



Derbyshire Dales Local Plan – Pre Submission Draft Habitats Regulations Report



**Prepared on behalf of:
Derbyshire Dales District Council**

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

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Author (signature):	V Pearson 
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Separate Annexes Document

Annex A: Correspondence with Natural England

Annex B: Detailed Information about European Sites

Annex C: Maps

Annex D: Screening of Preferred Options Policies

Annex E: Local Plan Protection Policies

Annex F: Air Quality Assessment Method

Annex G: Excerpt from the Greater Nottingham Aligned Core Strategies HRA

Glossary

In Combination Effects	Where policies, plans or projects might affect European sites in combination with each other resulting in an in combination effect.
Development Plan	The statutory framework for planning decisions, comprising the Development Plan Documents prepared by local planning authorities (including the County Council and District Councils).
DPD (Development Plan Document)	A document containing local planning policies or proposals which form part of the Development Plan, which has been subject to independent examination.
Habitats Regulations Assessment (HRA)	An assessment in accordance with the Habitats Regulations (the Conservation (Natural Habitats, & c.) 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.
LDD (Local Development Document)	The main group of documents within the LDF, comprising Development Plan Documents and Supplementary Planning Documents.
Local Plan	A plan prepared by District, Unitary and National Park authorities but which is being superseded by Development Plan Documents.
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).
Proposals Map	A map accompanying the LDF showing areas of protection and identifying locations for land use and development proposals included in the adopted Development Plan Documents.
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.

SEA (Strategic Environmental Assessment)	A process required by EU Directive 2001/42/EC (known as the SEA Directive) and the SEA Regulations (Statutory Instrument No. 1633) for the formal assessment of certain plans and programmes which are likely to have significant effects on the environment.
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Report Addendum

The majority of the HRA work on the Derbyshire Dales Local Plan has occurred at the preferred options / Draft Plan stage of the plan preparation. It was at this stage that draft policies and site allocations were identified and screened for potential Likely Significant Effects (LSEs) on European sites. Some LSEs were identified through screening and the potential for effects occurring has been considered within the main body of this HRA Report. The HRA Report was then consulted on alongside the Draft Local Plan during April and May 2016. The response received from Natural England on that version of the HRA Report is included within Annex A. Natural England agreed with the conclusions of the HRA, that the Local Plan would not result in any adverse effects on European sites, either alone or in combination with other plans and projects.

Following consultation on the Draft Local Plan, Derbyshire Dales District Council has made modifications to the plan policies and these are presented as a Pre Submission Draft of the Local Plan. The modifications to the policies have been screened for LSEs and this is recorded in Annex D. The screening has concluded that none of the policy modifications give rise to any LSEs and therefore the conclusions of the HRA are unaltered.

1 Introduction

Derbyshire Dales District Council ('the Council') is preparing a Revised Local Plan following a decision to withdraw the previous Local Plan from Examination in order that the full Objectively Assessed Need (OAN) for housing within the Derbyshire Dales can be reconsidered.

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 Derbyshire Dales Local Plan – Draft Plan, including options for site allocations.

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 Directive¹; and
- Special Protection Areas (SPAs) - designated under the Wild Birds Directive².

'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 –

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.

(a) *is likely to have a significant effect on a European sites 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 'Habitat Regulations Assessment'.

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.

1.2 Who has carried out the HRA?

The SA (and 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 Revised Local Plan. Consultants from ClearLead Consulting Limited have also undertaken the parallel SA.

1.3 Consultation

This report was consulted on alongside the Draft Local Plan between 7th April 2016 and 19th May 2016. One representation was received, from Natural England, and this is presented within Annex A. The response has not required any changes to be made to the HRA Report. This report will be subject to a further round of public consultation between 11th August and 22nd September 2016, alongside the Pre Submission Draft of the Local Plan.

How to comment on this report:

Please provide responses **by 22nd September 2016** to:

Esther Lindley

Senior Planning Policy Officer

Regeneration and Policy

Derbyshire Dales District Council

Town Hall

Bank Road

Matlock

DE4 3NN

localplan@derbyshiredales.gov.uk

2 The Derbyshire Dales Local Plan

2.1 Introduction

Derbyshire Dales District Council are preparing a revised Local Plan, which will set out the overall vision, objectives and policies for future development of the parts of the Derbyshire Dales 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 Derbyshire Dales 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 Derbyshire Dales Local Plan will guide development across the plan area up to the year 2033.

2.2 Plan Vision and Objectives

The vision for the Local Plan is reproduced within Box 2.1.

Box 2.1: Strategic Vision of the Derbyshire Dales Local Plan

The vision for the Derbyshire Dales is that it will be widely recognised as a distinctive rural area with vibrant villages and market towns, which reflects the character of the Derbyshire Dales landscape. The area will complement and not compete with Sheffield and Derby and out-commuting will reflect a sustainable balance of living and working.

Development in the Derbyshire Dales will be managed in a sustainable way that mitigates against, and responds to, our changing climate. The traditional character of the Market Towns and larger villages serving the smaller settlements within their rural hinterland will be maintained with increasing emphasis on the promotion of sustainable communities.

The landscape of the Derbyshire Dales is a complex combination of physical and cultural elements, developed over centuries to produce a landscape of particularly high quality which will be protected and enhanced.

New development particularly in Ashbourne, Matlock, and Wirksworth, will seek to satisfy the identified social and economic needs of local residents, which in turn will be supported by the protection and enhancement of areas of green space around them. Opportunities for the provision of new and improved recreation opportunities will be brought forward.

Market towns will be encouraged to respond to pressure from competing centres outside the area in order to further strengthen the Peak District's economy, provide more choice and reduce the need to travel. Proactive measures will be taken to maximise the use of previously developed land whilst recognising that some development will be required on greenfield land.

Box 2.1 9 Continued: Strategic Vision of the Derbyshire Dales Local Plan

Larger villages including Tansley, Doveridge and Brailsford will benefit from development with an improved range of amenities and facilities including schools and healthcare provision. Areas of countryside and green space around the villages of the plan will act as an important resource for recreational uses.

The sustainability of the villages and countryside will be promoted through appropriate investment, including agricultural diversification, and affordable homes that will help people remain in, or return to, their local communities.

The character of the Derbyshire Dales will be protected and enhanced with care taken to ensure new development is well integrated with its surroundings. The integrity of our towns and villages will be maintained by ensuring that there is appropriate separation between settlements, in particular between Matlock and Darley Dale along the A6 corridor.

Strengthening the local economy to deliver higher-level skills and wages will be facilitated through the proactive development of new employment opportunities in Matlock, Ashbourne and Wirksworth, and improved telecommunications connectivity.

The rich legacy of craft and industrial traditions, like textile manufacture, will complement new sectors and provide employment that secures the traditions of the Peak District. Where appropriate, redundant quarry sites will be sensitively re-used to bring economic benefits to the area. The Derwent Valley Mills World Heritage Site will continue grow in significance and increasing visitor numbers will lead to the development of new accommodation and attractions in and around the corridor.

Residents will be happier, healthier and more active and will enjoy an improved quality of life. The promotion of healthy and sustainable communities will improve access to a wider range of local jobs, housing, high quality services and facilities, cultural and leisure opportunities.

Opportunities to secure improvements in accessibility to services and facilities throughout the rural area will be seized. There will be an emphasis upon minimising the adverse impacts of traffic on the adjoining Peak District National Park together and finding more sustainable ways to reap the benefits of tourism in the towns and villages without increasing the use of the private car.

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

Box 2.2: Strategic Objectives of the Derbyshire Dales Local Plan

Protecting Derbyshire Dales Character

SO1: To protect and enhance the Green Infrastructure Network

SO2: To maintain, enhance and conserve the areas distinct landscape characteristics, biodiversity, and cultural and historic environment.

SO3. To ensure that design of new development is of high quality, promotes local distinctiveness and integrates effectively with its setting.

SO4: To protect and enhance the character, appearance and setting of the District's towns and villages.

SO5: To address, mitigate and adapt to the effects of climate change on people, wildlife and places.

Promoting Healthy and Sustainable Communities

SO6: To meet the objectively assessed housing need of the District, subject to consideration of other Strategic Objectives of the Local Plan.

SO7: To ensure that there is an adequate mix of housing types, sizes and tenures to meet the need of all sectors of the community.

SO8. To protect and facilitate the necessary infrastructure, connectivity, services and facilities to support the development of the District and connectivity.

SO9: To support developments that minimise risks to safety and health as a result of crime (or fear of crime), flooding, pollution and climate change of local residents, employees or visitors

SO10. To encourage development that increases opportunities for healthy lifestyles.

SO11: To promote the efficient use of suitably located previously developed land and buildings whilst minimising the use of greenfield land.

SO12: To facilitate low carbon development and energy generation from renewable sources, of a type, and scale appropriate to its location

SO13. To increase the opportunities for travel using sustainable forms of transport by securing improvements to public transport, walking and cycling infrastructure.

Supporting the Rural Economy and Enhancing Prosperity

SO14: To facilitate development that will support the growth of the District's economy, particularly through improving the quality of local employment.

Box 2.2 Continued: Strategic Objectives of the Derbyshire Dales Local Plan

SO15: To support employment development in locations and of a scale appropriate to the plan area.

SO16: To support and develop the District's tourism and cultural offer.

SO17: To strengthen the vitality and viability of the District's market towns as places for employment, shopping, services, leisure and tourism.

2.3 Overview of the Plan Area

The Local Plan area covers the parts of Derbyshire Dales 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 Derbyshire Dales Local Planning Authority area comprises 33,000 hectares and has a resident population of over 44,700 people.

The area is largely rural and includes attractive countryside interspersed with a large number of villages and hamlets. The area includes Matlock, Wirksworth and Ashbourne, which are long established rural market towns. These towns act as service centres to wide rural hinterlands and are home to 47% of the total population, whilst 29% live within large villages and the remaining 24% are scattered among the rural parishes in small villages and hamlets.

The geographical position of Derbyshire Dales and its close proximity to the major cities such as Sheffield 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 below 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 Derbyshire Dales 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.

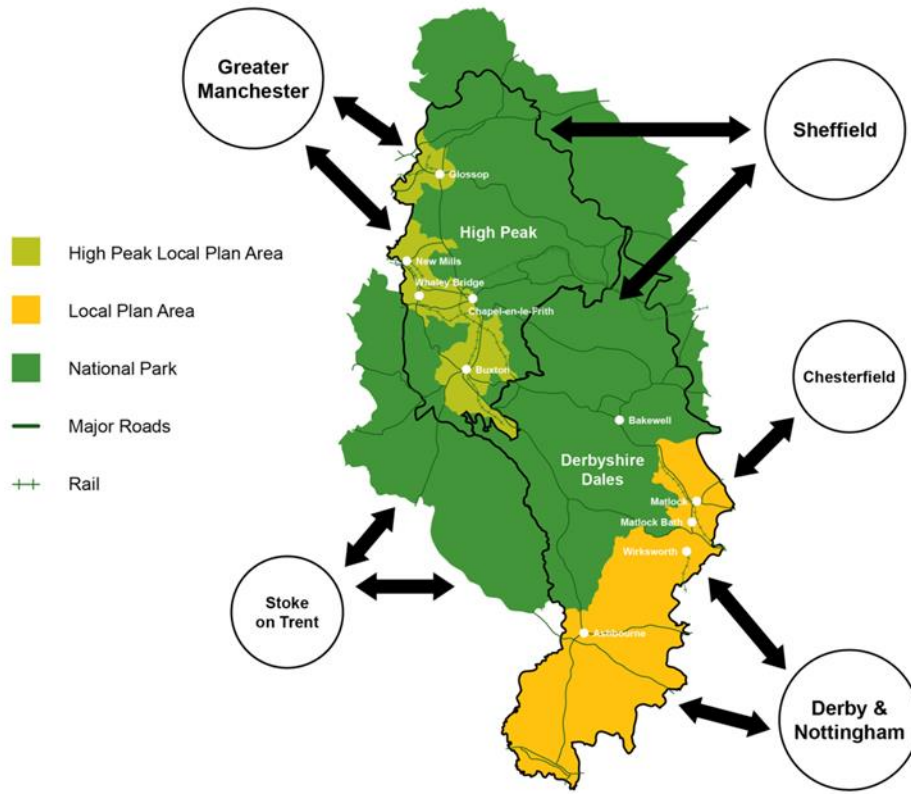


Figure 2.1: Relationship between the Derbyshire Dales Plan area and surrounding area

3 Methodology

3.1 Overview of HRA Process

An outline of the overall HRA process in accordance with current guidance^{3,4} 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)⁵ 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).

