigation has been put forward to the policy authors at Staffordshire Moorlands District Council in order to avoid the potential adverse effects identified in relation to the proposed allocation at **Waterhouses (WA004)** and draft policies **SS8 Larger Villages Area Strategy** and **SS9 Smaller Villages Area Strategy** from occurring:

In order to avoid adverse effects on European sites from occurring as a result of the proposed allocation at **Waterhouses (WA004)**, it was recommended that the following text should be added to the first bullet of Local Plan Policy NE1 Biodiversity and Geological Resources :

“Any development with a potential to adversely affect a European site/s through construction activities should ensure that Ciria construction guidelines are followed including environmental good practice on control of dust and water pollution.”

In order to avoid adverse effects on European sites from occurring as a result of Policy **SS8 Larger Villages Area Strategy** and Policy **SS9 Smaller Villages Area Strategy**, it was recommended that wording similar to that included in Local Plan Policy SS10 Other Rural Areas Strategy was added to both policies SS8 and SS9, as follows:

“Any development proposal that might have the potential to affect a European or Ramsar Site must itself be subject to appropriate assessment.”

The policy wording set out above and recommended to the Council in an HRA advice note dated 29 June 2017 has been added to the relevant policies (as included in the Local Preferred Options July 2017) and the HRA is therefore able to conclude that the proposed allocation at **Waterhouses (WA004)**, **Policy SS8 Larger Villages Area Strategy** and **Policy SS9 Smaller Villages Area Strategy will not** result in any adverse effects on European sites in relation to urban effects.

The HRA cannot be fully concluded at this stage because the air quality assessment is not completed in relation to potential In Combination Effects with the growth proposed within the Staffordshire Moorlands District Local Plan with that in neighbouring areas. An In Combination Effects assessment in relation to traffic and air quality will be undertaken in July / August 2017 and the HRA Report will be updated to accompany the next iteration of the Local Plan.

1 Introduction

Staffordshire Moorlands District Council ('the Council') is preparing its Local Plan, identifying land for future development to help deliver the objectives set out in the Council's adopted Core Strategy (March 2014).

The Council adopted its Core Strategy in March 2014. The Core Strategy states that in order to take account of the longer term requirements of the District, the Council will undertake an early and comprehensive review and the Council is doing this via the preparation of a Local Plan. The Local Plan will incorporate initial work undertaken to prepare a Site Allocations Development Plan Document (DPD) and will reflect and update the policies within the Core Strategy, to deliver a single comprehensive Local Plan to 2031.

The Core Strategy is a strategic district-wide plan which sets out what the District Council would like to achieve in each of the main towns and the rural areas outside the Peak District National Park. The Core Strategy comprises:

- A Portrait of Staffordshire Moorlands - a description of the District;
- The Challenges - a summary of the key challenges facing the District;
- The Vision – detailing what the Staffordshire Moorlands will be like in 2031;
- Aims and Objectives – stating what the Local Plan is proposing to achieve;
- A Spatial Strategy and Strategic Policies – setting out the over-arching strategy and policies for the District;
- Development Management Policies – setting out specific measures to manage Development;
- Strategic Development Site Policies - specific policy to guide the development of strategic sites; and
- Implementation and Monitoring - a framework for how the plan will be implemented and monitored.

The Local Plan must be subjected to Habitats Regulations Assessment (HRA), a parallel process which commences at an early stage in plan preparation.

This report presents the findings of the HRA of the emerging Staffordshire Moorlands Local Plan – Preferred Options July 2016.

1.1 The need for HRA

Directive 92/43/EEC on the conservation of natural habitats and wild flora and fauna, commonly known as the 'Habitats Directive,' provides for the protection of habitats and species of European Community importance. Article 2 of the Directive requires the maintenance (or restoration), at favourable conservation status, of habitats and species of European Community interest. This is

partly implemented through a network of protected areas referred to as 'Natura 2000 sites' (N2K), or 'European sites', consisting of:

- Special Areas of Conservation (SACs) - designated under the Habitats Directive³; and
- Special Protection Areas (SPAs) - designated under the Wild Birds Directive⁴.

'Ramsar sites', designated under the Ramsar Convention 1971, are treated by UK Government policy as if they were European sites in terms of the protection and management afforded to them. They should be included in assessment, where relevant.

Article 6(3) of the Habitats Directive requires that: *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives."*

This requirement is implemented in domestic English law through The Conservation of Habitats and Species Regulations 2010, with Regulation 102 setting out the obligations of the Directive's Article 6 placed upon local plan-making authorities:

"(1) Where a land use plan –

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

(b) is not directly connected with or necessary to the management of the site,

the plan-making authority must, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site's conservation objectives.

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

Undertaking of these particular requirements is often termed a 'Habitats Regulations Assessment' (HRA).

The purpose of an HRA is to assess the significance of potential impacts of a plan on relevant European sites. The assessment should determine whether the plan would adversely affect the integrity of the site in terms of its nature conservation objectives. Where negative effects are identified, other options should be examined to avoid any potential for damaging effects.

³ Council Directive 94/43/EEC on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive')

⁴ Council Directive 79/409/EEC on the conservation of wild birds. The 'Wild Birds' Directive.

1.2 Who has carried out the HRA?

The HRA has been undertaken by independent consultants from ClearLead Consulting Limited, who have worked closely with the District Council's planning policy officers during the preparation of the emerging Local Plan.

1.3 Consultation

This report is being consulted on alongside the Staffordshire Moorlands Local Plan Preferred Options July 2017 and its supporting documents between 31st July to 22nd September 2017.

How to comment on this report:

Please provide responses **by 5pm on Friday 22nd September.**

Responses can be made online via the Local Plan consultation website:

www.staffsmoorlands.gov.uk/localplan

This report is a supporting document to the Sustainability Appraisal of the Local Plan. A response form is included within the SA report.

Or comments may be made by Email to forward.plans@staffsmoorlands.gov.uk

2 The Staffordshire Moorlands Local Plan

2.1 Introduction

Staffordshire Moorlands District Council is preparing a Local Plan, which will set out the overall spatial strategy, strategic and development management policies and land use designations for the parts of the Staffordshire Moorlands that lie outside the Peak District National Park. The Plan seeks to address local needs, especially for housing and economic development, while ensuring that the very special qualities of the District's environment, both natural and built are conserved and where possible enhanced. The Staffordshire Moorlands Local Plan includes a series of policies which are intended to address the strategic priorities for the area as well as provide guidance to the development management process in the day to day determination of planning applications. Once adopted the Staffordshire Moorlands Local Plan will guide development across the plan area up to the year 2031.

2.2 Plan Vision and Objectives

The Local Plan sets out a spatial vision which is reproduced within Box 2.1. The spatial vision is also supported by specific visions for the rural areas and the major towns.

Box 2.1: Local Plan Vision

Spatial Vision for Staffordshire Moorlands:

The vision for Staffordshire Moorlands is that it will be recognised as a vital part of a regenerated North Staffordshire in terms of its functional relationship, its social and economic contribution, its rich historic and natural heritage and its distinctive character.

We will have sustainable and balanced urban and rural communities which have an excellent quality of life with access to appropriate, affordable and desirable housing, suitable local jobs, a range of recreational, cultural and leisure opportunities and high quality public services and facilities. Development clusters and smaller sites in sustainable locations will provide attractive opportunities for investment and communities.

The economy of the Moorlands will have undergone a significant change with more diversified and higher quality employment provision better meeting the skills and needs of its workforce and more opportunities for business start-ups across the whole of the District. There will be a more flexible and proactive approach to employment development, raising the District's economic fortunes by exploiting its assets, raising local skill levels and opportunities and addressing deficiencies and disadvantages. Importantly, we will tackle the potential issues relating to an ageing population by supporting inward investment providing desirable housing for people of working age. The District will support economic growth initiatives for the wider area, including those led by the Local Enterprise Partnership.

Tourism will be a key element in the diversification of the District's economy and will also contribute significantly to raising the environmental quality and the regeneration of the District. Its market towns will each have their own unique selling point for attracting visitors. The diversity and quality of the District's natural and historic assets will have improved and greater use will be made of the opportunities they provide for recreation and tourism, particularly around the Churnet Valley which together with Alton Towers will be a significant tourist attraction. The implementation of a Green Infrastructure Strategy will protect and enhance the environment as well as providing recreational opportunities where appropriate.

The needs of all sectors of the community, in particular younger and older people, will be better met through provision of recreational and community facilities, local employment opportunities and appropriate housing.

Development will be of a high standard of design and sustainability seeking to address and adapt to climate change. Settlements will develop in a way that acknowledges their historic and natural heritage, their unique setting and their green infrastructure.

Our market towns of Leek, Cheadle and Biddulph will remain the focus of the Moorlands. They will be distinctive and unique in terms of their character and the quality and range of shops, services and facilities they provide for both residents and visitors. Their town centres will be welcoming, safe and appealing and will retain their significant historic heritage and distinctiveness which makes them special places, as well as being prosperous and vibrant, catering for the needs of both the town and its hinterland. Access will be improved between market towns and with their surrounding settlements with greater opportunities to travel by means other than the car.

Strategic objectives for the Local Plan are presented within Box 2.2.

Box 2.2: Strategic Objectives of the Staffordshire Moorlands Local Plan

SO1.To make provision for the overall land use requirements for the District, consistent with national policy and evidence.

SO2.To create a District where development minimises its impact on the environment, helps to mitigate and adapt to the adverse effects of climate change and makes efficient use of resources.

SO3.To develop and diversify in a sustainable manner the District's economy and meet local employment needs in the towns and villages.

SO4. To provide new housing that is affordable, desirable, well-designed and meets the needs of residents of the Moorlands.

SO5. To ensure the long-term vitality and viability of the three market towns of Leek, Biddulph and Cheadle.

SO6. To maintain and promote sustainable regenerated rural areas and communities with access to employment opportunities, housing and services for all.

SO7. To support and enhance the tourism, cultural, recreation and leisure opportunities for the District's residents and visitors.

SO8. To promote local distinctiveness by means of good design and the conservation, protection and enhancement of historic, environmental and cultural assets throughout the District.

SO9. To conserve and improve the character and distinctiveness of the countryside and its landscape, heritage, biodiversity and geological resources.

SO10. To deliver sustainable, inclusive, healthy and safe communities.

SO11. To reduce the need to travel or make it safer and easier to travel by more sustainable forms of transport.

2.3 Overview of the Plan Area

The Local Plan area covers the parts of the Staffordshire Moorlands which sit outside the Peak District National Park, which is a local planning authority in its own right. The Plan area can be seen on Figure 2.1.

The entire Staffordshire Moorlands District covers an area of 57,624 hectares and has a resident population of over 97,000 people.

The Local Plan area is largely rural and includes attractive countryside interspersed with a large number of villages and hamlets. The Local Plan area includes Leek, Biddulph and Cheadle, which are long established rural market towns. These towns act as service centres to wide rural hinterlands. Based on the 2011 Rural and Urban Classification of the Staffordshire Moorlands population, 30% live in a rural area compared with 17% nationally. Population density in the area is far sparser at 169 people per square kilometre compared with 413 nationally.

The geographical position of Staffordshire Moorlands and its close proximity to the major cities such as Stoke-on-Trent and Derby put much of the plan area within easy commuting distance of these major conurbations. This relationship affects the role and function of the towns and villages, as well as the local housing market and the local economy of the plan area. The map over the page shows the relationship between the Local Plan Area and the surrounding area.

The proximity of the National Park is reflected in the quality of the landscapes in which the towns and villages of the Local Plan are set. The landscape of the Staffordshire Moorlands is key to the

fortunes of the area, attracting people to live and work in the area, as well as playing an important role for the economy both inside and outside the National Park.

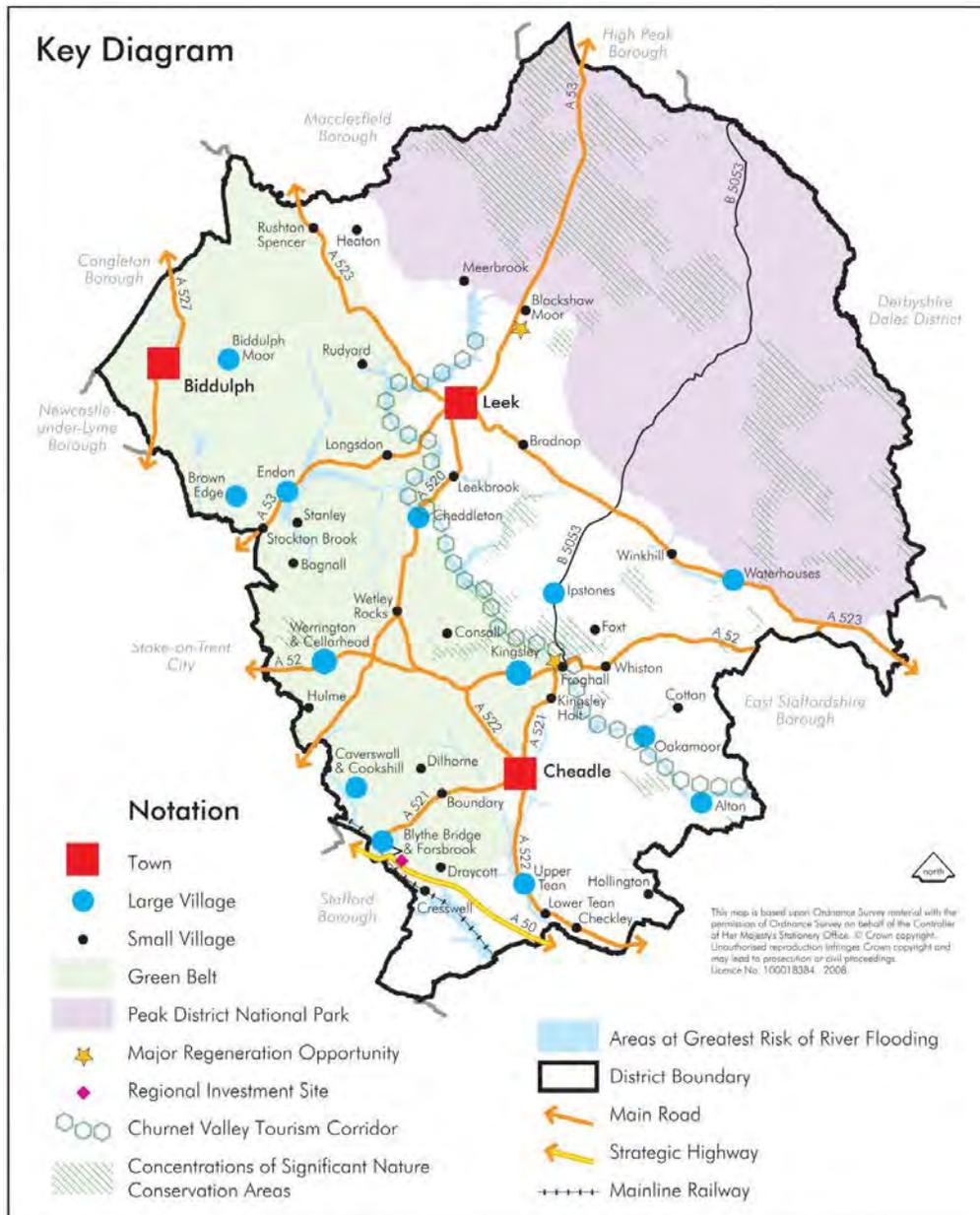


Figure 2.1: The Staffordshire Moorlands District (Local Plan Area excludes the National Park)

3 Methodology

3.1 Overview of HRA Process

An outline of the overall HRA process in accordance with current guidance⁵ is set out below.

Stage 1: Screening for likely significant effects

- Identify European sites that should be considered in the assessment;
- Gather information about the European sites;
- Discretionary consultation with statutory nature conservation body (Natural England for England) on the list of European sites, method and scope of screening;
- Screen the plan for likely significant effects (LSEs)⁶ on a European site, including the potential for effects in combination with other plans or programmes;
- Consider potential for the application of mitigation measures, in order to avoid potential effects;
- Rescreen the plan after mitigation measures applied; and
- Prepare a draft record of the HRA (Screening Report).

If it can be determined that there will be no significant effects on any European sites, taking into consideration potential mitigation measures and on the basis of objective information, then the HRA process may stop here.

If significant effects cannot be ruled out (applying the precautionary principle), then the effect must be reported as likely, and the HRA must progress to Stage 2: Appropriate Assessment (AA).

⁵ Habitats Regulations Appraisal of Plans: Guidance for plan-making bodies in Scotland v2.0 (David Tyldesley and Associates; August 2012). Note although this guidance was originally prepared for Scottish Natural Heritage it is recognised as an authoritative source of guidance throughout the UK;

European Commission: 'Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC' (European Communities, 2002); and

The Habitat Regulations Handbook, DTA Publications available via subscription only at <http://www.dtapublications.co.uk/> (applies to projects and plans in the UK but is accessible through subscription only).

⁶ The accepted meanings of 'likely' and 'significant' in the context of HRA come from the European Court of Justice (ECJ) ruling on 7 September 2004. Case C-127/02 Waddenzee cockle fishing. 'Likely' - "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site...": 'significant' – "Where a plan or project has an effect on that site but it is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on that site."

Stage 2: Appropriate Assessment

- Undertake an appropriate assessment in view of the conservation objectives of the European site(s);
- Apply mitigation measures until there is no adverse effect on site integrity;
- Consult Natural England (and other stakeholders and the public if appropriate) on the HRA;
- Screen any amendments for likelihood of significant effects and carry out appropriate assessment if required;
- Re-consult Natural England if necessary on amendments; and
- Complete and publish final HRA Report.

Should the situation arise where there were no alternative solutions and adverse impacts remain, then the plan could only proceed if it meets the test of Imperative Reasons of Overriding Public Interest (IROPI test), and all necessary compensatory measures are secured. However, it should be noted that the guidance states that this should only be undertaken in exceptional circumstances, and to date no UK plan has reached this stage.

The HRA process is iterative and should be revisited as policies develop, in response to consultation and as more information becomes available. This report is the first HRA Report which accompanies the emerging Local Plan.

3.2 Approach to the HRA

3.2.1 Stage 1 Screening for likely significant effects

Natural England were consulted in May 2016 regarding the proposed approach to the HRA and the European sites to be considered in the assessment. Copies of this correspondence can be found in Annex A. Natural England agreed to the approach set out within the letter dated 12th May 2016 and the European sites to be considered in the HRA.

It has therefore been agreed with Natural England that the likelihood for significant effects on the following European sites will be considered within the HRA:

- Peak District Moors (South Pennine Moors Phase 1) SPA;
- South Pennine Moors SAC;
- Peak District Dales SAC;
- Cannock Chase SAC.

Detailed information relating to the reasons for designation of the sites, their conservation objectives, requirements to maintain favourable condition status of the site and the key factors affecting site integrity are presented within Annex B to this report. Brief descriptions of the sites are presented in Section 4. Maps showing the location of the European sites listed above are included in Annex C.

Following consultation on a wide range of potential development site allocations undertaken between July and September 2015 the Council identified its preferred option development sites. These preferred options were subject to a further round of public consultation from April to June 2016 and were screened for LSEs in June / July 2016. At this time, the results of the screening of sites were reported to the plan authors and the results were also consulted on with Natural England. The results of this screening exercise are reported within Annex D to this report.

Having considered feedback from the public consultation and the findings of the initial HRA screening, as well as other relevant elements of the Council's developing evidence base, the Council now proposes revised preferred option sites as part of the emerging Local Plan which is currently being consulted on (July 2017). The proposed allocation sites included within this draft of the emerging Local Plan have been rescreened as part of the HRA process. The results of the screening of the preferred sites are presented within Section 5 of this report and Annex D.

The policies within the emerging Local Plan were screened for LSEs during September / October 2016 and the preferred site allocations and any associated development site policies in January / February 2017. The results are presented within Section 5 and Annex D.

3.2.2 Stage 2: Appropriate Assessment

The screening of policies and preferred option sites identified LSEs and it has therefore been necessary to progress to Stage 2 of the HRA (AA) in order to examine the risk of adverse effects on the conservation objectives of the European sites and to ensure that suitable mitigation measures are in place within the policy wording of the Local Plan. This is presented in this report from Section 6 onwards.

Where appropriate, in-combination effects have been considered with regards to each of the potential effects identified above. Where the potential for in-combination effects with other plans was identified, the scope of the AA was broadened to assess the possible combined effects of plans in the wider area. This approach was used in the AA of effects regarding recreational pressure (Section 9) and air quality (Section 7). Potential in-combination effects of proposed site allocations is addressed within the 'urban effects' section (Section 9).

4 Descriptions of the European Sites

4.1 Introduction

This section provides brief descriptions of the European sites screened in to the HRA in agreement with Natural England. Detailed information relating to the reasons for designation of the sites, their conservation objectives, requirements to maintain favourable condition status of the site and the key factors affecting site integrity are presented within Annex B. Information has been obtained from the High Peak Local Plan HRA Report⁷ (March, 2014) and from site citation forms and Site Improvement Plans. Maps are presented within Annex C.

