

# **Kirklees Local Plan Submission Documents SD10**

Publication Draft  
Kirklees Local Plan:  
Habitats Regulation  
Assessment Report  
(March 2017)





[www.landuse.co.uk](http://www.landuse.co.uk)

# Publication Draft Kirklees Local Plan

## Habitats Regulations Assessment Report

Prepared by LUC  
March 2017

**Project Title:** Habitats Regulations Assessment of the Kirklees Local Plan

**Client:** Kirklees Council

Version	Date	Version Details	Prepared by	Checked by	Approved by
1	16/10/15	HRA Report for the Draft Kirklees Local Plan	Kate Nicholls Kieran Moroney	Taran Livingston	Taran Livingston
2	30/10/15	Final HRA Report for the Draft Kirklees Local Plan	Kate Nicholls Kieran Moroney	Taran Livingston	Taran Livingston
3	04/11/16	Updated HRA Report for the Publication Draft Kirklees Local Plan	Katherine Sydney	Taran Livingston	Taran Livingston
4	30/03/17	HRA Report updated in response to Natural England comments	Katherine Sydney	Jeremy Owen	Jeremy Owen



[www.landuse.co.uk](http://www.landuse.co.uk)

# Publication Draft Kirklees Local Plan

## Habitats Regulations Assessment Report

Prepared by LUC

March 2017

Planning & EIA  
Design  
Landscape Planning  
Landscape Management  
Ecology  
Mapping & Visualisation

LUC BRISTOL  
12th Floor, Colston Tower,  
Bristol BS1 4XE  
Tel: 0117 929 1997  
Fax: 0117 929 1998  
[bristol@landuse.co.uk](mailto:bristol@landuse.co.uk)

Offices also in:  
London  
Glasgow  
Edinburgh



FS 566056  
EMS 566057

Land Use Consultants Ltd  
Registered in England  
Registered number: 2549296  
Registered Office:  
43 Chalton Street  
London NW1 1JD

LUC uses 100% recycled paper

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
	Background to the preparation of the Publication Draft Local Plan	1
	The requirement to undertake Habitats Regulations Assessment of Development Plans	1
	Stages of the Habitats Regulations Assessment	2
	Previous HRA work	4
	Structure of this report	5
<b>2</b>	<b>The Publication Draft Local Plan</b>	<b>7</b>
	Potential impacts of the Publication Draft Local Plan on Natura 2000 sites	9
<b>3</b>	<b>HRA Screening Methodology</b>	<b>11</b>
	Identification of Natura 2000 sites which may be affected by the Publication Draft Local Plan and the factors contributing to and defining the integrity of these sites	11
	Assessment of 'likely significant effects' of the Publication Draft Local Plan	12
	Screening assumptions and information used in reaching conclusions about likely significant effects	12
	Interpretation of 'likely significant effect'	20
	Mitigation provided by the Publication Draft Local Plan	20
	Identification of other plans and projects which may have 'in-combination' effects	21
<b>4</b>	<b>HRA Screening Assessment of the Publication Draft Local Plan</b>	<b>24</b>
	Significant effects likely	24
	Significant effects unlikely	24
	Significant effects uncertain	26
<b>5</b>	<b>Appropriate Assessment</b>	<b>37</b>
	Appropriate Assessment approach	37
	In-combination effects with neighbouring Local Plans	48
<b>6</b>	<b>Conclusions</b>	<b>50</b>
	<b>Appendix 1</b>	
	Consultation comments received and how these have been addressed	
	<b>Appendix 2</b>	
	Attributes of Natura 2000 sites within Kirklees District (+15km)	
	<b>Appendix 3</b>	
	HRA Screening of the Publication Draft Local Plan	
	<b>Appendix 4</b>	
	Kirklees Council Ecology Report	
	<b>Appendix 5</b>	
	Review of Potential for In-Combination Effects with other Local Authority Plans	

# 1 Introduction

- 1.1 Kirklees Council is producing a new Local Plan to set the framework for development in the district over the next 15-20 years. Once adopted, the Local Plan will replace the saved policies from the existing Kirklees Unitary Development Plan.
- 1.2 In October 2015, LUC carried out a Habitats Regulations Assessment (HRA) of the emerging Local Plan on behalf of Kirklees Council. That HRA Report was based on the Draft Local Plan (November 2015) which comprises two parts: "Strategy and Policies" and "Allocations and Designations". Since then, Kirklees Council has refined its policies and site allocations, following a period of consultation. This 2016 HRA is therefore based on the Publication Draft Local Plan (September 2016) "Strategies and Policies" and "Allocations and Designations", and has been updated in response to comments received on the 2015 HRA and discussions with Natural England.

## Background to the preparation of the Publication Draft Local Plan

- 1.3 Kirklees Council worked on the preparation of a new Local Development Framework (LDF) Core Strategy between 2005 and 2013. The Core Strategy was intended to set the framework for planning decisions in Kirklees up to 2028, including how much development should take place and broadly where, and setting out policies to ensure that development would take place in a sustainable way.
- 1.4 Several iterations of the Core Strategy were produced during its development, including a Preferred Options Consultation Report (2006), an Options Consultation Report (2009), a Draft Proposals Consultation (2010) and the Proposed Submission version (2011).
- 1.5 The Core Strategy was submitted to the Secretary of State in 2012; however in October 2013 the decision was made to withdraw the Core Strategy and move towards the production of a new-style Local Plan. The Publication Draft Local Plan has a broader scope than the Core Strategy – as well as setting out the overarching development strategy for the district up to 2031, it includes site allocations for different types of development. It also sets out the planning policies that will be used to assess planning applications.
- 1.6 The Draft Local Plan was made available for consultation between November 2015 and February 2016. Following completion of the consultation period, the Local Plan has been updated and is now available as the Publication Draft Local Plan (September 2016).
- 1.7 The consultation responses that were received for the Draft Local Plan and which relate to the HRA work are summarised in **Appendix 1**, along with an explanation of how those comments have been addressed in this updated HRA.

## The requirement to undertake Habitats Regulations Assessment of Development Plans

- 1.8 The requirement to undertake HRA of development plans was confirmed by the amendments to the Habitats Regulations published for England and Wales in July 2007 and updated in 2010<sup>1</sup> and again in 2012<sup>2</sup>. Therefore when preparing the new Local Plan, Kirklees Council is required by law to carry out a Habitats Regulations Assessment although consultants can undertake the HRA on

---

<sup>1</sup> The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007. HMSO Statutory Instrument 2007 No. 1843. From 1 April 2010, these were consolidated and replaced by the Conservation of Habitats and Species Regulations 2010 (SI No. 2010/490). Note that no substantive changes to existing policies or procedures have been made in the new version.

<sup>2</sup> The Conservation of Habitats and Species (Amendment) Regulations 2012. Statutory Instrument 2012 No. 1927.

its behalf. The requirement for authorities to comply with the Habitats Regulations when preparing a Local Plan is explained in the online National Planning Practice Guidance (NPPG).

- 1.9 The HRA refers to the assessment of the potential effects of a development plan on one or more Natura 2000 sites, including Special Protection Areas (SPAs) and Special Areas of Conservation (SACs):
- SPAs are classified under the European Council Directive ‘on the conservation of wild birds’ (79/409/EEC; ‘Birds Directive’) for the protection of wild birds and their habitats (including particularly rare and vulnerable species listed in Annex 1 of the Birds Directive, and migratory species).
  - SACs are designated under the Habitats Directive and target particular habitats (Annex 1) and/or species (Annex II) identified as being of European importance.
- 1.10 Potential SPAs (pSPAs)<sup>3</sup>, candidate SACs (cSACs)<sup>4</sup>, Sites of Community Importance (SCIs)<sup>5</sup> and Ramsar sites should also be included in the assessment.
- Ramsar sites support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention, 1971).
- 1.11 For ease of reference during HRA, these designations can be collectively referred to as European sites, despite Ramsar designations being at the international level. The term ‘European site’ is interchangeable with the term ‘Natura 2000 site’ in the context of HRA. The latter is used throughout this report.
- 1.12 The overall purpose of the HRA is to conclude whether or not a proposal or policy, or whole development plan, would adversely affect the integrity of the site in question either alone or in combination with other plans. This is judged in terms of the implications of the plan for a site’s ‘qualifying features’ (i.e. those Annex I habitats, Annex II species, and Annex I bird populations for which it has been designated). Significantly, HRA is based on the precautionary principle meaning that where uncertainty or doubt remains, an adverse impact should be assumed.

## Stages of the Habitats Regulations Assessment

- 1.13 **Table 1.1** below summarises the stages involved in carrying out a full HRA, based on various guidance documents<sup>6,7</sup>.

**Table 1.1 Stages in HRA**

Stage	Task	Outcome
Stage 1: Screening (the ‘Significance Test’)	Description of the plan. Identification of potential effects on Natura 2000 sites. Assessing the effects on Natura 2000 sites (taking into account potential mitigation provided by other policies in the plan).	Where effects are unlikely, prepare a ‘finding of no significant effect report’. Where effects judged likely, or lack of information to prove otherwise, proceed to Stage 2.
Stage 2: Appropriate Assessment (the ‘Integrity Test’)	Gather information (plan and Natura 2000 sites). Impact prediction. Evaluation of impacts in view of conservation objectives.	Appropriate Assessment report describing the plan, Natura 2000 site baseline conditions, the adverse effects of the plan on the Natura 2000 site, how these

<sup>3</sup> Potential SPAs are sites that have been approved by Government and are currently in the process of being classified as SPAs.

<sup>4</sup> Candidate SACs are sites that have been submitted to the European Commission, but not yet formally adopted.

<sup>5</sup> SCIs are sites that have been adopted by the European Commission but not yet formally designated as SACs by the Government.

<sup>6</sup> *Planning for the Protection of Natura 2000 sites. Guidance for Regional Spatial Strategies and Local Development Documents.* Department for Communities and Local Government (DCLG), August 2006

<sup>7</sup> *The HRA Handbook.* David Tyldesley & Associates, a subscription based online guidance document: <https://www.dtapublications.co.uk/handbook/>

Stage	Task	Outcome
	Where impacts considered to affect qualifying features, identify alternative options. Assess alternative options. If no alternatives exist, define and evaluate mitigation measures where necessary.	effects will be avoided through, firstly, avoidance, and secondly, mitigation including the mechanisms and timescale for these mitigation measures. If effects remain after all alternatives and mitigation measures have been considered proceed to Stage 3.
Stage 3: Assessment where no alternatives exist and adverse impacts remain taking into account mitigation	Identify and demonstrate 'imperative reasons of overriding public interest' (IROPI). Demonstrate no alternatives exist. Identify potential compensatory measures.	This stage should be avoided if at all possible. The test of IROPI and the requirements for compensation are extremely onerous.

- 1.14 In assessing the effects of the Publication Draft Local Plan in accordance with Regulation 102 of the Conservation of Habitats and Species Regulations 2012, there are potentially two tests to be applied by the competent authority: a 'Significance Test', followed if necessary by an Appropriate Assessment which will inform the 'Integrity Test'. The relevant sequence of questions is as follows:
- Step 1: Under Reg. 102(1)(b), consider whether the plan is directly connected with or necessary to the management of the sites. If not –
  - Step 2: Under Reg. 102(1)(a) consider whether the plan is likely to have a significant effect on the site, either alone or in combination with other plans or projects (the 'Significance Test'). *[These two steps are undertaken as part of Stage 1: Screening shown in Table 1.1 above.]* If Yes –
  - Step 3: Under Reg. 102(1), make an Appropriate Assessment of the implications for the site in view of its current conservation objectives (the 'Integrity Test'). In so doing, it is mandatory under Reg. 102(2) to consult Natural England, and optional under Reg. 102(3) to take the opinion of the general public. *[This step is undertaken during Stage 2: Appropriate Assessment shown in Table 1.1 above.]*
  - Step 4: In accordance with Reg.102(4), but subject to Reg.103, give effect to the land use plan only after having ascertained that the plan will not adversely affect the integrity of the Natura 2000 site.
- 1.15 It is normally anticipated that an emphasis on Stages 1 and 2 of this process will, through a series of iterations, help ensure that potential adverse effects are identified and eliminated through the inclusion of mitigation measures designed to avoid, reduce or abate effects. The need to consider alternatives could imply more onerous changes to a plan document. It is generally understood that so called 'imperative reasons of overriding public interest' (IROPI) are likely to be justified only very occasionally and would involve engagement with both the Government and European Commission.
- 1.16 The HRA should be undertaken by the 'competent authority' - in this case Kirklees Council, and LUC has been commissioned to do this on its behalf. The HRA also requires close working with Natural England as the statutory nature conservation body<sup>8</sup> in order to obtain the necessary information and agree the process, outcomes and any mitigation proposals. The Environment Agency, while not a statutory consultee for the HRA, is also in a strong position to provide advice and information throughout the process as it is required to undertake HRA for its existing licences and future licensing of activities.

<sup>8</sup> Regulation 5 of *The Conservation of Habitats and Species Regulations 2010*. HMSO Statutory Instrument 2010 No. 490.



## Previous HRA work

### Core Strategy HRA

1.17 As described above, the Kirklees Core Strategy reached a late stage in its development before being withdrawn, and the Core Strategy was subject to HRA screening by LUC throughout its development (the Appropriate Assessment stage of the HRA was not undertaken). The last HRA Screening Report for the Core Strategy was produced in May 2012 in relation to the Proposed Submission version of the Core Strategy.

1.18 The Core Strategy HRA concluded the following

*As described in the May 2012 HRA Screening Report for the Core Strategy, likely significant effects on Natura 2000 sites were not able to be ruled out for a number of proposals in the Proposed Submission version of the Core Strategy. This was because the policies in question were considered likely to lead (either directly or indirectly) to development but the precise nature and location of that development was unknown. Some of the 12 policies for which uncertainty was identified could also have led to an increase in visitor numbers at Natura 2000 sites, or to an increase in the volume of vehicle traffic in the area. Therefore, the potential effects identified included physical loss or damage to habitat from development as well as erosion/trampling from increased recreation and non-physical disturbance including air, noise and light pollution.*

*Although the Core Strategy did not specify the precise nature and location of individual developments, and this would not have been known until either a more specific DPD was prepared or planning applications came forward, most of the potential effects identified through the screening exercise related to the South Pennine Moors SAC and the Peak District Moors SPA (South Pennine Moors Phase 1) due to housing, employment and other types of development (e.g. minerals, transport improvements) being proposed in settlements in the south-west of the district. It was also noted that these effects could combine with effects from development proposed in adjacent authorities to the south and west of Kirklees.*

*However, despite the uncertainty that was flagged up, Appropriate Assessment was not undertaken in relation to the Proposed Submission Core Strategy. This was because the proposals that could potentially lead to significant effects on Natura 2000 sites would either be assessed in more detail during the preparation of lower tier plans or because effects would depend on how the proposals would eventually be implemented, and undertaking Appropriate Assessment in relation to the Core Strategy would not allow for more solid conclusions to be reached. Natural England was consulted on the HRA Screening Report and agreed with the conclusions and the decision not to undertake Appropriate Assessment.*

*The conclusions of the HRA Screening Report for the Core Strategy are being drawn on throughout the HRA of the Local Plan as appropriate, although the wider scope of the Local Plan (in particular the fact that it will allocate specific sites for development) should mean that it is possible to reach more certain conclusions with regards to the potential for significant effects on Natura 2000 sites.*

1.19 This significant body of fairly recent HRA work was drawn upon where relevant to inform the HRA of the Publication Draft Local Plan. However, the HRA of the Publication Draft Local Plan was carried out as a separate process to the earlier HRA of the Core Strategy and any information that was drawn on from the HRA of the Core Strategy was fully reviewed and updated.