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;

³ 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.

⁴ 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)

⁵ 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."

- 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 a final HRA Report which accompanies the Submission Local Plan.

3.2 Approach to the HRA

3.2.1 Stage 1 Screening for likely significant effects

The withdrawn Local Plan was prepared between 2009 and 2014. This preparation work included an HRA and, although the draft Local Plan may differ from the withdrawn Local Plan, it is proposed that relevant information collated for the HRA of the previous plan will be utilised as far as possible. The HRA of the withdrawn Local Plan was developed in consultation with Natural England and it is also proposed that assumptions and mitigation previously agreed with Natural England will be reviewed as a part of this HRA and used as far as possible and as relevant.

Natural England were consulted in July 2015 regarding the proposed approach to the HRA and the Europeans 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 29th July and the sites to be considered in the HRA. Natural England suggested that the reasons for excluding the Bees Nest and Green Clay Pits SAC from the assessment should be provided. The reasons that it has not been included within this HRA and the previous HRA of the Withdrawn Local Plan are:

- The site is not publicly accessible;
- There is no existing residential development within the immediate vicinity of the SAC. The nearest village is Brassington and no allocation sites have been proposed at this village; and
- The key factor affecting the integrity of the SAC is its management, which the Draft Local Plan will not have any influence over.

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) Special Protection Area (SPA);
- South Pennine Moors Special Area of Conservation (SAC);
- Peak District Dales SAC;
- Gang Mine SAC; and
- 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. This information was presented within Derbyshire Dales Local Plan Submission Version Habitats Regulations Assessment Report (ENVIRON, May 2014) and has been subsequently reviewed and updated using web-based data accessed in August 2015. Brief descriptions of the sites are presented in Section 5. Maps showing the location of the European sites listed above are included in Annex C.

Potential housing allocations were screened for LSEs at the same time as they were assessed for sustainability implications as a part of the parallel Sustainability Appraisal (SA). The findings of the screening of sites were reported to the plan authors prior to the drafting of the Preferred Options Local Plan and are also presented within Section 5 of this report.

The policies within the Preferred Options version of the Local Plan were screened for LSEs at an early stage of their drafting and the findings of the screening are presented within Section 6.

The screening of the site allocation options and the Preferred Options policies identified LSEs and, based on the previous work undertaken on the Withdrawn Local Plan, it was decided to progress to Stage 2 of the HRA 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 7 onwards.

3.2.2 Stage 2: Appropriate Assessment

The following potential adverse effects have been investigated within the AA:

- Increased water demand and effects on water quality;
- Air quality effects from increased traffic;
- Increased recreational pressure from population increase across the district; and
- Urban effects (i.e. localised recreation effects, fly tipping, fire setting, pet predation).

Where appropriate, in combination effects of policies 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 across the wider Peak District. This approach was used in the AA of effects regarding air quality (Section 8) and recreational pressure (Section 9).

Following consultation on the Draft Local Plan, Derbyshire Dales District Council has made modifications to the plan policies and these are presented as a Pre Submission Local Plan. The modifications to the policies have been screened for LSEs and this is recorded in Annex D. The screening has concluded that none of the policy modifications give rise to any LSEs and therefore the conclusions of the HRA are unaltered.

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. 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 several upland breeding species, including birds of prey and waders. Both Merlin and Golden Plover spend some of their time feeding outside the SPA on adjacent areas of in-by-land.

The following factors affect the integrity of the sites:

- 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;
- 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 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 factors affect the integrity of 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 is composed of a group of sites (classified individually as SSSIs) spread out over the Peak District. 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.

The following factors affect the integrity of 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 Gang Mine SAC

The site is currently managed as a nature reserve and is designated as an SAC for Calaminarian grasslands, which grow on soils that have relatively high concentrations of heavy metals, usually as a result of historical mining activity. The site provides an example of the habitat type on sedimentary rocks; it has colonised the large area of mine workings and spoil heaps on limestone. These are notable for the wide variations in slope, aspect and soil toxicity. With regards to flora, the site contains the richest anthropogenic Calaminarian grasslands in the UK, with abundant spring sandwort *Minuartia verna* and alpine penny-cress *Thlaspi caerulescens*. Other species of grassland vegetation present include early-purple orchid *Orchis mascula* and dyer's greenweed *Genista tinctoria*. Many of these species are likely to be distinct genotypes adapted to soils rich in heavy metals.

The designated habitat is sensitive to air pollution and nutrient enrichment. It is unclear whether dust production from adjacent quarry workings is significantly affecting the site.

The following factors affect the integrity of the site:

- Maintenance of suitable habitat and avoidance of succession; and
- Air pollution (possibly including dust although this is unclear) and nutrient enrichment.

4.6 Cannock Chase SAC

Cannock Chase SAC is located within Staffordshire and is designated because of the extent of its European Dry Heath habitat. Northern Atlantic Wet Heaths with *Erica tetralix* is a supporting Annex I habitat. 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 factors affect the integrity of 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 Potential Site Allocations

5.1 Introduction

This section presents the findings of the screening of site allocation options. The screening assessment considered the potential for likely significant effects (LSEs) on each of the European sites in turn as a result of the potential allocation sites which passed the Strategic Housing and Economic Land Availability Assessment (SHELAA) Stage B undertaken between November 2015 and January 2016. The screening assessment was undertaken in January and February 2016. Further sites which came forward following the Draft Local Plan consultation in April / May 2016 were screened in July 2016 and no LSEs were identified.

All sites that passed stage B of the SHELAA assessment have been screened for LSEs.

5.2 Findings

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

LSEs were identified in relation to the allocation sites at Northwood (SHLAA311, SHLAA324 and SHLAA281) as a precautionary measure. Site SHLAA324 was identified as a potential allocation site but has since been rejected due to highway constraints. The site is now considered undevelopable due to overriding constraints.

It was identified that further consideration of the potential risks to the SAC and SPA to the north east of the village are required in the HRA, including consideration of the potential for impacts on the water environment.

The HRA of the Draft Plan will also need to consider potential LSEs from the level of development proposed within in the Local Plan with regards to this SAC and SPA.

Peak District Dales SAC

An LSE was identified in relation to the allocation of site SHLAA187 at Bonsall. A watercourse on site flows into the Via Gellia SSSI which is a component site of the SAC. The potential allocation site is approximately 500m from the SSSI component site. This site has a capacity for only one dwelling and has therefore not been included in the Draft Local Plan as an allocation due to its size. SHLAA435 is also less than 1km from a component site of the SAC (Matlock Woods SSSI) and could result in a LSE, such as in relation to construction impacts on air quality and water. Since this screening exercise was undertaken, a further site was considered as an allocation (SHLAA471/allocation site reference HC2(y) located at Middleton) and an LSE was identified due to its proximity to the SAC.

It was identified that potential effects on the SAC require further consideration in the HRA.

Gang Mine SAC

The nearest proposed development sites is SHLAA160 which is approximately 400m to the north east of the SAC. SHLAA270 is approximately 500m to the south east and SHLAA269 is approximately 600m to the south of the SAC.

LSEs were identified as a result of the allocation of these sites, requiring further consideration within the HRA regarding the potential effects of construction and recreation on the SAC. Note that SHLAA270 only has capacity for 4 units and therefore has not been included in the Draft Local Plan as an allocation site due to its size.

Cannock Chase SAC

A 15km 'zone of influence' was identified in the Cannock Chase Visitor Impacts Mitigation report (2012) within which new housing developments had the potential to result in increased recreational pressure on the Cannock Chase SAC. The report recommends that developer contributions be required within this zone, and noted that large developments, defined as developments of over 100 houses, outside the 15 km zone may also require Appropriate Assessment (AA) in relation to this SAC, subject to advice from Natural England.

The 15km zone of influence extends into the south western corner of the Derbyshire Dales District but does not include any of the main District settlements. The village of Doveridge falls just outside the zone, approximately 17km from Cannock Chase SAC.

None of the potential development sites in Doveridge are over 100 dwellings and therefore are not classified as a "large development". However, the combined capacity of the 3 potential allocation sites in Doveridge is currently estimated to be 149 dwellings and therefore, in accordance with the precautionary principle, a potential LSE was identified requiring further consideration in the HRA.

5.3 Conclusions

LSEs were identified in relation to the following European sites resulting from the potential allocation sites considered:

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

The screening assessment identified that the risk of adverse effects occurring on these European sites required further investigation in the HRA (i.e. Appropriate Assessment) and this is addressed within Sections 7 onwards of this report.

6 Screening of the Local Plan Policies

6.1 Introduction

This section presents the findings of the screening of the policies within the Draft Local Plan. The screening assessment considered the potential for LSEs of each of the policies in turn. The approach to the screening was adapted from the HRA guidance prepared for Scottish National Heritage⁶. Policies have been screened out of the HRA (i.e. no LSE is identified) for the following reasons and further details can be found within Annex D:

- The policy is a general statement of policy setting out a strategic aspiration for the plan-making body for a certain issue or the policy is a general 'criteria based' policy expressing the tests or expectations of the plan-making body when it comes to consider particular proposals. (Note that a distinction is drawn between them and more site specific criteria based policies such as Policy HC2 Housing Land Allocations, which may require further assessment);
- The policy is intended to protect the natural or built environment;
- The policy promotes development or change but 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. European sites will be protected from such development by Local Plan Policy PD3;
- The policy could have no conceivable effect on a European site because no impact pathway is identified;
- Potential for a significant effect has been previously identified but adequate measures have been built into the policy wording to avoid any adverse effects from occurring.

6.2 Findings

Table D.1 in Annex D presents the detailed findings of the screening of policies. Table 6.1 below identifies the policies for which LSEs were identified.

⁶ Scottish Natural Heritage (January 2015) Habitats Regulations Appraisal of Plans Guidance For Plan-Making Bodies In Scotland Version 3.0

Table 6.1: Policies screened into the HRA						
Policy	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Gang Mine SAC	Cannock Chase SAC	Reasoning
S6 - Strategic Housing Development	✓	✓	✓	✓	✓	Could increase recreational pressure and air pollution through increasing housing provision and therefore the population of the District.
S8 - Matlock/Wirksworth / Darley Dale Development Area Strategy	✓	✓	✓	✓		Development in these locations could increase recreational, air quality and construction impacts on European sites nearby.
HC2 - Housing Land Allocations	✓	✓	✓	✓	✓	<p>LSEs were identified on all of these European sites from several of the allocation sites during the options assessment stage. LSEs are identified in relation to allocation references:</p> <ul style="list-style-type: none"> • HC2(m) Land at Cavendish Cottage, Doveridge, HC2(n) Land At Derby Road / hall Drive, Doveridge (increasing recreational pressure on Cannock Chase SAC approx. 17km away); • HC2(v) Land to the North of Porter Lane / East of main Street, Middleton by Wirksworth (recreational pressure and other urban effects on Peak District Dales SAC and Gang Mine SAC approx.300m away); and

Table 6.1: Policies screened into the HRA						
Policy	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Gang Mine SAC	Cannock Chase SAC	Reasoning
						<ul style="list-style-type: none"> • HC2(l) Land at Stancliffe Quarry, Darley Dale (recreation, urban and water effects on Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC approx. 1.4km away). This site is also subject to a separate policy (DS3).
EC8 - Promoting Peak District Tourism and Culture	✓	✓	✓			Policy seeks to increase visitors to the District which could increase air pollution and recreational pressure on these European sites located mainly within the National Park which tourists may visit.
DS3 – Land at Stancliffe Quarry, Darley Dale	✓	✓				LSE identified in site screening due to location near to South Pennine Moors SAC and SPA. The development site is approx. 1.4km from the SAC/SPA. The HRA needs to investigate whether a potential adverse effect could occur in relation to recreation and water effects.
EC2 - Employment Land Allocations				✓		The allocation 'Land at Porter Lane / Cromford Road, Wirksworth' lies within a few metres of Gang Mine SAC. It is not likely that business use on this site will increase recreation pressure on the SAC which would result in nutrient

Table 6.1: Policies screened into the HRA						
Policy	Peak District Moors (South Pennine Moors Phase 1) SPA	South Pennine Moors SAC	Peak District Dales SAC	Gang Mine SAC	Cannock Chase SAC	Reasoning
						enrichment from walking dogs. It is considered that Policies PD3 and PD9 (reproduced in Annex E) contain adequate mitigation to avoid adverse effects from construction and operation of this employment site on Gang Mine SAC.
<p>Key</p> <p>✓= Likely Significant Effect (LSE)</p> <p>Greyed out cells indicate no effect identified.</p>						

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

Policy S6 Strategic Housing Development 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);
- Peak District Dales SAC;
- Gang Mine SAC; and
- Cannock Chase SAC.