4.2 Peak District Moors (South Pennine Moors Phase 1) SPA

The South Pennine Moors SPA (including the proposed extension to encompass Eastern Peak District Moors SSSI) includes the major moorland blocks of the South Pennines from Ilkley in the north to Leek and Matlock in the south. It covers extensive tracts of semi-natural moorland habitats including upland heath and blanket mire. The site is of European importance for its populations of the following breeding species:

- Short-eared Owl;
- Merlin;
- Golden Plover;
- Peregrine Falcon; and
- Dunlin.

Both Merlin and Golden Plover spend some of their time feeding outside the SPA on adjacent areas of in-bye land. The following key factors affect the integrity of the designated features within the site:

- Maintenance of habitats on site;
- Maintenance of bird feeding areas outside the site (avoidance of agricultural intensification), in particular Golden Plover;
- Ground nesting birds - Maintaining low levels of disturbance and predation, i.e. where humans, dogs and predators are. Management of human access should direct disturbance away from sensitive areas;
- Wet heaths - Maintaining hydrological conditions. Water quality, including lack of eutrophication and maintenance of oligotrophic character;
- Avoidance of fires;

⁷ High Peak Local Plan Revised Preferred Options Draft Habitats Regulations Assessment Draft version Annexes (March 2014)

- Air quality - Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths;
- Mires and bogs - changes in hydrology and maintenance of natural regimes, water quality, and water table levels; and
- Absence of barriers e.g. wind farms.

4.3 South Pennine Moors SAC

This SAC is largely co-located with the South Pennine Moors SPA. The site is designated as a SAC for the following habitats:

- European dry heaths;
- Blanket bogs;
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles;
- Northern Atlantic wet heaths with *Erica tetralix*; and
- Transition mires and quaking bogs.

The site is representative of upland dry heath at the southern end of the Pennine range, the habitat's most south-easterly upland location in the UK. Dry heath covers extensive areas, occupies the lower slopes of the moors on mineral soils or where peat is thin, and occurs in transitions to acid grassland, wet heath and blanket bogs. The upland heath of the South Pennines is strongly dominated by heather *Calluna vulgaris*. On the higher, more exposed ground *Vaccinium myrtillus* - *Deschampsia flexuosa* heath becomes more prominent. In the cloughs, or valleys, which extend into the heather moorlands, a greater mix of dwarf shrubs can be found together with more lichens and mosses. The moors support a rich invertebrate fauna, especially moths, and important bird assemblages.

The site also includes blanket bog in the south Pennines, the most south-easterly occurrence of the habitat in Europe. The bog vegetation communities are botanically poor. Hare's-tail cottongrass is often overwhelmingly dominant and the usual bog-building Sphagnum mosses are scarce. Where the blanket peats are slightly drier, heather, crowberry and bilberry become more prominent. The uncommon cloudberry is locally abundant in bog vegetation. Bog pools provide diversity and are often characterised by common cottongrass.

Around the fringes of the upland heath and bog of the South Pennines are blocks of old sessile oak woods, usually on slopes. These tend to be dryer than those further north and west, such that the bryophyte communities are less developed (although this lowered diversity may in some instances have been exaggerated by the effects of 19th century air pollution). Other components of the ground flora such as grasses, dwarf shrubs and ferns are common. Small areas of alder woodland along stream-sides add to the overall richness of the woods.

The following key factors affect the integrity of the designated features within the site:

- Maintenance of habitats on site;

- Heaths - Maintaining hydrological conditions. Water quality, including lack of eutrophication and maintenance of oligotrophic character;
- Avoidance of fires;
- Air quality - Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths; and
- Mires and bogs - changes in hydrology and maintenance of natural regimes, water quality, and water table levels.

4.4 Peak District Dales SAC

Peak District Dales SAC is composed of a group of sites (classified individually by their component SSSIs) spread out over the Peak District. The site is designated as a site for the following habitats and species:

- Semi- natural dry grasslands and scrubland facies on calcareous substrates;
- Tilio-Acerion forests of slopes, screes and ravines;
- European Dry Heaths;
- Calaminarian grasslands;
- Alkaline Fens;
- Calcareous and calcshist screes of the montane to alpine levels;
- Calcareous rocky slopes with chasmophytic vegetation;
- White-clawed (or Atlantic stream) crayfish;
- Brook lamprey; and
- Bullhead.

The SAC includes one of the most extensive surviving areas in England of *Festuca ovina* - *Avenula pratensis* grassland. Grasslands at this site range from hard-grazed short turf through to tall herb-rich vegetation, with transitions through to calcareous scrub and *Tilio-Acerion* forests - a diversity of structural types unparalleled in the UK. There is also a great physical diversity due to rock outcrops, cliffs, screes and a variety of slope gradients and aspects. The Dales provide good examples of woodland-scrub-grassland transitions, with associated rich invertebrate populations and plant communities. Among the uncommon plants present in the woods are mezereon and green hellebore, as well as whitebeam on the crags. The River Dove has a population of white-clawed crayfish in a high-quality, upland limestone river, in the north-east of the species' UK range. Bullhead and brook lamprey are also present within the watercourses within the SAC.

The following key factors affect the integrity of the designated features within the site:

- Grasslands - maintain management including appropriate grazing or rotational cutting;
- Calaminarian Grasslands - sporadic management such as occasional light grazing may be beneficial;

- Alkaline fens - air quality, water quality and water levels;
- Calcareous rocky habitats - Maintenance of natural processes such as erosion;
- Crayfish - Maintenance of extent of habitat and water quality. Absence of introduced species and crayfish plague. Maintain visitor awareness initiatives, sympathetic management of fishery practices and regular monitoring; and
- Fish - Bullhead and Brook Lamprey - maintenance of the rivers' natural structure and form. Avoiding creation of artificial barriers. Maintaining sustainable fish populations.

4.5 Cannock Chase SAC

Cannock Chase SAC is located within Staffordshire and is designated as a SAC for the following habitats:

- European Dry Heath habitat; and
- Northern Atlantic Wet Heaths with *Erica tetralix*.

It is regarded as one of the best areas in the UK. The area of lowland heathland at Cannock Chase is the most extensive in the Midlands, although there have been losses due to fragmentation and scrub/woodland encroachment.

Cannock Chase has the main British population of the hybrid bilberry *Vaccinium intermedium*, a plant of restricted occurrence. There are important populations of butterflies and beetles, as well as European nightjar *Caprimulgus europaeus* and five species of bats. Much of Cannock Chase falls within a popular and well-used Country Park. Visitor pressures include dog walking, horse riding, mountain biking and off-track activities such as orienteering, all of which cause disturbance and result in erosion, new track creation and vegetation damage.

The following key factors affect the integrity of the designated features within the site:

- Recreational damage to vegetation composition and structure as well as erosion;
- Invasion by alien plant species; and
- Maintenance of suitable air and soil quality.

5 Screening of the Emerging Local Plan

5.1 Introduction

This section presents the findings of the screening of the policies within the emerging Local Plan. The screening assessment considered the potential for LSEs of each of the policies in turn. The approach to the screening is provided in Annex D.

5.2 Results of Draft Site Allocations Screening

Draft options for site allocations were screened in June / July 2016 based on the Local Plan Preferred Options Sites and Boundaries April 2016 and the findings were provided to the Council in order to inform decision making regarding preferred options for site allocations.

The screening exercise did not identify any LSEs in relation to the draft site allocations in Biddulph and Cheadle.

The June 2016 screening found that New housing development in Leek could potentially increase recreational pressure and air pollution from increased road traffic which could have an effect on the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC and recommended that this required further investigation in the HRA. The screening also identified that new employment sites could increase traffic and air pollution near to the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC and this also required further investigation in the HRA. The closest part of the SAC/SPA (Leek Moss SSSI) is approx. 4km from the western edge of Leek.

The screening identified that should draft allocation sites WA004 (Waterhouses) and IP019 (Ipstones) be taken forward, they would require further investigation in the HRA due to their proximity to a component of the Peak District Dales SAC and the potential for effects of development to result in an In Combination Effect in relation to recreational pressure.

In addition, uncertainty was recorded in respect of proposed infill boundaries at Blackshaw Moor, Bradnop, Heaton, Meerbrook, Rushton Spencer, Swinscoe and Winkhill which could be within 7km (and within walking distance) of some European sites in these areas (the Peak District Moors SPA, the South Pennine Moors SAC and the Peak District Dales SAC)⁸. This could risk increasing recreational pressure in these areas. Although low levels of development are likely to occur within

⁸ Site allocations within 7km of the boundary of the SPA/SAC would be subject to further investigation. Visitor surveys undertaken on other European Sites concluded that the majority of visitors who arrive by car come from within a 7km radius (Ashdown Forest SPA and Thames Basins Heaths SPA). Visitor distances may be different for the European Sites considered in this screening assessment (which are designed for different features compared to Ashdown Forest and Thames Basin Heaths SPA) and the 7km distance could therefore change during further investigation in the HRA.

the infill boundaries (up to 10 dwellings), in accordance with the precautionary principle, uncertainty was recorded within the HRA screening and it was recommended that this potential effect should be investigated in the HRA with regards to the site allocations proposed to be included within the emerging Local Plan.

5.3 Results of Policies and Selected Site Allocations Screening

Table D.6 in Annex D presents the detailed findings of the screening of policies and allocation sites proposed for inclusion in the Local Plan Preferred Options July 2017. As described within Annex D, an approach to screening has been used which has identified policies and sites which could result in an LSE, as well as policies and sites which will not result in an LSE because they are a general policy, there is no impact pathway, they are environmental protection policies which will either directly or indirectly protect European sites, or because mitigation has already been built into the policy wording to protect European sites.

A number of general policies are identified within Table D6 in Annex D, as well as those for which no impact pathway with a European site can be identified.

A number of environmental protection policies and mitigating policies are also identified in Annex D. The key protection policy is **Policy NE 1 Biodiversity and Geological Resources** which seeks to conserve and enhance biodiversity and geological resources through positive management and strict control of development. The policy goes on to state that the District Council will resist *“any proposed development that could have an adverse effect on the integrity of a European site (or successor designation) alone or in combination with other plans or projects unless it can be demonstrated that the legislative provisions to protect such sites can be fully met”*. This policy therefore provides adequate protection for any development proposals which come forward through the planning application process which could have a potential adverse effect on a European site and therefore mitigates for any development resulting from the Local Plan policies for which locations are currently unknown, e.g. some housing or commercial developments.

The screening of policies was undertaken in November 2016 and updated in June 2017 (when proposed allocations and updated policies were available). The screening exercise therefore reflects the policy wording within the Local Plan Preferred Options as at 27 June 2017. Table 5.1 below identifies the policies for which LSEs were identified.

Table 5.1: Local Plan Policies (June 2017) screened into the HRA					
Policy	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Reasoning
Policy SS3 – Future Provision and Distribution of Development	✓	✓	✓		An increase in population could increase recreation pressure, air pollution and water extraction which could affect the European sites indicated. Increased housing and employment land provision could result in LSEs. LSEs have been identified in relation to proposed allocations at Leek and at Waterhouses (see policies E2 and H2).
Policy SS4 - Strategic Housing Development Land Supply and Distribution	✓	✓	✓		This policy identifies amounts of housing directed to settlements and differentiates between urban extension and development within existing urban areas. Development in Leek especially could result in LSEs on the European sites indicated. An LSE is identified in relation to potential In Combination Effects of housing and employment growth at Leek.
SS8 – Larger Villages Area Strategy	✓	✓	✓		Policy supports housing development in the larger villages identified. Proposed allocations in such villages have been screened in relation to Policy H2 below. Some proposed allocations in the larger villages could result in LSEs relating to urban effects, bird disturbance and land take of SPA supporting sites, due to their proximity to the European sites. All developments in villages located within 2km of the Peak District Moors (South Pennine Moors Phase 1) and the South Pennine

Table 5.1: Local Plan Policies (June 2017) screened into the HRA					
Policy	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Reasoning
					<p>Moors SAC and all development within 500m of the Peak District Dales require HRA screening (refer to Figure C.3 in Annex C).</p> <p>There are no preferred options allocations within or near to 15km of Cannock Chase and very little potential for small infill developments to have a significant effect on Cannock Chase SAC.</p>
SS9 - Smaller Villages Area Strategy	✓	✓	✓		<p>Development in some smaller villages could potentially result in LSEs relating to urban effects, bird disturbance and land take of SPA supporting sites, due to their proximity to European sites. All developments in smaller villages located within 2km of the Peak District Moors (South Pennine Moors Phase 1) and the South Pennine Moors SAC and all development within 500m of the Peak District Dales require HRA screening (refer to Figure C.3 in Annex C).</p> <p>There are no preferred options allocations within 15km of Cannock Chase and very little potential for small infill developments to have a significant effect on Cannock Chase SAC.</p>
SS11 – Churnet Valley Area Strategy	✓	✓	✓		<p>The Churnet Valley is identified as an area for sustainable tourism and rural regeneration. The Churnet Valley Masterplan provides a comprehensive framework for development in the Churnet</p>

Table 5.1: Local Plan Policies (June 2017) screened into the HRA					
Policy	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Reasoning
					<p>Valley and development should be in accordance with the Masterplan. Within this area particular support will be given to:</p> <ul style="list-style-type: none"> • short stay and long stay visitor accommodation; • the expansion of existing tourist attractions and facilities and the provision of compatible new tourist attractions and facilities; and • actions to protect and enhance the biodiversity of the valley, including the maintenance, buffering and connection of designated sites and actions to mitigate climate change. <p>The HRA of the Churnet Valley Masterplan concluded that it would not result in any LSEs on European sites within the area. An aim of the Masterplan is to attract and hold tourists within the Churnet Valley and it may complement and ease pressures on the neighbouring Peak District National Park.</p> <p>Although LSEs from this policy alone are not identified, LSEs are recorded because this policy will need to be considered for potential in-combination effects with the policies which direct housing growth to Leek – Policy SS6 (Leek Area Strategy) and Policy SS7 (other rural areas) along with the proposed allocation sites selected.</p>

Table 5.1: Local Plan Policies (June 2017) screened into the HRA					
Policy	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Reasoning
E2 – Employment Allocations	✓	✓	✓		Proposed employment allocations in the Leek area could result in effects on air quality which require further investigation in the HRA, both alone and in combination with residential developments and growth in neighbouring areas.
H2 – Housing Allocations	✓	✓	✓		<p>There are no preferred options allocations within 15km of Cannock Chase and very little potential for small infill developments to have a significant effect on Cannock Chase SAC.</p> <p>LSEs relating to urban effects are identified resulting from the following proposed allocation sites:</p> <ul style="list-style-type: none"> • Waterhouses (WA004) located approx. 1950m from the Peak District Dales SAC; and • Allocated sites on the eastern edge of Leek (LE066, LE140, LE128a, LE142 a and b) located between 3.8km and 4.2km from the Peak District SPA and the South Pennine Moors SAC. <p>LSEs relating to air quality are identified in relation to all of the proposed allocation sites in Leek because they may increase traffic. Potential in combination effect with employment proposed allocations in Leek and development in neighbouring areas.</p>

Table 5.1: Local Plan Policies (June 2017) screened into the HRA					
Policy	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Reasoning
Policy DSL1 - Land at Horsecroft Farm, Leek(ADD1)	✓	✓	✓		LSEs relating to air quality are identified in relation to all of the proposed allocation sites in Leek because they may increase traffic, alone and in combination with other proposed allocations in Leek and development in neighbouring areas.
Policy DSL2 - Land at The Mount, Leek	✓	✓	✓		
Policy DSL3 – Land at Newton House, Leek	✓	✓	✓		
Policy DSL4 – Cornhill East Masterplan Site, Leek	✓	✓	✓		
Policy DSL5 - Undeveloped Land at Sainsburys, Churnet Works, Leek	✓	✓	✓		

5.4 Conclusions of the Screening of the Emerging Local Plan Policies and Allocation Sites

The screening exercise identified the following potential effects on European sites:

Policy SS3 – Future Provision and Distribution of Development (policy text as at 27 June 2017) could increase recreational pressure, increase water demand and air pollution from traffic through provision of housing to accommodate growth in the population of the Plan Area. LSEs were identified in relation to:

- Peak District Moors (South Pennine Moors Phase 1) Special Protection Area (SPA);
- South Pennine Moors Special Area of Conservation (SAC); and
- Peak District Dales SAC.

Development in settlements specifically in the north eastern part of the Plan Area could result in increases in recreational pressure and air pollution on European sites which are located nearby. Such effects could result from the policies alone or in combination. LSEs for policy texts as at 27 June 2017 were therefore identified as a result of **Policy SS4 - Strategic Housing and Employment Land Supply, Policy SS5 – Towns, Policy SS6 – Leek Area Strategy, Policy SS11 – Churnet Valley Area Strategy, Policy E2 – Employment Allocations and H2 – Housing Allocations** on the following European sites:

- Peak District Moors (South Pennine Moors Phase 1) Special Protection Area (SPA);
- South Pennine Moors Special Area of Conservation (SAC); and
- Peak District Dales SAC.

LSEs relating to urban effects were identified as a result of policies **H2 Housing Allocations, SS8 – Larger Villages and SS9 - Smaller Villages** (policy texts as at 27 June 2017) on the following European sites:

- Peak District Moors (South Pennine Moors Phase 1) Special Protection Area (SPA);
- South Pennine Moors Special Area of Conservation (SAC); and
- Peak District Dales SAC.

LSEs were identified with regards to the following proposed allocation sites:

- Waterhouses (WA004) located approx. 1950m from the Peak District Dales SAC; and
- Proposed allocation sites on the eastern edge of Leek (LE066, LE140, LE128a, LE142 a and b) located between 3.8km and 4.2km from the Peak District SPA and the South Pennine Moors SAC.

The remaining sections of this report assess the potential for adverse effects to occur on European sites with relation to water demand, urban effects (localised disturbance such as noise and visual intrusion, effects from construction, fire setting and fly tipping), changes to the local water environment, air quality and recreational pressure.

6 Appropriate Assessment: increased water demand

6.1 Introduction

Screening of the Preferred Options policies (text as at 27 June 2017) identified that **Policy SS3 – Future Provision and Distribution of Development** could increase water demand and therefore result in an LSE on the following European sites through increasing housing provision and therefore the population of the District:

- Peak District Moors (South Pennine Moors Phase 1) Special Protection Area (SPA);
- South Pennine Moors Special Area of Conservation (SAC); and
- Peak District Dales SAC.

Screening also identified potential LSEs in relation to construction effects on the local water environment as a result of proposed allocation site WA004 at Waterhouses due to its proximity to the Peak District Dales SAC. This potential effect has been addressed in Section 9 Urban Effects.

6.2 Assessment of Effects Alone and In-Combination

6.2.1 Potential Effects Relating to Water Demand on Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC and Peak District Dales SAC

The Council has agreed an annual housing requirement of 320 homes per year, close to the combined jobs growth scenario presented within the Staffordshire Moorlands Strategic Housing Market Assessment (SHMA)⁹ Update 2017. The SMHA predicts that under this scenario, there could be a + 5,376 increase in the number of households, representing an increase of 12.7%¹⁰.

Development is likely to lead to an increased demand for water and wastewater treatment in those parts of the District to which growth will be directed. Should an increase in demand for water lead to increased abstraction, this could potentially affect some of the habitats within the European sites identified above if the Plan Area and European site share a water catchment area.

⁹ Staffordshire Moorlands District Council has agreed an annual housing requirement of 320 homes per year, close to the combined jobs growth scenario set out within Nathaniel Lichfield and Partners (February 2017) Staffordshire Moorlands Strategic Housing Market Area Update. On this basis, a population change figure of +8,471 is predicted between 2014 – 2031.

¹⁰ Based on the 2014 Sub-National Household Projections, Staffordshire Moorlands is predicted to have had 42,355 households.

The Staffordshire Moorlands Local Plan Area is supplied with water predominantly by Severn Trent Water (the Strategic Grid WRZ), but a small section towards the northwest of the Plan Area, is supplied by United Utilities (the Integrated WRZ). The water resource zones supply a large number of homes in this part of the country and as such the water supply for the Plan Area is considered in-combination with the supply for the wider area.

The government are currently working on proposals to reform the abstraction licencing system. These changes are not expected to be implemented until 2020. As a precursor to abstraction reform Ofwat are developing an Abstraction Incentive Mechanism for the period 2015-2020. The abstraction incentive mechanism seeks to encourage water companies to reduce abstraction from environmentally sensitive water sources, during periods of low river flow.

Severn Trent Water confirm in their Water Resources Management Plan (2014)¹¹, that they are not expecting to apply for any new abstractions in this zone up to 2019. Although Severn Trent Water cannot confirm that they will not apply for any new abstraction licences in this WRZ between 2019 and 2033, they do state that they are extremely unlikely to apply for any new abstraction licences in this zone that would negatively affect any designated European sites. One reason for this is that Severn Trent Water carry out Strategic Environmental Assessments (SEA) and HRAs on each of their 5-yearly Water Resource Management Plans (WRMPs). These HRA/ SEA processes rule out options that do not comply with the Habitats or SEA Directives. In addition, the Environment Agency would not grant licences that could cause environmental harm. Whenever a water company applies for abstraction licences they must, amongst other things, satisfy the Environment Agency that the abstraction is environmentally sustainable.