### Draft Local Plan HRA

1.20 A full HRA was carried out in October 2015 for the emerging Draft Local Plan. The HRA concluded the following:

*At this stage in the Kirklees Local Plan preparation, provided that the identified mitigation and recommendations are implemented, adverse effects on the integrity of Natura 2000 sites around Kirklees from policies and site allocations in the Local Plan will not occur in relation to:*

- *Physical loss or damage to offsite habitat.*
- *Noise/vibration and light pollution.*
- *Recreation.*
- *Changes to water quality or quantity.*

However, until the transport modelling work in relation to the Local Plan which is currently being undertaken on behalf of Kirklees Council is complete, adverse effects on the integrity of South Pennine Moors SAC, South Pennine Moors SPA (Phases 1 and 2), Rochdale Canal SAC and Denby Grange Colliery Ponds SAC cannot be ruled out. This issue will therefore need to be examined further during later stages of the HRA process for the Local Plan.

The conclusion of no adverse effects on integrity in relation to physical loss or damage to habitat at the South Pennine Moors SPA (Phases 1 and 2) as a result of development in the vicinity of the SPA depends on the implementation of the following recommendation:

- It is recommended that, for the site allocations and safeguarded land sites that are within 2km of the South Pennine Moors SPA, the potential to affect habitat that is functionally connected to the SPA is added to the relevant site allocations in the Allocations and Designations document (for example in the 'constraints' section of the allocation boxes). It should be clearly specified that potential for physical loss or damage to functionally connected land and impacts on the qualifying bird species of the SPA, should be assessed, and avoided or mitigated as required prior to granting permission for the development of these sites

The conclusion of no adverse effects on integrity in relation to recreation and urban edge pressures at the South Pennine Moors SAC and SPA (Phases 1 and 2) depends on the implementation of the following recommendation:

- It is recommended that the Kirklees Local Plan takes a similar approach to the policy safeguards that are being put in place in the Bradford Core Strategy, i.e. a policy specifying zones of influence and the specific requirements for development within those areas in order to protect the integrity of the South Pennine Moors SPA (and SAC).

1.21 Following consultation on the Draft Local Plan and supporting documents, including the HRA report, a number of comments were received. Those that relate to the HRA work are provided in **Appendix 1**. The key comments were those from Natural England (the statutory consultee for the Habitats Regulations), who said (in summary):

- Data and mitigation used to screen potential effects on the South Pennine Moors SAC should be site-specific. This has been addressed in **Chapter 3**.
- The distance at which habitats could be functionally connected to the South Pennine Moors SAC should be explained, with evidence. It is also not acceptable to pass on assessment of sites that could have functional connectivity to the planning stage; functional connectivity should be ruled out or confirmed at the HRA stage. This has been addressed in **Chapter 3**, with further information in **Appendix 4**.
- Justification for ruling out possible hydrological connection to Denby Grange Colliery SAC should be explained fully. This has been addressed in section **Chapter 3**.
- Further consideration should be given to possible in-combination effects with policies in Bradford's Core Strategy. This has been addressed in section **Chapter 5**.
- Natural England disagrees that Policy DLP39 will provide mitigation as it does not make reference to protecting natural environmental receptors. This has been addressed in **Appendix 1**.

## Structure of this report

1.22 This chapter (**Chapter 1**) has described the background to the production of the Publication Draft Local Plan and the requirement to undertake HRA. The remainder of the report is structured into the following sections:

- **Chapter 2: The Publication Draft Local Plan** summarises the content of the Publication Draft Local Plan (September 2016), which is the subject of this HRA report.
- **Chapter 3: HRA Screening Methodology** sets out the approach taken and the tasks carried out during the screening stage of the HRA.

- **Chapter 4: HRA Screening Assessment of the Publication Draft Local Plan** summarises the findings of the screening stage of the HRA and describes whether significant effects on Natura 2000 sites are likely to result from the implementation of the Publication Draft Local Plan.
- **Chapter 5: Appropriate Assessment** describes the approach taken to the Appropriate Assessment stage of the HRA and summarises the findings.
- **Chapter 6: Conclusions** summarises the HRA conclusions for the Publication Draft Local Plan and describes the next steps to be undertaken.

## 2 The Publication Draft Local Plan

2.1 The Publication Draft Local Plan (September 2016) comprises two parts: “Strategy and Policies” and “Allocations and Designations”. Together these two documents set the framework for development in Kirklees up to 2031.

2.2 The Strategy and Policies document sets out an overall Vision for Kirklees as follows:

In 2031, Kirklees will be a great place to live, work and invest in, delivered through an integrated approach to housing and employment. Development will have taken place in a sustainable way (balancing economic, social and environmental priorities) and by making efficient and effective use of land and buildings supported by necessary infrastructure and with minimal effect on the environment. Health inequalities will have been reduced, enabling higher standards of health and well-being resulting from improved access to training and job opportunities, a decent and affordable home, access to services and green spaces and opportunities for physical activity and a healthy lifestyle.

The diverse character of the district as a whole and within its different character areas will be retained and enhanced while creating opportunities to build thriving communities which respond to local needs.

Kirklees will be ideally placed to encourage inward investment and stimulate economic growth. This will be achieved through the provision of new prime employment land, sites of strategic importance for employment with a focus on manufacturing and engineering including Cooper Bridge and Chidswell and safeguarded employment land which, as a whole, provide the opportunities to grow businesses, improve economic resilience and increase the district’s ability to compete with other areas, economic benefits of housing delivery and the potential to reduce out-commuting.

There will be a focus on regenerating our towns whilst safeguarding and reinforcing those elements which make them distinctive. Huddersfield Town Centre will be revitalised through an enhanced independent retail, cultural and leisure offer; mixed use development of the Waterfront and St. George’s Quarters and other key sites; and next generation digital connectivity. Dewsbury will be transformed by building on its strategic location, driven by integrated housing and economic development in the town centre and connected to communities. Supporting the rural economy will be encouraged and opportunities facilitated by provision of high speed broadband.

There will be a mix of high quality housing which offers choice and meets the needs of all our communities including affordable housing. The challenges of an ageing population will have been addressed and a range of housing and employment choices available to attract and retain younger age groups within the district to build sustainable communities.

People will have access to a range of local facilities including services, health-care and education provision, and adequate infrastructure. Places will be well-connected encouraging sustainable travel including increased opportunities for walking and cycling and improved links to other parts of the Leeds City Region and beyond.

The local character and distinctiveness of Kirklees and its places will be retained. The natural, built and historic environment will be maintained and enhanced through high quality, inclusive design and safe environments, opportunities for play and sport, the protection and enhancement of green infrastructure, minimisation of waste, enhancement of distinctive and contrasting landscapes, tree and woodland protection, opportunities for local food growing, the enhancement of biodiversity and geodiversity and the protection and enhancement of heritage assets.

2.3 The Publication Draft Local Plan (Strategy and Policies document) then sets out 10 Strategic Objectives which summarise the measures needed to achieve the overall vision:

- 1 Support the growth and diversification of the economy, to increase skill levels and employment opportunities including the provision of a high quality communication infrastructure.
- 2 Strengthen the role of town centres, particularly Huddersfield, Dewsbury and Batley, to support their vitality and viability.
- 3 Improve transport links within and between Kirklees towns and with neighbouring towns and cities, giving priority to public transport, commercial traffic, and to cycling and walking.
- 4 Provide new homes which meet the needs of the community offering a range of size, tenure and affordability, with good access to employment, public transport, shops and services.
- 5 Tackle inequality and give all residents the opportunity of a healthy lifestyle, free from crime and to achieve their potential in work and education.
- 6 Protect and improve green infrastructure so that residents have access to good quality open spaces, sport and recreation opportunities, and for wildlife to flourish.
- 7 Promote development that helps to mitigate climate change, and development which is adapted so that the potential impact from climate change is reduced.
- 8 Protect and enhance the characteristics of the built, natural and historic environment, and local distinctiveness which contribute to the character of Kirklees.
- 9 Promote the use of brownfield land to meet development needs and support the regeneration of areas.
- 10 Facilitate the sustainable use and management of minerals and waste.

2.4 Chapters 4-17 of the Publication Draft Local Plan (Strategy and Policies document) then set out draft policies within the following sections:

- Delivering growth and sustainable development
- Place shaping
- Economy
- Homes
- Retailing and Town Centres
- Transport
- Design
- Climate Change
- Natural Environment
- Historic Environment
- Minerals
- Waste
- Health and supporting communities
- Green belt and open spaces

2.5 The final section of the Strategy and Policies document sets out proposals for monitoring the Publication Draft Local Plan.

2.6 The second part of the Publication Draft Local Plan, the Allocations and Designations document, makes site-specific allocations for residential, employment and mixed use development, and for open space, traveller sites, minerals and waste sites. These allocations will provide for the overall quantum of development set out in the Strategy and Policies document. The draft plan also identifies safeguarded land which will potentially accommodate development beyond the end of the plan period.

## Potential impacts of the Publication Draft Local Plan on Natura 2000 sites

2.7 **Table 2.1** below sets out the range of potential impacts that development in general and related activities may have on Natura 2000 sites.

**Table 2.1 Potential impacts and activities adversely affecting Natura 2000 sites**

Broad categories and examples of potential impacts on Natura 2000 sites	Examples of activities responsible for impacts
<p><b>Physical loss</b></p> <ul style="list-style-type: none"> <li>• Removal (including offsite effects, e.g. foraging habitat)</li> <li>• Mine collapse</li> <li>• Smothering</li> <li>• Habitat degradation</li> </ul>	<p>Development (e.g. housing, employment, infrastructure, tourism)                      Infilling (e.g. of mines, water bodies)                      Alterations or works to disused quarries                      Structural alterations to buildings (bat roosts)                      Afforestation                      Tipping                      Cessation of or inappropriate management for nature conservation</p>
<p><b>Physical damage</b></p> <ul style="list-style-type: none"> <li>• Sedimentation / silting</li> <li>• Prevention of natural processes</li> <li>• Habitat degradation</li> <li>• Erosion</li> <li>• Trampling</li> <li>• Fragmentation</li> <li>• Severance / barrier effect</li> <li>• Edge effects</li> <li>• Fire</li> </ul>	<p>Flood defences                      Dredging                      Mineral extraction                      Recreation (e.g. motor cycling, cycling, walking, horse riding, water sports, caving)                      Development (e.g. infrastructure, tourism, adjacent housing etc.)                      Vandalism                      Arson                      Cessation of or inappropriate management for nature conservation</p>
<p><b>Non-physical disturbance</b></p> <ul style="list-style-type: none"> <li>• Noise</li> <li>• Vibration</li> <li>• Visual presence</li> <li>• Human presence</li> <li>• Light pollution</li> </ul>	<p>Development (e.g. housing, industrial)                      Recreation (e.g. dog walking, water sports)                      Industrial activity                      Mineral extraction                      Navigation                      Vehicular traffic                      Artificial lighting (e.g. street lighting)</p>
<p><b>Water table/availability</b></p> <ul style="list-style-type: none"> <li>• Drying</li> <li>• Flooding / stormwater</li> <li>• Water level and stability</li> <li>• Water flow (e.g. reduction in velocity of surface water)</li> <li>• Barrier effect (on migratory species)</li> </ul>	<p>Water abstraction                      Drainage interception (e.g. reservoir, dam, infrastructure and other development)                      Increased discharge (e.g. drainage, runoff)</p>

Broad categories and examples of potential impacts on Natura 2000 sites	Examples of activities responsible for impacts
<p><b>Toxic contamination</b></p> <ul style="list-style-type: none"> <li>• Water pollution</li> <li>• Soil contamination</li> <li>• Air pollution</li> </ul>	<p>Agrochemical application and runoff  Navigation  Oil / chemical spills  Tipping  Landfill  Vehicular traffic  Industrial waste / emissions</p>
<p><b>Non-toxic contamination</b></p> <ul style="list-style-type: none"> <li>• Nutrient enrichment (e.g. of soils and water)</li> <li>• Algal blooms</li> <li>• Changes in salinity</li> <li>• Changes in thermal regime</li> <li>• Changes in turbidity</li> <li>• Air pollution (dust)</li> </ul>	<p>Agricultural runoff  Sewage discharge  Water abstraction  Industrial activity  Flood defences  Navigation  Construction</p>
<p><b>Biological disturbance</b></p> <ul style="list-style-type: none"> <li>• Direct mortality</li> <li>• Out-competition by non-native species</li> <li>• Selective extraction of species</li> <li>• Introduction of disease</li> <li>• Rapid population fluctuations</li> <li>• Natural succession</li> </ul>	<p>Development (e.g. housing areas with domestic and public gardens)  Predation by domestic pets  Introduction of non-native species (e.g. from gardens)  Fishing  Hunting  Agriculture  Changes in management practices (e.g. grazing regimes, access controls, cutting/clearing)</p>

## 3 HRA Screening Methodology

- 3.1 HRA Screening of the Publication Draft Local Plan (September 2016) has been undertaken in line with current guidance and seeks to meet the requirements of the Habitats Regulations. The tasks that have been undertaken during the Screening stage of the HRA are described in detail below.

### Identification of Natura 2000 sites which may be affected by the Publication Draft Local Plan and the factors contributing to and defining the integrity of these sites

- 3.2 During the HRA of the now-withdrawn Core Strategy, an initial investigation was undertaken to identify the Natura 2000 sites within or adjacent to the Kirklees district boundary which may be affected by development. This involved the use of GIS data to map the locations and boundaries of Natura 2000 sites using publicly available data from Natural England.
- 3.3 All Natura 2000 sites lying partially or wholly within 15km from the district boundary were included in the HRA of the Core Strategy, in order to address the fact that development resulting from a plan may affect Natura 2000 sites which are located outside the administrative boundary of the plan. This distance has generally been considered reasonable in other local authority HRAs to ensure that all designated sites that could potentially be affected by development are identified and included in the assessment. For this reason the same buffer distance is being applied during the HRA of the Publication Draft Local Plan, although it is recognised that sites beyond 15km from the Kirklees boundary could be affected by development within the district, for example if the water resources used to supply the district come from a source that lies further afield and which is subject to European designation. Therefore, if information obtained during the HRA indicates that other Natura 2000 sites could be affected they will be included in the assessment.
- 3.4 Four Natura 2000 sites are located within 15km of the Kirklees District boundary, although only the South Pennine Moors SAC, the South Pennine Moors SPA (Phase 2) and a tiny part of the Peak District Moors (South Pennine Moors Phase 1) SPA actually fall within the district (all lie in the south western corner). There are no Ramsar sites present within Kirklees (+15km). The four Natura 2000 sites within 15km of Kirklees are listed below in **Table 3.1** and are mapped in **Figure 3.1** at the end of this section.