Development in the Matlock, Wirksworth and Darley Dale areas could increase recreational, air quality, urban effects and construction impacts on these European sites which are located nearby. LSEs were identified as a result of **Policy S8 Matlock / Wirksworth / Darley Dale Development Area Strategy** 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);
- Peak District Dales SAC; and
- Gang Mine SAC.

LSEs were identified as a result of **Policy HC2 Housing Land 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);
- Peak District Dales SAC;
- Gang Mine SAC; and
- Cannock Chase SAC.

LSEs were identified with regards to operational effects in relation to the allocation sites:

- **HC2(m) Land at Cavendish Cottage, Doveridge, and HC2(n) Land At Derby Road / Hall Drive, Doveridge** (increasing recreational pressure on Cannock Chase SAC approx. 17km away);
- **HC2(v) Land to the North of Porter Lane / East of main Street, Middleton by Wirksworth** (recreational pressure and other urban effects on Peak District Dales SAC and Gang Mine SAC approx.300m away); and
- **HC2(l) Land at Stancliffe Quarry, Darley Dale (DS3)** (recreation, urban and water effects on Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC approx. 1.4km away). This site is also subject to a separate policy (DS3).

LSEs were identified as a result of **Policy EC8 Promoting Peak District Tourism and Culture** because this policy seeks to increase visitors to the District which could increase air pollution from traffic and recreational pressure on these European sites located within the National Park. LSEs were identified on the following European sites:

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

The Preferred Options policies have been developed using relevant policy wording from the withdrawn Local Plan. Mitigation was developed in consultation with Natural England as a part of the HRA of the withdrawn Local Plan and as the Local Plan has been revised, the policy authors have ensured that all relevant mitigation (mainly in the form of policy wording) has also been built into the Preferred Options policies. Therefore, when the policies were screened it was found that measures that will avoid adverse effects occurring on European sites are present within a number of policies.

Policy PD3 Biodiversity and the Natural Environment (reproduced within Annex E) within the Local Plan Preferred Options seeks to protect, manage and where possible enhance the biodiversity and geological resources of the Plan Area by ensuring that development proposals will not result in significant harm to biodiversity interests including SACs and SPAs. The policy goes on to state that the District Council will not permit any development proposals that has an adverse effect on the integrity of a European site either alone or in combination with other plans or projects. 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.

In addition, the following policies relating to allocation sites contain specific wording which avoids effects on European sites:

- **Policy EC4 - Regenerating an Industrial Legacy:** An LSE on Gang Mine SAC was previously identified in the screening of sites in relation to 'Land off Middleton Road' which is allocated via Policy EC4. This allocation site lies approximately 600m to the south of the SAC. The site could potentially result in adverse effects on the SAC from air pollution and from increased recreational pressure from new residents. However, the wording of Policy DS6 Land off Middleton Road/Cromford Road, Wirksworth requires an assessment of air quality and recreation which identify any potential effects and mitigation measures necessary to avoid adverse effects on the SAC. The policy includes adequate measures to mitigate for the potential effects relating to air quality and recreation and therefore the screening concluded that there will be no LSE associated within this policy.
- **Policy DS6 – Land off Middleton Road/Cromford Road, Wirksworth:** As above, an LSE on Gang Mine SAC was previously identified in the screening of sites in relation to this site. The wording of Policy DS6 includes adequate measures to mitigate for the potential effects relating to air quality and recreation and therefore the screening concluded that there will be no LSE associated within this policy.
- **Policy DS5 – Land at Halldale Quarry/Matlock Spa Road, Matlock:** This site is less than 1km from a component site of the Peak District Dales SAC (Matlock Woods SSSI) and could potentially result in a significant effect, such as in relation to construction

impacts on air quality and water. However, the policy requires an assessment of air quality and hydrological and hydrogeological assessment which identify any potential effects and mitigation measures necessary to avoid adverse effects on the SAC. Therefore the screening concluded that there will be no LSE associated with this policy.

- **Policy DS7 – Land at Middle Peak Quarry, Wirksworth:** An LSE on Gang Mine SAC was previously identified in the screening of sites. This allocation site lies approximately 700m to the south west of the SAC. The site could result in adverse effects on the SAC from air pollution and from increased recreational pressure from new residents. However, the wording of this policy requires an assessment of air quality and recreation which identify any potential effects and mitigation measures necessary to avoid adverse effects on the SAC. The policy includes adequate measures to mitigate for the potential effects relating to air quality and recreation and therefore the screening concluded that there will be no LSE associated within this policy.
- **PD7 - Climate Change:** The policy includes a safeguard for European sites protecting 'acknowledged biodiversity interests (and the habitats that support them)' from adverse impacts therefore the screening concluded that there will be no LSE associated within this policy.

Policies PD7 and DS5 in addition to Policy PD3 will ensure that any potential effects on water quality and from renewable energy proposals such as wind turbines which could adversely affect European sites will be avoided and therefore they do not require any further consideration in the HRA.

The remaining sections of this document assess the potential for adverse effects to occur on European sites with relation to water demand, changes to the local water environment, air quality, recreational pressure and urban effects.

Following consultation on the Draft Local Plan, Derbyshire Dales District Council has made modifications to the plan policies and these are presented as a Pre Submission Local Plan. The modifications to the policies have been screened for LSEs and this is recorded in Annex D. The screening has concluded that none of the policy modifications give rise to any LSEs and therefore the conclusions of the HRA are unaltered.

7 Appropriate Assessment: increased water demand and effects on the local water environment

7.1 Introduction

Screening of the Preferred Options policies identified that **Policy S6 Strategic Housing 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 effects on the local water environment as a result of allocation site **HC2(I) /DS3 Land at Stancliffe Quarry, Darley Dale** due to its proximity to the Peak District Moors (South Pennine Moors Phase 1) Special Protection Area (SPA) and South Pennine Moors Special Area of Conservation (SAC).

7.2 Assessment

7.2.1 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

Increased water demand could affect some of the habitats within the European sites identified above if the Plan Area and European site share a water catchment area.

The Derbyshire Dales Plan Area is supplied with water by Severn Trent Water. The Derbyshire Dales District is located within the Strategic Grid Water Resource Zone (WRZ). Severn Trent Water have responded to a consultation request⁷ which can be found in Annex A.

Severn Trent Water confirm 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 (SAE) 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.

⁷ Personal communication dated 31/03/16 (See Annex A in separate annex document)

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 providing alternative sources of water supply where necessary.

It is therefore concluded that Policy S6 Strategic Housing Development will not result in an adverse effect on the integrity of any European site with regards to water demand.

7.2.2 Potential Effects Relating to the Local Water Environment on the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC

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 on the local water regime. Habitats within the SPA/SAC could be affected by changes in the local water environment.

Potential LSEs were identified in relation to effects on the local water environment in relation to allocation site **HC2(I) DS3 Land at Stancliffe Quarry, Darley Dale** (see map in Annex C). Allocation **HC2(I)** is located to the south of Northwood in the direction of Darley Dale.

Analysis of the location and elevation of the SPA/SAC against that of the allocation site **HC2(I) DS3 Land at Stancliffe Quarry, Darley Dale** using Ordnance Survey (OS) data suggests that there is no surface water connectivity from the allocation site to the SPA/SAC. As such it is considered unlikely that a surface water impact pathway exists between the allocation site and the European sites. Whilst groundwater connectivity between the allocation site and European sites cannot be discounted, due to the distance involved and the relatively slow movement of groundwater in comparison to surface water allowing for dispersion, it is considered unlikely that a groundwater impact pathway exists.

7.3 Summary and Conclusions

This section has assessed the potential for adverse effects occurring on European sites in relation to water quality and water demand. *It is concluded that allocation site HC2(I) DS3 Land at Stancliffe Quarry, Darley Dale **will not** result in an adverse effect on the integrity of South Pennine Moors (Phases 1 and 2) SPA and SAC with regards to the water environment.*

8 Appropriate Assessment: increased traffic on air quality

8.1 Introduction

Screening of the Preferred Options policies identified that **Policy S6 Strategic Housing Development, Policy S8 - Matlock/ Wirksworth / Darley Dale Development Area Strategy** and **Policy EC8 - Promoting Peak District Tourism and Culture** 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);
- Peak District Dales SAC; and
- Gang Mine SAC.

8.2 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 Areas 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. An uncertain effect of construction impacts, including construction traffic, was also noted in the screening of allocation sites and policies and this is addressed within Section 10 as an 'urban effect'.

The Air Pollution Information System (APIS) website (<http://www.apis.ac.uk/>) was consulted to review the likely sensitivities of designated interest features on these sites to air pollution and to confirm the sites' critical loads for acid and nitrogen deposition. The results are summarised in Annex F.

Natural England has advised that emissions from point sources more than 200m from the boundary of a site can be considered negligible⁸ (this does not mean that there is not the possibility of impacts due to increasing emissions from diffuse sources). A GIS exercise was undertaken to identify any European sites within 200m of an A road within the Derbyshire Dales District (including land within the Peak District National Park). This analysis was based on the assumption that only traffic on A roads is significant, except in the case of Gang Mine SAC, as this site is adjacent to a B road that is used for regular commuting, and therefore, this B road was included in the assessment. There are a number of roads that pass through European sites within and immediately adjacent to the Plan Area. The APIS information and GIS exercises have been used to assess potential air quality impacts on each European site in turn.

⁸ Letter from English Nature to Runnymede Borough Council, dated 16th May 2006, regarding Conservation (Natural Habitats &C.) Regulations 1994 Runnymede Borough Local Development Framework

8.3 Assessment

8.3.1 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 Draft Local Plan 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 as regards 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 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 deposition⁹. The SAC is large, extending over 64,983.13ha and the proportion of the site lying within 200 m of a road on which traffic levels could potentially increase is relatively small (in the region of 2%, or 1336.86ha). The conclusion of the HRA screening was that it is therefore unlikely (but not impossible) that the integrity of the site as a whole would be affected by traffic-related emissions.

A GIS exercise was undertaken as part of the HRA of the withdrawn Local Plan and was reported within Derbyshire Dales Local Plan Submission Version Habitats Regulations Assessment Report (Environ, May 2014). This exercise identified the roads that pass within 200m of the European sites and also considered the relative locations of the Plan Area and possible major destinations, and using commuter data from the Derbyshire Dales Transport Topic Paper¹⁰. Information about travel patterns indicates that East Midland towns, such as Derby, are the main destination for travel from Derbyshire Dales¹¹. This analysis concluded that, with the exception of the A621 and A625, no other roads within 200m of a European site are a direct route between any Derbyshire Dales main settlements and any major conurbations and possible major destinations. The A621 and A625 are routes between the northern part of the Plan Area (Matlock or Darley Dale) and Sheffield.