In fact, in the short to medium term, the Severn Trent Water WRMP (2014) proposes that the amount of water abstracted from the environment will be reduced, by providing local environmental improvements and by augmenting resilience, flexibility and sustainability of water resources in the region.

Severn Trent Water have responded to a consultation request¹² which can be found in Annex A in which they confirm that it will not be applying for any new abstraction licences to supply water to this area which would result in any adverse effect on European sites.

The United Utilities WRMP (2015)¹³ sets out the following approach to forecasting population increase within all of the zones that it manages (p73):

- 2014-15 – current best estimate of household growth based on economic research;

¹¹ Severn Trent Water (2014) Final Water Resources Management Plan 2014

¹² Email dated 23/11/16 (See Annex A in separate annex document)

¹³ United Utilities (March 2015) Final Water Resources Management Plan 2015

- 2016-20 – we will assume that the number of new households will increase by an additional 6.5% year on year;
- 2021-25 – we will assume that the number of new households will increase by an additional 10% year on year; and
- 2025-2040 – we will assume gradual increase back to absolute level forecast by ONS, with additional higher growth rate to allow for alignment to overall ONS figures.

An increase of 5,376 households¹⁴ within Staffordshire Moorlands District between 2014 and 2031 represents a 12.7% increase. This is well within the assumptions set out above. Although this is a crude evaluation, with no information available in the WRMP giving a breakdown of population projections by local authority, we suggest that we can assume that a 12.7% increase in households within the Staffordshire Moorlands District is currently planned for within the WRMP (2015).

United Utilities have outlined in their WRMP (2015) that they expect the Integrated Zone to have sufficient supplies of water to meet the growing demand over the next 25 years.

The HRA Report which accompanies the WRMP (2015) concludes that there will not be any adverse effects on European sites resulting from the WRMP.

In response to a consultation request, United Utilities¹⁵ has stated that they do not yet know if there will be any requirement for new abstraction licences in the Integrated Zone in WRMP19, and if there are, which options/sites will be selected as part of any preferred programme, or the timelines for implementation. HRA and SEA influence the selection of options in the WRMP. Given the size and connectivity of the Integrated Zone, it would be considered unlikely that any options that resulted in significant impacts on European designated sites would be selected as part of any preferred programme (as there would be likely to be other options available which would not impact European designated sites and therefore, the Plan would not pass through HRA Stage 3 Alternative Options).

6.2.2 Conclusions

The two water companies who control the water supply in the Plan Area have confirmed their plans to supply water to the Plan Area accommodating predicted population increase within the plan period will not result in any adverse effects on European sites.

¹⁴ Nathaniel Lichfield and Partners (February 2017) Staffordshire Moorlands Strategic Housing Market Area Update

¹⁵ Email dated 13/12/16 (See Annex A in separate annex document)

*It is therefore concluded that Policy SS3 – Future Provision and Distribution of Development **will not** result in an adverse effect on the integrity of any European site with regards to water demand.*

7 Appropriate Assessment: increased traffic on air quality

7.1 Introduction

Screening of the Preferred Options policies (text as at June 2017) identified that **Policy SS3 – Future Provision and Distribution of Development** could increase traffic and therefore air pollution and therefore result in an LSE on the following European sites:

- Peak District Moors (South Pennine Moors Phase 1) Special Protection Area (SPA);
- South Pennine Moors Special Area of Conservation (SAC); and
- Peak District Dales SAC.

In addition, screening has identified that the following policies could result in potential in-combination effects on air quality in relation to growth in the Leek / Churnet Valley area:

- **Policy SS4 – Strategic Housing and Employment Land Supply;**
- **Policy SS5 – Towns;**
- **Policy SS6 – Leek Area Strategy;**
- **Policy SS13 – Churnet Valley Area Strategy;**
- **Policy H2 – Housing Allocations (DSL1, DSL2, DSL3, DSL4, and DSL5); and**
- **Policy E2 – Employment Allocations.**

7.2 Background

The Local Plan could potentially cause an adverse effect on the European sites identified above if traffic (and therefore emissions to air) were to increase between the settlements in the Plan Area or beyond the Plan Area for trips to access employment or other facilities such as cultural or retail. This could result in an increase in nitrogen deposition, which could have an effect on those habitats sensitive to additional nitrogen through eutrophication (i.e. fertilisation), which could lead to effects such as a change in species composition. In terms of employment developments, certain business uses have the potential to have direct impacts on air quality, including emissions of nitrogen compounds. LSEs associated with construction impacts were also noted in the screening of proposed allocation sites and policies and this is addressed within Section 10 as an 'urban effect'.

Natural England has advised that emissions from point sources more than 200m from the boundary of a site can be considered negligible¹⁶ (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources).

¹⁶ Letter from English Nature to Runnymede Borough Council, dated 16th May 2006, regarding Conservation (Natural Habitats &C.) Regulations 1994 Runnymede Borough Local Development Framework

Figure C.1 in Annex C shows the location of the European sites in relation to the A roads into and out of the Staffordshire Moorlands District. There are not considered to be any other main road routes in the area (i.e. important B roads or a motorway) which pass close to a European site. The only A road which lies within 200m of a European site is the A53 between Leek and Buxton. Parts of the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC lie within 200m of the A53.

The Local Plan will accommodate a potential increase in population within the District of up to 9,000¹⁷ new residents 2014 - 2031. **Policy SS 4 - Strategic Housing Development** and **Policy SS 5 - Towns** direct approximately 75% of housing and 70% of employment growth to the three towns in the district and 25% of housing and 30% of employment growth to the rural area. This spatial strategy directs most growth therefore to areas which are close to existing facilities, services and employment; it encourages the use of public transport and other sustainable means of travel. By directing 25% of new housing and 30% of new employment development to the rural area, the spatial strategy also supports the vitality of the rural area, maintaining facilities, services and employment there and avoiding the need for residents to travel further afield. **Policies SS5 to SS11** inclusive set out the sustainable strategies for the towns and rural settlements, enabling them to accommodate growth along with the necessary facilities and infrastructure required to support it and maintain vital settlements; reducing the need to travel and ensuring that sustainable travel choices are available to access day to day facilities, services and employment.

7.3 Assessment of Effects Alone and In-Combination

7.3.1 Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC

A potential effect of increased traffic on nitrogen deposition has been identified in the screening of Local Plan Preferred Options policies. As the South Pennine Moors (Phases 1 and 2) SPA and SAC are almost entirely co-located, these two sites have been considered together with regards to the assessment of effects of air quality – this section considers the southern part of these sites, i.e. the area covered by the Phase 1 SPA.

For the SPA, effects of atmospheric nitrogen deposition on designated interest features, i.e. the bird species, are not straightforward to predict. There is no known direct pathway of effect from additional nitrogen deposition (from traffic) to the bird species that are the qualifying features for

¹⁷ Staffordshire Moorlands District Council has agreed an annual housing requirement of 320 homes per year, close to the combined jobs growth scenario set out within Nathaniel Lichfield and Partners (February 2017) Staffordshire Moorlands Strategic Housing Market Area Update. On this basis, a population change figure of +8,471 is predicted between 2014 – 2031.

this site. However, it is possible that there may be indirect effects: either on the habitats on which the birds depend; or on habitats on which the birds' food may depend.

The habitats of these moors are designated under the South Pennine Moors SAC. Air pollution and specifically atmospheric deposition of nitrogen could adversely affect some of the habitats in the SAC. This includes: Northern Atlantic wet heaths with *Erica tetralix* (H4010), European dry heaths (H4030), Blanket bogs (H7130), Transition mires and quaking bogs (H7140) and Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (H91A0), all of which are over their critical loads for acid and nitrogen deposition¹⁸.

The only A road which lies within 200m of a European site is the A53 between Leek and Buxton. Parts of the South Pennine Moors SAC lie within 200m of the A53. The SAC is large, extending over 64,983.13ha. GIS analysis tells us that the proportion of the site lying within 200 m of the A53 is 0.002% (74.6ha). The SPA has a total area of 45,300.54ha and 0.32% (147.2ha) of it lies within 200m of the A53.

In an email dated 12th December 2016 (see Annex A), Natural England advised that the Design Manual for Roads & Bridges (DMRB) methodology¹⁹ should be referred to and an exercise carried out to determine how much extra traffic is expected to use the A53 and/or how this would affect vehicle emissions (i.e. congestion, referred to in the DMRB as changes in speed of +/- 10 km/h). The DMRB methodology sets criteria for trunk roads²⁰ over which a predicted increase in traffic is considered to be 'significant':

- Daily traffic flows will change by 1000 Average Annual Daily Traffic (AADT) or more;
- HGV flows change by 200 AADT or more; and
- Daily average speed will change by 10 km/h or more.

An assessment to predict the increase in traffic resulting from the development proposed in the Leek area (see Section 7.1 for policy references) has been undertaken by the Transport and the Connected County - Strategy Officer at Staffordshire County Council. The assessment is presented in Annex E. The assessment has found that an estimated additional 267 vehicles will use the A53 between Leek and Buxton (two-way flow) over an average day, with all of the proposed development in place.

¹⁸ APIS website www.apis.ac.uk

¹⁹ <http://www.standardsforhighways.co.uk/ha/standards/dmr/vol11/section4.htm>

²⁰ The A53 may not be considered to be a trunk road and is not a motorway, however it is considered relevant to apply these criteria to all roads, particularly as emissions from more minor roads (such as the A53) are likely to be lower given lower traffic flows.

Assuming the same proportion of HGVs are generated from the development as currently use the A53 between Leek and Buxton (10.1%) then there will be an additional 27 HGVs. None of the land uses proposed through the Local Plan in the Leek area are expected to be significantly high generators of heavy vehicles.

By 2031 The total number of vehicles using the A53 between Leek and Buxton is expected to be 7800 AADT (7533 (do minimum) + 267 (additional as a result of planned growth)) of which approximately 788 (761 + 27) are likely to be HGVs. These figures are below the thresholds set by the DMRB to assess air quality changes and therefore it is concluded that the predicted increase in traffic is not significant in accordance with the DMRB criteria and the A53 is not materially affected by the proposed Local Plan development in terms of leading to air quality effects on European sites.

*It is therefore concluded that the policies within the Local Plan **alone will not** result in an adverse effect on the integrity of the Peak District Moors (South Pennine Moors Phase 1) SPA or South Pennine Moors SAC as regards effects of increased traffic on air quality.*

Natural England has confirmed in an email dated 31/05/17 that it is content with this conclusion. However, following a request for advice, it has recommended that an in-combination effects assessment is undertaken to determine the potential effect of traffic growth resulting from development in the Leek area in combination with growth in neighbouring areas. This further assessment will be undertaken during July / August 2017 and this part of the HRA Report will be updated to accompany the next iteration of the Local Plan.

7.3.2 Peak District Dales SAC

All the plant communities that are qualifying interest features for the site are vulnerable to any additional deposition of nitrogen. They are less vulnerable to further acidification.

As can be seen on Figure C.1 in Annex C, there are no A roads within or in / out of the Staffordshire Moorlands District or which are otherwise considered to be important routes for residents of the District which pass within 200m of the Peak District Dales SAC.

*It is therefore concluded that the policies within the Local Plan **will not** result in an adverse effect on the integrity of the Peak District Dales SAC with regards to effects of increased traffic on air quality.*

7.4 Conclusions

The section has set out an assessment of the potential for adverse effects arising in relation to air quality from increased traffic on the Peak District Dales SAC, the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC.

The assessment concludes at this stage that the Local Plan alone **will not** result in an adverse effect on the integrity of any of the European sites as a result of any traffic increases. An In

Combination Effects assessment will be undertaken in July / August 2017 and the HRA Report will be updated to accompany the next iteration of the Local Plan.

8 Appropriate Assessment: increased recreational pressure

8.1 Introduction

A potential effect of increased recreational pressure from increased population in the Plan Area was identified in the screening regarding the following European sites:

- Peak District Moors (South Pennine Moors Phase 1) SPA;
- South Pennine Moors SAC; and
- Peak District Dales SAC.

Screening identified that these potential effects could result from the following policies which accommodate an increased population within the Plan Area:

- **SS3 – Future Provision and Distribution of Development.**

In addition, screening has identified that the following policies could result in potential In-Combination Effects on recreational pressure in relation to growth in the Leek / Churnet Valley area:

- **Policy SS4 - Strategic Housing and Employment Land Supply;** and
- **Policy SS11 – Churnet Valley Strategy.**

Please note that the potential effects of localised increases in recreational pressure are addressed within Section 10.

8.2 Background

The possible effects of relevance to this assessment are as follows:

- Disturbance of the bird species for which the SPA is designated (either by people or by accompanying dogs; mountain biking and horse riding); and
- Soil compaction, erosion and vegetation damage of the habitats for which the SACs are designated caused by trampling. (Please note that potential effects of fires and localised recreational effects from specific proposed allocation sites have been considered under the issue of 'Urban Effects' in Section 10).

In order to assess the potential effects from increased recreation pressure, information has been gathered with regard to the potential for the Local Plan to increase visitor numbers and with regard to possible visitor behaviour on the SPA and SACs. The SPA and SACs are located within the Peak District National Park with the exception of some very small areas that extend just beyond the boundary. Therefore, in the absence of visitor data to the European sites, data on visitor numbers to the National Park have been used.

8.3 Assessment of Effects Alone and In Combination

8.3.1 Peak District Moors (South Pennine Moors Phase 1) SPA, South Pennine Moors SAC and Peak District Dales SAC

Estimates of visitor numbers

Data from the Peak District Visitor Survey (2005²¹); the Peak District Visitor Survey (2015²²); from STEAM analysis²³ by the National Park Authority (accessed via the Park Authority's website²⁴); and from population estimates taken from the Staffordshire Moorland District Council Sub National Household Projections study²⁵ (which is based on ONS population data) have been used to estimate the increase in visitor numbers to the National Park as a result of predicted population increases in the Staffordshire Moorland Plan Area. This is outlined in Box 9.1.

Box 9.1 Estimation of increase in visitor numbers to the Peak District National Park as a result of estimated population increases in the Staffordshire Moorlands Local Plan Area 2012-2031

- Data from STEAM analysis estimated that the total number of tourist days spent in the National Park (by visitors spending over 3 hours) has remained around 12 million per annum for the last five years. However, a 1996 study estimated that the number of tourist days spent in the park per year, including visitors spending less than 3 hours, was approximately 22 million tourist days per annum. The difference in numbers is likely to be because this study includes visitors spending less than 3 hours. This higher figure of 22 million is used to estimate an increase in numbers as a worse-case scenario.

²¹ Peak District National Park Visitor Survey, Peak District National Park Authority, 2005

²² Peak District National Park Visitor Survey 2014 & 2015, & Non-Visitor Survey 2014 & 2015, Peak District National Park Authority, 2015

²³ STEAM is a tourism economic impact modelling process which approaches the measurement of tourism from the bottom up, through its use of local supply side data and tourism performance and visitor survey data collection.

²⁴ <http://www.peakdistrict.gov.uk/microsites/sopr/welcoming/tourism/volume> Accessed 4th November 2016.

²⁵ Staffordshire Moorlands 2012-based Sub National Household Projections Update, January 2016 Revision

- 70% of visitors to the National Park were day visitors with the remaining 30% staying overnight nearby (Peak District National Park Authority, 2015 Survey) and it is assumed that the vast majority of visitors to the park from Staffordshire Moorlands District are day visitors due to the close proximity of the Plan Area and the National Park. 70% of 22 million is 15.4 million.
- 3% of day respondents surveyed during the 2015 survey came from Staffordshire Moorlands District (percentage obtained from detailed analysis of the raw data from the 2015 visitor survey; NB this is a larger area than the Local Plan Area). This percentage is in line with the 2005 survey where between 1 and 5% of respondents came from Staffordshire Moorlands District. 3% of 15.4million is 46,000.
- The population of Staffordshire Moorlands District was approximately 97,237²⁶, so if this population is responsible for 46,000 visitor days per year, that means each resident of Staffordshire Moorlands District spends an average of 0.47 visitor days per year in the National Park.

Therefore, it is assumed an average of 0.47 visitor days per person per year for a resident of the Local Plan area.

- Staffordshire Moorland District population totalled 97,237 persons as of 2012.
- Under scenario H within the Staffordshire Moorlands 2012-based Sub National Household Projections Update (2016) the population of the Plan Area is predicted to go from a population of 97,237 in mid 2012 to one of 105,138 in mid 2031 – a population increase of 7,901. A population increase of 9,000 is currently assumed to be a reasonable estimate for the purposes of the HRA. This is a precautionary figure based on the latest SMHA report for the District²⁷.

This additional population of 9,000 is therefore expected to result in an increase of 4,230 visitor days per year to the National Park, which is an increase of 0.019% ($4,230/22 \text{ million} \times 100 = 0.019\%$).

A projected population increase in the Local Plan Area of up to 9,000 people by 2031, with an estimated 0.47 visitor days per person by residents in the Plan Area, has been calculated to generate an increase in visits to the National Park of approximately 4,230 visitor days per year in

²⁶ 2012 Mid-year population estimates for Staffordshire Moorlands

²⁷ Staffordshire Moorlands District Council has agreed an annual housing requirement of 320 homes per year, close to the combined jobs growth scenario set out within Nathaniel Lichfield and Partners (February 2017) Staffordshire Moorlands Strategic Housing Market Area Update. On this basis, a population change figure of +8,471 is predicted between 2014 – 2031.

2031. This represents an increase of 0.019% to the current total number of visitor days to the park per year of approximately 22 million, which is considered a very small increase. It should be emphasised that these figures are for visits to the whole of the National Park, not just the SPA/SAC areas (which cover approximately 35% of the National Park) and number of visitor days to these sites are likely to be much lower. It should also be noted that whilst the Local Plan makes provision for more houses, some increase in population would be expected without the Plan. The assumption is taken that all the increase is as a result of the Local Plan in order to consider the worst-case scenario. Current recreational pressures on the SPA/SACs are considered below in order to inform the overall conclusions.

Current recreational pressures on the SPA and SACs

The SPA is of European importance for breeding populations of Merlin, Golden Plover, Short-eared Owl and Dunlin which are ground nesting birds potentially vulnerable to disturbance from recreational activities. The SPA is also designated for its breeding populations of Peregrine Falcon but this species is not ground nesting and therefore not considered vulnerable to disturbance.

An analysis of moorland breeding bird distribution and change in the Peak District was produced by the Moors for the Future Partnership^{28 29}. It concluded that a number of species, particularly ground nesting waders such as Golden Plover, avoid areas of habitat close to footpaths. However, when bird density was analysed at the 1km level, the presence of footpaths appeared to have little impact on overall density of bird populations. Indeed, the study found that populations of wader species regarded as sensitive to visitor pressures are increasing in the Peak District. The report notes that Golden Plover populations are stable and Merlin populations have increased since the early 1970s alongside considerable increases in recreational pressure. Dunlin populations appear to have declined in many upland regions in the UK (Sim *et al* 2005³⁰), this decline is reflected in the Peak District National Park. The decline is considered to be as a result of intensive management and not due to recreational pressures. Overall, the conclusions of the Moors for the Future Partnership^{31 32} indicate that visitor pressure is not currently having an effect

²⁸ Moors for the Future, 2004. Breeding Bird Survey of the Peak District Moorlands.

²⁹ Moors for the Future 2006. Analysis of Moorland Breeding Bird Distribution and Change in the Peak District.

³⁰ Sim, I.M.W., Gregory, R.D., Hancock, M.H. and Brown, A.F. (2005). Recent changes in the abundance of British upland breeding birds. *Bird Study*, 52, 261-275.

³¹ Moors for the Future, 2004. Breeding Bird Survey of the Peak District Moorlands.

³² Moors for the Future 2006. Analysis of Moorland Breeding Bird Distribution and Change in the Peak District.

on breeding populations of SPA species. This report is being used in the absence of up-to-date information.

Large areas of open access land have been designated within the National Park by Natural England following the Countryside and Rights of Way Act, 2000. Beeley Moor was the only site designated as open access that requires dogs to be kept on a lead through the nesting season, suggesting that disturbance is localised to this area. Beeley Moor is part of the Peak District Moors SPA and is located approximately 25km to the east of the Plan area and is therefore highly unlikely to be affected by the recreational pressures caused by the increase in population resulting from the Local Plan.

The Peak District Biodiversity Action Plan states that the blanket bogs (designated feature of the South Pennine Moors SAC) and heather habitats (designated features of South Pennine Moors SAC and Peak District Dales SAC) are most sensitive to visitor pressures. The National Park Authority has a Management Plan and Recreational Strategy³³, which supports the aim of increasing accessible recreation opportunities, while protecting the environmental and historical assets of the National Park. The Park Authority has implemented mitigation measures contained within the strategy to reduce recreational pressures, such as paving busy routes to reduce widening of routes and restricting access points e.g. the Pennine Way, which passes through the Peak District Moors SPA and South Pennine Moors SAC. These measures allow high levels of visitors to a site with no detectable impact upon breeding success (Pearce-Higgins *et al*, 2007)³⁴.