**Table 3.1 Natura 2000 sites within 15km of Kirklees District**

Special Areas of Conservation (SACs)	Special Protection Areas (SPAs)
South Pennine Moors	South Pennine Moors – this site comprises two designations: - Peak District Moors SPA (South Pennine Moors Phase 1) - South Pennine Moors SPA (Phase 2) Where both of these sites are referred to together they are referred to as 'phases 1 and 2'.
Rochdale Canal	
Denby Grange Colliery Ponds	

- 3.5 The attributes of these sites which contribute to and define their integrity have been described (see **Appendix 2**). This information has been based on the Natura 2000 standard data forms on the Joint Nature Conservation Committee (JNCC) website<sup>9</sup><sup>10</sup>. This analysis has enabled Natura 2000 site interest features to be identified, along with the features of each site which determine

<sup>9</sup> [www.jncc.defra.gov.uk](http://www.jncc.defra.gov.uk)

<sup>10</sup> There has been some updates to these since the 2015 HRA of the Draft Local Plan. These changes are explained in Appendix 2.



site integrity and the specific sensitivities of the site. This information allows an analysis of how the potential impacts of the Publication Draft Local Plan may affect the integrity of each site.

## Assessment of 'likely significant effects' of the Publication Draft Local Plan

- 3.6 As required under Regulation 102 of the Conservation of Habitats and Species Regulations 2010<sup>11</sup> an assessment has been undertaken of the 'likely significant effects' of the Publication Draft Local Plan. A screening matrix was prepared in order to assess which components of the Publication Draft Local Plan would be likely to have a significant effect on Natura 2000 sites. The findings of the screening assessment are summarised in **Chapter 4** and the full screening matrix can be found in **Appendix 3**.
- 3.7 A risk-based approach involving the application of the precautionary principle was adopted in the assessment, such that a conclusion of 'no significant effect' was only reached where it was considered very unlikely, based on current knowledge and the information available, that a proposal in the Publication Draft Local Plan would have a significant effect on the integrity of a Natura 2000 site.
- 3.8 A 'traffic light' approach has been used to record the likely impacts of the policies and site allocations on Natura 2000 sites and their qualifying habitats and species, using the colour categories shown below.

Red	There are likely to be significant effects (Appropriate Assessment required).
Amber	There may be significant effects, but this is currently uncertain (Appropriate Assessment required).
Green	There are unlikely to be significant effects (Appropriate Assessment <b>not</b> required).

## Screening assumptions and information used in reaching conclusions about likely significant effects

- 3.9 The screening stage of the HRA has taken the approach of screening each Publication Draft Local Plan policy individually, which is consistent with current guidance. For the site allocations, the very high number of allocations means that they have been screened in groups by type (e.g. residential sites, employment sites etc.). This approach allows the screening matrix to reflect the different effects that certain development types would have, for example employment development is less likely than residential development to increase recreation pressure on nearby Natura 2000 sites.
- 3.10 For some types of impacts, screening for likely significant effects has been determined on a proximity basis, using GIS data to determine the proximity of potential development locations to the Natura 2000 sites that are the subject of the assessment. However, there are many uncertainties associated with using set distances as there are very few standards available as a guide to how far impacts will travel. Therefore, during the screening stage a number of assumptions have been applied in relation to assessing the likely significant effects on Natura 2000 sites that may result from the Publication Draft Local Plan, as explained below. These assumptions draw from the information gathered during the HRA screening of the Core Strategy and Draft Local Plan as appropriate, as well as the conclusions of that work (as summarised in **Chapter 1**).

<sup>11</sup> SI No. 2010/490

### Physical loss of habitat

- 3.11 Any development resulting from the Publication Draft Local Plan will be located within Kirklees District; therefore loss of habitat from within the boundaries of a Natura 2000 site can be ruled out in relation to those sites that lie entirely outside of Kirklees (i.e. Rochdale Canal SAC and Denby Grange Colliery Ponds SAC). However, the potential for loss of habitat from within the boundaries of the Natura 2000 sites that lie partially within the district (South Pennine Moors SAC, Peak District Moors SPA (South Pennine Moors Phase 1) and South Pennine Moors SPA (Phase 2)) needs to be considered if Publication Draft Local Plan proposals could result in development coming forward in those areas.
- 3.12 In addition, loss of habitat from outside of the boundaries of a Natura 2000 site could still affect the site if it occurs in an area used for offsite foraging or roosting by the qualifying species of the site (land in an area used for foraging or roosting by SPA birds, for example, would be functionally connected to the Natura 2000 site). Therefore, consideration needs to be given to whether the Natura 2000 sites in and around Kirklees have transient species amongst their qualifying features which could be affected by habitat loss resulting from development on functional land outside of the Natura 2000 site boundary. This consideration is relevant to the Peak District Moors SPA (South Pennine Moors Phase 1) and South Pennine Moors SPA (Phase 2) as these designations have bird species as their qualifying features.
- 3.13 Natural England queried the assumptions that had been made regarding sites that could be functionally connected to the SPA sites, in their consultation response to the 2015 HRA. As a result, the assumptions were reviewed and the following was agreed between Kirklees Council and Natural England:
- The screening distance for foraging birds in Kirklees would be considered to be 2.5km, which is appropriate for the species present at the South Pennine Moors SPAs (see **Table 3.2**) and consistent with the foraging distance used for birds in the South Pennines in the HRA of the Bradford Core Strategy.
  - All the site allocations within 2.5km of the SPAs would be reviewed to identify those that could be screened out on the basis of the following criteria:
    - Safeguarded land sites can be screened out because there is no intention to develop the sites within the lifetime of the current Publication Draft Local Plan, therefore the ecological status could alter significantly between the assessment and any application for development;
    - Active minerals extraction sites can be screened out as the nature of the habitats present and level of disturbance is considered to preclude the use of the sites as foraging grounds for the SPA bird species<sup>12</sup>; and
    - Where allocation sites have extant planning permission covering the entire site, and a review of the planning documents shows that the potential for impacts to functionally linked land has been considered and addressed, these sites can be screened out of further assessment.
  - Where it was not possible to screen out sites based on desk study, site-specific habitat surveys would be carried out to determine whether the habitats and species present indicate functional connectivity to the SPAs.
- 3.14 The ecology of the species present at the South Pennine Moors SPAs defines the 2.5km buffer, as set out in **Table 3.2**.

---

<sup>12</sup> It was also appropriate to apply these criteria to two existing mill sites.

**Table 3.2 Foraging distance for SPA birds**

Bird species (designated features)	Status	Usage of non-SPA habitat	Required buffer
Golden plover ( <i>Pluvialis apricaria</i> )	Annex 1 species. Citation (2015): qualifying feature of Phase 1 and Phase 2. Conservation objectives (Phase 1, 2014 and Phase 2, 2015): qualifying feature of Phase 1 and Phase 2. JNCC reassessment (2001): qualifying feature.	Extensive usage. Foraging is primarily on grassland habitats outside of the SPA. Various wet grassland habitats are preferred, depending on availability of invertebrate prey. Females forage during the day (6.6-7.4 km from nest) and males forage at night (2.4 to 2.7 km from nest). The moorland edge is avoided for nesting.	2.5km is considered a proportionate distance, and provides a consistent approach with other LPA HRA work undertaken in relation to the South Pennines SPA, local evidence and knowledge, and NE's zones of influence.
Merlin ( <i>Falco colubarius</i> )	Annex 1 species. Citation (2015): qualifying feature of Phase 1 and Phase 2. Conservation objectives (Phase 1, 2014 and Phase 2, 2015): qualifying feature of Phase 1 and Phase 2. JNCC reassessment (2001): qualifying feature.	Will use land outside of the SPA however, as an aerial predator this species' distribution is linked to distribution of prey and there is little fidelity for specific sites.	2.5km is considered a reasonable distance for the likely functionally connected land
Short-eared owl ( <i>Asio flammeus</i> )	Annex 1 species. Citation (2015): qualifying feature of Phase 1 and Phase 2. Conservation objectives (Phase 1, 2014 and Phase 2, 2015): qualifying feature of Phase 1. JNCC reassessment (2001): qualifying feature.	Will use land outside of the SPA. This species is a predator of voles primarily. Therefore the distribution is linked to the distribution of habitat suitable for voles. This is likely to be found in areas of lower agricultural intensification, particularly rough pastures.	2.5km is considered a reasonable distance for the likely functionally connected land.

Bird species (designated features)	Status	Usage of non-SPA habitat	Required buffer
Breeding bird assemblage	Listed as a qualifying feature on Phase 2 citation (2015) and conservation objectives document (2015). Not listed on JNCC reassessment (2001). Described as non-qualifying interest on old citation (English Nature, 2000). Species listed are: Peregrine, Lapwing, Dunlin, Snipe, Curlew, Redshank, Common Sandpiper, Whinchat, Wheatear, Ring Ouzel and Twite.	<p>Of the bird species comprising the assemblage, the following will make use of land outside of the boundary of the South Pennine Moors SPA Phase 1 and 2.</p> <ul style="list-style-type: none"> <li>• Twite (<i>Carduelis flavirostris</i>) travel between 0.1 and 2.6 km from the nest when feeding, and forage almost exclusively on dandelion and sorrel seeds found in unimproved grassland.</li> <li>• Curlew (<i>Numenius arquata</i>) breeds within the SPA, utilises wet grassland and arable fields during migration and prefers wet grassland for foraging during the breeding season. Can fly up to 2 km to forage, however will typically use the closest available suitable foraging site.</li> <li>• Lapwing (<i>Vanellus vanellus</i>) may breed within the SPA but are more typical of the moorland fringe. Adult birds will chaperone newly hatched and unfledged chicks to adjacent land to forage. Therefore, in instances where lapwing are breeding within the SPA, only immediately adjacent habitat is likely to be functionally linked to the SPA.</li> <li>• Peregrine (<i>Falco peregrinus</i>) hunt over a wide area and where this species is breeding within the SPA it is likely that these individuals will hunt over habitats outside of the SPA. However, as an aerial predator, this species shows low fidelity for individual sites.</li> </ul> <p>Other species of the assemblage are restricted to the habitats of the SPA, or are discussed elsewhere in this table.</p>	2.5km is considered a reasonable distance for the likely functionally connected land of the assemblage species.
Dunlin ( <i>Calidris alpine schinzii</i> )	Annex 1 species. Citation (2015): not listed apart from as part of breeding bird assemblage. Conservation objectives (Phase 1, 2014 and Phase 2, 2015): not listed apart from as part of breeding bird assemblage. JNCC reassessment (2001): qualifying feature.	Largely restricted to upland habitats of the SPA for both nesting and foraging during the breeding season.	No buffer required.

3.15 Impacts relating to offsite habitat loss can be screened out in relation to the South Pennine Moors SAC and Rochdale Canal SAC because these sites do not include transient species amongst their qualifying features. Impacts relating to offsite habitat loss can also be screened out in relation to Denby Grange Colliery Ponds SAC because this site is located approximately 1km outside of Kirklees district (at the nearest point) where any development resulting from the Publication Draft

Local Plan would be located, and the qualifying great crested newt is not expected to travel that far<sup>13</sup>.

- 3.16 **Therefore, effects relating to physical loss of habitat onsite need to be considered in relation only to South Pennine Moors SAC, Peak District Moors SPA (South Pennine Moors Phase 1) and South Pennine Moors SPA (Phase 2). Loss of habitat offsite needs to be considered only in relation to Peak District Moors SPA (South Pennine Moors Phase 1) and South Pennine Moors SPA (Phase 2).**

#### Non-physical disturbance (noise, vibration and light pollution)

- 3.17 Noise and vibration effects, e.g. during the construction of new housing or other development, are most likely to disturb bird species and are therefore a key consideration with respect to Natura 2000 sites where birds are the qualifying features, although such effects may also impact upon some mammals and fish species. Artificial lighting at night (e.g. from street lamps, flood lighting and security lights) is most likely to affect bat populations and some nocturnal bird species, and therefore have an adverse effect on the integrity of Natura 2000 sites where bats or nocturnal birds are a qualifying feature. None of the Natura 2000 sites within and around Kirklees are designated for bats.
- 3.18 The 2015 HRA assumed that the effects of noise, vibration and light would be most likely to be significant if development takes place within 2km of a Natura 2000 site; however this HRA has been updated based on additional information described above (and in **Appendix 4**), and uses a 2.5km screening distance as this is the distance at which offsite habitats could be associated with the Natura 2000 sites. This type of impact is only relevant where Natura 2000 sites have qualifying features sensitive to these disturbances.
- 3.19 As Rochdale Canal SAC and Denby Grange Colliery Ponds SAC lie well outside of Kirklees District, impacts associated with noise, vibration and light pollution can be screened out in relation to those sites. Similarly, the South Pennine Moors SAC only has habitats amongst its qualifying features which are not vulnerable to these types of impacts. **Therefore, the impacts of noise, vibration and light pollution only needed to be considered in relation to South Pennine Moors SPA (Phases 1 and 2).**

#### Air pollution

- 3.20 Air pollution is most likely to affect Natura 2000 sites where plant communities or terrestrial and aquatic habitats are the qualifying features, but some qualifying animal species may also be affected, either directly or indirectly, by any deterioration in habitat as a result of air pollution. Deposition of pollutants to the ground and vegetation can alter the characteristics of the soil, affecting the pH and nitrogen availability that can then affect plant health, productivity and species composition.
- 3.21 In terms of vehicle traffic, nitrogen oxides (NO<sub>x</sub>, i.e. NO and NO<sub>2</sub>) are considered to be the key pollutants. Deposition of nitrogen compounds may lead to both soil and freshwater acidification, and NO<sub>x</sub> can cause eutrophication of soils and water.
- 3.22 Based on the Highways Agency Design for Road and Bridges (DMRB) Manual Volume 11, Section 3, Part 1<sup>14</sup> (which was produced to provide advice regarding the design, assessment and operation of trunk roads (including motorways)), it is assumed that air pollution from roads is unlikely to be significant beyond 200m from the road itself. Where increases in traffic volumes are forecast, this 200m buffer needs to be applied to the relevant roads in order to make a judgement about the likely geographical extent of air pollution impacts.
- 3.23 The DMRB Guidance for the assessment of local air quality in relation to highways developments provides criteria that should be applied at the screening stage of an assessment of a plan or project, to ascertain whether there are likely to be significant impacts associated with routes or

---

<sup>13</sup> Government guidance on Great crested newts: Surveys and Mitigation for Development Projects indicates that a buffer distance of 500m is adequate when considering great crested newt travel distances from water bodies: <https://www.gov.uk/guidance/great-crested-newts-surveys-and-mitigation-for-development-projects>

<sup>14</sup> *Design Manual for Road and Bridges*. Highways Agency. <http://dft.gov.uk/ha/standards/dmrb/index.htm>

corridors. Based on the DMRB guidance, affected roads which should be assessed are those where:

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

- 3.24 An assessment has been undertaken to identify which Natura 2000 sites lie within 200m of the strategic road network. The South Pennine Moors SAC and South Pennine Moors SPA (Phases 1 and 2) both have a number of strategic roads running through the sites, Rochdale Canal SAC cuts across a number of strategic roads, and Denby Grange Colliery Ponds SAC lies close to the A637. Therefore, impacts relating to increased air pollution were not able to be screened out in relation to these Natura 2000 sites on the basis of their distance from the strategic road network.
- 3.25 None of the strategic roads close to the SPAs/SACs will be subject to proposals to change traffic speeds or road alignment, therefore AADT has been used as the indicator for significant changes in traffic emissions. Kirklees Council has analysed the effect of planned growth on strategic roads within 200m of Natura 2000 sites and estimated increases in AADT to 2030. This has been done by locating existing Department for Transport (DfT) traffic count sites in the immediate vicinity and applying a growth factor to them. The growth factor has been calculated using the DfT's National Trip End Model (NTEM) forecasts contained within the TEMPro software. The NTEM data set is created from a series of models developed and run by DfT's Transport Appraisal and Strategic Modelling division. The forecasts are:
- Population.
  - Employment.
  - Households by car ownership.
  - Trip ends.
  - Simple traffic growth factors, based on data from the National Transport Model (NTM).
- 3.26 The qualifying habitats and species of the South Pennine Moors SAC, South Pennine Moors SPA (Phases 1 and 2) and Rochdale Canal SAC are potentially sensitive to air pollution – the Site Improvement Plans for these sites identify the impact of atmospheric nitrogen deposition as priority issues for the sites. While the Site Improvement Plan for Denby Grange Colliery Ponds SAC does not identify increased air pollution as a priority issue, the qualifying species, great crested newt, is potentially vulnerable to increased nitrogen deposition which can result in changes to vegetation and water chemistry. **Therefore, the potential for increased air pollution to impact any of the Natura 2000 sites in Kirklees (+15km) needs to be considered at this stage.**
- 3.27 Where employment and waste management development is proposed, consideration is being given to whether activities on the site could potentially result in effects on Natura 2000 sites as a result of increased air pollution from industry and waste management processes.