⁹ APIS website www.apis.ac.uk

¹⁰ Derbyshire Dales District Council (2008) Topic Paper 7: Transport, key stakeholder consultation. This was a supporting document to a Key Stakeholder Consultation in January 2008, part of the work for the Derbyshire Dales and High Peak Joint Core Strategy (the preparation of which was later abandoned).

¹¹ Scott Wilson (March 2010) North Derbyshire Local Development Frameworks: High Peak and Derbyshire Dales

To be precautionary, an estimate has been made of the potential in-combination effects on traffic levels on the A621 and A625 with other Local Plans within the wider Peak District. Official 2012-based Sub-National Population Projections project suggest that the District's population will increase by 8.4% between 2013 and 2033¹². It has been assumed that the increase in numbers of cars, and also the increase in traffic, might be approximately twice this local increase in population, which would generate an increase in traffic of approximately 16.8% over the Plan Period (see Annex F for details of air quality assessment methodology used). Table 8.1 shows the effects of a 16.8% increase in traffic flows over the plan period on traffic flows on the two roads considered.

Table 8.1 Traffic flow data on roads used by residents of Derbyshire Dales that are within 200 m of the South Pennine Moors (Phase 1) SPA / SAC		
Road	Baseline AADT¹ (2014)	Potential in-combination increase of 16.8% in AADT
A621	5712	960
A625	5303	891
Notes		
1 AADT = Annual Average Daily Traffic. Traffic counts were obtained from the website of the Department for Transport (see methodology in Annex D)		

According to the guidance on air quality assessments given in the Design Manual for Roads and Bridges¹³ (DMRB), in terms of nitrogen deposition from traffic emissions, only increases in Annual Average Daily Traffic (AADT) of 1000 or more are considered significant and require further assessment. On the two roads considered, the estimated in-combination increase results in an increased AADT of less than 1000. Therefore, it is possible to conclude that the Local Plan will not have an adverse effect on the South Pennine Moors SAC through air quality.

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 Moors (South Pennine Moors Phase 1) SPA or South Pennine Moors SAC as regards effects of increased traffic on air quality from traffic.

8.3.2 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. Roads which pass within 200 m of a component of the Peak District Dales SAC, and the SSSI and relevant habitats are shown in Table 8.2, and can be summarised as follows:

- A623 between Chesterfield and Chapel-en-le-Frith passing through Baslow (Cressbrook Dale SSSI);

¹² Derbyshire Dales Housing & Economic Development Needs Assessment, prepared by GL Hearn on behalf of Derbyshire Dales District Council, Final Report (September 2015)

¹³ DMRB Volume 11 Section 3 Part 1 HA207/07
<http://www.dft.gov.uk/ha/standards/DMRB/vol11/index.htm>

- The A6 between Bakewell and Buxton (Topley Pike and Deep Dale SSSI and the Wye Valley SSSI) and between Matlock and Cromford (Matlock Woods SSSI);
- The A515 between Buxton and Ashbourne (Topley Pike and Deep Dale SSSI); and
- The A5012 between Buxton and Cromford (leading to Matlock and Wirksworth) (Long Dale and Gratton Dale SSSI and Via Gellia Woodlands SSSI).

To be precautionary, an estimate has been made of the potential in-combination effects on traffic levels with other Local Plans within the wider Peak District. Again, it has been assumed that the in-combination increase in numbers of cars, and also the increase in traffic, might be approximately 16.8% over the Plan Period (this is double the predicted population increase; see methodology in Annex F for details). Table 8.2 shows the effects of a 16.8% increase in traffic flows over the plan period on the roads considered.

Component SSSI	Road	Relevant habitat for air quality analysis¹	Critical Load² (kg N ha⁻¹ yr⁻¹)	Baseline AADT³	Increased AADT (16.8%)	Increase in AADT⁴
Cressbrook Dale SSSI	A623	Sub-Atlantic semi-dry calcareous grassland	15	6493	7584	1091
Long Dale & Gratton Dale SSSI	A5012	Sub-Atlantic semi-dry calcareous grassland	15	3299	3853	554
Matlock Woods SSSI	A6	Meso- and eutrophic Quercus woodland	15	12,687	14818	2131
Topley Pike and Deep Dale SSSI	A515	Sub-Atlantic semi-dry calcareous grassland	15	6950	8118	1168
Topley Pike and Deep Dale SSSI	A6	Sub-Atlantic semi-dry calcareous grassland	15	4881	5701	820
Via Gellia Woodlands SSSI	A5012	Sub-Atlantic semi-dry calcareous grassland	15	3853	4500	647
		Meso- and eutrophic Quercus woodland	15			

Table 8.2 Traffic flows on A roads that pass within 200 m of a component of Peak District Dales SAC						
Component SSSI	Road	Relevant habitat for air quality analysis¹	Critical Load² (kg N ha⁻¹ yr⁻¹)	Baseline AADT³	Increased AADT (16.8%)	Increase in AADT⁴
Wye Valley SSSI	A6 (section 1)	Sub-Atlantic semi-dry calcareous grassland	15	4881	5701	820
		Meso- and eutrophic Quercus woodland	15			
Wye Valley SSSI	A6 (section 2)	Sub-Atlantic semi-dry calcareous grassland	15	5445	6360	915
		Meso- and eutrophic Quercus woodland	15			

Notes

¹ Habitats are those given by the APIS website for air quality assessment, based on the designated habitats of the SAC

² Critical Load values taken from APIS. In all cases the recommended number, at the bottom of the range of values, was used.

³ AADT – Annual Average Daily Traffic. Traffic counts were obtained from the website of the Department for Transport (see methodology in Annex D)

⁴ Increases in AADT of 1000 or more are considered potentially significant, and are shown in **bold**

According to the DMRB¹⁴, in terms of nitrogen deposition from traffic emissions, only increases in AADT of 1000 AADT or more are considered significant. On the roads assessed, the A623 past Cressbrook Dale SSSI, the section of the A6 through Matlock near to Matlock Woods SSSI and the A515 at Topley Pike and Deep Dale SSSI are estimated to have an increased AADT of 1000 or more as a result of the in-combination assessment. It is possible to conclude that there will not be adverse effects of increased traffic on air quality on the remaining roads identified in Table 8.2.

An assessment was made of the increase in nitrogen deposition that could result from traffic flow increases along the A623 adjacent to the Cressbrook Dale SSSI, on the A6 near to Matlock Woods SSSI and on the A515 adjacent to Topley Pike and Deep Dale SSSI. The

¹⁴ DMRB Volume 11 Section 3 Part 1 HA207/07

<http://www.dft.gov.uk/ha/standards/DMRB/vol11/index.htm>

methodology for this assessment can be found in Annex D of the HRA Report (April 2016) and the results are presented in Table 8.3 below. The estimated traffic increase of 16.8% is calculated to result in a $0.004 \text{ kg N ha}^{-1} \text{ yr}^{-1}$ increase in nitrogen deposition at the boundary of Matlock Woods SSSI. This is 0.03% of the Critical Load for the habitat of Matlock Woods and well below the accepted threshold of 1% of the Critical Load¹⁵. The increase in traffic along the A623 is predicted to result in a change in N-Deposition at the Cressbrook Dale SSSI of $0.002 \text{ kg N ha}^{-1} \text{ yr}^{-1}$. At the Topley Pike and Deep Dale SSSI the change in N- deposition is predicted to be $0.03 \text{ kg N ha}^{-1} \text{ yr}^{-1}$. At both sites the change is less than threshold of 1% of the relevant critical load. This is not considered to be a significant increase because the change in N-deposition is below the accepted threshold of 1% of the Critical Load as set out within the Environment Agencies Guidance (see details provided in Annex D of the main HRA Report). Below this threshold, it can be concluded that increased nitrogen deposition as a result of increased traffic will not have an adverse effect on the habitat and therefore on site integrity. It also supports the use of the level of increases of 1000 AADT or more to screen out roads that will not have an effect as outlined above. It can therefore be concluded that increases in nitrogen deposition as a result of increased traffic on the other roads assessed where the change is less than 1000 AADT would not be significant and at those where the change is higher than 1000 AADT the impacts are also unlikely to be significant.

*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.*

¹⁵ Confirmed by Natural England within a personal communication dated 17/01/14

Table 8.3 Effect of estimated increased traffic on A6 on N deposition on Matlock Woods SSSI (Peak District Dales SAC)

Component SSSI	Road	Relevant habitat for air quality analysis ¹	Baseline AADT ²	Increased AADT (16.8%)	Background NO ₂ (µg m ⁻³)	Total NO ₂ with baseline AADT (µg m ⁻³)	Total NO ₂ with increased AADT (µg m ⁻³)	Total N deposition with baseline AADT (kgN ha ⁻¹ yr ⁻¹)	Total N deposition with increased AADT (kgN ha ⁻¹ yr ⁻¹)	Difference in N deposition due to increased traffic (kgN ha ⁻¹ yr ⁻¹)	Difference as % of critical load
Matlock Woods SSSI	A6	Meso- and eutrophic Quercus woodland Critical Load 15 kg N ha ⁻¹ yr ⁻¹	12,687	14818	10.9	13.97	14.01	1.397	1.401	0.004	0.03
Cressbrook Dale SSSI	A623	Sub-Atlantic semi-dry calcareous grassland	6493	7584	8.7	11.34	11.36	1.134	1.136	0.002	0.03
Topley Pike and Deep Dale SSSI	A515	Sub-Atlantic semi-dry calcareous grassland	6950	8118	8.8	9.33	9.64	0.933	0.964	0.03	0.2

¹ Habitats are those given by APIS website for air quality assessment based on the designated habitats for the SAC. Critical load values taken from APIS website.

² AADT – Annual Average Daily Traffic. Traffic counts were obtained from the website of the Department for Transport (see methodology in Annex D)

8.3.3 Gang Mine SAC

Gang Mine SAC SK286557: The designated interest feature for this site is Calaminarian grasslands of the *Violetalia calaminariae* (H6130), which grow on soils that have relatively high concentrations of heavy metals, usually as a result of historical mining activity. Calaminarian grassland can occur on a wide variety of substrates in the UK including both acid and calcareous rocks/spoil. However, it is predominantly associated with Carboniferous limestone substrates such as in the Peak District and North Pennines. This vegetation is sensitive to the effects of increased levels of nitrogen deposition which generally results in an increase in tall grasses and a decline in diversity. The critical load is 15-25 kg N ha⁻¹ yr⁻¹ and the exceedance range is from 14.1 down to 4.1 kg N ha⁻¹ yr⁻¹.

This plant community type is also affected by acidification which may cause toxicity to plants and mycorrhiza, and in particular can have a detrimental effect on any lower plants present in the community (bryophytes and lichens), but the site is not currently over its critical load for acidification. This site is therefore potentially vulnerable to the effects of any further eutrophication that could be caused by increased traffic emissions on the B5036 between Wirksworth and Cromford, leading on to Matlock, which passes within 200 m of the Gang Mine SAC.

To be precautionary, an estimate has been made of the potential in-combination effects on traffic levels with other Local Plans within the wider Peak District. As outlined above, and in Annex F, it has been estimated that there might be an in-combination increase in traffic of approximately 16.8% over the Plan Period, and Table 8.4 shows the potential effects on traffic flows.

Site	Road	Relevant habitat for air quality analysis ¹	Critical Load ² (kg N ha ⁻¹ yr ⁻¹)	Baseline AADT ³	Increased AADT (16.8%)	Increase in AADT ⁴
Gang Mine SAC	B5036	Sub-Atlantic semi-dry calcareous grassland	15	6074	7094	1020

¹ Habitats are those given by the APIS website for air quality assessment, based on the designated habitats of the SAC

² Critical Load values taken from APIS. In all cases the recommended number, at the bottom of the range of values, was used.