Potential In-combination effects

The majority of the HRA of other Local Plans surrounding the National Park have concluded that there would be no LSEs on the nearby European Sites. However, the HRA Report of the Kirklees Local Plan³⁵ and the HRA of the Bradford Core Strategy³⁶ found that a LSE on the integrity of the Pennine Moors SAC and SPA could occur due to increased recreational pressures. A policy was developed for inclusion in the Bradford Core Strategy and Draft Kirklees Local Plan setting out measures to avoid or mitigate recreational impacts. These avoidance/mitigation measures were based on research undertaken as part of the Thames Basins Heaths and Dorset Heathlands SPAs and identified zones around the Pennine Moors SAC/SPA where development could either

³³ Active in the Outdoors – A Recreation Strategy and Action Plan for the Peak District National Park 2010-2020. Peak District National Park Authority

³⁴ Pearce-Higgins, J.W., Finney, S.K., Yalden, D.W. & Langston, R.W. (2007) Testing the effects of recreational disturbance on two upland breeding waders. *Ibis* 149 (S1): 45-55.

³⁵ LUC, October 2015. Habitat Regulations Assessment. Draft Kirklees Local Plan.

³⁶ Urban Edge Environmental Consulting, December 2014. Habitats Regulations Assessment for the City of Bradford District Core Strategy.

not take place or would require contributions towards greenspace improvements (refer to Section 10 below for further information).

8.3.2 Summary and Conclusions

In order to assess the potential effects from increased recreation pressure, information has been gathered with regard to the potential for the Local Plan to increase visitor numbers and with regard to current recreational impacts on the Peak District Moors (South Pennine Moors Phase 1) SPA, Peak District Dales SAC and South Pennine Moors SAC. A review of HRA of Local Plans surrounding the National Park has also been undertaken to determine in-combination effects.

The estimated increase in visitor numbers to the National Park as a result of the Local Plan would be very low (0.019% of current visitor days to the park per year). Current recreational pressures are not considered to be impacting on the features of the SPA. The sensitive habitats within the SACs are being adequately protected from damage by mitigation measures implemented by the National Park Authority. It is considered that the management of the estimated increase in visitor numbers to the National Park resulting from the Local Plan as well as from neighbouring local plans, can be accommodated within the National Park's plans.

Provided the mitigation measures within the Kirklees Local Plan³⁷ and the Bradford Core Strategy³⁸ HRAs are implemented then there would be no likely significant adverse effects on the integrity of the SACs/SPA as a result of in-combination effects.

*It is therefore concluded that there will be **no adverse effect** on the integrity of any European Sites with regards to recreational pressure as a result of **Local Plan Policy SS3 - Future Provision and Distribution of Development, Policy SS4 - Strategic Housing and Employment Land Supply and Policy SS11 – Churnet Valley Strategy, both alone and in combination with growth in neighbouring areas.***

³⁷ LUC, October 2015. Habitat Regulations Assessment. Draft Kirklees Local Plan.

³⁸ Urban Edge Environmental Consulting, December 2014. Habitats Regulations Assessment for the City of Bradford District Core Strategy.

9 Appropriate Assessment: urban effects

9.1 Introduction

A variety of 'urban effects' can result in adverse effects on European sites. Those considered in particular in this section are given below:

- Cat predation;
- Effects of dogs - eutrophication (mainly through faeces) and disturbance of grazing livestock;
- Localised recreational pressure;
- Localised effects from construction and on water quality;
- Fires; and
- Fly tipping / Litter.

These effects could potentially affect the following European sites:

- Peak District Moors (South Pennine Moors Phase 1) SPA;
- South Pennine Moors SAC; and
- Peak District Dales SAC.

However, all of the proposed allocation sites have been screened (as at 27 June 2017) for this potential effect and LSEs were identified in relation to the following sites (**Policy H2 Housing Allocations**) due to their proximity to European sites:

- Waterhouses (WA004) located approximately 1950m from the Peak District Dales SAC; and
- Sites on the eastern edge of Leek (LE066, LE140, LE128a, LE142 a and b) located between 3.8km and 4.2km from the Peak District SPA and the South Pennine Moors SAC.

In addition, screening identified that the following policies (text as at 27 June 2017) could result in LSEs due to a risk that they could result in development close to the European sites:

- SS8 – Larger Villages Area Strategy; and
- SS9 – Smaller Villages Area Strategy.

9.2 Background

This sub-section gives an outline of the evidence regarding each of these effects, followed by a summary of the effects of relevance to each European site in sub-sections 9.2.1 to 9.2.5:

- Cat predation;
- Effects of dogs - eutrophication (mainly through faeces) and disturbance of grazing livestock;
- Localised recreational pressure;

- Localised effects from construction and water quality;
- Fires; and
- Fly tipping / Litter.

A number of research projects have been carried out regarding recreational pressure and urban effects on the Thames Basin Heaths SPA, and also the Dorset Heathlands SPA. Those HRAs and subsequent work have been used as an evidence base for much HRA assessment on these issues in England since, and both the assessments and the recommended mitigation are often quoted. However, there are a number of important differences between those SPAs and the Peak District Moors (South Pennine Moors Phase 1) SPA that should be noted. Firstly, the landscape and habitats are different – lowland heathland versus upland heathland and moorland. Secondly, the species for which the SPAs are designated are different. Thirdly, the size of the sites is different: Thames Basin Heaths SPA is 8,275 ha; Dorset Heathland SPA is 8,169 ha, whereas the Peak District Moors (South Pennine Moors Phase 1) SPA is considerably larger at 45,271 ha. Finally, the surrounding areas are different: there is significant urban development around the Thames Basin Heaths and Dorset Heathlands, whereas the area immediately surrounding Peak District Moors (South Pennine Moors Phase 1) SPA / SAC is more rural. These differences need to be kept in mind when applying the information from the HRAs regarding the Thames Basin Heaths and Dorset Heathland in this HRA of the Staffordshire Moorlands Local Plan.

9.2.1 Cat predation

Cat predation is considered to be a potential issue for the birds breeding within the Peak District Moors (South Pennine Moors Phase 1) SPA as the other European sites under consideration have not been designated for features vulnerable to predation. Studies have shown that on average cats roam up to 400m although they were recorded up to 900m³⁹. 400m is considered to be the zone where adverse effects from cat predation could occur.

9.2.2 Effects of dogs

Two possible effects of dogs on European sites have been considered: firstly, that of eutrophication from dog faeces causing fertilisation, potentially resulting in a change in species composition of habitats sensitive to nitrogen; and secondly, of effects of dogs worrying grazing livestock. While this latter effect is an indirect effect, it can have a substantial effect if grazing is an important component of the management regime (often recommended for grasslands), and if farmers decide they will not allow their livestock to graze on certain land because of problems of

³⁹ Barratt, D.G. (1997). Home range size, habitat utilisation and movement patterns of suburban and far cats *Felix catus*. *Ecography* 20 271-280.

dogs worrying their animals. This would upset the management programme. Both these effects are discussed in detail in Taylor et al⁴⁰.

9.2.3 Localised recreational pressure

Localised recreational pressure is as a result of people living sufficiently close to a European site to be able to walk directly to it from their house. It is often associated with localised dog-walking, but 'footfall' effects of habitat trampling are possible from the people themselves, with or without a dog. An extensive study on distances people are likely to walk to natural areas was undertaken on the Dorset Heaths⁴¹. These studies found that the average distance walked on heaths by walkers with or without dogs, was 2.2km. However, of the people who walked to the site, 75% had walked less than 500m to reach the heath, and 89% had walked less than 1km.

9.2.4 Localised effects from construction on air quality and water quality

Construction within the Plan Area could create air and water pollution which could have adverse effects on the habitats within the European sites. This has been identified as a potential adverse effect of certain proposed allocation sites due to their proximity to European sites or, in the case of water quality, the presence of a potential impact pathway, such as a stream, which creates a hydrological connection between an allocation site and a European site.

9.2.5 Fires

Fires can have significant effects, both on heathland, woodland and grassland habitats, and on the birds or animals that live on these habitats. Effects can be temporary, but they can also be long-term or even permanent.

Studies have been undertaken on the cause of fires^{42 43}, although much of this is based on research on the lowland heathland in the Dorset Heaths. The principle causes of 'wild' fires are: deliberate fire-setting; camp fires that have got out of control; planned fires that have got out of control (e.g. part of moorland management for grouse); and bonfires that have got out of control.

⁴⁰ Ken Taylor, Ros Taylor (Asken Ltd) Penny Anderson, Kath Longden, Paul Fisher (Penny Anderson Associates) (2005). 'Dogs, access and nature conservation.' English Nature Research Reports, Report Number 649

⁴¹ CLARKE, R., LILEY, D., UNDERHILL-DAY, J. & ROSE, R. 2005. Visitor access patterns on the Dorset heathlands. English Nature Research Reports, No. 683.

⁴² J. C. Underhill-Day, (2005) 'A literature review of urban effects on lowland heaths and their wildlife', English Nature Research Reports, Number 623

⁴³ J.S. Kirby & D.A.S Tantram (1999) 'Monitoring heathland fires in Dorset: Phase 1' Report to Department of the Environment, Transport and the Regions: Wildlife and Countryside Directorate

There is some evidence that a significant proportion of deliberate fire setting is by school-aged children. The Kirby & Tantram research³¹, showed that where more than 15% of the surrounding area (taken to be a 500m buffer around the designated site) was developed the numbers of unplanned fires increased; below this threshold the incidence of fires was close to zero. The 500m zone correlated with the maximum likely access distance for average users of greenspace^{44 45}.

9.2.6 Fly-tipping / litter

Fly-tipping and littering including garden waste are likely to be more prevalent when the urban area is within 500m of the SPA/SAC boundary (Liley, 2004; Liley, 2005; Underhill-Day, 2005). A study of Yateley Common to Castle Bottom SSSI (Liley, 2004) found that garden waste dumping was concentrated around the developed edges of the SSSI/SPA.

9.3 Assessment of Effects Alone and In Combination

9.3.1 Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC

As the South Pennine Moors (Phases 1) SPA and SAC are almost entirely co-located, these two sites have been considered together with regards to the assessment of urban effects. This subsection presents a combined AA of the potential effects of increased recreational pressure for the two sites and pet predation on the SPA.

Local Plan Policy H2 Housing Allocations

One of the urban effects – cat predation – is restricted to the SPA. Four of the designated birds of the Peak District Moors (South Pennine Moors Phase 1) SPA are ground-nesting (except peregrines, which nest in a scrape usually on a rocky ledge), and there is insufficient evidence to rule out the possible effect of cats attacking the designated birds, particularly young birds within the nest.

The proposed site allocations closest to the SPA are on the eastern edge of Leek (LE066, LE140, LE128a and LE142 a and b) are located between 3.8km and 4.2km from the SPA. This is well outside of the foraging range of cats and therefore no significant effects from cat predation are predicted as a result of allocating the sites.

The effects of dogs and localised recreational pressures are not considered to be significant on the South Pennine Moors (Phase 1) SPA / SAC, due to the distance between the proposed site

⁴⁴ Harrison, C, Burgess, J, Millward, A, Dawe, G. 1995. Accessible greenspace in towns and cities: A review of appropriate size and distance criteria. English Nature Research Report No. 153. English Nature, Peterborough.

⁴⁵ Box, J. & Harrison, C. 1993. Natural spaces in urban places. *Town & Country Planning*, 62(9): 231-235

allocations and the SPA/SAC and the degree of management of walking activities within the Peak District National Park (see Section 8 on recreational pressure for more details).

Fires can have significant effects, both on the vegetation (particularly summer fires) and on ground-nesting birds (particularly spring fires). None of the proposed allocated sites occur within the 500m zone and therefore the risk of unplanned fires is unlikely to increase as a result of these allocated sites.

On a precautionary basis, as there are potential effects from fire-setting from developments close to the SPA/SAC, it is recommended that project-level HRA be carried out for developments close to European sites within at least 500 m from the SPA/SAC based on the issue of fire-setting alone. As can be seen in Figure C.3 in Annex C, this would be relevant for development only on the Peak District National Park boundary north of Thornccliffe.

An increase in fly-tipping/littering is therefore likely to be limited due to the distance between the preferred option sites and this SPA/SAC, which is outside of the 500m zone where fly-tipping and littering is more prevalent. Fly-tipping was therefore not considered to have a significant effect on the habitats of the SAC or the features of the SPA.

Construction of the proposed sites could result in dust deposition on surrounding habitats and localised run-off of pollutants into adjacent watercourses. Coarse particles associated with dust from construction sites falls-out within 200m of the source⁴⁶. No European sites occur within this 200m zone and therefore no effects on these sites are predicted as a result of construction dust. All watercourses near to the proposed allocations at Leek flow in a westerly direction away from this SAC/SPA and therefore no adverse effects are anticipated from construction of these preferred option sites.

In summary, it is concluded that the Policy H2 will not result in any adverse urban effects on the South Pennine Moors (Phase 1) SPA / SAC.

Local Plan Policy SS8 Larger Villages Area Strategy and SS9 Smaller Villages Area Strategy

Policies SS8 and SS9 support appropriate development within the larger and smaller villages within the Plan Area. This presents a risk that development could occur in villages close to the South Pennine Moors (Phase 1) SPA / SAC. As discussed above, urban effects from cat predation, dogs, localised recreational pressures, fires and fly tipping decrease significantly over 500m from housing sites. Therefore, any development within this 500m zone could result in an adverse effect on this SPA/SAC.

The Site Improvement Plan for the South Pennine Moors SPA (Natural England, 2014) states that planning applications also need to consider the impact on land which is functionally linked to the

⁴⁶ Arup, The Environmental Effects of Dust at Surface Mineral Workings. (Report to the DETR 1995).

SPA (e.g. adjacent feeding habitats for SPA birds). The SPA description on the JNCC website states that, in particular, merlin and golden plover spend some of their time feeding outside of the SPA. Studies have shown that during the breeding season golden plover feed between 1.1km and 3.7km from their nests (Whittingham et al, 2000). However, golden plover and other birds for which the SPA is designated are considered to spend the majority of their time feeding within 2km of the SPA during the breeding season⁴⁷. Therefore, any development within 2km of the SPA that occurs within or adjacent to functionally connected land used by SPA bird species could result in an adverse effect on the SPA. It is not possible to determine the effect of each development until the planning application stage when detailed habitat and bird surveys have been undertaken and the exact details of the development are known. Guidance is given at Section 10.3 and Figure C.3 in Annex C recommending that project level HRA screening be carried out for developments proposed within 2km of the SPA to ensure no adverse effects.

Figure C.3 in Annex C shows the small part of the Plan Area that lies within 500m of the South Pennine Moors SAC and within 2km of the South Pennine Moors (Phase 1) SPA.

9.3.2 Peak District Dales SAC

Local Plan Policy H2 Housing Allocations

The proposed housing allocation at Waterhouses (WA004) occurs approximately 270m to the north of a watercourse that flows into the River Hamps that flows through the Peak District Dales SAC. There is a small risk that pollutants created during construction could enter this watercourse if construction is not undertaken in accordance with the precautionary measures detailed in the Ciria Guidelines⁴⁸ on the control of water pollution from construction sites.

On the basis of the precautionary principle, the HRA therefore concludes that the proposed allocation at Waterhouses (WA004) could result in an adverse effect on the Peak District Dales SAC.

The preferred option site at Waterhouses occurs 1.95km from the SAC. Urban effects from cat predation, dogs, localised recreational pressure, fires and fly tipping are considered unlikely beyond 500m from the allocated sites. No other adverse effects on the integrity of the Peak District Dales SAC are therefore anticipated as a result of Policy H2.

Local Plan Policy SS8 Larger Villages Area Strategy and SS9 Smaller Villages Area Strategy

Policies SS8 and SS9 support appropriate development within the larger and smaller villages within the plan area. This presents a risk that development could occur in villages close to the Peak District Dales SAC. Urban effects from cat predation, dogs, localised recreational pressures,

⁴⁷ Email correspondence with the Kirklees Council Biodiversity Officer. Cited in Draft Kirklees Local Plan Habitat Regulations Assessment Report (LUC, 2015).

⁴⁸ CIRIA C532. Control of Water Pollution from Construction Sites

fires and fly tipping decrease significantly over 500m from housing sites. Therefore, any development within this 500m zone could result in an adverse effect on this SPA/SAC.

Figure C.3 in Annex C shows the small part of the Plan Area that lies within 500m of the Peak District Dales SAC.

9.4 Summary and Conclusions

This section has considered the potential for the following proposed allocation sites to result in adverse urban effects on the Peak District Moors (South Pennine Moors Phase 1) SPA, the South Pennine Moors SAC and Peak District Dales SAC:

- H2 - Housing Allocations, in connection with the following proposed allocation sites:
 - Waterhouses (WA004) located approx. 1950m from the Peak District Dales SAC; and
 - Proposed allocation sites on the eastern edge of Leek (LE066, LE140, LE128a, LE142 a and b) located between 3.8km and 4.2km from the Peak District SPA and the South Pennine Moors SAC

On the basis of the precautionary principle, it is concluded that the proposed allocation at Waterhouses (WA004) could result in an adverse effect on the Peak District Dales SAC due to the risk of pollution arising from construction activities.

No adverse effects have been identified on the Peak District Moors (South Pennine Moors Phase 1) SPA and the South Pennine Moors SAC with regards to urban effects of the proposed housing allocations.

Policies SS8 and SS9 Larger and Smaller Villages Area Strategies could potentially result in adverse effects on the Peak District Dales SAC, Peak District Moors (South Pennine Moors Phase 1) SPA and the South Pennine Moors SAC if development occurred within 500m of these sites. These policies (as worded at 27 June 2017) could also result in an adverse effect on the Peak District Moors (South Pennine Moors Phase 1) SPA if development occurred on land which is functionally linked to the SPA.

10 Summary, Mitigation and Conclusions

10.1 Screening Results

HRA screening of the Local Plan Preferred Option policies as dated 27 June 2017 identified a number of LSEs in relation to the following:

- Effects from increased water demand on the on the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC and Peak District Dales SAC;
- Effects from increased traffic on air quality on the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC and Peak District Dales SAC;
- Increased recreational pressure on the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC and Peak District Dales SAC; and
- Urban effects on the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC and Peak District Dales SAC.

10.2 Appropriate Assessment

The AA stage of HRA has been undertaken to evaluate the potential for the 'screened in' Local Plan policies to result in adverse effects on the European sites as listed above.

At June 2017 the HRA was able to conclude that the Local Plan Preferred Options will not result in any adverse effects on the European sites in relation to water demand, and increased recreational pressure both alone and in combination with growth in neighbouring areas. The HRA is also able to conclude at this stage that the Local Plan Preferred Options alone will not result in an adverse effect on European sites in relation to air quality.

An In Combination Effects assessment in relation to traffic and air quality will be undertaken in July / August 2017 and the HRA Report will be updated to accompany the next iteration of the Local Plan.

Potential adverse effects in relation to urban effects were identified. On the basis of the precautionary principle, it was concluded that the proposed allocation at **Waterhouses (WA004)** could result in an adverse effect on the Peak District Dales SAC due to the risk of pollution arising from construction activities.

Policies SS8 and SS9 Larger and Smaller Villages Area Strategies (text as at June 2017) could potentially result in adverse effects on the Peak District Dales SAC, Peak District Moors (South Pennine Moors Phase 1) SPA and the South Pennine Moors SAC if development occurred within 500m of these sites. These policies could also result in an adverse effect on the Peak District Moors (South Pennine Moors Phase 1) SPA if development occurred on land which is functionally linked to the SPA.

10.3 Mitigation

The following mitigation has been put forward to the policy authors at Staffordshire District Council in order to avoid the potential adverse effects identified in relation to the proposed allocation at **Waterhouses (WA004)** and the June 2017 draft policies **SS8 Larger Villages Area Strategy** and **SS9 Smaller Villages Area Strategy** from occurring:

In order to avoid adverse effects on European sites from occurring as a result of the proposed allocation site at **Waterhouses (WA004)**, it was recommended that the following text should be added to the first bullet of the June 2017 draft Local Plan Policy NE1 Biodiversity and Geological Resources:

“Any development with a potential to adversely affect a European site/s through construction activities should ensure that Ciria construction guidelines are followed including environmental good practice on control of dust and water pollution.”

In order to avoid adverse effects on European sites from occurring as a result of the June 2017 draft Policy **SS8 Larger Villages Area Strategy** and **Policy SS9 Smaller Villages Area Strategy**, wording similar to that included in Local Plan Policy SS10 Other Rural Areas Strategy was recommended to be added to both policies SS8 and SS9, as follows:

“Any development proposal that might have the potential to affect a European or Ramsar Site must itself be subject to appropriate assessment.”

In preparing the Staffordshire Moorlands Local Plan Preferred Options for consultation in July 2017 the policy wording has been added to the policies identified above and the HRA is therefore able to conclude that the proposed allocation at **Waterhouses (WA004)**, **Policy SS8 Larger Villages Area Strategy** and **Policy SS9 Smaller Villages Area Strategy** will not result in any adverse effects on European sites.