### Recreation and urban impacts

- 3.28 Recreation activities and general human presence can have an adverse impact on the integrity of a Natura 2000 site as a result of physical disturbance, e.g. through erosion, arson and trampling as well as disturbance to species including breeding birds. Where policies or site allocations in the Publication Draft Local Plan are likely to result in an increase in the local population, or where an increase in tourism is considered likely, the potential for an increase in visitor numbers and the associated impacts at sensitive Natura 2000 sites has been identified. Consideration has been given to factors such as the characteristics and current use of the Natura 2000 sites and their accessibility from potential development areas. On this basis, recreation and urban impacts were considered to be key considerations with regards to the South Pennine Moors SAC and SPA but are less likely to be significant in relation to Denby Grange Colliery Ponds and Rochdale Canal SAC.

- 3.29 Visitor survey work undertaken by the City of Bradford Metropolitan District Council, which informed the HRA of the Bradford Core Strategy<sup>15</sup>, resulted in the identification of a 'zone of influence' for recreational impacts on the South Pennine Moors SAC and South Pennine Moors SPA (Phases 1 and 2). This represents the area from within which most recreational visitors to the SAC and SPA are expected to originate and was found to extend to approximately 10.5km around the SAC and SPA boundaries. 'Urban edge' impacts (which include fly tipping, off-road vehicle use, wildfire and increased predation) were considered to be experienced primarily where development takes place within 400m of the Natura 2000 sites (on the basis of work carried out in the south of England in relation to heathland areas). The HRA Report concluded that adverse effects on the integrity of the South Pennine Moors SAC and SPA could not be ruled out due to recreation pressure, loss of functionally linked land used by the breeding bird assemblage and urban edge pressures. Therefore, a policy was developed for inclusion in the submitted Bradford Core Strategy setting out the measures which will avoid and/or mitigate these impacts and reflected the distances identified through survey work: a 400m exclusion zone around the SPA and SAC where only exceptional development will be permitted to mitigate urban edge effects; a 2.5km zone within which important foraging areas outside the SPA will be protected; and a 7km zone within which residential developments contribute to greenspace improvements that deflect visitors away from the SPA (and avoid effects), the implementation of onsite access management measures and a programme of habitat management and monitoring. This approach has been scrutinised during the Examination in Public into the Bradford Core Strategy.
- 3.30 A 2014 study by Natural England<sup>16</sup> provides additional information that can be drawn upon to inform the assumptions used in the assessment of recreational impacts in this HRA. The study analysed the results of visitor surveys and identified the following:
- 73% of visits to the South Pennines involve travel distances of five miles or less and 82% are less than ten miles; and
  - Residents of Kirklees make 13 annual visits to the South Pennines per capita, which contributes 21.8% or 4.3 million visits to the 20 million visits made each year to the South Pennines.
- 3.31 With reference to the Natural England study and the Bradford Core Strategy HRA, 7km is considered an appropriately conservative screening distance, inside which recreational pressure impacts could require mitigation.
- 3.32 The nature of development proposed is also being taken into account, for example employment sites are considered less likely to result in increased recreation pressure than residential sites as employees will be at work within the development site for the majority of the time.
- 3.33 Particular consideration is being given to the potential need to take a strategic approach to mitigation of recreation pressure on the South Pennine Moors SAC and SPA and offsite areas of functional land, in the form of buffers for development and provision of alternative natural green spaces.
- 3.34 **Therefore, at this stage, recreation-related impacts needed to be considered in relation to all of the Natura 2000 sites within Kirklees (+15km) but are a more significant consideration in relation to South Pennine Moors SAC and South Pennine Moors SPA (Phases 1 and 2).**

### Water quantity and quality

- 3.35 New development has the potential to result in increased demand for water abstraction and treatment. During the HRA of the now-withdrawn Kirklees Core Strategy it was concluded that significant effects on Natura 2000 sites were not expected to result from increased demand for water abstraction because Yorkshire Water's Water Resources Management Plan (WRMP) at that time<sup>17</sup> indicated that there was available capacity to accommodate the planned growth in the area from the existing sources of supply. It was also noted that Yorkshire Water's water abstraction

<sup>15</sup> Habitats Regulations Assessment for the City of Bradford District Core Strategy (Proposed Modifications). Urban Edge Environmental Consulting, November 2015.

<sup>16</sup> Natural England (2014) Monitor of engagement with the natural environment survey (2009-2012): Visit taking in the South Pennines

<sup>17</sup> At the time, the latest version was: Yorkshire Water (2010) Final Water Resources Management Plan 2010-2035.

licences had been assessed through the Environment Agency's review of consents work and had remained unchanged following that review. Yorkshire Water's WRMP has since been updated, and the latest version<sup>18</sup>, which sets out the water company's plans to maintain a balance between supply and demand for the 25 year period from 2015/16 to 2039/40, indicates that there will be a significant deficit in water supply over the planning period in the Grid Surface Water Zone (SWZ) in which Kirklees District lies. This is attributed in part to the impacts of climate change. The WRMP sets out a number of options for balancing the deficit, and the preferred approach involves a combination of demand reduction (including reducing leakage and processing losses) and ways of increasing supply (including increasing abstraction from certain boreholes). On the basis of that preferred solution, it is concluded that a surplus can be achieved during the 25 year planning period. The preferred solution was subject to HRA and it was concluded that there would be no significant effects on Natura 2000 sites<sup>19</sup>. **Therefore, it is possible to conclude that the Publication Draft Local Plan will not have significant effects on Natura 2000 sites as a result of increased demand for water consumption.**

- 3.36 Likely significant effects in relation to water quality were also able to be ruled out during the HRA of the Core Strategy, because Yorkshire Water confirmed<sup>20</sup> that the existing Meltham and Clayton West waste water treatment works that serve Kirklees are downstream of the South Pennine Moors SPA (Phases 1 and 2) and the South Pennine Moors SAC, and therefore would not affect water quality at these sites as there is no hydrological connection. Although water supplied to the Rochdale Canal in part arises from the Pennines<sup>21</sup>, the Rochdale Canal SAC is to the west of Kirklees District on the other side of the Pennines, and would not be affected by discharges from the waste water treatment works that serve Kirklees. Significant effects of this nature can therefore be screened out in relation to Rochdale Canal SAC.
- 3.37 Denby Grange Colliery Ponds SAC is also not hydrologically connected to waterbodies within Kirklees that receive discharges from the waste water treatment works that serve Kirklees. A 2016 study<sup>22</sup> for Natural England identified that the ponds at Denby Grange Colliery SAC are fed by a combination of shallow groundwater, Stony Cliffe Beck, and surface water flows; Stony Cliffe Beck is not connected to any other surface water bodies upstream of the SAC. While the site overlies a bedrock aquifer with connectivity to the whole of Kirklees District, this is not connected to the ponds and there is no connectivity via the surface aquifer that would mean that development in Kirklees could affect the site.
- 3.38 It should also be noted that there are established regulatory mechanisms over the treatment of waste water that take into account environmental impacts including likely significant effects on Natura 2000 sites, which should provide safeguards to ensure no adverse effects on integrity arise.
- 3.39 **Therefore, issues associated with water quality and quantity were able to be screened out in relation to all Natura 2000 sites in Kirklees (+15km).**

### Summary of screening assumptions

- 3.40 **Table 3.3** below summarises the types of effects that have been screened in and out of the assessment, based on the screening assumptions described above.

<sup>18</sup> Yorkshire Water (2014) Water Resources Management Plan: Yorkshire Water Services Ltd.

<sup>19</sup> Referred to in the Revised Draft Water Resources Management Plan 2013 – Strategic Environmental Assessment Report, Cascade in association with Arup, November 2013.

<sup>20</sup> Emails between Yorkshire Water and Kirklees Council dated 14th April 2011.

<sup>21</sup> Rochdale Canal Site Improvement Plan. Natural England, October 2014.

<sup>22</sup> Hydrology Investigation – Denby Grange, Grontmij for Natural England, 2016



**Table 3.3 Summary of screening assumptions used for the Publication Draft Local Plan**

	South Pennine Moors SAC	South Pennine Moors SPA (Phases 1 and 2)	Rochdale Canal SAC	Denby Grange Colliery Ponds SAC
Physical loss of or damage to habitat	Screened in (onsite)	Screened in (both onsite and offsite)	Screened out (both onsite and offsite)	Screened out (both onsite and offsite)
	Screened out (offsite)			
Non-physical disturbance	Screened out (both onsite and offsite)	Screened in (both onsite and offsite)	Screened out (both onsite and offsite)	Screened out (both onsite and offsite)
Air pollution	Screened in	Screened in	Screened in	Screened in
Recreation and urban impacts	Screened in	Screened in	Screened in	Screened in
Water quantity	Screened out	Screened out	Screened out	Screened out
Water quality	Screened out	Screened out	Screened out	Screened out

## Interpretation of 'likely significant effect'

- 3.41 Relevant case law helps to interpret when effects should be considered as a likely significant effect, when carrying out HRA of a land use plan.
- 3.42 In the Waddenzee case<sup>23</sup>, the European Court of Justice ruled on the interpretation of Article 6(3) of the Habitats Directive (translated into Reg. 102 in the Habitats Regulations), including that:
- An effect should be considered 'likely', "if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site" (para 44).
  - An effect should be considered 'significant', "if it undermines the conservation objectives" (para 48).
  - Where a plan or project has an effect on a site "but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned" (para 47).
- 3.43 Another opinion delivered to the Court of Justice of the European Union<sup>24</sup> commented that:
- "The requirement that an effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill."*
- 3.44 This opinion (the 'Sweetman' case) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or *de minimis*; referring to such cases as those "that have no appreciable effect on the site". In practice such effects could be screened out as having no likely significant effect; they would be 'insignificant'.

## Mitigation provided by the Publication Draft Local Plan

- 3.45 Some of the potential effects of the Publication Draft Local Plan could be mitigated through the implementation of other policies in the plan itself, such as those relating to the provision of

<sup>23</sup> ECJ Case C-127/02 "Waddenzee" Jan 2004.

<sup>24</sup> Advocate General's Opinion to CJEU in Case C-258/11 Sweetman and others v An Bord Pleanala 22nd Nov 2012.

improved sustainable transport links (which could help to mitigate potential increases in air pollution associated with increased vehicle traffic) and the provision of green infrastructure within new developments (which could help mitigate increased pressure from recreation activities at Natura 2000 sites). During the HRA of the Core Strategy, most of the mitigation referred to was set out in other Core Strategy policies covering topics such as those listed above. It was also noted that the use of good practice construction techniques may help to mitigate potential noise and light pollution effects associated with new development. The extent to which mitigation may be achieved through the Draft and now Publication Draft Local Plan has been considered during the screening process and has influenced the screening conclusions (see **Appendix 3** and **Chapter 4**).

- 3.46 In addition to mitigation provided by the Publication Draft Local Plan, it has been assumed that national legislation and guidance<sup>25</sup> for the protection of Natura 2000 sites will be adhered to.