³ AADT – Annual Average Daily Traffic. Traffic counts were obtained from the website of the Department for Transport (see methodology in Annex D) Data is only available for 2008 for this road

⁴ Increases in AADT of 1000 or more are considered potentially significant.

The estimated increase in AADT on the B5036 is 1020, above the threshold of significance of changes in 1000 AADT or more. Using the same methodology as outlined for the assessment of Peak District Dales SAC (although noting that this is a B road), the effect on nitrogen deposition of this increase in traffic flow was calculated to be an increase of 0.003 N ha⁻¹ yr⁻¹, which is 0.02% of the Critical Load for that habitat. As mentioned above, this is not considered to be a significant

increase because the change in N-deposition is below the accepted threshold of 1% of the Critical Load as set out within the Environment Agencies Guidance (see details provided in Annex D of the main HRA Report). Therefore, it is possible to conclude that there will not be adverse effects of increased traffic on air quality on Gang Mine SAC.

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

8.4 Summary and Conclusions

The section has set out an assessment of the potential for adverse effects arising in relation to air quality from increased traffic. *It is concluded that the Local Plan **will not** result in an adverse effect on the integrity of any of the European sites as a result of any traffic increases.*

9 Appropriate Assessment: increased recreational pressure

9.1 Introduction

A potential effect of trampling of habitats or disturbance of birds as a result of increased recreational pressure from housing development and from increased tourism across 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 Preferred Options policies which accommodate an increased population within the Plan Area:

- S6 - Strategic Housing Development;
- S8 - Matlock/ Wirksworth / Darley Dale Development Area Strategy; and
- EC7 - Promoting Peak District Tourism and Culture.

Please note that the potential effects of localised increases in recreational pressure are addressed within Section 10 and also include potential effects on Gang Mine SAC and Cannock Chase SAC.

9.2 Background

9.2.1 Potential Effects from Increasing the Resident Population and Visitors on the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC

As the South Pennine Moors (Phase 1) SPA and SAC are almost entirely co-located, these two sites have been considered together – this section considers the southern part of these sites, i.e. the area covered by the Phase 1 SPA, and when referred to together are termed the ‘South Pennine Moors (Phase 1) SPA / SAC’. This section presents a combined AA of the potential effects of increased recreational pressure for the two sites. The possible effects of relevance to this assessment are disturbance of the bird species for which the Phase 1 SPA is designated (either by people or by accompanying dogs), and trampling or erosion of the habitats for which the SAC is designated. (Please note that potential effects of fires and localised recreational effects from specific 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 regards to the potential for the Derbyshire Dales Local Plan to increase visitor numbers and with regards to possible visitor behaviour on the SPA/SAC. The SPA/SAC is located within the Peak District National Park (PNDP) 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. This section of the assessment also considers the results of a separate HRA of Local Plans of a group of councils known as the 'Greater Nottingham' area, which are pertinent to this assessment. The information regarding the Greater Nottingham HRA includes a summary of the management and mitigation measures currently available to the various organisations responsible for managing the land of the South Pennine Moors (Phase 1) SPA / SAC.

Estimates of visitor numbers

Data from the Peak District Visitor Survey (2005¹⁶); the Peak District Visitor Survey 2014¹⁷; from STEAM analysis¹⁸ by the National Park Authority (accessed via the Park Authority's website¹⁹); and from population estimates taken from the Sheffield City Region Population demographics forecast study ²⁰ (which is based on ONS population data) have been used to estimate the increase in visitor numbers to the Peak District National Park as a result of population increases in the Derbyshire Dales Plan Area. This is outlined in Box 9.1.

It should be noted that the 2014 National Park Visitor Survey used a representative sample of visitors via interviews in the North West of the PDNP to obtain information about visitor behaviour and their perceptions. This part of the PDNP is located closest to Great Manchester and is not in close proximity to the Derbyshire Dales Plan Area which is located near to the south eastern part of the National Park. The Visitor Survey report has implemented a methodology and sample frame to replicate the survey in other areas of the PDNP and therefore the survey provides some useful information for consideration in relation to the Derbyshire Dales area. However, the 2005 Visitor Survey was undertaken at survey points across the whole PDNP and provides data which is more relevant to the Derbyshire Dales District and therefore relates to areas closer to the Derbyshire Dales District. Therefore, information from both the 2005 and the 2014 visitor surveys has been referred to in Box 9.1.

¹⁶ Peak District National Park Visitor Survey, Peak District National Park Authority, 2005

¹⁷ Peak District National Park Visitor Survey 2014 & Non-Visitor Survey 2014, Peak District National Park Authority, 2014

¹⁸ 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.

¹⁹ <http://www.peakdistrict.gov.uk/microsites/sopr/welcoming/tourism> Accessed 30th October 2013.

²⁰ Sheffield City Region Demographic forecasts: 2014—2034, Phase 2. Edge Analytics, April 2015

Box 9.1 Estimation of increase in visitor numbers to the Peak District National Park as a result of population increases in the Derbyshire Dales Plan Area 2013-2033

- Data from STEAM analysis estimated that the total number of tourist days spent (by visitors spending over 3 hours) in the Park has remained around 12 million per annum for the last five years (STEAM does not capture visitors spending less than 3 hours).
- Approximately half of visitors spend less than 3 hours in the Park²¹. There are 21 million total annual visitors.
- About 8 in 10 visitors to the Peak District National Park are day visitors (2014 Survey). 77% of respondents to the 2005 visitor survey were 'day respondents' = 16.2m.
- One third of respondents to the National Park Visitor Survey 2014 stated they visited because they lived locally and or the area was easy to get to.
- 83% of visitors to the National Park surveyed in 2014 came to the area by car, indicating a slight decrease since 2005 when 85% came by car.
- Overnight visitors make up 16% of the visitors, with two thirds staying inside the National Park (2014 visitor survey).
- 19% of day respondents to the 2005 visitor survey came from a Derby postcode (NB this is a much larger area than Derbyshire Dales Local Plan Area). 19% of 16.2m is 3.1m.
- The population of Derbyshire is 0.76 million, so if this population is responsible for 3.1m visits, that means each resident makes an average of 4.1 visits per year.
- Two thirds of visitors to the National Park are regular visitors (2014 visitor survey).
- It is assumed that as residents of the Derbyshire Dales Plan Area are the closest in the County to the National Park, they would make proportionately more visits, so to be conservative, it has been assumed they might visit twice as often as other residents of the County.

Therefore, it is assumed an average of 8.2 visits per person per year for a resident of the Derbyshire Dales plan area.

- Derbyshire Dales' population totals 71,300 persons as of mid-2013²².

²¹ Peak District National Park, State of the Park

www.peakdistrict.gov.uk/mircrosites/sopr/welcoming/tourism accessed on 27/07/14

²² ONS 2013 Mid-Year Population Estimates

- Official 2012-based Sub-National Population Projections project forward population trends seen over the 2006/2007-2012 period. They suggest that the District's population will increase by 8.4% between 2013-33²³

An 8.4% increase represents an increased population within the Derbyshire Dales District of 5,989 people by 2033.

A projected population increase in the Plan Area of 5,989 people by 2033, with an estimated 8.2 visits per person per year by residents in the Plan Area, has been calculated to generate an increase in visits to the National Park of approximately 49,110 visits per year in 2033. Whilst this is not a small number, to put it in context, it represents 0.23% of the current annual total visitor numbers to the Park of approximately 21 million. It should be emphasised that these figures are for visits to the whole of the Peak District National Park, not just the SPA/SAC areas (see below for discussion of the use of the SPA/SAC areas/National Park). 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.

Visitor behaviour and accessibility to the SPA / SAC

It should be noted that much of the South Pennine Moors SPA/SAC is also Open Access Land, and as such, the public has the right to enter and remain on the access land for the purposes of open-air recreation as permitted by the Countryside and Rights of Way Act ('CRoW', 2000; subject to certain restrictions). Within the area of the SPA/SAC closest to the Plan Area - 'East Moor', there are very few footpaths marked on an OS Explorer map (a total of approximately 3 km of footpaths), and equally few tracks on the ground (as viewed on Google EarthTM). Therefore, to walk (or pursue other recreational activities) in this area, people must travel across the open moor.

It is difficult to predict the proportion of people who would walk across the open moor, away from footpaths. One source of evidence for this is an Access Management Report published by Natural England²⁴. A summary of the results from this study is given in Box 9.2.

²³ Derbyshire Dales Housing & Economic Development Needs Assessment, prepared by GL Hearn on behalf of Derbyshire Dales District Council, Final Report (September 2015)

²⁴ Countryside and Rights of Way (CROW) Act 2000 (Part 1): National Open Access Visitor Survey (2006-2008), Natural England Commissioned Report NECR036c, published September 2011.

Box 9.2 Summary of results from Natural England's National Open Access Visitor Survey (NECR036c; 2011)

This study used a variety of methods to investigate both whether people walked on public rights of way (PRoW), tracks, or open access land, and also how this use may have changed since the introduction of the CRoW Act. The evidence is not straightforward to interpret. One of the methods used was to interview recreational users and ask them to show on a map the route that they had/were going to walk. This data was then digitized and the length and proportion of the walk on the 3 types of area: PRoW; non-PRoW tracks; and open access land calculated. This showed that visitors spent an average of 34% of their walk on open access land (averaged over the three years of the survey). However, an average of 89% of visitors spent at least some part of their walk on open access land, although it should be noted that any activity that wasn't on a PRoW or track was allocated to the 'open access' category, and this included car parks, picnic areas and other areas. As the percentage of visitors spending at least some part of their walk off PROW was much greater than the proportion of a walk off PROW, it was concluded that many visitors only go off PROW for a short time or distance.

It was also noted that: *"the mapping software assumed a 20m buffer zone around the line of the PRoW or track to calculate the lengths of walk on PRoW or path, with the rest of the walk length then deemed to be on Open Access Land. The spatial analysis of a walk off PROW or track will include those who are recorded as being just off a path as well as those who are wandering away from paths completely. Visual analysis of the routes plotted and of the observation data suggests that the estimates of usage of Open Access Land from the spatial analysis are high, that is, the majority of people do actually follow the general alignments of established routes, and the number of people who wander completely away from paths and tracks is actually quite small."*

Also: *"Going off PROW to exercise dogs was mentioned by only 3% of those respondents at moorland sites compared with 8% at lowland sites, and by 4% at sites with biodiversity designations compared with 10% at other sites."*

In terms of how far people walked: *"The average walk length when at a site (i.e. within the boundary of an Open Access Land site) is 2.29km. This is often part of a longer walk however, with the total recorded walk length averaging at 3km. More than a quarter of walks are less than a km in length, and half are between 1 and 3km. Only 6% are more than 7km (4.3miles)."*

One of the areas studied was the South Pennine Moors, although north of the European sites which are being considered in this assessment of the Derbyshire Dales Local Plan - the two locations studied were Ilkley Moor and Bingley Moor. They concluded that there was no direct impact of CRoW, as the areas were being used before CRoW came into force. On Ilkley Moor most users stayed on PRoW in sensitive areas and on Bingley Moor all users interviewed and observed stayed on PRoW, although one dog owner was observed allowing their dog to roam,

in contravention of an exclusion in force at the time. In this area there was pre-existing 'linear' use (on two long distance trails, the Dales Way Link and the Millenium Way).

The study concluded that: *"it appears that CRoW has legitimised usage of land off PRoW rather than changed usage at this early period in the life of the new CRoW rights of access."*

Therefore, while it is difficult to put a number on the percentage of visitors who would walk across the open access land of the moors, i.e. significantly away from the network of footpaths / rights of way, it is suggested in the light of the evidence above, that it would likely be a minority of visitors.