Guidance is provided to Staffordshire District Council in relation to the implementation of this policy. The following guidance is supported by Figure C.3 in Annex C to this report. In determining whether a development proposal might have the potential to affect a European or Ramsar Site, any development within a 2km zone around the South Pennine Moors Phase 1 SPA should be expected to undertake a project-level HRA to ensure no potential adverse effects on the SPA or land that is functionally connected to it. This zone is mapped and illustrated at Figure C.3. The HRA found that potential adverse effects from cat predation, fire setting and other urban effects could occur on the Peak District Dales SAC, the South Pennine Moors SAC and the South Pennine Moors Phase 1 SPA if development occurred within 500m of these sites. This zone is also mapped and illustrated at Figure C.3. Any development proposed within a 500m zone of the SACs or SPA should be subject to a project-level HRA to ensure no potential adverse effects occur from cat predation, fires or other urban effects.

10.4 Overall Conclusions of the HRA

The HRA cannot be fully concluded at this stage because the air quality assessment is not completed in relation to potential in-combination effects with the growth proposed within the Staffordshire Moorlands Local Plan Area with that expected in neighbouring areas. An In-Combination Effects assessment in relation to traffic and air quality will be undertaken in July / August 2017 and the HRA Report will be updated to accompany the next iteration of the Local Plan.

Staffordshire Moorlands Local Plan Habitats Regulations Report

Annexes

**Prepared on behalf of:
Staffordshire Moorlands District Council**

Date: July 2017

Prepared by:
ClearLead Consulting Limited
The Barn, Cadhay, Ottery St Mary, Devon, EX11 1QT, UK
01404 814273

Contract Number: C0045

Contract No:	C0045
Issue:	2
Author (signature):	V Pearson 
Project Director (signature):	J Mitchell 
Date:	July 2017

Version Control Record				
Issue	Status	Date	Reviewer Initials	Author Initials
1	Draft	22/11/16	JM	VP
2	Updated draft	19/07/17	JRP	VP

This report has been prepared by ClearLead Consulting, Limited. (ClearLead) with all reasonable skill, care and diligence. This report is confidential to the Client named on the front of this report and is protected by copyright for intellectual property. This report has been prepared at the Client's instruction and in accordance with the Services and the Terms agreed between ClearLead and the Client. ClearLead accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known, unless formally agreed by ClearLead beforehand. Any such party relies upon the report at their own risk.

ClearLead disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the Services.

Table of Contents

1	Annex A Correspondence	1
1.1	Correspondence with Natural England in relation to the scope of the HRA	2
1.2	Correspondence with Natural England in relation to the scope of the assessment in relation to traffic and air quality	5
1.4	Correspondence with United Utilities in relation to water demand	7
1.5	Correspondence with Severn Trent Water in relation to water demand.....	7
3	Annex B: Detailed Information about the European Sites.....	8
3.1	Introduction	8
	Peak District Moors (South Pennine Moors Phase 1) SPA.....	9
	South Pennine Moors SAC	13
	Peak District Dales SAC	17
	Cannock Chase SAC.....	22
4	Annex C: Figures.....	25
4.1	Introduction	25
5	Annex D: Screening Results.....	32
5.1	Introduction	32
6	Annex E: Traffic Assessment	50

1 Annex A Correspondence

This annex provides copies of correspondence in relation to the HRA. The correspondence is as follows:

- Natural England in relation to the scope of the HRA and the scope of the assessment in relation to traffic and air quality;
- United Utilities in relation to water demand; and
- Severn Trent Water in relation to water demand.

1.1 Correspondence with Natural England in relation to the scope of the HRA

Date: 01 June 2016
Our ref: 185639
Your ref: LP00045_StaffsMoors_HRA_2_120516.docx



Vicky Pearson
ClearLead Consulting Limited
(on behalf of Staffordshire Moorlands District Council)

Customer Services
Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

BY EMAIL ONLY

Dear Vicky

Planning consultation: Staffordshire Moorlands Local Plan HRA

Thank you for your consultation on the above dated 12 May 2015 which was received by Natural England on the same day.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The Conservation of Habitats and Species Regulations (as amended) 2010

Natural England welcomes your initial screening letter and report. With regard to the questions posed at the end of your letter Natural England would like to be consulted at the preferred options stage, as proposed in section 3.4 of your letter. We confirm that we are satisfied with the summary of your proposed approach to HRA screening of the Local Plan subject to the following observations:

We welcome your proposal to expand the HRA screening 'narrative' (reference section 3.1 of your letter). That narrative should ensure that a clear explanation is provided for those sites screened out of the HRA process at the 'initial sift' stage e.g. to demonstrate the lack of a linkage or 'pathway' between the plan's policies/allocations/proposals and the European designated sites in question.

In terms of the information sources listed at section 3.1 you may also wish to refer to the APIS (Air Pollution Information System) website¹. This includes information on 'site relevant critical loads' which helps to illustrate the current air quality status of individual designated sites and offers valuable contextual information alongside the Natura 2000 sites' 'conservation objectives'.

¹ <http://www.apis.ac.uk/>

We agree with the list of N2k sites identified at section 2.2 for further HRA work at this stage.

With regard to the Cannock Chase SAC I enclose a weblink² to Stafford Borough's planning document 'Cannock Chase SAC – guidance to mitigate the impact of residential development'. This describes the current approach to mitigation of recreation impacts arising from new dwellings in that borough. Very similar guidance documents have been produced by Lichfield and South Staffordshire District Councils. In particular the guidance indicates the approach that is being taken with regard to housing within the 0-8Km and 8-15Km of the SAC.

Regarding 'uncertainty' we would encourage the use of robust scientific evidence in all HRAs. Where direct and detailed evidence is lacking a plan level HRA should seek to address this by gathering relevant evidence to identify trends. It may be necessary to undertake modelling, seek expert opinion or to commission new research and/or survey work.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter only please contact me on 0208 026 0939. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely

Antony Muller
Lead Adviser – Sustainable Development and Wildlife Team – North Mercia Area

² Weblink - <http://www.staffordbc.gov.uk/live/Documents/Planning%20Policy/Further%20Information%20and%20Evidence/Habitats%20Regulation%20Assessment/Cannock-Chase-SAC-Financi-Contributions.pdf>

1.2 Correspondence with Natural England in relation to the scope of the assessment in relation to traffic and air quality

Email to ClearLead Consulting Ltd dated 31.05.17

Subject: Staffordshire Moorlands HRA screening for air quality

Dear Vicky

**Staffordshire Moorlands local Plan - Site Allocations – Development in/around Leek and HRA in respect of air quality impacts on the South Pennine Moors Special Area of Conservation (SAC)
Our reference 216706**

Thank you for your email dated 25.5.17 and related attachments. With respect to the effects of increased road traffic associated with development in the Leek area I can confirm that the information presented in those documents appears satisfactory regarding a conclusion of no likely significant effects on European designated sites 'alone' i.e. the submitted information demonstrates that the process contribution from the planned developments described in the HRA screening report falls below the 1000AADT (or equivalent for HGVs) threshold.

With regard to consideration of 'in combination' effects Natural England advises the Council to ensure that due account is taken of neighbouring authority area's local plans. Where suitable information exists we advise that you use this to inform your conclusions. For example the recently adopted High Peak local plan would appear to include strategic site allocations for the locality around Buxton (policies DS17 and DS 18 refer) at the northern end of the A53. Other planned developments may need to be taken into consideration. Your HRA narrative allows you to describe your approach to information gathering, together with any challenges and assumptions or caveats that are felt to be appropriate in the light of the available information. In terms of the metrics for consideration of 'in combination' effects the thresholds used for assessment of effects 'alone' apply here also (i.e. 1000 AADT or equivalent for other transport modes). Our previous email dated 12.12.16 refers (our reference 201226).

One of the following two outcomes may be envisaged:

Either

No – Conclude that appropriate assessment is not required if:

- no other plans/projects can be identified that would act in-combination, or
- **together** they add up to **less than** 1000 AADT (1%)

Or

Yes – Conclude that appropriate assessment is required if:

- other plans/projects can be identified that would act in-combination, and
- **together** they add up to **more than** 1000 AADT (1%)

If the Council concludes that appropriate assessment is needed then please contact us again to agree the scope of the assessment. Alternatively if no significant effect would appear likely the Council does not need to re-consult Natural England.

I hope this information is helpful. Please contact me if you have any questions.

Kind regards

Antony

Antony Muller

Lead Adviser

Sustainable Development Team - North Mercia Area

Email to ClearLead Consulting Limited, dated 12.12.16

Subject: Staffordshire Moorlands HRA screening for air quality

Dear Vicky

Staffordshire Moorlands Local Plan - Air quality screening
Our reference 201226

Thank you for your email dated 10.11.16. I'm sorry for the delay responding.

We have considered the situation outlined in your email and would caution against screening out increases in traffic along the A53 on the basis you have described. This is because the 'percentage area' approach you have set out would overlook the fact that almost 75 Ha of the designated site would remain 'at risk'. To address this we propose that you continue the screening process by referring to the Design Manual for Roads & Bridges (DMRB) methodology – <http://www.standardsforhighways.co.uk/ha/standards/dmr/vol11/section4.htm>

In general terms, by using this in conjunction with the critical loads and levels data for the N2k sites available on APIS (see 'site relevant critical loads') and existing background levels we anticipate a more finely tuned (and robust) screening conclusion will result.

Your screening should consider:

N2k/Ramsar territory within 200m of the road in question

How much extra traffic is expected to use the road in question and/or how will this affect vehicle emissions (i.e. congestion – referred to in the DMRB as changes in speed of +/- 10 Kmh)

Apply the DMRB thresholds for possible significant impacts.

Please note that the DMRB screening information is based on trunk roads and motorways and is in need of review regarding impacts on less major road routes. As a result we advise that for less major routes an HRA screening needs to apply the following criteria in order to achieve a robust 'case by case' approach:

Where

- (i) an increase in car movement so 1000 AADT is expected, and/or
- (ii) any net increase in HGVs is expected and/or
- (iii) a change in traffic speed of +/- 10 kmh is forecast.

...then please consult us again in order to provide advice on the approach to establishing whether detailed modelling is needed.

I hope this is helpful and please contact me if you have any immediate questions.

Kind regards

Antony

Antony Muller

Lead Adviser

Sustainable Development & Wildlife Team - North Mercia Area

1.4 Correspondence with United Utilities in relation to water demand

Email to ClearLead Consulting Limited, dated 13.12.16

Subject: RE: Staffordshire Moorlands

Vicky,

Apologies for the delay coming back to you. In response to your query, UU's Water Resources Team has provided the following response:

The 2015 WRMP is our current WRMP, however, we are currently preparing our next WRMP (WRMP19). It will set out how the balance between demand for water and supply will be maintained over the period 2020 to 2045 and beyond.

We do not yet know if there will be any requirement for new abstraction licences in the Integrated Zone in WRMP19, and if there are, which options/sites will be selected as part of any preferred programme, or the timelines for implementation. HRA and SEA influence the selection of options in the WRMP. Given the size and connectivity of the Integrated Zone, it would be considered unlikely that any options that resulted in significant impacts on European designated sites would be selected as part of any preferred programme (as there would be likely to be other options available which would not impact European designated sites and therefore, the Plan would not pass through HRA Stage 3 Alternative Options).

I hope this answers your query.

Kind regards,
Ed

Edward Harvey | Senior Planner
Planning & Development
CBRE Ltd

1.5 Correspondence with Severn Trent Water in relation to water demand

Email to ClearLead Consulting Limited, dated 23.11.16

Subject: FW: Staffordshire Moorlands Local Plan

Hi Kate,

Further to your enquiry below, I can now provide you with the following information.

The likelihood of us applying for a new abstraction licence (up until 2031) in the Strategic Grid Zone that could negatively affect a designated European site is very unlikely. I can say with a lot of confidence that the Environment Agency would not entertain the idea of a new abstraction licence that will negatively impact a designated site.

When applying for a new licence we need to approve the following:

- Justification of need
- Efficient use of water
- Environmental sustainability

I would not be able to fulfil the 3rd point if it affects a designated site negatively.

The only possible way the Environment Agency would allow us to obtain a new licence in this instance would be if there was over-riding public interest, however it is very unlikely we would pursue this option as we would prefer to try to obtain new licences where we would not impact negatively on a designated site.

Should you need any further information, please do not hesitate to contact me on the details below.

Kind regards



Dawn Williams
Growth & Water Efficiency Analyst

3 Annex B: Detailed Information about the European Sites

3.1 Introduction

The annex presents detailed information about the European sites included within the HRA of the Staffordshire Moorlands Local Plan HRA, as agreed with Natural England (see Annex A). This information includes the site conservation objectives, the reasons for designation, the factors affecting site integrity and the requirements to maintain favourable condition status. Information has been obtained from the High Peak Local Plan HRA Report¹ (March, 2014) and from site citation forms and Site Improvement Plans.

¹ High Peak Local Plan Revised Preferred Options Draft Habitats Regulations Assessment Draft version Annexes (March 2014)

Peak District Moors (South Pennine Moors Phase 1) SPA

Table B.1: Peak District Moors (South Pennine Moors Phase 1) SPA	
Name	Peak District Moors (South Pennine Moors Phase 1) SPA UK9007021
Location with regards to plan area	To the north and north-west of the plan area, with the most south-eastern tip of the site extending into the plan area: approximately 2 km ² of the site is within the plan area itself.
Reason(s) for designation:	
<p>This site qualifies under Article 4.1 of the Directive (79/409/EEC) as during the breeding season the area regularly supports:</p> <ul style="list-style-type: none"> • Short-eared owl <i>Asio flammeus</i> at least 2.2% of the GB breeding population count, as at 1990 and 1998 • Merlin <i>Falco columbarius</i> at least 2.3% of the GB breeding population count as at 1990 and 1998 • Golden plover <i>Pluvialis apricaria</i> (North-western Europe - breeding) at least 1.9% of the GB breeding population count, as at 1990 and 1998 <p>Additional Qualifying Features Identified by the 2001 UK SPA Review²:</p> <ul style="list-style-type: none"> • A103 <i>Falco peregrinus</i>; Peregrine falcon (Breeding) • A466 <i>Calidris alpina schinzii</i>; Dunlin (Breeding) 	
Component SSSI sites	<ul style="list-style-type: none"> • The Dark Peak SSSI • Eastern Peak District Moors SSSI • Goyt Valley SSSI • Leek Moors SSSI

² Additional Qualifying Features identified by the 2001 UK SPA Review: although not yet legally classified, are, as a matter of Government policy, treated in the same way as classified features (Natural England's European Site Conservation Objectives for this site)

Table B.1: Peak District Moors (South Pennine Moors Phase 1) SPA	
Conservation objectives	<p>Avoid the deterioration of the habitats of the qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained or restored as appropriate, and ensure the site makes a full contribution to achieving the aims of the Wild Birds Directive.</p> <p>Subject to natural change, to maintain or restore:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features; • The structure and function of the habitats of the qualifying features; • The supporting processes on which the habitats of the qualifying features rely; • The populations of the qualifying features; • The distribution of the qualifying features within the site.³
Vulnerability	
<p>Major urban and industrial centres near to the Peak District Moors provide significant visitor pressure and approximately two-thirds of the moorlands are open to public access. Habitat damage through physical erosion or fire, combined with disturbance of breeding birds, can be significant. Initiatives for sustainable recreation are being developed. Many habitats are sub-optimal (in vegetation terms) as a consequence of historic air pollution, high grazing pressure and wildfire burns. Grazing pressure is generally being lowered and appropriate burning encouraged by two separate ESAs which encourage and support habitat restoration. Notwithstanding these schemes, evidence suggests that breeding birds in the south-west of the area may be declining on both open moorland and enclosed rough grazing land, possibly due to general agricultural improvement of the surrounding areas which are used by some species for some of their habitat requirements; e.g. golden plovers feed on in-bye land off the moor.</p> <p>It is also worth noting that the site is also a SAC for habitats such as blanket bog and there will be a need to balance the management of the different interests across the whole site (considered below).</p>	
Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
<ul style="list-style-type: none"> • Requires maintenance of the extent of suitable habitat mosaic including areas of tall mature heath and grass sward suitable for nesting short-eared owl and merlin whilst 	<ul style="list-style-type: none"> • Maintenance of habitats on site

³ Natural England 30 June 2015 – version 2. <http://publications.naturalengland.org.uk/file/6446418461982720>.

Table B.1: Peak District Moors (South Pennine Moors Phase 1) SPA	
<p>maintaining shorter, recently grazed and burnt areas suitable for nesting golden plover.</p> <ul style="list-style-type: none"> • Maintaining low levels of disturbance and predation are especially important for ground nesting birds and management of human access should direct disturbance away from sensitive areas (particularly recreational disturbance - Major urban and industrial centres near to the Peak District Moors provide significant visitor pressure and 524km² of the moorlands are open to public access)⁴. Predator control may be required. • Avoidance of fires (many habitats are sub-optimal in vegetation terms as a consequence of wildfire burns). The Site Improvement Plan includes Managed rotational burning and prevention of wildfire/arson. • Maintenance of the extent of habitats suitable for providing adequate food supply such as small mammals, nesting birds and invertebrates. • Avoidance of air pollution (many habitats are sub-optimal (in vegetation terms) as a consequence of historic air pollution). • Appropriate grazing regimes are required to maintain the extent of the moorland and heaths, the structural diversity including undisturbed dwarf shrub, varied age structure and vegetational mosaic. Grazing plays an important role in this management. The control of inappropriate and invasive species is required. • Maintaining hydrological conditions as wet heaths require wet soils during winter with a dry surface in summer. Also importance of water quality, including lack of eutrophication and maintenance of oligotrophic character. 	<ul style="list-style-type: none"> • Maintenance of bird feeding areas outside the site (avoidance of agricultural intensification), in particular Golden Plover. • Ground nesting birds - Maintaining low levels of disturbance and predation, i.e. where humans, dogs and predators are. Management of human access should direct disturbance away from sensitive areas. • Wet heaths - Maintaining hydrological conditions. Water quality, including lack of eutrophication and maintenance of oligotrophic character. • Avoidance of fires. • Air quality - Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths. • Mires and bogs – changes in hydrology and maintenance of natural regimes, water quality, and water table levels. • Absence of barriers e.g. wind farms

⁴ JNCC data form (05/05/06) <http://www.jncc.gov.uk/pdf/SPA/UK9007021.pdf>

Table B.1: Peak District Moors (South Pennine Moors Phase 1) SPA	
<ul style="list-style-type: none">• Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths. Impacts of atmospheric nitrogen deposition are included within the Site Improvement Plan.• Mires and Bogs are sensitive to changes in hydrology and maintenance of natural regimes, water quality, and avoidance of water table lowering are important factors.• The NE Site Improvement Plan⁵ also includes addressing changes in species distribution, low breeding success, disease, forestry and woodland management, addressing inappropriate management practices, managing vehicle use, and planning permissions.	

⁵ <http://publications.naturalengland.org.uk/publication/6024205996916736?map=true>

South Pennine Moors SAC

Table B.2: South Pennine Moors SAC	
Name	South Pennine Moors SAC UK0030280
Location with regards to plan area	To the north and north-west of the plan area, with the most south-eastern tip of the site extending into the plan area: approximately 2 km ² of the site is within the plan area itself. (Area of 64,983 ha)
Reason(s) for designation:	
<p>ANNEX 1</p> <p>Primary</p> <ul style="list-style-type: none"> • 4030 European dry heaths. • 7130 Blanket bogs * Priority feature if active • 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles. <p>Non Primary</p> <ul style="list-style-type: none"> • 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>. • 7140 Transition mires and quaking bogs 	
SSSI component sites	<ul style="list-style-type: none"> • The Dark Peak SSSI • Goyt Valley SSSI • Eastern Peak District Moors SSSI • Leek Moors SSSI • South Pennine Moors SSSI

Table B.2: South Pennine Moors SAC	
Conservation objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats • The structure and function (including typical species) of qualifying natural habitats • The supporting processes on which qualifying natural habitats rely⁶
Vulnerability	
<p>The South Pennine Moors SAC is largely enclosed on two sides by large industrial urban areas, which means that large numbers of people use the area for recreational activities. Around two-thirds is within the Peak District National Park. Land management is primarily driven by agriculture, rough grazing for sheep, and grouse-shooting.</p> <p>Access management has been a key issue, and with proposals under the Countryside and Rights of Way Act, will continue as such. Mechanisms for addressing access management issues include a range of fora, research and the role of organisations such as the Peak District National Park and its Ranger Service. Accidental fires can cause extensive damage to vegetation. The National Park Authority has produced a strategic Fire Plan and areas are closed to the public at times of high fire risk.</p> <p>Maintenance of the ecosystems relies primarily on appropriate grazing levels and burning regimes. There are a number of key pressures upon the site; these include overgrazing by sheep, burning as a tool for grouse moor management and inappropriate drainage through moor-gripping. All these issues are being tackled, and an integrated management strategy and conservation action programme has been produced as part of an EU funded LIFE project for the area to the north of the National Park. Within the Park, the MAFF-funded North Peak and South West Peak Environmentally Sensitive Areas are important mechanisms in attempts to achieve balanced management. MAFF's Countryside Stewardship Scheme and English Nature's Wildlife Enhancement Scheme (WES) are also being used to achieve favourable management. Management of the site, especially north of the National Park, is further complicated by the large number of commons. The National Park Authority owns a significant area of moorland, as does the National Trust.</p> <p>Atmospheric pollution over the last few hundred years has depleted the lichen and bryophyte flora and may be affecting dwarf-shrubs. The impact has arguably been greatest on blanket bog, wet heath and transition mire where the bog-building <i>Sphagnum</i> mosses have been largely lost. Combined with historical overgrazing, burning (accidental and deliberate), drainage and locally trampling, large areas of blanket bog have become de-vegetated and eroded. It is unclear at this stage whether the effects are irreversible. Attempts over recent decades to reverse these processes have achieved mixed and limited results. The combination of these effects means that most if not all of the blanket bog will not be classed as favourable according to English Nature's condition assessment criteria. Whilst all efforts can be made to control current factors such as current grazing and burning patterns, current</p>	

⁶ Natural England 30 June 2014 – version 2. <http://publications.naturalengland.org.uk/file/5166558741528576>.