## Identification of other plans and projects which may have 'in-combination' effects

- 3.47 Regulation 102 of the Amended Habitats Regulations 2010 requires an Appropriate Assessment where "*a land use plan is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is not directly connected with or necessary to the management of the site*". Therefore, where likely significant effects are identified from the Publication Draft Local Plan, it is necessary to consider whether there may also be significant effects in combination with other plans or projects. This exercise has been carried out as part of the screening stage of the HRA.
- 3.48 The first stage in identifying 'in-combination' effects involves identifying which other plans and projects in addition to the Publication Draft Local Plan may affect the Natura 2000 sites that will be the focus of this assessment. This exercise was previously carried out as part of the HRA of the now-withdrawn Core Strategy and in the 2015 HRA of the Draft Local Plan; the list of relevant plans has been reviewed and updated in order to identify those components of nearby plans that could have an impact on the Natura 2000 sites within the Kirklees boundary (+15km), e.g. areas or towns where additional housing or employment development is proposed near to the Natura 2000 sites (as there could be effects from the transport, water use, infrastructure and recreation pressures associated with the new developments).
- 3.49 There are a large number of potentially relevant plans; therefore the review has focussed on planned spatial growth within authorities adjacent to Kirklees as well as other authorities that are adjacent to the Natura 2000 sites included in this HRA. The findings of any associated HRA work for those plans have been reviewed where available.
- 3.50 **Appendix 5** presents the updated review of other plans, outlining the components of each plan that could have an impact on nearby Natura 2000 sites and considering the findings of the accompanying HRA work (where available). This information is also summarised in **Chapter 4**. The following authorities' plans and HRA work has been included:

### Shared boundary with Kirklees District:

- Bradford Metropolitan District
- Leeds City
- Wakefield District (includes Denby Grange Colliery Ponds SAC within its boundary)
- Barnsley Metropolitan Borough
- Calderdale District
- Rochdale District (includes part of Rochdale Canal SAC within its boundary)
- Oldham District (includes part of Rochdale Canal SAC within its boundary)

---

<sup>25</sup> For example: <https://www.gov.uk/guidance/protected-sites-and-areas-how-to-review-planning-applications>

- High Peak District
- Peak District National Park

**Shared boundary with South Pennine Moors SAC/SPA and/or Rochdale Canal SAC:**

- Tameside District (HRA Report considered in-combination effects with Oldham District)
- Sheffield District
- Craven District
- Pendle District
- Burnley District

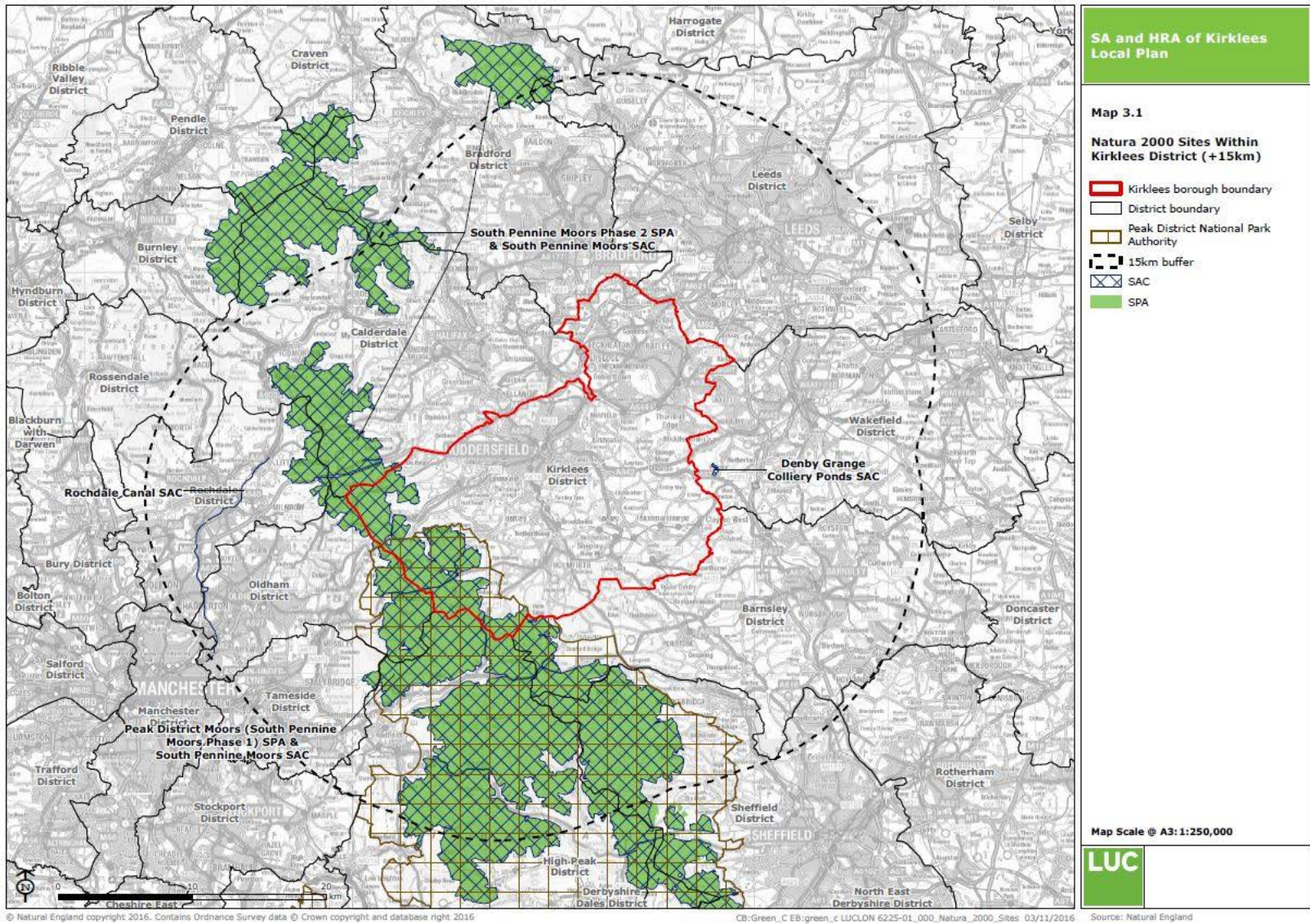


Figure 3.1: Natura 2000 sites within Kirklees District (+15km)

## 4 HRA Screening Assessment of the Publication Draft Local Plan

- 4.1 As described in **Chapter 3**, a screening assessment has been carried out in order to identify the likely significant effects of the Publication Draft Local Plan on the Natura 2000 sites in and around the district. The full screening matrix used for this assessment can be found in **Appendix 3** and the findings are summarised below.
- 4.2 This HRA report has taken the approach of screening each policy and group of site allocations individually, which is consistent with current guidance. In reality, however, the Publication Draft Local Plan policies will combine to deliver the overall scale of development within the district and the in-combination effects of the policies together have therefore been taken into consideration where relevant.

### Significant effects likely

- 4.3 **None of the policies or site allocations** in the Publication Draft Local Plan are considered **likely** to result in significant effects on the Natura 2000 sites in and around Kirklees District.

### Significant effects unlikely

- 4.4 Significant effects are considered **unlikely** in relation to **most of the Publication Draft Local Plan policies**. The following 34 policies are screened out because they will not result directly in development (i.e. they set out criteria for development that will be determined under other more specific policies, which have been screened separately for their impacts on Natura 2000 sites):
- PLP1: Presumption in favour of sustainable development
  - PLP2: Place shaping
  - PLP3: Location of new development
  - PLP5: Masterplanning large sites
  - PLP7: Efficient and effective use of land and buildings
  - PLP8: Safeguarding employment land and premises
  - PLP9: Supporting skilled and flexible communities and workforce
  - PLP11: Housing mix and affordable housing
  - PLP13: Town centre uses
  - PLP14: Shopping frontages
  - PLP16: Food and drink uses and the evening economy
  - PLP22: Parking
  - PLP23: Core walking and cycling network
  - PLP24: Design
  - PLP25: Advertisements and shop fronts
  - PLP27: Flood risk
  - PLP28: Drainage

- PLP29: Management of water bodies
- PLP32: Landscape
- PLP33: Trees
- PLP34 Conserving and enhancing the water environment
- PLP35: Historic environment
- PLP37: Site restoration and aftercare
- PLP38: Minerals safeguarding
- PLP39: Protecting existing and planned minerals infrastructure
- PLP43: Waste management hierarchy
- PLP45: Safeguarding waste management facilities
- PLP51: Protection and improvement of local air quality
- PLP52: Protection and improvement of environmental quality
- PLP53: Contaminated and unstable land
- PLP58: Garden extensions
- PLP59: Infilling and redevelopment of brownfield sites
- PLP60: The re-use and conversion of buildings
- PLP61: Urban green space
- PLP62: Local green space

4.5 PLP6: Safeguarded land (Land to be safeguarded for potential future development) has also been screened out on the basis that it will not result in development within the plan period.

4.6 Another three policies are unlikely to have significant effects on Natura 2000 sites because they could help to mitigate the potential effects of development proposed elsewhere in the Publication Draft Local Plan as follows:

- PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars, which could provide mitigation for the air pollution impacts of development in Kirklees;
- PLP30: Biodiversity and geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive; and
- PLP31: Strategic Green Infrastructure Network. This policy seeks to protect and enhance existing green infrastructure and to provide for the delivery of new green infrastructure. This could help to mitigate the potential impacts of development in terms of increased recreation pressure at Natura 2000 sites. Its effectiveness will depend on factors such as the comparable nature and quality of the greenspace to be protected under this policy.

4.7 In addition, the 503 allocations that the Publication Draft Local Plan makes for local and urban green space (referred to collectively as open space allocations in the screening matrix) in the Allocations and Designations document have also been screened out from having likely significant effects as they will not result in development. The potential for these allocations to provide mitigation for the effects associated with pressure for recreation space from other Publication Draft Local Plan policies on Natura 2000 sites has been considered separately below.

4.8 A number of other policies in the Publication Draft Local Plan could result in development in any part of Kirklees which could therefore potentially be located within close proximity of the Natura 2000 sites within Kirklees and/or could result in an increase in traffic generation or demand for recreation pressure. However, there is no detail available at this stage about the location of the development that could result from these policies (or in several cases the nature of the development). The areas of Kirklees in which development would need to be located to affect

Natura 2000 sites through physical loss of habitat or direct disturbance are very small, and are located away from the main urban areas in the north of the District where the spatial strategy directs the majority of development. In addition, policy PLP30: Biodiversity and Geodiversity is considered to provide robust mitigation about the potential for effects on Natura 2000 sites, as described above. The policies that have been screened out as unlikely to have significant effects on this basis are:

- PLP4: Providing infrastructure
- PLP15: Residential use in town centres policy
- PLP17: Huddersfield town centre
- PLP18: Dewsbury town centre
- PLP19: Strategic transport infrastructure
- PLP21: Highways safety and access
- PLP26: Renewable and low carbon energy
- PLP40: Alternative development on protected minerals infrastructure sites
- PLP41: Proposals for exploration and appraisal of hydrocarbons
- PLP42: Proposals for production of hydrocarbons
- PLP44: New waste management facilities
- PLP46: Waste disposal
- PLP47: Healthy, active and safe lifestyles
- PLP48: Community facilities and services
- PLP49: Educational and health care needs
- PLP50: Sport and physical activity
- PLP54: Buildings for agriculture and forestry
- PLP55: Agricultural and forestry workers' dwellings
- PLP56: Facilities for outdoor sport, outdoor recreation and cemeteries
- PLP57: The extension, alteration or replacement of existing buildings
- PLP63: New open space

- 4.9 The site allocations that are made in the Allocations and Designations document for Traveller sites and waste management are also screened out, as described in **Appendix 3**. The two Traveller site and one waste site allocations are all located in the north of the District, away from Natura 2000 sites and are not considered likely to result in a significant amount of traffic generation or increased demand for recreation space and are therefore unlikely to have a significant effect on Natura 2000 sites. The potential for these allocations to contribute to cumulative effects on Natura 2000 sites from the overall scale of growth proposed in the Publication Draft Local Plan is considered separately further ahead in this report.

## Significant effects uncertain

- 4.10 For a number of the Publication Draft Local Plan proposals it was concluded that there **may** be a significant effect on one or more Natura 2000 sites, **although this is uncertain**. Therefore, in line with the precautionary approach being applied in the HRA, until significant effects can be ruled out they are identified as likely significant effects.
- 4.11 The following proposals would all result in development which could combine to increase air pollution from vehicle traffic and/or pressure for recreation space. In addition, depending on the location of development resulting from the proposals there is a chance that physical damage/loss

of habitat or non-physical disturbance could affect the South Pennine Moors SAC or SPA (Phases 1 and 2).

- 4.12 The following proposals were therefore highlighted as having potential in-combination but uncertain significant effects on Natura 2000 sites:
- PLP10: Supporting the rural economy
  - PLP12: Accommodation for Travellers
  - PLP36: Proposals for mineral extraction
- 4.13 In addition, the proposals for the overall quantum of development in Kirklees were also not able to be screened out for the same reasons (these proposals are set out in the supporting text of the Publication Draft Local Plan rather than in draft policies):
- Provision of 23,000 jobs
  - Development of 31,140 homes
- 4.14 The specific site allocations for residential development (208 sites), employment development (14 sites), mixed use development (13 sites) and minerals site allocations (35 sites) were also not able to be screened out, as all have potential in-combination air pollution impacts. However, it was possible to screen out some types of site and specific sites, in relation to other impacts. The locations of the allocated sites are shown in **Maps 4.1-4.5** at the end of this section.

### Physical loss of habitat and non-physical disturbance

- 4.15 While none of the residential, employment, mixed use or minerals site allocations are within the boundaries of Natura 2000 sites and so physical loss of habitat from within the boundaries of Natura 2000 sites is not likely, seven of the residential site allocations, one employment site and one minerals site are within 2.5km of the South Pennine Moors SPA (Phases 1 and 2) and could support habitat that could be used by qualifying bird species from the SPAs. Development of these sites could therefore result in offsite habitat loss or damage or non-physical disturbance such as noise, vibration and light pollution, which could have a significant effect on the SPAs.
- 4.16 The screening of allocated sites for potential offsite habitat loss / non-physical disturbance on the South Pennine Moors SPAs undertaken by the Kirklees Council Ecologist considered all allocated sites within 2.5km of the SPA boundaries. It was possible to screen the majority out of further assessment, as shown in **Table 4.1**.

**Table 4.1 Initial screening of allocated sites within 2.5km of South Pennine Moors SPA boundary**

Site	Screening outcome	Justification
E1866 Provisional Open Land at Meltham	Screen in	Predominantly Brownfield site. Cannot be screened out on the basis of previous surveys.
H200 Existing Housing Allocation at Meltham	Screen in	Greenfield site. Planning Application 2015/93847 pending on the site. Cannot be screened out on the basis of previous surveys.
H2585 Unallocated land at Holmbridge	Screen out	Previous survey evidence - Previous planning permission 2010/91518 for conversion of Mill now expired – brownfield site.
H2649 Existing business and industry Allocation at Marsden	Screen out	Previous survey evidence – Part previously developed site, with planning permission 2011/9156 and within the centre of Marsden
H288a Provisional Open Land site at Hade Edge	Screen in	Greenfield site. Pending planning application. Cannot be screened out on the basis of previous surveys.
H342 Provisional Open Land on west side of Meltham	Screen in	Greenfield site. Cannot be screened out on the basis of previous surveys.
H343 Provisional Open Land on east side of Meltham	Screen in	Greenfield site. Cannot be screened out on the basis of previous surveys.
H356 Provisional Open Land	Screen in	Greenfield site with some survey evidence – Majority of



Site	Screening outcome	Justification
at Slaithwaite		the site has Planning Permission 2014/93946. However, part of the site has not been surveyed.
H626 Provisional Open Land at Holmbridge	Screen in	Greenfield site. Cannot be screened out on the basis of previous surveys.
H67 Provisional Open Land at Meltham	Screen in	Greenfield site with some survey evidence – planning permission 2014/90722 & 2014/93959 under construction. However, part of the site has not been surveyed.
H784 Provisional Open Land at Mill Moor Road Meltham	Screen out	Previous survey evidence: outline planning permission – 2014/91342 and full application pending 2015/93861
H785 UDP housing allocation at Colders Lane, Meltham	Screen out	Previous survey evidence - Planning permission 2012/90096
ME1966 Minerals extraction site	Screen in	Site abuts existing minerals extraction site it is therefore not considered likely that SPA birds will use the site due to disturbance caused by site activities, however additional work to confirm suitability of land to be undertaken.
ME2245 Minerals extraction site	Screen out	Active minerals extraction site
ME2246 Minerals extraction site	Screen out	Active minerals extraction site
ME2252 Minerals extraction site	Screen out	Active minerals extraction site
ME2254 Minerals extraction site	Screen out	Active minerals extraction site
ME2255 Minerals extraction site	Screen out	Active minerals extraction site
MX1919 Mixed use site	Screen out	Active mill: no suitable habitat and high levels of disturbance
MX1920 Mixed use site	Screen out	Active mill: no suitable habitat and high levels of disturbance
SL2166 Safeguarded land site	Screen out	Site will not be developed within the plan period
SL2167 Safeguarded land site	Screen out	Site will not be developed within the plan period
SL2170a Safeguarded land site	Screen out	Site will not be developed within the plan period

### Air pollution

- 4.17 The scale of development resulting from the site allocations in combination would also contribute to increased vehicle traffic and the associated air pollution, as well as pressure for recreation space. The impacts of air pollution could potentially affect any of the Natura 2000 sites within 15km of Kirklees but are concluded more likely to have significant effects on the South Pennine Moors SAC and SPA (Phases 1 and 2) due to their closer proximity to the development proposed.
- 4.18 Data provided by Kirklees Council<sup>26</sup>, shown in the table below allows air pollution impacts on the Natura 2000 sites to be screened according to the DMRB criteria: predicted increases in total traffic flow of >1,000 AADT or increases in HDV traffic flow of >200 AADT mean that significant effects cannot be ruled out at this stage.
- 4.19 The South Pennine Moors SAC/SPA could be affected by air pollution from the M62 and therefore remains screened in at this stage. Denby Grange Colliery Ponds SAC and Rochdale Canal can be

<sup>26</sup> This data differs from that used in previous versions of this HRA Report. Progression of the district's traffic model and air quality study in parallel to the HRA work resulted in changes to the model. The data below will be consistent with Kirklees Council's finalised model.

screened out at this stage as traffic flows along their adjacent roads will increase by well under 1,000 AADT, during the plan period, and in some cases decrease.