9.2.2 Open Space Provision

Accessibility of open space within the South Pennine Moors SPA / SAC for recreational use

It is assumed that those people who wish either to access the moorland landscape in particular, or to go for a 'countryside' walk out of their town, would be expected to drive or use public transport. Those driving would need to find a suitable place to park, which would typically mean a car park. The nearest car park to the Plan Area that is adjacent to the SPA/SAC (Eastern Peak District Moors SSSI component) and shown on OS Explorer Map OL24, is approximately 13 km away via road, which would take 18 minutes to drive. From this car park, there are no rights of way up to the moorlands either side of the road. There is a footpath leading north from the car park for approximately 1.5 km to a triangulation point. On the south side, approximately 1 km along the A619 a track leads up onto East Moor, where it runs for approximately 1km across a corner of the moor before joining the opposite boundary. Any other walks or other recreational activities starting from this car park would be across open moorland on open access land.

This combination of relatively few car parks and a sparse distribution of rights of way in the area of the South Pennine Moors SPA / SAC closest to the Derbyshire Dales Plan Area, means that the moorland of the SPA / SAC is not particularly easy to access. Evidence suggests that only a minority of walkers stray far from a footpath or right of way²⁵.

Current provision of open space accessible to residents of Derbyshire Dales

As the large majority of the South Pennine Moors (Phase 1) SPA / SAC is within the Peak District National Park, the remainder of the National Park forms the most closely comparable alternative for recreational activities. Following on from the consideration of accessibility above, once people are in their cars, they are not restricted to driving to the nearest location for a walk. The majority of the south-eastern quarter of the Peak District National Park is accessible within 20 minutes'

²⁵ Countryside and Rights of Way (CROW) Act 2000 (Part 1): National Open Access Visitor Survey (2006-2008), Natural England Commissioned Report NECR036c, published September 2011.

drive of Darley Dale (the closest settlement with a housing allocation site to the South Pennine Moors (Phase 1) SPA/SAC). Therefore, residents of the Derbyshire Dales Local Plan Area would be expected to spread out across the Peak District for outdoor recreation activities.

The Peak District National Park Management Plan 2012-2017 (2012)²⁶ describes how the Peak District National Park Authority is actively managing recreation, rather than discouraging it, including making it more accessible. To support this aim, the National Park Authority also has a strategy for recreation, 'Active in the Outdoors'²⁷, which includes an Action Plan.

In the south-eastern quarter of the Peak District are a multitude of footpaths, including a number of long distance trails:

- Derwent Valley Heritage way – this passes alongside Darley Dale and Matlock;
- Limestone Way; part of which connects Matlock with Monyash, Miller's Dale and Castleton; and
- Monsal trail – this trail is for walkers, cyclists, horse riders and wheelchair users and has received recent investment and promotion. It runs along the route of a disused railway line.

An assessment of open spaces across the combined planning areas of Derbyshire Dales District Council, the Peak District National Park Authority and High Peak Borough Council was carried out in 2009 and reported within the 'Peak sub-region, PPG17 Open space, Sport and Recreation Study'²⁸. This was a PPG17-compliant Audit and Needs Assessment and was commissioned to underpin the then Joint Core Strategy (JCS). The JCS was abandoned in 2012 and the authorities are progressing separate Local Plans. Although the study is relatively old and relates to a larger area than just the Derbyshire Dales Plan Area²⁹, the visitor survey information is relevant. The study found that within the previous 12 months, 33% of residents had accessed a 'civic space' (e.g. civic and market squares); 32% had accessed 'green corridors' (e.g. footpaths); 27% had accessed publicly accessible parks and 17% had accessed a 'nature area' (also termed 'natural and semi-natural greenspaces'). 36% of residents had not accessed any form of open space during the previous 12 months, the main reason given was 'lack of interest'.

²⁶ Available at: <http://www.peakdistrict.gov.uk/microsites/npmp/our-vision>

²⁷ Active in the Outdoors 2010-2020, A Recreation Strategy and Action Plan for the Peak District National Park. Peak District National Park Authority, 2010

²⁸ Peak sub-region, PPG17 Open space, Sport and Recreation Study; Open Spaces Assessment Report. Prepared by Knight, Kavanagh & Page, February 2009

²⁹ Note that an updated Open Space, Sport and Recreation Study is currently being commissioned by Derbyshire Dales District Council in liaison with Sport England.

In general, the residents of the assessed area felt that open space was well provided, although a concern was expressed about the possible loss of open space to new developments (e.g. which might result in coalescence of neighbouring settlements, which was seen as a negative outcome).

With regards to 'natural and semi-natural greenspaces', although the quality scores were often below a 'green flag' threshold, the study noted that these sites tend to score poorly against criteria such as bins and benches, and that the scoring system may not be appropriate for natural / semi-natural spaces. High value was placed on these types of spaces and availability was regarded to be good. Residents were willing to travel 15-30 minutes by bus or car to access nature areas. Whilst the provision of Local Nature Reserves in the Derbyshire Dales area was below the recommended threshold of 1hectare Local Nature Reserve per 1000 population, there are two National Nature Reserves in Derbyshire Dales, and also 20 Derbyshire Wildlife Trust nature reserves across the sub-region, the total area of which exceeded the recommended threshold value. Wildlife Trust reserves do not have the statutory designation of a Local Nature Reserve but were considered by the study to meet a similar need.

Residents considered the provision of parks in the study area to be adequate, both in terms of quality and quantity. This type of open space scored the highest in terms of the value placed on them by residents. It was noted that in addition to the parks officially included in the assessment, the study area had three parks that were outside the scope of the assessment as they had restricted access in terms of times, or an entrance fee. These were Chatsworth Park, Lyme Park and Ilam Hall Parkland. These were considered to be an important recreational resource, and the study concluded that they made a significant contribution to residents' perceptions on open space provision.

Green corridors are sites that offer opportunities for walking, cycling or horse riding, whether for leisure purposes or travel and opportunities for wildlife migration. This also includes river and canal banks, road and rail corridors, cycling routes within towns and cities, pedestrian paths within towns and cities, rights of way and permissive paths. Five green corridors were identified within the study area, plus an extensive public right of way network. Almost a third of residents used green corridors, with 73% of this group doing so at least once per week. Walking or rambling was noted as a popular pastime for residents. The provision of footpaths was felt to be sufficient in terms of quantity, although quality was more varied, and a potential improvement of greater connectivity of paths was noted. Bridleway provision was not as good and it was noted that the existing bridleway network was heavily used.

In summary the current provision of open space within and surrounding the Plan Area is considered to be good.

The future of open space provision: management and improvement

Through the Peak District National Park Management Plan (2012) and strategy for recreation, 'Active in the Outdoors', the Peak District National Park Authority is actively managing recreation,

while protecting the environmental and historical assets of the National Park, including making it more accessible.

It is considered reasonable to assume that the scale of the increased number of recreational visits calculated above (an average of 8.2 visits per person per year for a resident of the Derbyshire Dales Plan Area – see Box 9.1), as a result of population increase in the Derbyshire Dales Local Plan area, should be accommodated within the scope of the Peak District National Park Management Plan and Recreational Strategy. Considering cumulative effects, it is furthermore assumed that similar increases in visits from neighbouring Local Plan areas would also be accommodated within the National Park's plans.

There are a number of plan-wide Policies in the Derbyshire Dales Local Plan which are relevant to the provision of open space and recreational facilities. These are:

- Policy PD4 Green Infrastructure;
- Policy HC14 Open Space and Outdoor Recreation Facilities; and
- Policy HC17 Promoting Sport, Leisure and Recreation.

Amongst other things, these policies aim to: encourage improvement to existing recreation facilities; provide accessible green spaces within the towns and villages of the Plan Area, especially where new development takes place; safeguard existing open spaces from development; require new residential developments to make provision for appropriately designed green space and recreation facilities; and require a financial contribution (where appropriate) to improve the provision of parks and gardens, allotments and civic space.

There is a legal duty on landowners to maintain access to PRoW and therefore there is reason to believe that the network of footpaths will be at least maintained, if not improved during the Plan Period. Derbyshire County Council produced their first Rights of Way Improvement Plan³⁰ (RoWIP) in November 2007. Recently, a new Statement of Action has been produced for the period to 2017. This includes aims to provide a more connected, safe and accessible network of paths suitable for all users and improve the use of the network.

Derbyshire County Council also have a number of 'Greenway strategies'³¹, which have identified routes that meet the goals of Natural England and create a user-friendly network to link communities and places of interest across Derbyshire and through the PDNP. The aim of the strategies at this stage is to identify the potential for developing a network of Greenways across Derbyshire. No dedicated funding has been approved to implement the strategies, but it is hoped

³⁰ <http://www.derbyshire.gov.uk/leisure/countryside/access/improvements/default.asp> accessed 30th October 2013

³¹ <http://www.derbyshire.gov.uk/leisure/countryside/access/greenways/strategies/> accessed 30th October 2013

that they will provide the basis to safeguard the routes and pursue funding as and when opportunities arise.

9.2.3 The Greater Nottingham Aligned Core Strategy HRA

Further evidence regarding potential effects of increased recreational effects on the Peak District Moors (South Pennine Moors Phase 1) SPA, the South Pennine Moors SAC and the Peak District Dales SAC can be found within the HRA³² of the 'Greater Nottingham' Aligned Core Strategy (ACS). This is a group of Councils: Broxtowe Borough Council; Erewash Borough Council; Gedling Borough Council; Nottingham City Council; and Rushcliffe Borough Council. The full HRA can be found through the link in the footnote below, but the section of that assessment regarding effects of recreational pressure on the three European sites referred to above is included as Annex G to this document. In addition, some relevant information of the Greater Nottingham HRA is summarised or reproduced below.

Firstly, it is important to note that the Greater Nottingham HRA assessment was based on the assumption that all the local planning authorities around the Peak District National Park would be providing for a similar population increase. A 7% increase in total visitors was taken as the 'in-combination' assessment of the increase in visitors from all areas around the National Park (as the population increase for the Derbyshire Dales District is 8.4% but over a long period it is assumed that a 7% increase up to 2028 is comparable to what could be expected within the Plan Area up to 2033), and therefore the conclusions of that assessment are directly applicable to the HRA of Derbyshire Dales Local Plan.

Discussion for the Greater Nottingham assessment with officers from The Peak District National Park Authority and Natural England concluded: firstly, that a 7% increase in visitors from a 7% increase in population was unlikely, but represented a 'worst-case scenario'; and secondly, that "none of the officers raised immediate concerns about such a potential increase in visitor numbers to the three European sites".

The assessment on the South Pennine Moors (Phase 1) SPA / SAC considered three effects:

- erosion of surface vegetation;
- disturbance of birds; and
- increased fire risk.

The effects of erosion were considered to be negligible, they noted that: "*most visitors do stay on paths*" (although there was no citation for this assertion), and "*the spatial impact therefore would*

³² Habitats Regulations Appraisal Screening Record for the 'Greater Nottingham' Aligned Core Strategy (ACS), David Tyldesley and Associates, 2010. Obtained through <http://www.nottinghamcity.gov.uk/article/23500/ACS---Examination-Library-Core-Documents> (accessed 12 December 2013); Document code CD/REG/11, dated June 2012.

be very localized. The worst affected areas are and would be subject to repair, maintenance and improvement works, limiting the extent of damage.”