Table B.2: South Pennine Moors SAC	
<p>atmospheric pollutant levels and access impacts, it is unclear whether this can fully mitigate the long-term influence of the historical factors such as atmospheric pollution, past burning and overgrazing. The situation is further complicated by a view that some erosion features can be considered natural phenomena of intrinsic interest. It may not therefore always be appropriate to try and revegetate bare peat even if suitable techniques exist.</p> <p>The former extensive cover of woodland has declined over many centuries to the point that it is fragmented, relatively small-scale and largely restricted to steeper valley sides. There is no woodland included in the site to the north of the National Park. Remaining woods are often unfenced and open to grazing which restricts tree regeneration. In some <i>Rhododendron</i> has invaded, choking out native flora. These issues are being tackled through the Forestry Commission's Woodland Grant Scheme and Challenge Fund for creating new native woodland, MAFF's North Peak ESA and English Nature's WES though more incentive and resources are needed. As well as restoring existing stands of woodland there is an emphasis on re-creation to expand and link fragments which inevitably involves changing existing habitats. This will raise questions over the balance of vegetation types we wish to see on the site but given woodland would naturally have covered much of the area we need to treat its expansion seriously. The flora of woodlands, quality as with bog and heath, has suffered from poor air quality. Again, it is less clear what can be done to reverse this situation other than to try and ensure continued improvements in air quality to allow affected species to recolonise if they can.</p>	
Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
<p>Heaths</p> <ul style="list-style-type: none"> • Appropriate heathland management is required to maintain the extent of the heaths, the structural diversity including undisturbed dwarf shrub, varied age structure and vegetational mosaic. Grazing plays an important role in this management. The control of inappropriate and invasive species is required. Specific grouse moor management contributes to the maintenance of habitat mosaic. • Maintaining hydrological conditions as wet heaths require wet soils during winter with a dry surface in summer. Also importance of water quality, including lack of eutrophication and maintenance of oligotrophic character. • Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths. 	<ul style="list-style-type: none"> • Maintenance of habitats on site • Heaths - Maintaining hydrological conditions. Water quality, including lack of eutrophication and maintenance of oligotrophic character. • Avoidance of fires. • Air quality - Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths. • Mires and bogs – changes in hydrology and maintenance of natural regimes, water quality, and water table levels.

Table B.2: South Pennine Moors SAC	
<p>Mires and Bogs</p> <ul style="list-style-type: none"> • Maintenance of habitat extent and species composition are important for this habitat, with some areas requiring management of scrub encroachment in addition to minimising the levels of trampling and damage from recreational activities including fire-setting. • Mires and Bogs are sensitive to changes in hydrology and maintenance of natural regimes, water quality, and avoidance of water table lowering are important factors. • Areas that have suffered previous damaging activities require enhancement including re-vegetation of bare peat, increased vegetational diversity in response to past heavy sheep grazing and a reduction of erosion through gullying. <p>Woodlands</p> <ul style="list-style-type: none"> • Appropriate woodland management is required in particular to maintain natural processes and create a diverse woodland structure, allow tree regeneration potential, control invasive species, and support characteristic species and habitat types. 	

Peak District Dales SAC

Table B.3: Peak District Dales SAC	
Name	Peak District Dales SAC UK0019859
Location with regards to plan area	Two of the component SSSI sites (Matlock Woods and Via Gellia Woodland) are within plan area; others are within the Peak District National Park, outside the Plan Area. (Total Area 2326 ha)
Reason(s) for designation:	
<p>ANNEX 1 habitats:</p> <p>Primary:</p> <ul style="list-style-type: none"> • 6210: Semi- natural dry grasslands and scrubland facies on calcareous substrates. • 9180: Tilio-Acerion forests of slopes, screes and ravines * Priority feature. <p>Non-primary:</p> <ul style="list-style-type: none"> • 4030: European Dry Heaths. • 6130: Calaminarian grasslands. • 7230: Alkaline Fens. • 8120: Calcareous and calcshist screes of the montane to alpine levels. • 8210: Calcareous rocky slopes with chasmophytic vegetation. 	<p>ANNEX II species:</p> <p>Primary:</p> <ul style="list-style-type: none"> • 1092: White-clawed (or Atlantic stream) crayfish. <p>Non Primary:</p> <ul style="list-style-type: none"> • 1096: Brook lamprey. • 1163: Bullhead.
SSSI component sites	<ul style="list-style-type: none"> • Ballidon Dale • Coombs Dale • Cressbrook Dale • Dove Valley and Biggin Dale • Hamps and Manifold Valleys

Table B.3: Peak District Dales SAC	
	<ul style="list-style-type: none"> • Lathkill Dale • Long Dale, Hartington • Long Dale and Grattonn Dale • Matlock Woods • Monks Dale • Wye Valley • Topley Pike and Deepdale • Via Gellia Woodlands
Conservation objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats and habitats of qualifying species • The structure and function (including typical species) of qualifying natural habitats • The structure and function of the habitats of qualifying species • The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely • The populations of qualifying species, and, • The distribution of qualifying species within the site.⁷
<p>Vulnerability</p> <p>The main threat to the limestone grasslands of the Peak District Dales is inappropriate grazing management. The ideal management for nature conservation purposes - light grazing throughout most of the year, with a break in grazing during the spring and early summer - tends to conflict with today's agricultural regimes. The result is either neglect and invasion by scrub, or overgrazing and the loss of the important vegetation communities. A number of the daleside grasslands are managed as part of a larger grazing unit with the richer improved plateau lands, with the result that any regulation of stocking levels in the dales becomes difficult. Some of the dalesides are now managed under Countryside Stewardship, which has brought about</p>	

⁷ Natural England 30 June 2014 – version 2. <http://publications.naturalengland.org.uk/file/5682327405461504>.

Table B.3: Peak District Dales SAC	
<p>considerable improvements in their management. Similarly since 1996 English Nature's White Peak Wildlife Enhancement Scheme has been successful in attracting land managers and enhancing the conservation value of sites.</p> <p>Proposed developments have the potential to interfere with drainage patterns within the site. The impact of dust from quarrying needs to be assessed. Potential adverse effects arising from such proposals will be dealt with under the provisions of the Habitats Regulations.</p> <p>The woodlands within the SAC occupy very steeply-sloping dalesides, where access is always going to be problematic, and development pressures are therefore limited. Existing permission for limestone or mineral extraction is a potential threat to some of the woodlands on one part of the site. This will be addressed through the planning review procedures under the Habitats Regulations. Neglect has resulted in invasion by non-native species in some woods. This is now being addressed where possible through management under a Wildlife Enhancement Scheme. In some areas access by grazing livestock to some of the woodlands has resulted in a degraded ground flora, and limited regeneration of the shrub and canopy species. Once again, this is to be addressed, wherever practicable, through the Wildlife Enhancement Scheme.</p> <p>The dominance of sycamore and its regeneration potential are a problem whilst it is considered a non-native part of the woodland. Removal of sycamore with the eventual aim of eradication would be a very long-term goal. Assessment of the status of sycamore (naturalised?) is needed to put in perspective eradication proposals. Some mature sycamore should be left as veterans. This will in part make up for the fact that there are few veteran trees in the woods. To have a natural and diverse age structure is therefore a long-term aspiration.</p> <p>In addition to grassland and woodland there are a range of scrub communities some of which are valuable for nature conservation. They are a key part of a natural woodland and an open daleside. The scrub also illustrates how neglected grassland will revert to woodland whilst grazed woodland may not regenerate. The balance between woodland, grassland and scrub needs to be struck.</p> <p>There will be a need to work closely with game fishing interests to ensure that fishery management does not adversely affect the freshwater features of the cSAC. The same is true of shooting tenants, who may impact on the overall ecology of the woodland.</p>	
Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
<p>Grasslands</p> <p>Sward structure and composition provide a valuable indication of habitat quality. Maintaining appropriate grazing or rotational cutting may be used to retain the presence of positive indicator species and prevent domination by rank grasses and scrub, though some scrub can be ecologically beneficial.</p> <p>Calaminarian Grasslands</p> <p>Maintenance of suitable habitat with characteristic species assemblages, and substrate enriched with heavy metals, areas of bare ground with characteristically short sward structure and suitably low levels of dead plant matter.</p>	<ul style="list-style-type: none"> • Grasslands – maintain management including appropriate grazing or rotational cutting • Calaminarian Grasslands - sporadic management such as occasional light grazing may be beneficial. • Heaths – maintain management including appropriate grazing and removal of inappropriate/invasive species.

Table B.3: Peak District Dales SAC	
<p>Sporadic management such as occasional light grazing may be beneficial.</p> <p>Woodlands</p> <p>Appropriate woodland management is required in particular to maintain natural processes and a diverse woodland structure, tree regeneration potential and a diverse age structure, control invasive species, and support characteristic species and habitat types.</p> <p>Heaths</p> <p>Without management heathland becomes progressively dominated by bracken, gorse and/or scrub and trees. Appropriate heathland management is therefore required to maintain the extent of the heaths, the structural diversity including undisturbed bare ground, age structure and vegetation mosaic. Grazing can play an important role in this management. The control of inappropriate and invasive species is required. Air quality must be maintained.</p> <p>Alkaline Fens</p> <p>Appropriate management, usually in the form of light grazing, is required to maintain sward structure and composition.</p> <p>The control of inappropriate and invasive species.</p> <p>Hydrology, water quality and air quality must be maintained. Although groundwater levels need to be high, standing water may be detrimental for alkaline fen communities.</p> <p>Calcareous rocky habitats</p> <p>Maintenance of the extent of habitat with characteristic pioneer calcicole and basiphilous species. Maintenance of natural processes such as erosion.</p> <p>Crayfish</p> <p>Maintenance of extent of habitat and water quality. The absence of introduced species and crayfish plague is especially important and can be introduced by human activity, therefore maintaining visitor awareness initiatives, sympathetic management of fishery practices and regular monitoring is important.</p> <p>Fish</p> <p>River's natural structure and form should be maintained to support a natural flow regime that will help ensure the provision of resting pools for fish, conserve the quality of the riverbed as fish spawning habitat, and avoid the creation of artificial barriers to the passage of migratory fish.</p>	<ul style="list-style-type: none"> • Woodland – maintain appropriate management. • Alkaline fens - Air quality, water quality and water levels. • Calcareous rocky habitats - Maintenance of natural processes such as erosion • Crayfish - Maintenance of extent of habitat and water quality. Absence of introduced species and crayfish plague. Maintain visitor awareness initiatives, sympathetic management of fishery practices and regular monitoring. • Fish - Bullhead and Brook Lamprey – Maintain rivers' natural structure and form. Avoid creation of artificial barriers. Maintain sustainable fish populations.

Table B.3: Peak District Dales SAC	
Any exploitation of fish populations or other native animals or plants should be at a sustainable level, without manipulation of the river’s natural capacity to support them or augmentation by excessive stocking.	

Cannock Chase SAC

Table B.4: Cannock Chase SAC	
Name	Cannock Chase SAC UK0030107
Location with regards to plan area	Outside of Plan Area. Approximately 17 km from Doveridge
Reason(s) for designation	
<p>ANNEX 1 habitats</p> <p>Primary:</p> <ul style="list-style-type: none"> • 4030 European dry heaths <p>Non-primary:</p> <ul style="list-style-type: none"> • 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> 	
SSSI component site	Cannock Chase SSSI
Conservation objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats • The structure and function (including typical species) of qualifying natural habitats, and, • The supporting processes on which the qualifying natural habitats rely⁸

⁸ Natural England 30 June 2012 – version 2. <http://publications.naturalengland.org.uk/file/4569187175366656>.

Table B.4: Cannock Chase SAC	
<p>Vulnerability</p> <p>Much of Cannock Chase falls within a popular and well-used Country Park. Visitor pressures include dog walking, horse riding, mountain biking and off-track activities such as orienteering, all of which cause disturbance and result in erosion, new track creation and vegetation damage.</p> <p>Bracken invasion is significant, but is being controlled. Birch and pine scrub, much of the latter from surrounding commercial plantations, is continually invading the site and has to be controlled. High visitor usage and the fact that a significant proportion of the site is Common Land, requiring Secretary of State approval before fencing can take place, means that the reintroduction of sustainable management in the form of livestock grazing has many problems.</p> <p>Cannock Chase overlies coal measures which have been deep-mined. Mining fissures continue to appear across the site even though mining has ceased and this is thought to detrimentally affect site hydrology. Furthermore the underlying Sherwood Sandstone is a major aquifer with water abstracted for public and industrial uses and the effects of this on the wetland features of the Chase are not fully understood.</p>	
Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
<p>Heaths: Without management heathland becomes progressively dominated by bracken, gorse and/or scrub and trees. Appropriate heathland management is therefore required to maintain the extent of the heaths, the structural diversity including undisturbed bare ground, age structure and vegetation mosaic. Grazing can play an important role in this management. The control of inappropriate and invasive species is required. Air quality must be maintained.</p> <p>Woodlands: Appropriate woodland management is required in particular to maintain natural processes and a diverse woodland structure, tree regeneration potential and a diverse age structure, control invasive species, and support characteristic species and habitat types.</p> <p>Water regime: Maintaining hydrological conditions and water chemistry. The Oldacre and Sherbrook valleys have small-scale mosaics of spring-fed mire and wet heath vegetation, a result of complex water chemistry.</p>	<ul style="list-style-type: none"> • Recreational damage to vegetation composition and structure as well as erosion; • Maintenance of habitats on site. • Maintenance of suitable air, water and soil quality. • Maintaining hydrological conditions. • Control of invasive species.

Table B.4: Cannock Chase SAC	
<p>Recreation: Management of visitors is necessary to avoid damage to habitats and disturbance of species.</p> <p>Soil chemistry: Maintenance of soil chemistry which affects plant assemblages. Where acidic conditions prevail the mires are mostly formed of bog mosses <i>Sphagnum</i> spp. with cranberry <i>Vaccinium oxycoccus</i>, cottongrasses <i>Eriophorum</i> spp. and cross-leaved heath <i>Erica tetralix</i>.</p>	

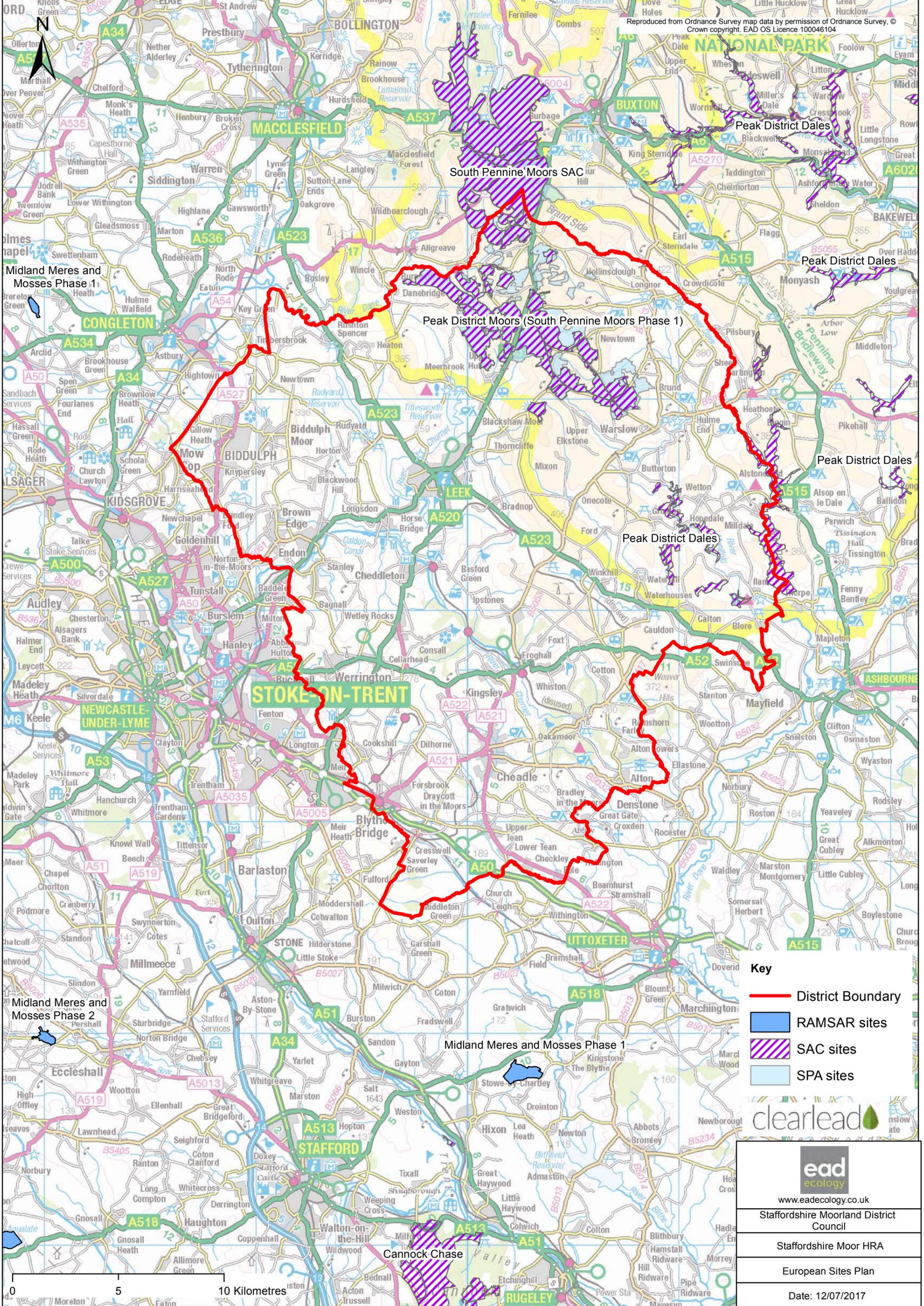
4 Annex C: Figures

4.1 Introduction

This annex presents the following maps:

- Figure C.1: European sites and A Roads in relation to Local Plan Area;
- Figure C.2: Proposed allocation sites (as at June 2017) in relation to the European sites; and
- Figure C.3: Buffer Zones around European sites.