**Table 4.2 Strategic roads within 200m of Natura 2000 and the effect of Publication Draft Local Plan proposals on them**

Natura 2000 Site	Strategic Road within 200m	Forecast change in AADT in 2030	Forecast change in HDV	Consideration
Denby Grange Colliery Ponds SAC	A637	-1,069	-347	Reduction in vehicle flow anticipated, therefore screened out
South Pennine Moors SAC / SPA	M62 J23-22	+1,175	+188	Increase of more than 1,000 AADT – cannot be screened out at this stage
	A6024	+93	0	Change in AADT of less than 1,000 and HDV of less than 200, therefore screened out
	A635	+280	+10	Change in AADT of less than 1,000 and HDV of less than 200, therefore screened out
	A62	-23	-3	Change in AADT of less than 1,000 and HDV of less than 200, therefore screened out
	A640	-222	-49	Change in AADT of less than 1,000 and HDV of less than 200, therefore screened out
Rochdale Canal SAC	M62 J19-20	+232	+18	Change in AADT of less than 1,000 and HDV of less than 200, therefore screened out
	A664	-8	0	Change in AADT of less than 1,000 and HDV of less than 200, therefore screened out
	A627(M)	+686	+112	Change in AADT of less than 1,000 and HDV of less than 200, therefore screened out
	A671	-48	0	Change in AADT of less than 1,000 and HDV of less than 200, therefore screened out
	A640	-149	-51	Change in AADT of less than 1,000 and HDV of less than 200, therefore screened out

- 4.20 The decreases in AADT forecast for some roads are due to anticipated changes in the routes used by drivers. For example, Kirklees Council's traffic model shows a rerouting of trips away from the A637 / B6118 corridor. This is caused by an increase in traffic at the northern end of this corridor (A62 / A644), potentially as a result of development sites such as Cooper Bridge and Bradley. The increased congestion coupled with improved capacity on alternative routes (Cooper Bridge and South Dewsbury, for example) is expected to make alternative routes between the M62 and the M1 more attractive.

### Recreation impacts

- 4.21 Recreation-related impacts are also more likely to have significant effects on the South Pennine Moors SAC and SPA (Phases 1 and 2), but are considered to occur from any allocated residential or mixed use site within 7km of the Natura 2000 site.
- 4.22 Denby Grange Colliery Ponds SAC is located approximately 1km to the east of the Kirklees District boundary; therefore is relatively accessible for people travelling from the north of Kirklees where most development is proposed. However, the site is not known to be widely used for recreation activities and Natural England's Site Improvement Plan does not identify recreation-related issues or disturbance as a priority issue for the site. Therefore, particularly in light of the mitigation provided through the open space allocations and green infrastructure provisions in the Publication Draft Local Plan, recreational pressure impacts on Denby Grange Colliery Ponds SAC can be screened out.
- 4.23 Rochdale Canal SAC is located over 7km to the west of the Kirklees District boundary at the closest point; therefore it is not considered to be a particularly convenient and accessible location for day to day recreation activities, particularly for people living in the north of Kirklees where the

Publication Draft Local Plan directs the majority of new development. The SAC is designated for the presence of floating water-plantain within the watercourse; therefore the integrity of the site could be affected by boating activities but other types of recreation activities are not likely to impact upon the designation. The impacts of population growth within Kirklees on levels of boating activity on the canal are likely to be minimal and the Site Improvement Plan for the SAC does not include recreation-related issues or disturbance as a priority issue for the site. Therefore, recreational pressure impacts on Rochdale Canal SAC can be screened out.

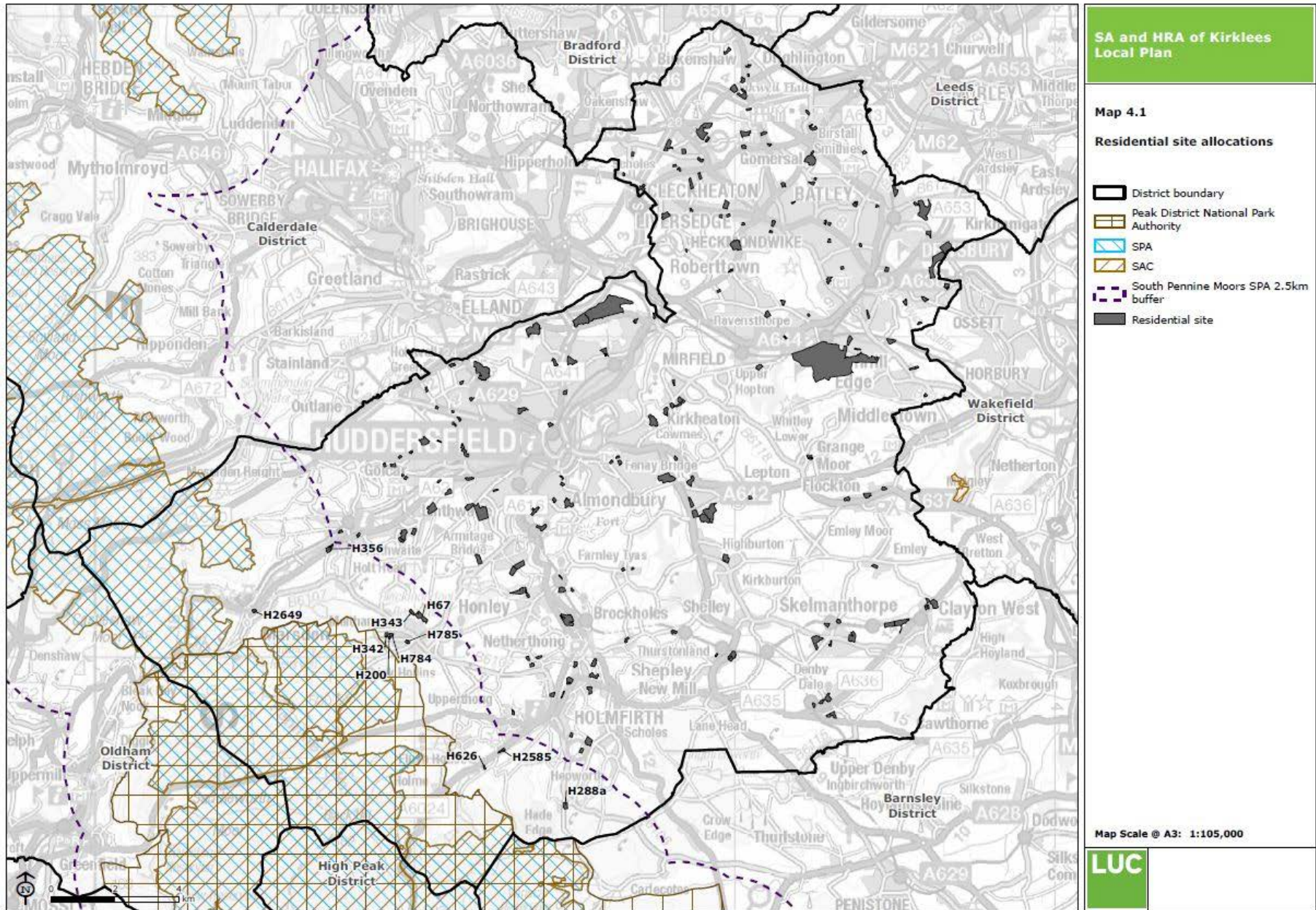
- 4.24 Recreation-related impacts are therefore only a risk to the South Pennine Moors SAC/SPAs. 62 of the allocated residential sites and five of the mixed use sites lie within 7km of the South Pennine Moors SAC and SPA (Phases 1 and 2).

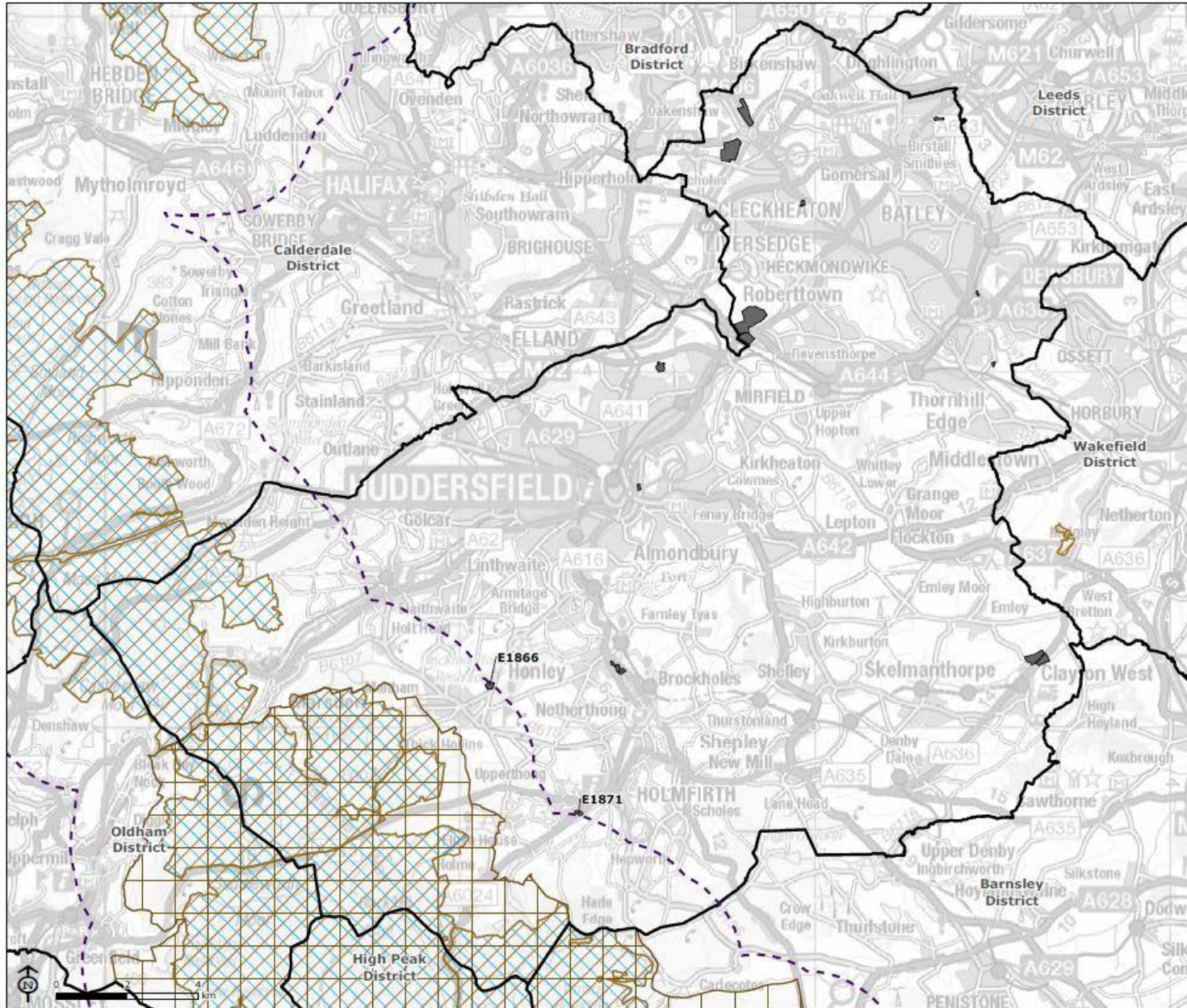
### Summary of uncertain significant effects

- 4.25 **Table 4.3** summarises the types of impact and Natura 2000 sites affected for the policies, strategies and site allocations identified as having uncertain significant effects. Where impacts have been screened in, they are indicated with a '✓' or the number of site allocations affected. Those screened out are indicated with an 'x'. Those policies, strategies and site allocations that have been screened in have been considered further at the Appropriate Assessment stage to determine whether they would be likely to have an adverse effect on the integrity of the whole Natura 2000 site in question (see **Chapter 5**).