Disturbance was noted as “*potentially significant*”. However, it was also noted that “*Defining the effects of disturbance as a result of increased visitors is not straightforward and appears not to be proportional to a defined increase in visitor numbers (apart from core ‘honey pot’ sites)*”. “*Rather, the observed effects of disturbance are more acute when small numbers of people act in such a way as to cause potential harm.*”

With regards to fire risk, the Greater Nottingham HRA states “... *an increase in recreation pressure related to an increase in fire risk has the potential to be a significant effect on the moorland European sites.*”

Existing management or mitigation measures considered in Greater Nottingham HRA for the South Pennine Moors (Phase 1) SPA / SAC were identified as including but not limited to the following:

- *Moorland management plans*
- *‘Soft’ visitor management (e.g. controlling parking, positioning access styles, education, ranger patrols and voluntary agreements)*
- *Higher Level Stewardship agri-environment agreements*
- *Natural England powers and measures*
- *Local Access Forum agreements on use by key stakeholders.*

These measures were regarded as inter-related factors and measures all capable of reducing the likelihood of significant effects. Even in light of the 7% increase in visitors to the moors, the officers all felt that the existing raft of management initiatives and powers of the CRoW Act will continue to be sufficient to avoid a significant effect on the European sites, even if experience in the future indicated that these measures, such as closure due to high fire risk, may need to be used more often or for longer. Well tried and tested habitat and access management measures are available to respond to any perceived adverse effect on the European sites before they became significant in conservation terms. In conclusion, the measures were considered sufficient to manage any potential effects resulting from an increase in visitor numbers to the Peak District National Park including the European sites within the Park arising from an increase in population provided for by the ACS, either alone or in combination with other plans or projects.

9.3 Assessment and Conclusions

In order to assess the potential effects from increased recreation pressure, information has been gathered with regards to the potential for the Derbyshire Dales Local Plan to increase visitor numbers and with regards to possible visitor behaviour on the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC. There are very few footpaths or car parks across the south-eastern section of the SPA/SAC nearest the Plan Area, which makes this area of the SPA/SAC relatively inaccessible (although it is open access land). There are a good choice

of alternative outdoor recreation facilities, open spaces (including accessible natural green space) and rights of way across the rest of the Peak District National Park, as well as within the Plan Area itself, and more widely across Derbyshire, which are readily accessible to residents of Derbyshire Dales. There is commitment from Derbyshire Dales District Council and Derbyshire County Council to maintain and where possible improve these facilities.

The Peak District National Park Authority has a Management Plan and Recreational Strategy, which supports the aim of increasing accessible recreation opportunities, while protecting the environmental and historical assets of the National Park, and it is considered that the management of the estimated increase in visitor numbers to the National Park resulting from the Derbyshire Dales Local Plan (8.4%), as well as from neighbouring local plans, can be accommodated within these National Park plans. Commitment is given in the Derbyshire Dales Local Plan to require appropriate levels of open space provision as part of new residential developments.

Finally, a separate HRA, of a group of 'Greater Nottingham' councils' Aligned Core Strategy, has concluded no significant effect as the result of an in-combination assessment regarding recreational pressure on the Peak District Moors (South Pennine Moors Phase 1) SPA, the South Pennine Moors SAC and the Peak District Dales SAC resulting from comparable predicted levels of population growth.

*Combining the results of the AA work for the Derbyshire Dales Local Plan presented above, with the conclusions of the HRA Screening Record for the Greater Nottingham Aligned Core Strategy it is therefore concluded that the policies within the Derbyshire Dales Local Plan will not result in an adverse effect on site integrity of the South Pennine Moors (Phase 1) SPA / SAC and the Peak District Dales SAC with regards to recreational pressure as a result of Draft Local Plan Policies **S6 - Strategic Housing Development, S8 – Matlock / Wirksworth / Darley Dale Development Area Strategy; and EC7 - Promoting Peak District Tourism and Culture.***

10 Appropriate Assessment: urban effects

10.1 Introduction

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

- Predation of bird or animal species (mainly by cats);
- Effects of dogs - eutrophication (mainly through faeces) and disturbance of grazing livestock;
- Localised recreational pressure;
- Localised effects from construction;
- 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;
- Peak District Dales SAC;
- Gang Mine SAC; and
- Cannock Chase SAC.

For development which could occur in unspecified locations, it is considered that Local Plan Policy PD3 Biodiversity and the Natural Environment (reproduced within Annex E) provides a high level of protection for European sites from potential urban effects for any development coming forward with the Plan Area.

However, all of the allocation sites have been screened for this potential effect and LSEs have been identified in relation to the following allocation sites due to their proximity to European sites:

- HC2 - Housing Land Allocations, in connection with the following allocation sites:
 - HC2(m) Land at Cavendish Cottage, and Doveridge, HC2(n) Land at Derby Road / Hall Drive, Doveridge (Cannock Chase SAC);
 - HC2(v) Land to the North of Porter Lane / East of main Street, Middleton by Wirksworth (Peak District Dales SAC and Gang Mine SAC); and
- DS3 – Land at Stancliffe Quarry, Darley Dale (Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC).

10.2 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 10.2.1 to 10.2.5:

- Predation of bird or animal species (mainly by cats);
- Effects of dogs - eutrophication (mainly through faeces) and disturbance of grazing livestock;
- Localised recreational pressure;
- 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 Derbyshire Dales Local Plan.

10.2.1 Pet predation

This is mainly an issue of cats preying on sensitive bird or animal species – in the European sites under consideration, there are no designated animal species, so this issue is confined to the effects on birds on the Peak District Moors (South Pennine Moors Phase 1) SPA.

10.2.2 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 dogs worrying their animals. This would upset the management programme. Both these effects are discussed in detail in Taylor et al³³.

³³ 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

10.2.3 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.

10.2.4 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 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.

10.2.5 Fires

Fires can have significant effects, both on heathland 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.

There is evidence available on fires^{34 35}, 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.

There is some evidence that a significant proportion of deliberate fire setting is by school-aged children. Within the Kirby & Tantram research, a zone of 500m was used, and it was found that the degree of development within this zone correlated with incidence of fires (on Dorset Heathlands). The explanation given for the choice of this distance was previous reports suggesting that this is the maximum likely access distance for average users of greenspace^{36 37}. On a precautionary basis, where there are potential effects on fire-setting from developments close to a European site, it is recommended that project-level HRA be carried out within at least a zone of 500 m from the European site, based on the issue of fire-setting alone. However, other

³⁴ J. C. Underhill-Day, (2005) 'A literature review of urban effects on lowland heaths and their wildlife', English Nature Research Reports, Number 623

³⁵ 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

³⁶ 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.

³⁷ Box, J. & Harrison, C. 1993. Natural spaces in urban places. *Town 19 Country Planning*, 62(9): 231-235

urban effects (primarily dog walking) have a larger zone of influence, and the proposed mitigation against urban effects is for the larger zone – of 1.6 km – which captures all urban effects identified.

10.2.6 Fly-tipping / litter

This issue was discussed with a representative of the organisations responsible for management of the relevant European sites. The general conclusion from these conversations was that fly tipping / littering is considered more of a localised and visual problem, and not likely to result in an adverse effect on the integrity of the European sites considered.

10.3 Assessment

10.3.1 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 and when referred to together are termed the ‘South Pennine Moors (Phase 1) SPA / SAC’. This sub-section presents a combined AA of the potential effects of increased recreational pressure for the two sites and pet predation on the SPA.

One of the urban effects – pet predation – is restricted to the SPA. Cat predation was a cause of concern on the Thames Basin Heaths SPA, although, as noted above, there are a number of important differences between the Thames Basin Heaths SPA and the Peak District Moors (South Pennine Moors Phase 1) SPA, and these are particularly relevant to the issue of cat predation. Evidence was available both that cats visit lowland heathland, and also that cats had been recorded taking some (adult) heathland species including Dartford warbler³⁸, which is one of the birds for which the Thames Basin Heaths SPA is designated.

However, no data has been found regarding how frequently domestic cats visit upland moorland. An opinion from the Peak District Park Authority Ranger Service³⁹ was that they would not expect cats to roam over the entirety of the moorlands, but that they would likely be confined to a relatively narrow band around the perimeter. Neither has any data been found regarding cat predation of the species of interest in the Peak District Moors (South Pennine Moors Phase 1) SPA: merlin, short-eared owl, golden plover, peregrine falcon or dunlin. In the absence of scientific evidence, and based on common sense, it is expected that predation of these species by domestic cats would be significantly less than of species such as the Dartford Warbler. This is partly based on size⁴⁰: Dartford Warbler is 12 cm in length, whereas merlin is 28 cm, short-eared owl is 38 cm, golden plover is 28 cm, peregrine falcon is 42 cm and dunlin is 18 cm. Furthermore, three of the

³⁸ Underhill-Day (2005); and see Annex G for further details.

³⁹ Andy Farmer, South Area Manager Ranger Team, Peak District National Park Authority 18 December 2013, *pers comm* by phone

⁴⁰ Sizes are from tip of beak to tip of tail and were obtained from British Trust for Ornithology website: <http://www.bto.org/about-birds/birdfacts>

designated species of the South Pennine Moors Phase 1 SPA are birds of prey, and it is considered highly unlikely that a domestic cat would successfully kill these adult birds.

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 young birds in the nest. However, it is considered unlikely that domestic cats would have a significant effect on the populations of the designated bird species, in view of the fact that domestic cats are expected to be restricted to the edges of the SPA, and the Derbyshire Dales Plan Area shares a border of less than 4 km with the south-western tip of the SPA. It has therefore been considered a 'minor' issue within urban effects and unlikely to result in an adverse effect on the site integrity of the SPA alone.

The two site allocations closest to the SPA are allocation site **DS3 – Land at Stancliffe Quarry, Darley Dale**. The site is approximately 1.4km. These distances are around the upper limits of the principles of cat roaming which have formed the basis of the Thames Basin Heath Delivery Framework⁴¹ which prevents any development within 400m of the Thames Basin Heath SPA boundaries as this is considered to be the distances that most cats will roam.

Due to the small proportion of the South Pennine Moors (Phase 1) SPA boundary which is located within the Derbyshire Dales District and the distances to the allocation site, it is concluded that neither allocation site nor the Draft Local Plan as a whole will result in an adverse effect on the South Pennine Moors (Phase 1) SPA from pet predation.

The effects of dogs are not considered to be significant on the South Pennine Moors (Phase 1) SPA / SAC, given the size of the sites, the fact that a majority of walkers seem to stay on or near footpaths and the degree of management of walking activities within the Peak District National Park (see Section 9 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). These European sites are almost entirely within the Peak District National Park, and the Peak District National Park Authority has very good arrangements for preventing and fighting fires. There is a Fires Operation Group within the Park, with a high national reputation: this includes the Peak District National Park Authority, all the local fire services, landowners and organisations renting the land, and gamekeepers. They share equipment and knowledge, fight fires and raise awareness. 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.

⁴¹ Thames Basin Heaths Special Protection Area Delivery Framework Thames Basin Heaths Joint Strategic Partnership Board, 2009

Evidence from a Manager from the Peak District National Park Authority⁴², was that fly-tipping does occur, and is unsightly, but only at a local scale, and was not considered likely to result in a significant impact on the habitats as a whole. Therefore, it is concluded that fly-tipping would not result in an adverse effect on site integrity of the SPA/SAC.

The wording of Local Plan Policy PD3 Biodiversity and the Natural Environment is reproduced in Annex E. This is a strongly worded policy which provides protection to European sites from adverse effects of development proposals. In addition, any potential effects from construction activities associated with any development sites within the Plan Area will also be controlled via Local Plan Policy PD9 Pollution Control and Unstable Land. In accordance with Policy PD3, the District Council will screen all development proposals for potential adverse effects on European sites and along with Policy PD9, will ensure that proposals are not permitted which would cause harm to any European sites.

Policy DS3 Land at Stancliffe Quarry, Darley Dale allocates land for residential development comprising approximately 100 dwellings. This site is located near to the settlement of Northwood, approximately 1.4km from the boundary of the SPA and SAC. It was identified in the screening exercise that development of the land at Stancliffe Quarry for residential use might result in increased recreational pressure on the Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC in this area from localised and regular recreation.

Analysis of this area using Ordnance Survey (OS) data suggests that in order to reach the boundary of the SPA/SAC, residents would need to walk approximately 1.5km on a lane and path up a steep gradient. Policy DS3 requires provision of open space as a part of the scheme. Given that open space will be provided on site which could be used for daily recreation and given the distance and gradients involved in accessing the SPA/SAC, it is suggested that residents will not visit the SPA/SAC on a daily basis and therefore, it is concluded that allocating this site for housing development is not going to increase recreational pressure on the SPA/SAC.