Figure C.1: European sites and A Roads in relation to Local Plan Area



Midland Meres and Mosses Phase 1

Midland Meres and Mosses Phase 2

South Pennine Moors SAC

Peak District Moors (South Pennine Moors Phase 1)

Peak District Dales

Peak District Dales

Peak District Dales

Peak District Dales

- Key**
-  District Boundary
 -  RAMSAR sites
 -  SAC sites
 -  SPA sites



www.eadeology.co.uk

Staffordshire Moorland District Council

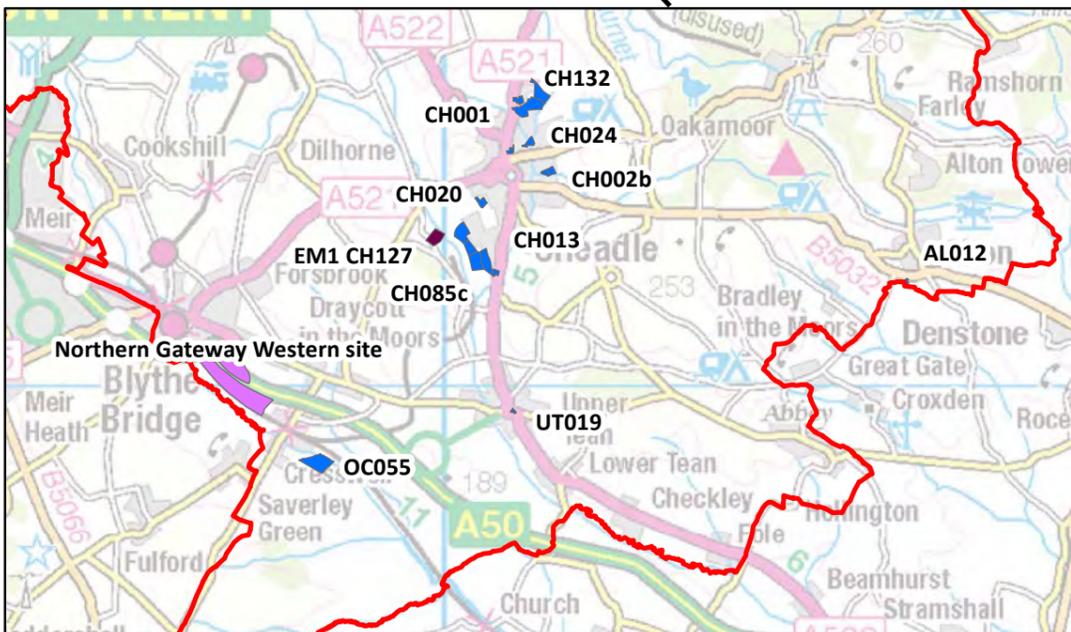
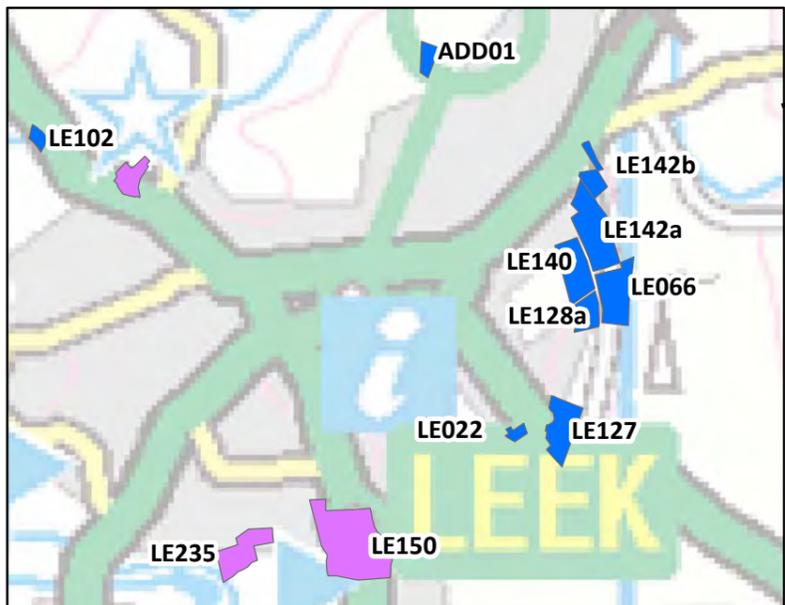
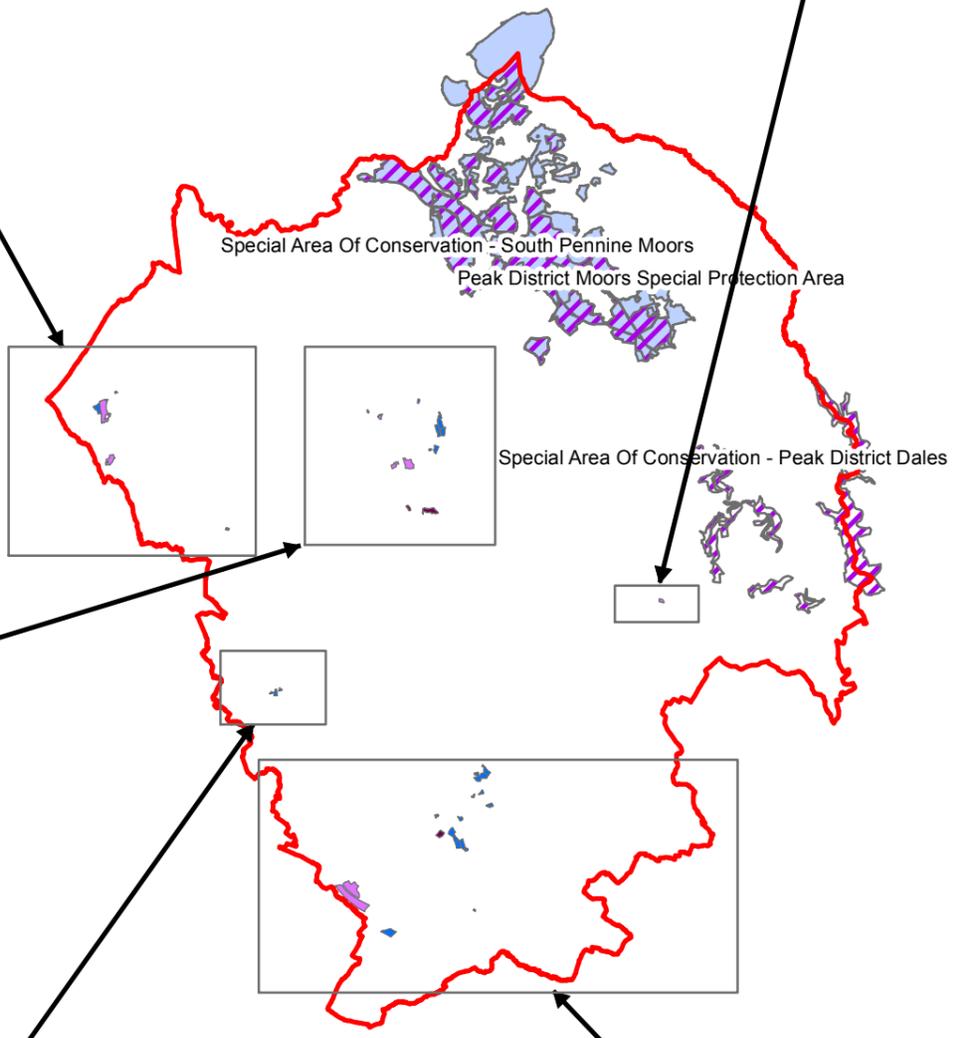
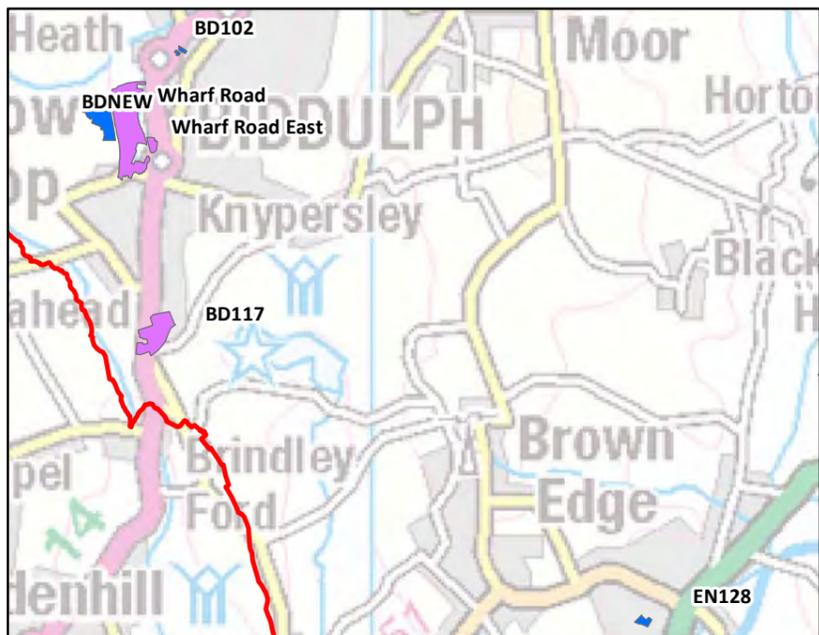
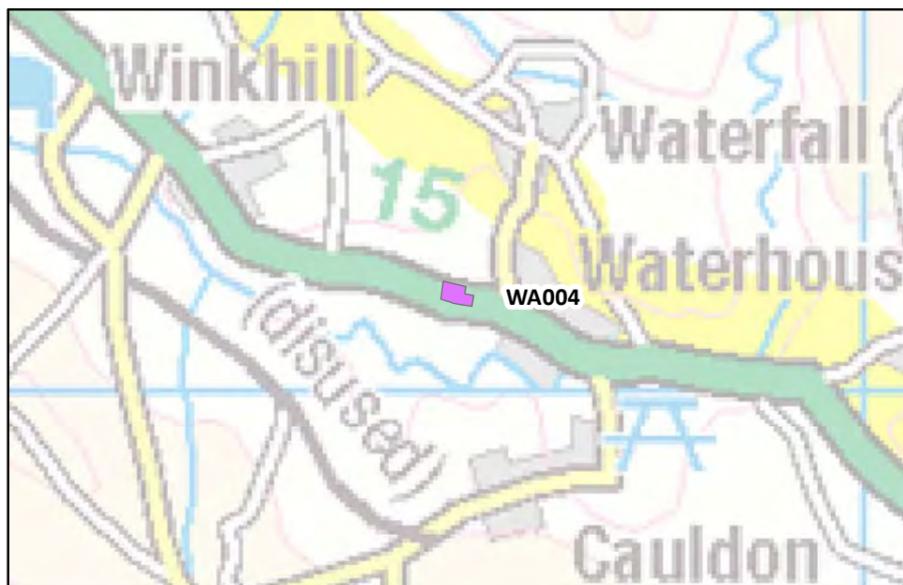
Staffordshire Moor HRA

European Sites Plan

Date: 12/07/2017

0 5 10 Kilometres

Figure C.2: Proposed allocation sites (as at June 2017) in relation to the European sites



- Key**
- SAC
 - SPA
 - District Boundary
 - Preferred Employment Allocation
 - Preferred Mixed Use Allocation
 - Preferred Housing Allocation

clearlead



www.eadecology.co.uk

Staffordshire Moorland District Council

Staffordshire Moorland HRA

Site Allocation Plan

Date: 21/06/2017

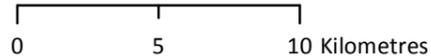
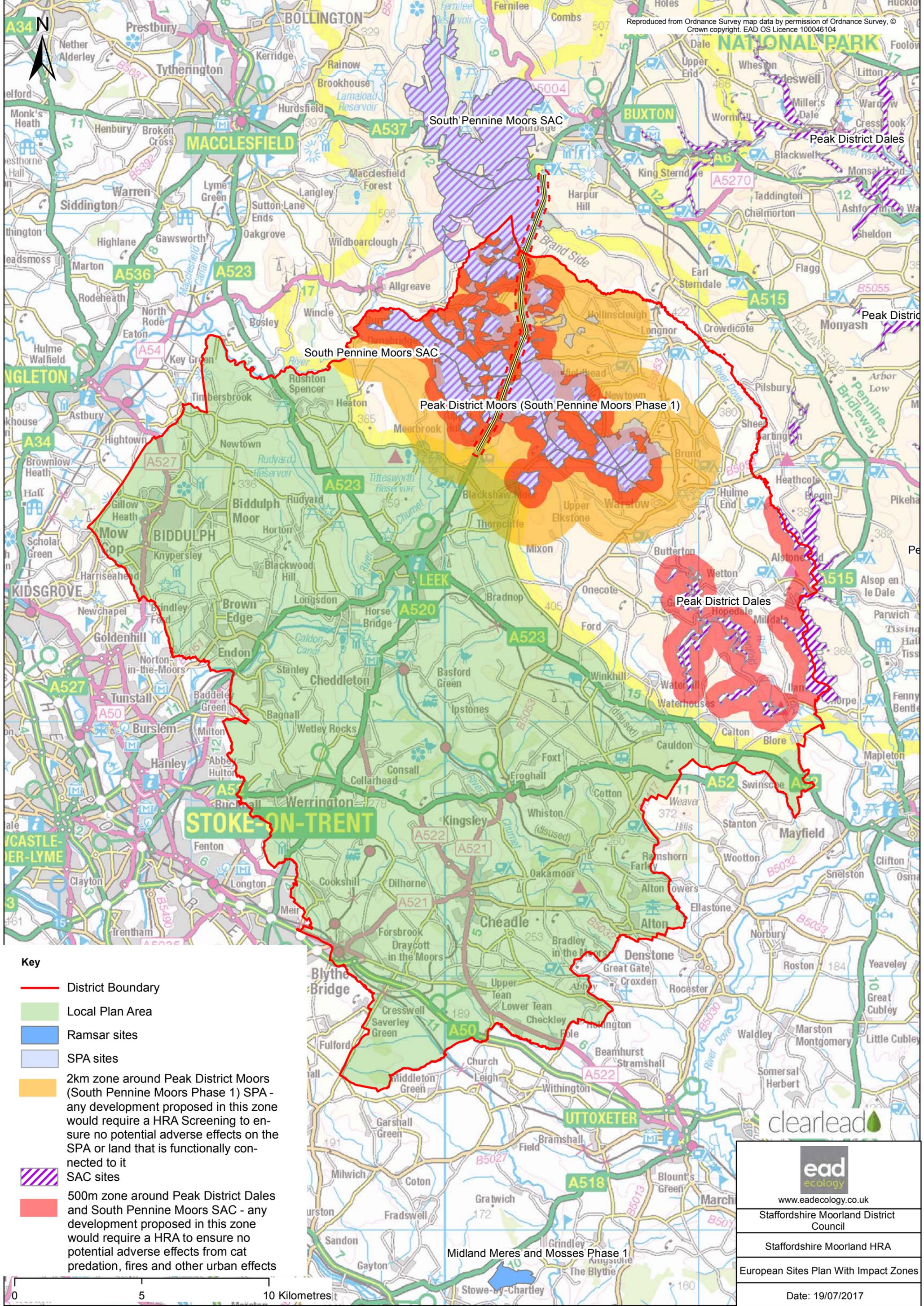


Figure C.3: Buffer Zones around European sites



- Key**
- District Boundary
 - Local Plan Area
 - Ramsar sites
 - SPA sites
 - 2km zone around Peak District Moors (South Pennine Moors Phase 1) SPA - any development proposed in this zone would require a HRA Screening to ensure no potential adverse effects on the SPA or land that is functionally connected to it
 - SAC sites
 - 500m zone around Peak District Dales and South Pennine Moors SAC - any development proposed in this zone would require a HRA to ensure no potential adverse effects from cat predation, fires and other urban effects



clearlead



www.eadeecology.co.uk

Staffordshire Moorland District Council
Staffordshire Moorland HRA
European Sites Plan With Impact Zones
Date: 19/07/2017

5 Annex D: Screening Results

5.1 Introduction

This annex sets out the findings of the screening of the emerging Local Plan policies in which has taken place in two stages; the main policy screening in November 2016 and the proposed site allocations and associated policies in June 2017 (policy wording as at 27 June 2017). The screening assessment considered the potential for Likely Significant Effects (LSEs) of each of the allocation sites and policies in turn.

The methodology for screening policies (i.e. no LSE identified) is in line with HRA guidance prepared by DTA Publications⁹ and for Scottish National Heritage¹⁰. These guidance documents suggest reasons for screening policies out of the HRA, as follows:

- A general statement of policy sets out a strategic aspiration for the plan-making body for a certain issue. A general 'criteria based' policy expresses the tests or expectations of the plan-making body when it comes to consider particular proposals. General Policy (GP) statements and general criteria based policies have been screened out of the HRA and are identified within the screening table (in Table D.6) as 'GP';
- Policies intended to protect the natural or built environment (Protection Policies (PP)) have been screened out and identified within the screening table as 'PP';
- Policies have been screened out which, although they promote development or change, it is so general that it is not known where, when or how the aspect of the plan may be implemented, or where any potential effects may occur, or which European sites, if any, may be affected. Such policies are identified within the screening table as 'TG' (Too General). European sites will be protected from any development resulting from these policies by Local Plan Policy NE1 – Biodiversity and Geological Resources.
- Policies which could have no conceivable effect on a European site because no impact pathway is identified are identified as 'NP' (No Pathway).
- Policies for which a potential for a significant effect has been identified but for which adequate mitigation / avoidance measures have been built into the policy wording are identified as 'ME' (Mitigated Effect).

⁹ The Habitat Regulations Handbook, DTA Publications available via subscription only at <http://www.dtapublications.co.uk/>.

¹⁰ Habitats Regulations Appraisal of Plans: Guidance for plan-making bodies in Scotland v2.0 (David Tyldesley and Associates; August 2012). Note although this guidance was originally prepared for Scottish Natural Heritage it is recognised as an authoritative source of guidance throughout the UK

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak Moors (South Pennine Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
SS1 – DEVELOPMENT PRINCIPLES	GP	GP	GP	GP	Policy has not altered significantly from the version included in the Core Strategy.
SS1A - PRESUMPTION IN FAVOUR OF SUSTAINABLE DEVELOPMENT	GP	GP	GP	GP	Policy has not altered significantly from the version included in the Core Strategy.
SS2 – SETTLEMENT HIERARCHY	GP	GP	GP	GP	This is a new policy which adopts the same hierarchy as the Core Strategy. The policy removes reference in the Core Strategy to infill boundaries being proposed in Smaller Villages as they are no longer proposed. A criteria based policy is proposed to apply instead (see Policy H1).
SS3 – FUTURE PROVISION AND DISTRIBUTION OF DEVELOPMENT	✓	✓	✓	NP	Increased dwellings to be provided from 6000 to 6080 and changes the plan period from 2006 to 2026 to 2012 to 2031. Increases employment land provision from 25ha during 2006 to 2026 to 27 ha up to the year 2031.

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations							
Policy Name	Peak Moors (South Pennine Phase 1) SPA	District Moors (South Pennine Moors SAC	South Pennine Moors SAC	Peak Dales SAC	District SAC	Cannock Chase SAC	Comments
							<p>The growth proposed could increase the population by +8,471 and this could increase recreation pressure, air pollution and water extraction which could affect the European sites indicated to the left. Increased housing and employment land provision could result in LSEs depending on the location of allocation sites and this is dealt with under the screening of policies E2 Employment Allocations and H2 Housing Allocations, below.</p> <p>A general increase in population within the district is not likely to result in an LSE on Cannock Chase SAC, only if a development were very close to the Cannock Chase SAC zone of influence which skims the southern tip of the District.</p> <p>The distribution of development is the same as the Core Strategy policy apart from the % of District's housing requirement to be met in Cheadle has been increased to 25% and reduced to 25% in the Rural Areas to reflect the supply of suitable sites and Green Belt constraints.</p>

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
					Any neighbourhood plan proposed for adoption within the district will need to be screened for potential effects on European designated sites.
POLICY SS4 STRATEGIC HOUSING DEVELOPMENT HOUSING LAND SUPPLY AND DISTRIBUTION	✓	✓	✓	NP	This policy identifies amounts of housing directed to settlements and differentiates between urban extension and development within existing urban areas. Development in Leek especially could result in LSEs on the sites indicated. An LSE is identified in relation to potential recreational pressure and traffic / air pollution in combination effects from housing and employment growth at Leek.
SS5 – LEEK AREA STRATEGY	GP	GP	GP	NP	The Leek area strategy itself does not allocate development sites. Policy E2 Employment Allocations and Policy H2 Housing Allocations allocate development sites.
SS6 – BIDDULPH AREA STRATEGY	NP	NP	NP	NP	This policy itself does not allocate development sites. Policy E2 Employment Allocations and policy H2 Housing Allocations allocate development sites.

Policy Name	Peak Moors (South Pennine Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
SS7 – CHEADLE AREA STRATEGY	NP	NP	NP	NP	This policy itself does not allocate development sites. Policy E2 Employment Allocations and policy H2 Housing Allocations allocate development sites.
SS8 – LARGER VILLAGES AREA STRATEGY	✓	✓	✓	NP	<p>Policy supports housing development in the larger villages identified. Allocations in such villages have been screened in relation to Policy HC2 below. Some allocations in the larger villages could result in LSEs, due to their proximity to the European sites. See Figure C.3 in Annex C.</p> <p>There are no preferred options allocations within or near to 15km of Cannock Chase and very little potential for small infill developments to have a significant effect on Cannock Chase SAC.</p>
SS9- SMALLER VILLAGES AREA STRATEGY	✓	✓	✓	NP	Development in some smaller villages could potentially result in LSEs due to their proximity to European sites. Some are located close enough to the European sites to require HRA screening. See Figure C.3 in Annex C.