**Table 4.3 Policies, strategies and site allocations with uncertain significant effects**

Potential impact:	Air pollution	Onsite habitat loss	Non-physical disturbance / offsite habitat loss	Recreation
Applicable Natura 2000 sites:	South Pennine Moors SAC/SPA and Rochdale Canal SAC	South Pennine Moors SAC/SPA – if development is within site	South Pennine Moors SPAs only – if development is within 2.5km on land with potential for functionally-connected habitat	South Pennine Moors SAC/SPA – if development is within 7km
<b>Policies</b>				
PLP10: Supporting the rural economy	✓	✓	✓	✓
PLP12: Accommodation for Travellers (excluding allocated sites)	✓	✓	✓	✓
PLP36: Proposals for mineral extraction (excluding allocated sites)	✓	✓	✓	X
<b>Strategies</b>				
23,000 jobs (excluding allocated sites)	✓	✓	✓	X
31,140 homes (excluding allocated sites)	✓	✓	✓	△
<b>Site allocations</b>				
Residential	✓	x	Seven sites	62 sites
Employment	✓	x	One site	x
Mixed use	✓	x	x	Five sites
Minerals	✓	x	One site	x





**SA and HRA of Kirklees Local Plan**

**Map 4.2**

**Employment site allocations**

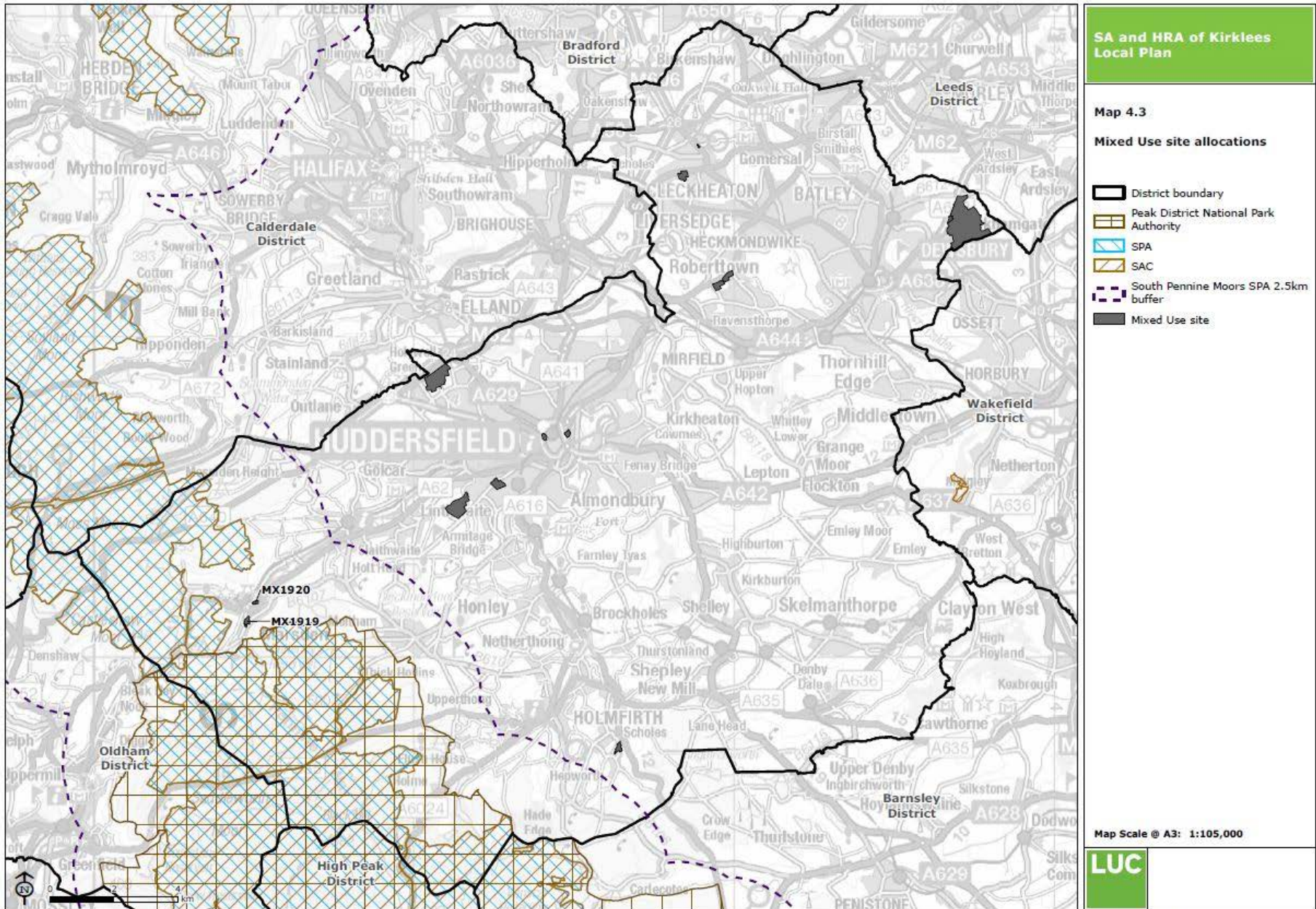
- District boundary
- Peak District National Park Authority
- SPA
- SAC
- South Pennine Moors SPA 2.5km buffer
- Employment site

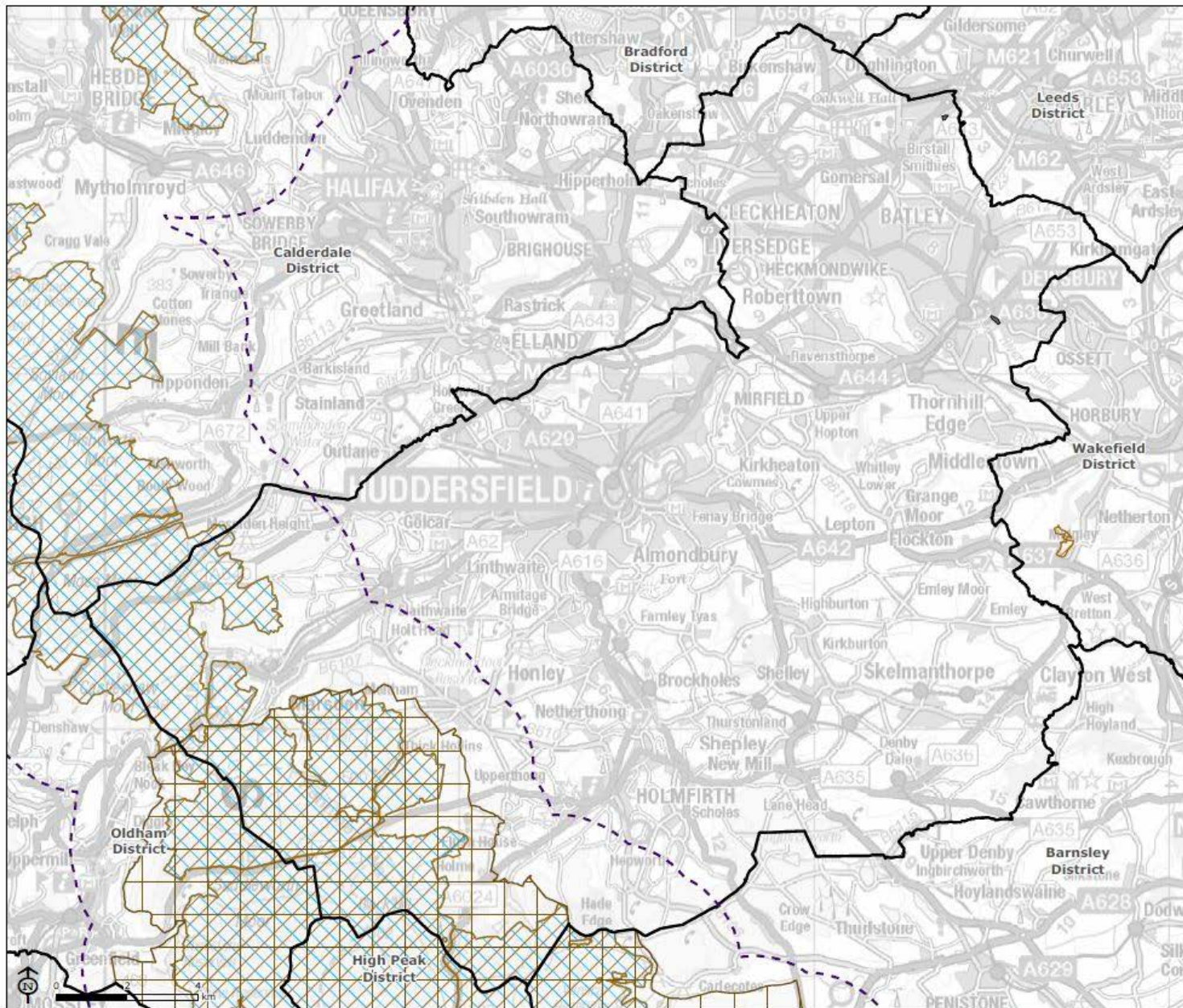
**Map Scale @ A3: 1:105,000**

**LUC**

Contains Ordnance Survey data © Crown copyright and database right 2016

CB:Green\_C EB:green\_c LUC/LON 6225-01\_016\_Sites\_Allocated\_European\_Sites\_2016 03/11/2016 Source: Kirklees Council





**SA and HRA of Kirklees Local Plan**

**Map 4.4**  
**Traveller site allocations**

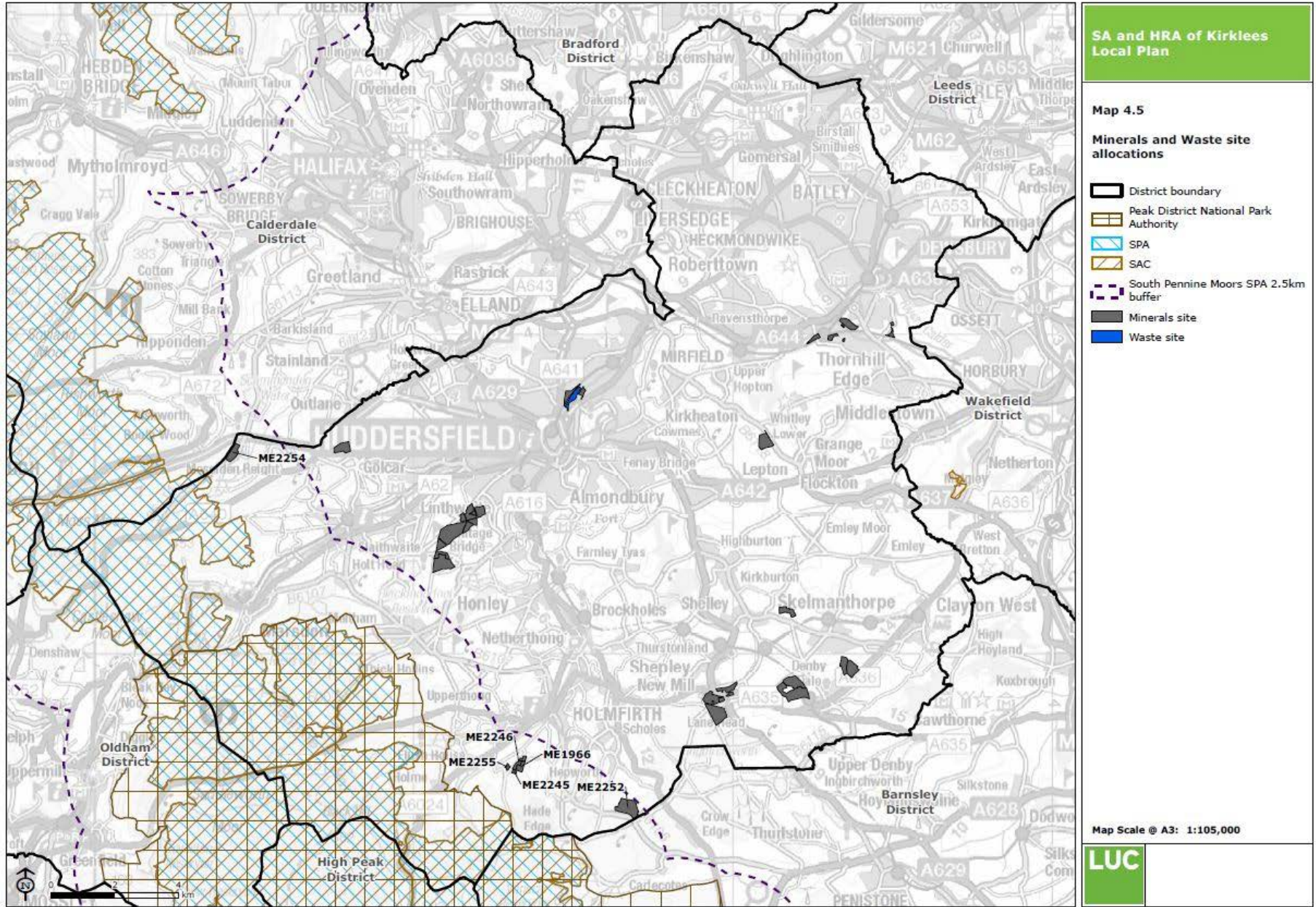
-  District boundary
-  Peak District National Park Authority
-  SPA
-  SAC
-  South Pennine Moors SPA 2.5km buffer
-  Traveller site

Map Scale @ A3: 1:105,000

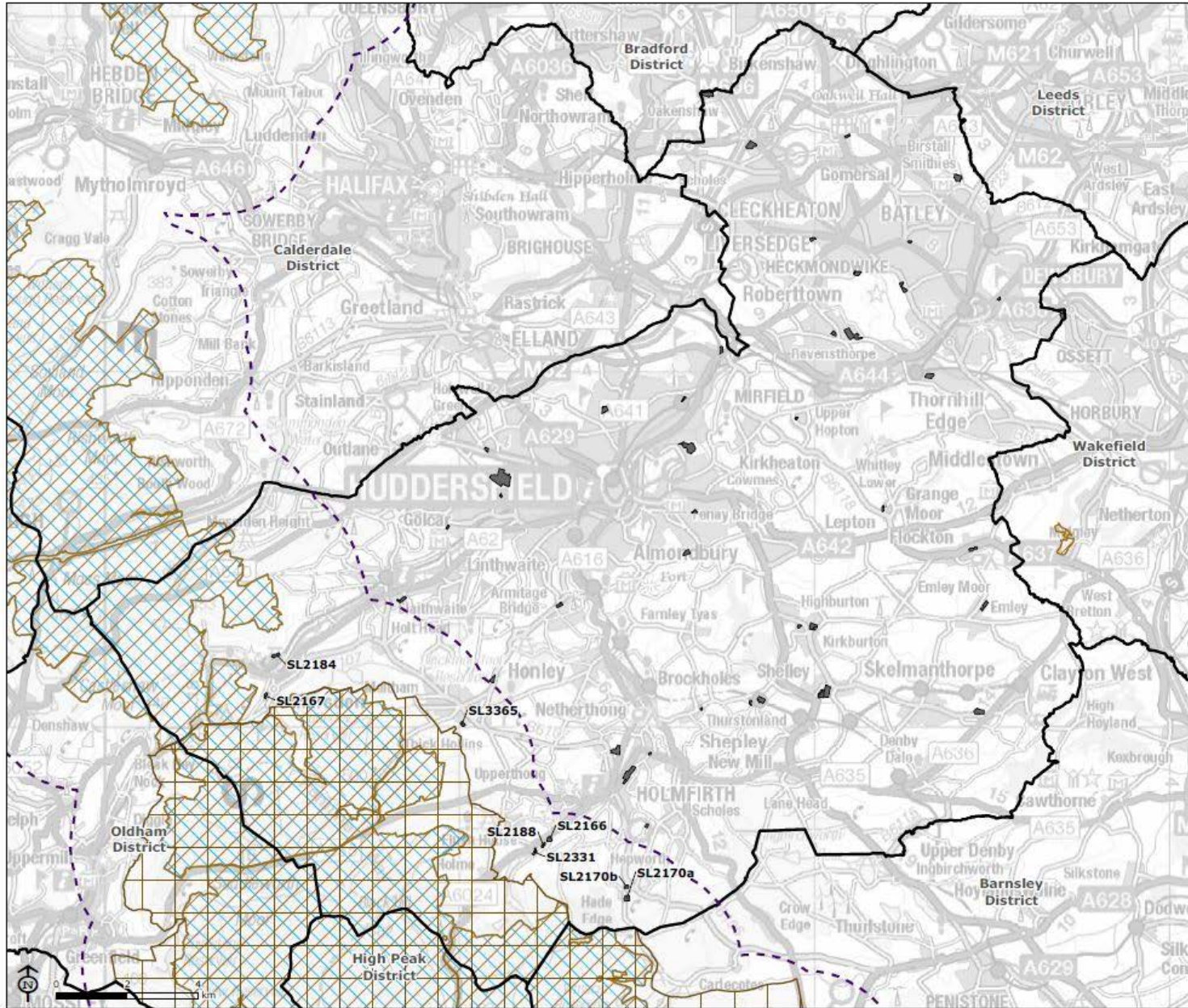


Contains Ordnance Survey data © Crown copyright and database right 2016

CB:Green\_C EB:green\_c LUC/LON 6225-01\_016\_Sites\_Allocated\_European\_Sites\_2016 03/11/2016 Source: Kirklees Council