*It is therefore concluded that **Policy DS3 Land at Stancliffe Quarry, Darley Dale** will not result in an adverse effect on the integrity of any European site with regards to recreational pressure.*

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

10.3.2 Peak District Dales SAC

There are possible effects of dog walking on two components of the Peak District Dales SAC that lie within or adjacent to the plan area: Matlock Woods SSSI; and Via Gellia Woodlands SSSI. Effects on Matlock Woods SSSI are unlikely as the woodland habitat is less sensitive to effects from eutrophication and also that habitat does not require grazing as a management practice. Some of the units of the Via Gellia Woodlands SSSI are calcareous or neutral grassland, both of

⁴² Andy Farmer, South Area Manager Ranger Team, Peak District National Park Authority 18 December 2013, *pers comm* by phone.

which can experience species composition changes as a result of eutrophication. Grazing may also be required or beneficial for maintenance of those habitats, and therefore there is the potential for dogs to disturb the grazing animals. Mitigation is suggested to reduce the likelihood of significant numbers of additional dogs having an effect on the site.

Fires could cause adverse effects on the habitats of this SAC.

Fly-tipping was considered to be a localised issue, and not likely to result a significant impact on the habitats of the SAC as a whole. Therefore, it is concluded that fly-tipping would not result in an adverse effect on site integrity of the SAC.

Allocation reference HC2(v) Land to the North of Porter Lane / East of Main Street, Middleton by Wirksworth is a site which lies approximately 1km to the south of the Via Gelia Woodland SSSI component site of the Peak District Dales SAC. In order to access the Via Gelia Woodland residents of this site would most likely drive along Main Street in Middleton, however, there is no formal carpark for accessing the Via Gelia Woodland and therefore it is considered that the SSSI is relatively inaccessible to residents of this site and is not likely to be used for regular recreation.

*It is concluded that Allocation reference **HC2(v) Land to the North of Porter Lane / East of Main Street, Middleton by Wirksworth** will not increase recreation pressure on the Via Gelia Woodland SSSI component site of the Peak District Dales SAC.*

10.3.3 Gang Mine SAC

There are possible effects of increased numbers of visitors resulting in trampling of the habitats of the site. Gang Mine SAC is a small site at approximately 8 ha, and is managed as a nature reserve by Derbyshire Wildlife Trust. Other than one area where visitors are not allowed (around a dewpond), it is open access land with a number of public footpaths. Local increases in the population, particularly those people living close enough to the site to walk regularly to it, could result in a significant effect on the habitats through trampling.

There are possible effects of dog walking on the grassland habitat of Gang Mine SAC, which can experience species composition changes as a result of eutrophication. Grazing may also be required or beneficial for maintenance of the habitats, and therefore there is the potential for dogs to disturb the grazing animals.

The closest site allocation is **HC2(v) Land to the North of Porter Lane / East of Main Street, Middleton by Wirksworth**. This is a small residential allocation site with a capacity of 24 dwellings situated in an area with some limited existing residential uses. The site is approximately 400m to the north east of Gang Mine SAC from the nearest point of the allocation. An LSE was identified in screening because the proximity poses a risk of increasing recreational pressure and other urban effects on the SAC. However, there are no direct public rights of way leading from the allocation site which could be used to access Gang Mine SAC by foot. In order to access Gang Mine from the allocation site, residents would have to walk along the B5035 which is enclosed with dry stone walls and has no walkway. This route would add another 100m to the walking route in order to reach the SAC. Due to the low accessibility of the allocation site to Gang Mine SAC, it is considered that the risk of an adverse effect from recreation is low.

There could be potential effects on Gang Mine from fire setting – Derbyshire Wildlife Trust, who manage this site, have advised that it would likely result in a change in species composition after the fire⁴³. There have not been any problems with fires to date. Due to the low accessibility of the SAC from the allocation site it is not considered likely that residents will frequently access the site and the risk of the allocation site increasing resulting in incidents of fire setting on the SAC is low.

Fly-tipping was considered to be a localised issue, and not likely to result in a significant impact on the habitats of the SAC as a whole. It was confirmed by the Derbyshire Wildlife Trust that there has not been problems with fly-tipping in the past. Therefore, it is concluded that fly-tipping would not result in an adverse effect on site integrity of the SAC.

*It is concluded that the allocation sites **HC2(v) Land to the North of Porter Lane / East of Main Street, Middleton by Wirksworth** will not result in adverse effects on Gang Mine SAC with regards to recreational pressure, fire setting and fly tipping.*

10.3.4 Cannock Chase SAC

A 15km 'zone of influence' was identified in the Cannock Chase Visitor Impacts Mitigation report (2012)⁴⁴ within which new housing developments had the potential to result in increased recreational pressure on the Cannock Chase SAC. The report recommends that developer contributions be required within this zone, and noted that large developments, defined as developments of over 100 houses, outside the 15 km zone may also require Appropriate Assessment (AA) in relation to this SAC, subject to advice from Natural England.

The 15km zone of influence extends into the south western corner of the Derbyshire Dales District but does not include any of the main District settlements. The village of Doveridge falls just outside the zone, approximately 17km from Cannock Chase SAC.

The Preferred Options Policy HC2 includes the following allocations for housing or mixed use developments in Doveridge:

Table 10.1: Allocation sites in Doveridge		
Reference	Location	No. of Dwellings
HC2(m)	Land at Cavendish Cottage, Doveridge	46
HC2(n)	Land at Derby Road / Hall Drive, Doveridge	85

⁴³ Julia Gow, Reserves Officer, Derbyshire Wildlife Trust, 20 December 2013, *pers comm*, by phone

⁴⁴ J Underhill-Day and D Liley, (2012) Cannock Chase SA Visitor Impacts Mitigation Report (2012) Footprint Ecology, unpublished.

None of the potential development sites in Doveridge is over 100 dwellings. However, the combined capacity of the 3 allocation sites in Doveridge is 131 dwellings and therefore, in accordance with the precautionary principle, a potential LSE was identified when the policy was screened.

Natural England was contacted for advice with regards to the LSE identified. A response was received which stated:

- “[Doveridge] village is outside the 15km zone.
- The developments in question are each less than 100 homes, though in total they would exceed that figure.
- The ‘caveat’ re HRA of schemes above 100 homes beyond the 15km zone for Cannock Chase SAC is precautionary and expresses the need to be ‘open minded’ about the potential scope for major development (say an urban extension or something of that scale) to generate additional recreation pressure that requires HRA consideration ‘alone’. Although the 100 homes threshold implies that scale of housing is a useful indicator, in practice, the evidence base also tells us that transport links are a key factor (almost everyone who visits Cannock Chase SAC does so by car). So while a major residential development outside the 15Km zone boundary might need to be screened, one that was also well served with good A roads in the direction of Cannock Chase SAC would need a very careful look.
- Taking the above bullet point into consideration it is unlikely that the 3 separate developments at Doveridge would generate these sorts of impacts – scale and transport links being key factors.

Another point relates to [green infrastructure (GI)]. If Derbyshire Dales is planning to take a proactive stance on GI provision then the chances of adverse effects on existing open spaces would seem that much less. If the Plan is encouraging new and enhanced GI areas then the HRA screening could cite this work as ‘diverting’ at least some visitors from more well established sites (including Cannock Chase SAC).”

Local Plan Policy PD4 is reproduced within Annex E. This policy demonstrates a proactive approach to the provision of GI through new developments and sets requirements for delivery.

On the basis of the advice provided by Natural England and the fact the Local Plan is taking a proactive approach to the provision of GI through development, it is concluded that no adverse effect will result from the allocation sites located at Doveridge.

10.4 Summary and Conclusions

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

- HC2 - Housing Land Allocations, in connection with the following allocation sites:
 - HC2(m) Land at Cavendish Cottage, and Doveridge, HC2(n) Land at Derby Road / Hall Drive, Doveridge (Cannock Chase SAC);
 - HC2(v) Land to the North of Porter Lane / East of main Street, Middleton by Wirksworth (Peak District Dales SAC and Gang Mine SAC); and
- DS3 – Land at Stancliffe Quarry, Darley Dale (Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors SAC).

Each of the European sites and allocation sites has been considered in turn and no adverse effects on the European sites have been identified.

*It is therefore concluded that the allocation sites identified above **will not** have any adverse effects on the Peak District Moors (South Pennine Moors Phase 1) SPA, the South Pennine Moors SAC, Peak District Dales SAC, Gang Mine SAC and Cannock Chase SAC with regards to urban effects.*

11 Mitigation and Conclusions

Derbyshire Dales District Council prepared a Local Plan between 2009 and 2014 before a decision was made to withdraw that plan from Examination in order to reconsider the Objectively Assessed Housing Need (OAHN). The withdrawn Plan was at an advanced stage and mitigation identified within the HRA had been incorporated into the policy wording. The Derbyshire Dales Local Plan has been drafted using relevant policy wording previously developed and as such the policies have performed reasonably well in the HRA.

Annex D presents the detailed findings of the screening of the Preferred Options policies and identifies where mitigation has been built into specific policies already, particularly in relation to a number of the large allocation sites proposed for mixed use developments.

In addition, Local Plan Policy PD3 Biodiversity and the Natural Environment, reproduced in Annex E, provide a high level of protection of European sites and does not allow any harm to European sites from developments within the District. This policy has been drafted on the basis of the mitigation put forward in the HRA of the withdrawn Local Plan.

However, a number of LSEs were identified in relation to the Derbyshire Dales Local Plan Draft Plan policies. The potential for adverse effects in relation to the integrity of the European sites has been considered and their ability to achieve their conservation objectives has been assessed in this document.

The following LSEs were identified:

Policy S6 Strategic Housing Development 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);
- Peak District Dales SAC;
- Gang Mine SAC; and
- Cannock Chase SAC.

Development in the Matlock, Wirksworth and Darley Dale areas could increase recreational, air quality, urban effects and construction impacts on these European sites which are located nearby. LSEs were identified as a result of **Policy S8 Matlock / Wirksworth / Darley Dale Development Area Strategy** 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);
- Peak District Dales SAC; and
- Gang Mine SAC.

LSEs were identified as a result of **Policy HC2 Housing Land 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);
- Peak District Dales SAC;
- Gang Mine SAC; and
- Cannock Chase SAC.

LSEs were identified with regards to operational effects in relation to the allocation sites:

- **HC2(m) Land at Cavendish Cottage, Doveridge** and **HC2(n) Land At Derby Road / Hall Drive, Doveridge Doveridge** (increasing recreational pressure on Cannock Chase SAC approx. 17km away); and
- **HC2(v) Land to the North of Porter Lane / East of main Street, Middleton by Wirksworth** (recreational pressure and other urban effects on Peak District Dales SAC and Gang Mine SAC approx.300m away).

LSEs were identified as a result of **Policy EC8 Promoting Peak District Tourism and Culture** because this policy seeks to increase visitors to the District which could increase air pollution from traffic and recreational pressure on these European sites located within the National Park. LSEs were identified on the following European sites:

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

The HRA has assessed the potential for adverse effects to occur on all of the European sites included within this study for the following types of effects:

- Water demand and changes to local water environments;
- Increased recreational pressure;
- Increased air pollution from traffic; and
- Urban effects⁴⁵.

Following the assessment of potential effects, the HRA has been able to conclude that the Derbyshire Dales Local Plan **will not result in any adverse effects** on any European sites **with regards to water demand and changes to the water environment, increased recreational pressure, urban effects and effects of increased traffic on air quality.**

⁴⁵ A variety of localised effects from developments including fire setting, fly tipping, recreational pressure, construction and pet predation.

Derbyshire Dales District Council has made modifications to the plan policies after consultation on the Draft Local Plan and these are presented as a Pre Submission Local Plan. The modifications to the policies have been screened for LSEs. The screening has concluded that none of the policy modifications give rise to any LSEs and therefore the above conclusion of the HRA remains unaltered.