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
					There are no preferred options allocations within 15km of Cannock Chase and very little potential for small infill developments to have a significant effect on Cannock Chase SAC.
SS10 – OTHER RURAL AREAS STRATEGY	ME	ME	TG	TG	The policy contains the following wording which will ensure that any potential adverse effects on European sites are avoided: <i>“Any development proposal that might have the potential to affect a European or Ramsar Site must itself be subject to appropriate assessment and also a rigorous environmental impact assessment to determine potential effects on ecology, protected species and site integrity.”</i>
SS11 – CHURNET VALLEY AREA STRATEGY	?	?	?	NP	The Churnet Valley is identified as an area for sustainable tourism and rural regeneration. The Churnet Valley Masterplan provides a comprehensive framework for development in the Churnet Valley and development should be in accordance with the Masterplan. Within this area particular support will be given to:

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak Moors (South Pennine Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
					<ul style="list-style-type: none"> • short stay and long stay visitor accommodation; • the expansion of existing tourist attractions and facilities and the provision of compatible new tourist attractions and facilities; and • actions to protect and enhance the biodiversity of the valley, including the maintenance, buffering and connection of designated sites and actions to mitigate climate change. <p>The HRA of the Churnet Valley Masterplan concluded that it would not result in any LSEs on European sites within the area. An aim of the Masterplan is to attract and hold tourists within the Churnet Valley and it may complement and ease pressures on the neighbouring Peak District National Park.</p> <p>Although LSEs from this policy alone are not identified, uncertainty is recorded in the screening because this policy will need to be considered for potential in combination effects with the policies which direct housing growth to Leek – Policy SS6 (Leek Area</p>

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak Moors (South Pennine Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
					Strategy) and Policy SS7 (other rural areas) along with the allocation sites listed in Policy HC2 and EC2.
SS12 - PLANNING OBLIGATIONS AND COMMUNITY INFRASTRUCTURE LEVY	NP	NP	NP	NP	
SD1 - SUSTAINABLE USE OF RESOURCES	PP	PP	PP	PP	This policy aims to reduce carbon emissions which should have an indirect benefit on European sites through reductions in air pollution and reduction in contributions to climate change. This policy also seeks the efficient use of resources including water, which could have an indirect benefit for the European sites some of which contain habitats vulnerable to change in water regimes.
SD2 - RENEWABLE / LOW CARBON ENERGY	ME	ME	ME	NP	This policy sets out that Council will assess wind turbine schemes in line with the Government's specific policy on wind turbines. For all other forms of renewable energy the Council will support small and large-scale stand alone renewable or low-carbon

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
					energy schemes subject to the impact on designated sites of European (or successor), national and local biodiversity and geological importance in accordance with policy NE1.
SD3 – SUSTAINABILITY MEASURES IN DEVELOPMENT	PP	PP	PP	PP	This policy aims to reduce carbon emissions which should have an indirect benefit on European sites through reductions in air pollution and reduction in contributions to climate change
SD4 – POLLUTION	PP	PP	PP	PP	This policy provides protection to European sites from pollution.
SD5 – FLOOD RISK	NP	NP	NP	NP	
E1 – NEW EMPLOYMENT DEVELOPMENT	TG	TG	TG	NP	
E2 – EMPLOYMENT ALLOCATIONS	✓	✓	✓	NP	Employment allocations in the Leek area could result in effects on air quality which require further investigation in the HRA, both alone and in

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak Moors (South Pennine Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
					combination with residential developments and growth in neighbouring areas.
E3– EXISTING EMPLOYMENT AREAS	NP	NP	NP	NP	
E4 – TOURISM & CULTURAL DEVELOPMENT	ME	ME	ME	NP	<p>This policy does not actively promote significant new tourism development. The potential effects of tourism development are an increase in traffic and air pollution, which could affect European sites.</p> <p>The policy requires new tourism developments to have good connectivity with tourism destinations and amenities particularly by public transport, walking and cycling. It is considered that this policy mitigates for potential effects and is therefore screened out of the HRA.</p>
E5 – RURAL ECONOMY	TG	TG	TG	NP	
H1 – NEW HOUSING DEVELOPMENT	TG	TG	TG	TG	

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations						
Policy Name	Peak Moors (South Pennine Phase 1) SPA	District Moors (South Pennine Moors SAC)	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
H2 – HOUSING ALLOCATIONS	✓	✓	✓	✓	NP	<p>There are no preferred options allocations within 15km of Cannock Chase and very little potential for small infill developments to have a significant effect on Cannock Chase SAC.</p> <p>LSEs relating to urban effects are identified resulting from the following allocation sites:</p> <ul style="list-style-type: none"> • Waterhouse (WA004) located approx. 1950m from the Peak District Dales SAC; and • Allocated sites on the eastern edge of Leek (LE066, LE140, LE128a, LE142 a and b) located between 3.8km and 4.2km from the Peak District SPA and the South Pennine Moors SAC. <p>LSEs relating to air quality are identified in relation to all of the allocation sites in Leek because they may increase traffic. Potential in combination effect with employment allocations in Leek and development in neighbouring areas.</p>

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak Moors (South Pennine Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
H3 – AFFORDABLE HOUSING	TG	TG	TG	TG	
H4 – GYPSY AND TRAVELLER SITES AND SITES FOR TRAVELLING SHOWPEOPLE	TG	TG	TG	TG	
TCR1 – DEVELOPMENT IN THE TOWN CENTRES	NP	NP	NP	NP	
TCR2 – PRIMARY SHOPPING FRONTAGES	NP	NP	NP	NP	
TCR3 - RETAILING AND OTHER TOWN CENTRE USES OUTSIDE TOWN CENTRES	NP	NP	NP	NP	
DC1 – DESIGN CONSIDERATIONS	NP	NP	NP	NP	

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations						
Policy Name	Peak Moors (South Pennine Phase 1) SPA	District Moors (South Pennine Moors SAC	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
DC2 – THE HISTORIC ENVIRONMENT	NP		NP	NP	NP	
DC3 – LANDSCAPE AND SETTLEMENT SETTING	NP		NP	NP	NP	
DC4 – LOCAL GREENSPACE	PP		PP	PP	PP	The protection of local greenspace resources within the Plan Area could help to alleviate recreation pressure on the European sites.
C1 – CREATING SUSTAINABLE COMMUNITIES	TG		TG	TG	TG	
C2 – SPORT, RECREATION AND OPEN SPACE	TG		TG	TG	TG	
C3 – GREEN INFRASTRUCTURE	PP		PP	PP	PP	The protection and enhancement of green infrastructure resources within the Plan Area could help to alleviate recreation pressure on the European sites.

Policy Name	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
NE1 – BIODIVERSITY AND GEOLOGICAL RESOURCES	PP	PP	PP	PP	The policy seeks to conserve and enhance biodiversity and geological resources through positive management and strict control of development. The policy goes on to state that the District Council will resist “ <i>any proposed development that could have an adverse effect on the integrity of a European site (or successor designation) alone or in combination with other plans or projects unless it can be demonstrated that the legislative provisions to protect such sites can be fully met</i> ”. This policy therefore provides adequate protection for any development proposals which come forward through the planning application process which could have a potential adverse effect on a European site and therefore mitigates for any development resulting from the Local Plan policies for which locations are currently unknown, e.g. some housing or commercial developments.
T1 – DEVELOPMENT AND SUSTAINABLE TRANSPORT	TG	TG	TG	TG	

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
T2 – OTHER SUSTAINABLE TRANSPORT MEASURES	TG	TG	TG	TG	
Policy DSL1 - Land at Horsecroft Farm, Leek(ADD1)	✓	✓	✓	NP	LSEs relating to air quality are identified in relation to all of the allocation sites in Leek because they may increase traffic, alone and in combination with other allocations in Leek and development in neighbouring areas.
Policy DSL2 - Land at The Mount, Leek	✓	✓	✓	NP	LSEs relating to air quality are identified in relation to all of the allocation sites in Leek because they may increase traffic, alone and in combination with other allocations in Leek and development in neighbouring areas.
Policy DSL3 – Land at Newton House, Leek	✓	✓	✓	NP	LSEs relating to air quality are identified in relation to all of the allocation sites in Leek because they may increase traffic, alone and in combination with other allocations in Leek and development in neighbouring areas.

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
Policy DSL4 – Cornhill East Masterplan Site, Leek	✓	✓	✓	NP	LSEs relating to air quality are identified in relation to all of the allocation sites in Leek because they may increase traffic, alone and in combination with other allocations in Leek and development in neighbouring areas.
Policy DSL5 - Undeveloped Land at Sainsburys, Churnet Works, Leek	✓	✓	✓	NP	LSEs relating to air quality are identified in relation to all of the allocation sites in Leek because they may increase traffic, alone and in combination with other allocations in Leek and development in neighbouring areas.
Policy DSB1 – Wharf Road Strategic Development Area	NP	NP	NP	NP	
Policy DSB2 – Biddulph Mills	NP	NP	NP	NP	
Policy DSB3 – Tunstall Road Strategic Development Area	NP	NP	NP	NP	

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
(opposite Victoria Business Park)					
Policy DSC1 – Cheadle North Strategic Development Area (CH001 and CH132)	NP	NP	NP	NP	
Policy DSC2 – Cecilly Brook Strategic Development Area (CH002a & CH002b, CH024)	NP	NP	NP	NP	
Policy DSC3 – Mobberley Farm, Cheadle (CH085A, CH085B, CH085C, CH085D and CH128)	NP	NP	NP	NP	
Policy DSR1 Blythe Vale	NP	NP	NP	NP	

Table D.1: Findings of the Screening of Preferred Options Policies and Site Allocations					
Policy Name	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Cannock Chase SAC	Comments
Policy DSR2 Land east of Brooklands Way, Leekbrook	NP	NP	NP	NP	
Policy DSR3 Land west of Basford Lane, Leekbrook	NP	NP	NP	NP	
Policy DSR4 Land off Ash Bank Road WE003 & WE052	NP	NP	NP	NP	

6 Annex E: Traffic Assessment

Staffordshire Moorlands Habitat Regulations Assessment Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors Special Area of Conservation (SAC) A53 Air Quality Assessment for Transport Related Emissions

Methodology

The A53 Leek to Buxton road passes within 200m of the South Pennine Moors protected sites. This report gives consideration to the potential air quality impacts of the delivery of the Local Plan on these sites to gauge the significance of the potential effect.

The Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 1 guidance for the assessment of traffic related air quality impacts requires the consideration of do-minimum and do-something scenarios for the years to be assessed. The end of the Local Plan (2031) forms the year of assessment and the do-minimum scenario includes background traffic growth determined using TEMPRO 7. The do-something scenario includes background traffic growth and all local plan development likely to impact on the A53 N.

The DMRB methodology requires the identification of affected roads. Affected roads are those that meet the following criteria:

- road alignment will change by 5m or more; or
- daily traffic flows will change by 1,000 AADT or more; or
- Heavy Duty Vehicles (HDV) flows will change by 200 AADT or more; or
- daily average speed will change by 10kph or more; or
- peak hour speed will change by 20kph or more.

Background Traffic Growth

A permanent traffic count is located at Blackshaw Moor, see figure 1. Data for the entirety of 2015 was utilised to produce a baseline AADT figure of 6154 two way movements. An estimate of the proportion of HGVs using the A53N has been taken from a classified traffic count (March 2013) which shows that two-way there was 10.1% HGVs. HGVs are defined as vehicles in excess of 6.5 metres in length.

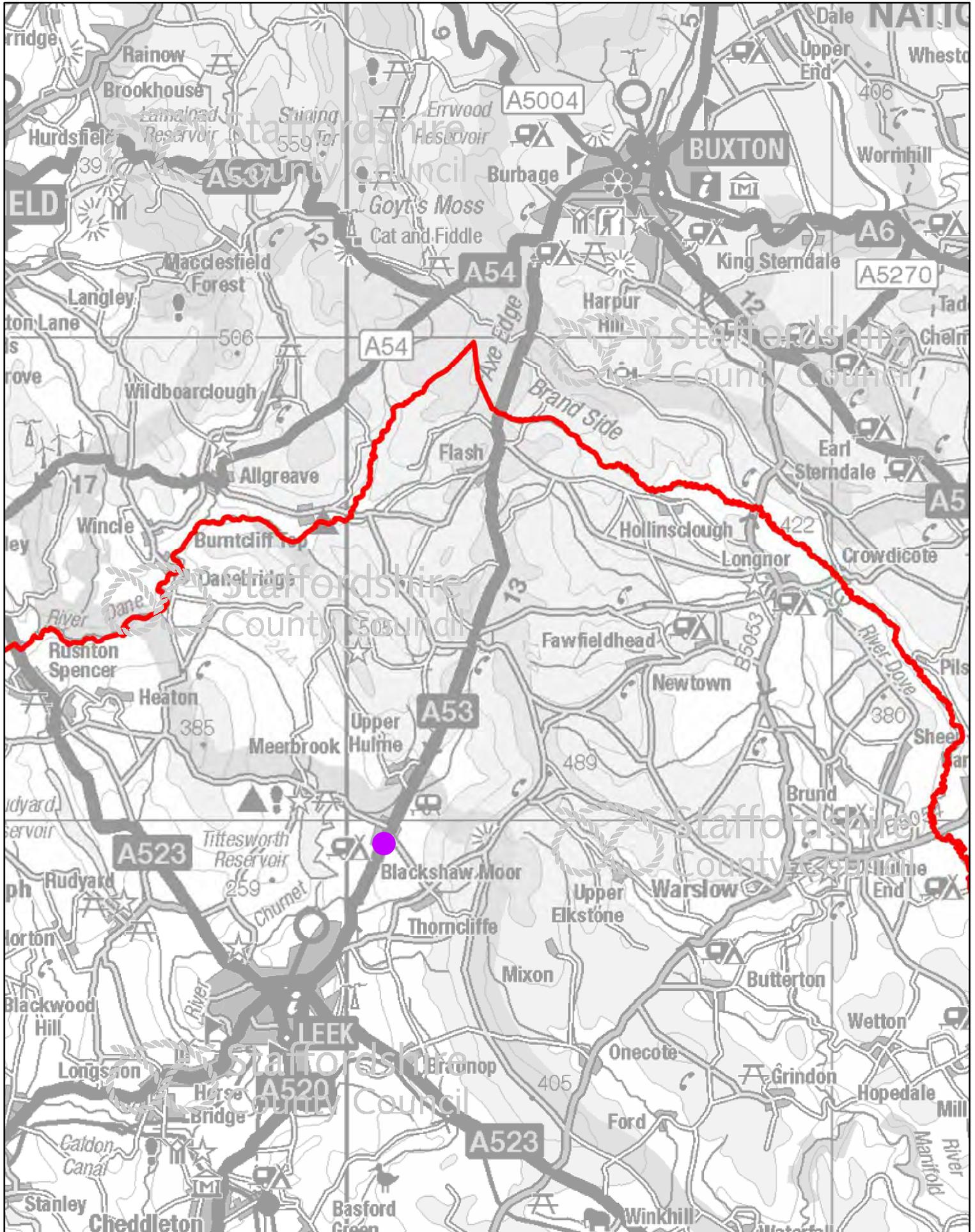
TEMPRO 7 was utilised to determine background traffic growth. The following three zones were selected to reflect the study area of Leek:

- E02006204 Staffordshire Moorlands 001
- E02006208 Staffordshire Moorlands 005
- E02006209 Staffordshire Moorlands 006

Alternative planning assumptions were applied to retain existing numbers of households and jobs to provide an estimate for background growth alone; excluding development. Growth was calculated between the year of baseline

data, 2015 and the end of the Local Plan period, 2031. Traffic is forecast to grow by 22.41% between 2015 and 2031 resulting in a two way do-minimum AADT figure of 7533 in 2031.

Location of A53 Traffic Count



(C) Crown Copyright and database rights 2016. Ordnance Survey 100019422.
You are not permitted to copy, sub-license, distribute or sell any of this data to third parties in any form.
Use of this data is subject to the terms and conditions shown at www.staffordshire.gov.uk/maps
Produced by Staffordshire County Council, 2016.



Local Plan Development

The Churnet Valley Masterplan Transport Study, 2013 quantifies the forecast traffic impact of the majority of relevant Local Plan development. The report included the following development that may affect A53 Leek to Buxton road:

- Cornhill mixed use site comprising 100 residential units, 25,000 sq. m B1 and B2 employment and tourism and leisure uses (rail terminus and marina);
- Bolton Copperworks mixed use site comprising 50 residential units, 10,500 sq. m B1 and B2 employment, 50 bed hotel, pub/ restaurant, visitor centre and outdoor activity centre;
- Moneystone Quarry tourism and leisure site comprising 250 holiday lodges and 100 bed hotel; and
- 800 residential dwellings located in Leek.

Since the completion of this study the following changes to Local Plan development have occurred:

- Evolution of Cornhill proposals changing the quantum of development. The assessment made in Churnet Valley Masterplan Transport Study is considered to be a very robust assessment and has been utilised.
- Broad Area EM2 (located in Leekbrook) employment site comprising 7.66ha of either B2 or B8. For the purpose of this traffic calculation it has been assumed to deliver B2 employment as the trips generated would be greater than for B8 development.
- ADD09 employment site comprising 1.67ha B1, B2 and B8.
- Newton House, Leek mixed use site comprising 3.25ha of B1, B2 and B8 employment and 179 dwellings.

Traffic Impact

The transport study and transport assessment for Broad Area EM2 considered the traffic generations during peak hours. To provide AADT flows this information has been translated into daily traffic generations and applied to the same distributions. Trip rate data has been taken from TRICS and where a maximum of 12 hour generations were provided, for example, then this is assumed to represent all of the expected trips over a 24 hour period.

Broad Area EM2

Although Broad Area EM2 has a transport assessment (SMD/2014/0678) the area of assessment is not sufficiently wide to provide a forecast of trips using the A53 Leek to Buxton road. For the purposes of this assessment, the distribution of trips for Broad Area EM2 has been assumed to match that of the Cornhill B1 and B2 employment development which is located at the southern edge of Leek nearby. The transport study distributed 72% of trips externally of Leek and 4% of those are expected to use the A53 N.

The Transport Assessment for Broad Area EM2 provides 12 hour trip rates for B2 development as shown below. The site has a gross area of 7.66ha and a developable floor space of 20,000 sq. m.

ADD09

Trip rates have been generated for employment site ADD09 assuming one of third for each B1, B2 and B8 employment development types. The gross site area is 1.67ha and it has been assumed that this would deliver approximately 5845 sq. m of employment development.

For the purposes of this assessment, the distribution of trips for Broad Area EM2 has been assumed to match that of the Cornhill B1 and B2 employment development which is located at the southern edge of Leek nearby. The transport study distributed 72% of trips externally of Leek and 4% of those are expected to use the A53 N.

Newton House, Leek

The employment development has been assumed to take the same distribution as the employment element of Cornhill resulting in a distribution of 72% of trips externally of Leek and 4% of those are expected to use the A53 N in each of the AM and PM peaks for both arrivals and departures. For the residential development the same distribution as the Leek residential development element of the Churnet Valley Master Plan transport study was applied. It is expected that 49% of residential trips will be made externally of Leek and of those 5% will use the A53N.

Churnet Valley Master Plan Transport Study

Many of the relevant developments were included in the transport study to support the Churnet Valley Master Plan. AM and PM peak hour traffic generations were included in the transport study. These have been multiplied to represent a full day of vehicle trips by interrogating TRICS to obtain a multiplier for each land use type.

Cornhill

Employment trips were based on the Cornhill Transport Assessment 2009 and the TRICS output included in that document provided the multiplier for the employment trips (B1 and B2). TRICS database was interrogated for the residential and marina trips. For the housing and employment trips AADT has been represented by an average weekday and Saturday trips were utilised for the marina and tourist railway for robustness.

For the tourism railway use the transport study (p35) assumed an even spread of vehicle arrivals between 0900 and 1500, dropping thereafter. To estimate a full day of trips the Saturday peak hour trips have been multiplied by 7 hours to include an additional hour after the even spread of vehicles.

For all land use types the transport study distributed 72% of trips externally of Leek and 4% of those are expected to use the A53 N.

Bolton Copperworks

The employment multiplier to estimate daily trips was taken from Cornhill. AM and PM peak trips were used to estimate daily flows for the employment, residential, hotel and pub/ restaurant development. Saturday peak trips were used to generate daily trips for the tourist complex.

For all land use types the transport study distributed 81% of trips externally of Leek and 4% of those are expected to use the A53N.

Moneystone Quarry

The transport study showed that no trips are expected to use the A53 between Leek and Buxton.

Residential Development in Leek

TRICS was interrogated to derive daily trip trips from the AM and PM weekday peak flows. Sites of up to 200 properties were selected as the 800 houses will be built across a number of sites. It is expected that 49% of residential trips will be made externally of Leek and of those 5% will use the A53N.

Forecast Impact

It is estimated that an additional **267 vehicles** will use the A53 between Leek and Buxton (two way flow) over an average day, see figure 2 below. Assuming the same proportion of HGVs are generated from the development as currently use the A53 N (10.1%) then there will be an additional **27 heavy vehicles**. None of the land uses proposed through the Local Plan are expected to be significantly high generators of heavy vehicles.

The total number of vehicles using the A53N is expected to be 7800 AADT (7533 + 267) of which approximately 788 (761 + 27) are likely to be HGVs.

These figures are below the thresholds set by the DMRB to assess air quality changes and therefore it is concluded that the road is not materially affected by the proposed Local Plan development in terms of air quality.

Figure 2: Local Plan Development Traffic using A53N

Local Plan Development	Daily Trips on A53N		
	Arrivals	Departures	Total
Broad Area EM2	18	19	37
ADD09	6	7	13
Newton House Leek - employment	12	12	12
Newton House Leek - residential	9	10	19
Cornhill	28	32	60
Bolton Copperworks	21	25	46
Moneystone Quarry	0	0	0
Leek residential development	54	58	112
Total	127	140	267