Contains Ordnance Survey data © Crown copyright and database right 2016

CB:Green\_C EB:green\_c LUC/LON 6225-01\_017\_Safeguarded\_Land\_2016 03/11/2016 Source: Kirklees Council

**SA and HRA of Kirklees Local Plan**

**Map 4.6**

**Safeguarded Land Sites**

- District boundary
- Peak District National Park Authority
- SPA
- SAC
- South Pennine Moors SPA 2km buffer
- Safeguarded land site

**Map Scale @ A3: 1:105,000**

**LUC**

## 5 Appropriate Assessment

### Appropriate Assessment approach

- 5.1 Following the screening stage, if likely significant effects on Natura 2000 sites are unable to be ruled out, the plan-making authority is required under Regulation 102 of the Habitats Regulations 2010 to make an 'Appropriate Assessment' of the implications of the plan for Natura 2000 sites, in view of their conservation objectives. EC Guidance<sup>27</sup> states that the Appropriate Assessment should consider the impacts of the plan (either alone or in combination with other projects or plans) on the integrity of Natura 2000 sites with respect to their conservation objectives and to their structure and function.
- 5.2 A site's integrity depends on it being able to sustain its 'qualifying features' (i.e. those Annex 1 habitats, Annex II species, and Annex 1 bird populations for which it has been designated) and to ensure their continued viability. A high degree of integrity is considered to exist where the potential to meet a site's conservation objectives is realised and where the site is capable of self-repair and renewal with a minimum of external management support.
- 5.3 An Appropriate Assessment has therefore been undertaken for all of the Natura 2000 sites in Kirklees District (+15km) where likely significant effects from the Publication Draft Local Plan were identified (or were not able to be ruled out) during the screening stage, i.e. in relation to the potential for effects from:
- Development of 31,140 homes
  - Provision of 23,000 jobs
  - PLP10: Supporting the rural economy
  - PLP12: Accommodation for Travellers
  - PLP36: Proposals for mineral extraction
  - Site allocations for residential development (209 sites), employment development (14 sites), mixed use development (13 sites) and minerals site allocations (35 sites).
- 5.4 Of the allocated sites, seven residential, one employment and one minerals site are within 2.5km of the South Pennine Moors SPA (Phases 1 and 2) and could support habitat which could be functionally connected to the SPAs. These could therefore result in offsite habitat loss or damage or non-physical disturbance such as noise, vibration and light pollution, which could have a significant effect on the SPA.
- 5.5 67 of the residential sites and six mixed use sites are within 7km of the South Pennine Moors SAC and SPA (Phases 1 and 2) and could therefore contribute to recreational pressure.
- 5.6 As described in **Chapter 1**, a conclusion needs to be reached as to whether or not a policy or site allocation in the Publication Draft Local Plan would adversely affect the integrity of a Natura 2000 site. As stated in the EC Guidance, assessing the effects on the site(s) integrity involves considering whether the predicted impacts of the Publication Draft Local Plan policies (either alone or in combination) have the potential to:
- Cause delays to the achievement of conservation objectives for the site.
  - Interrupt progress towards the achievement of conservation objectives for the site.
  - Disrupt those factors that help to maintain the favourable conditions of the site.

---

<sup>27</sup> *Assessment of plans and projects significantly affecting European sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.* European Commission Environment DG, November 2001.

- Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site.
- Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem.
- Change the dynamics of relationships that define the structure or function of the site (e.g. relationships between soil and water, or animals and plants).
- Interfere with anticipated natural changes to the site.
- Reduce the extent of key habitats or the population of key species.
- Reduce the diversity of the site.
- Result in disturbance that could affect the population, density or balance between key species.
- Result in fragmentation.
- Result in the loss of key features.

5.7 The conservation objectives for each Natura 2000 site (listed in **Appendix 2**) are generally to maintain the qualifying features in favourable condition. The Site Improvement Plans for each Natura 2000 site provide a high level overview of the issues (both current and predicted) affecting the condition of the Natura 2000 features on the site(s) and outline the priority measures required to improve the condition of the features. These have been drawn on to help to understand what is needed to maintain the integrity of the Natura 2000 sites.

5.8 For each Natura 2000 site where an uncertain likely significant effect was identified at the screening stage in relation to a policy or group of site allocations in the Publication Draft Local Plan (i.e. those listed in **Table 4.2** and shaded orange in the screening matrix in **Appendix 3**), the potential impacts have been set out below and judgements made (based on the information available) regarding whether the impact will have an adverse effect on the integrity of the site. Consideration has been given to the potential for mitigation measures to be implemented that could reduce the likelihood or severity of the potential impacts such that there would not be an adverse effect on the integrity of the site.

### South Pennine Moors SPA (Phases 1 and 2)

5.9 As concluded in **Chapter 4**, Publication Draft Local Plan proposals have the potential to significantly affect the SPA in relation to physical damage/loss of habitat (both onsite and offsite), non-physical disturbance, increased air pollution and recreation and urban impacts. The policies and proposals in the Publication Draft Local Plan that could result in these impacts are PLP10: Supporting the rural economy, PLP12: Accommodation for Travellers, PLP36: Proposals for mineral extraction and the proposals for the overall quantum of development in Kirklees (provision of 23,000 jobs and development of 31,140 homes). Impacts on water quality and quantity were able to be screened out.

#### *Physical damage/loss of habitat*

5.10 The SPA extends within the boundaries of Kirklees District and the Site Improvement Plan for the South Pennine Moors identifies 'planning permission: general' as a priority issue for the site, and something that could potentially affect the qualifying bird species of the SPA.

5.11 While the Publication Draft Local Plan does not allocate any development within the boundaries of the SPA, four policies (PLP10: Supporting the rural economy, PLP12: Accommodation for Travellers and PLP36: Proposals for mineral extraction) could potentially result in development anywhere in the District. However, the safeguards provided by policy PLP30: Biodiversity and Geodiversity mean that **it is highly unlikely that development of these types would take place resulting in damage to or loss of habitat from within the boundaries of the SPA.**

5.12 However, as described in **Chapter 3**, consideration also needs to be given to the potential for development to impact upon offsite, functionally connected habitat areas used by the qualifying bird species of the SPA, which are known to travel up to 2.5km from the SPA boundaries for foraging and roosting. The approach to identifying functionally connected habitat has been developed through discussions with Natural England (**Appendix 1**). The full methodology and findings are provided as **Appendix 4** and summarised below.

- 5.13 Of the qualifying species breeding within the SPA, golden plover, curlew and twite all nest within the habitats of the SPA and will forage within agricultural habitats outside of the SPA. Any such habitats would therefore be considered functionally linked to the SPA in respect of the species present. As curlew and twite are included in the designation for Phase 2 of the SPA only, as part of the breeding bird assemblage, the potential for allocated sites to include functionally connected land has been assessed only in relation to sites within 2.5 km of Phase 2 of the SPA, ie only site H356. Golden plover are a qualifying feature of both Phase 1 and Phase 2 of the SPA and have therefore been considered in relation to sites within 2.5 km of both Phases of the SPA, ie all nine sites screened in for further assessment (**Table 4.1**).
- 5.14 The assessment of whether these sites may be functionally connected to the SPAs has been carried out by surveying the habitats at the sites and identifying whether features are present that golden plover, curlew or twite prefer or avoid. For example, golden plover prefer sites where there is an abundance of earthworms (indicated by molehills) but avoid sites where grassland is taller than 10cm.
- 5.15 In addition to identifying the presence or absence of suitable habitat features at the allocated sites, the assessment has involved a desk study of existing survey records and research, to identify and map areas known to be used by golden plover. It was not necessary to examine records for curlew and twite, as explained in **Appendix 4**.
- 5.16 The findings of the assessment of potential functional connectivity are summarised in **Table 5.1**.

**Table 5.1 The potential of allocated sites to be functionally connected to the SPAs**

Site	Relevant species	Potential for functional connectivity
E1866	Golden plover	This site has some suitable habitat but the field is bordered to the north and south by public footpaths, which will result in disturbance, and no molehills were recorded during the survey in 2017, which suggests a low abundance of earth worms. A public footpath runs along the southern boundary of the site, which is expected to result in disturbance in this area of the site. The habitats are therefore considered to be <b>suboptimal</b> in relation to foraging golden plover.
H67	Golden plover	This site has potentially suitable habitat; however, no molehills were recorded during the survey in 2017, which indicates that the site is likely to have a low abundance of earthworms. These habitats are considered to be suboptimal for foraging golden plover and, as the site is currently under construction, it is <b>unsuitable</b> for use foraging habitat.
H200	Golden plover	This site is adjacent to residential properties, which is expected to result in disturbance to this small field. The site is also currently under construction. The site is considered to be highly disturbed and the grassland height is too high; it is therefore <b>unsuitable</b> for golden plover foraging.
H288A	Golden plover	This site is adjacent to residential properties is therefore considered to be highly disturbed. The site is considered to be too highly disturbed and the grassland height too high for the site to be suitable for golden plover foraging. The RSPB has also been consulted directly in relation to this site and considers this site to be <b>unsuitable</b> for golden plover.
H342	Golden plover	The habitats at this site are considered to be too tall or too steeply sloping to be suitable for golden plover foraging. The whole site is also disturbed by the presence of residential properties and people. This field is therefore <b>unsuitable</b> for supporting foraging golden plover.
H343	Golden plover	This site has habitat that is suitable for use by foraging golden plover but no molehills were recorded during the survey in 2017, which suggests a low abundance of earthworms. The habitats are therefore considered to be <b>suboptimal</b> for foraging golden plover.
H356	Twite	Twite forage exclusively on unimproved grasslands managed as hay meadows. The habitats of this site are predominantly improved and semi-improved grasslands and are therefore <b>unsuitable</b> for foraging twite.
	Curlew	Curlew typically forage within 1 km of the nest site and use the closest available foraging site where possible. Due to the distance between this site and the SPA, and the availability of habitats suitable for foraging curlew between the site and the SPA, it is considered <b>highly unlikely</b> that curlew nesting within Phase 2 of the SPA are also foraging with the site.
	Golden	This site has high levels of disturbance from adjacent residential properties, footpaths

Site	Relevant species	Potential for functional connectivity
	plover	and horse grazing (which will be regularly attended by people). The site is also relatively steeply sloping over much of its area and no molehills were recorded during the 2017 survey. The site is therefore considered <b>unsuitable</b> for foraging golden plover.
H626	Golden plover	This is a sloping site with high levels of disturbance from adjacent residential properties and a footpath. No molehills were recorded during the survey in 2017, indicating low abundance of earthworms and the site is considered <b>unsuitable</b> for foraging golden plover.
ME1966	Golden plover	This site is within an area identified through desk study as 'potential functionally connected land'. The site has habitats suitable for foraging golden plover; however, no molehills were recorded during the 2017 survey, indicating low abundance of earthworms, and active quarry sites are located to the north and south of this area. Due to the levels of disturbance and likely low abundance of earthworms, these fields are considered to be <b>suboptimal</b> for foraging golden plover.

- 5.17 No habitat suitable for foraging twite has been recorded at the only site (H356) within 2.5km of the SPA (Phase 2), therefore effects on twite can be ruled out. This site has habitat potentially suitable for supporting foraging curlew but, as it is separated from the SPA by other potentially suitable habitats, it is considered unlikely that the site is functionally connected to the SPA (Phase 2), in respect of curlew. However, without mitigation, there would be a low residual risk of the site being used by curlew that are breeding at the SPA (Phase 2).
- 5.18 All nine sites have been found to contain habitats that are either suboptimal or unsuitable for supporting foraging golden plover. Without mitigation, there is a low residual risk of the sites being used by golden plover that are breeding in Phase 1 or Phase 2 of the SPA.
- 5.19 Following discussions with Natural England, it has been agreed that the following text will be added to the supporting text (specifically paragraph 13.10) of Publication Draft Local Plan policy PLP30 as an additional safeguard:

*In accordance with the findings of the Habitats Regulations Assessment, for those development allocations within 2.5km of the SPA, further surveys will be required at planning application stage to assess detailed impacts on SPA birds and, if found to be necessary, appropriate avoidance and/or mitigation measures will be required to address any identified impacts in line with policy PLP30. Suitable avoidance and mitigation measures may include:*

- *Avoidance of areas used by significant numbers of SPA birds (to be determined by a project level Habitats Regulations Assessment).*
- *Provision of equivalent or greater quantity and quality of replacement habitat onsite (or as a last resort off site within 2.5km) with improved management to ensure use by SPA birds.*
- *Timing of works (construction, operation and decommissioning) outside the period most frequently used by SPA birds.*
- *Monitoring of impacts to assess bird use over time.*

- 5.20 With this mitigation in place, it is possible to conclude that there will be **no adverse effects on integrity of the South Pennine Moors SPA (Phases 1 and 2) as a result of physical disturbance or loss of habitat, either onsite or offsite.**

*Non-physical disturbance*

- 5.21 The impacts of noise, vibration and light pollution can affect the qualifying bird species of the SPA, and as with loss of habitat, could be significant up to 2.5km from the SPA due to the use of offsite functionally connected habitat by the SPA qualifying bird species. Therefore, development at the allocated sites within 2.5km of the SPA could result in noise and vibration affecting SPA birds, particularly during construction of any new development. Light pollution could occur during construction, but also occupation of new developments. However, good practice construction methods and specific design measures could be required to reduce noise, vibration and light pollution during and post-construction.

- 5.22 As described in relation to offsite habitat disturbance or loss, above, potential functional connectivity to the South Pennine Moors SPAs the allocated sites within 2.5km have low potential to be functionally connected to the SPAs. Additional safeguards incorporated into Policy PLP30 will ensure that any residual risk is mitigation.
- 5.23 For the policies and strategies that could result in development anywhere in the district (PLP10, PLP12, PLP36 and the overall employment and housing allocations), policy PLP30: Biodiversity and Geodiversity provides general mitigation for impacts on the SPA, including in relation to non-physical disturbance. Policy PLP24: Design seeks to ensure that development contributes towards enhancement of the natural environment, supports biodiversity and connects to and enhances ecological networks. Policy PLP36<sup>28</sup>: Proposals for Mineral Extraction will only permit mineral extraction sites that do not cause significant disturbance to residents from dust, noise and vibration (and this requirement would also help to reduce these effects on SPA birds). Policy PLP52: Protection and Improvement of Environmental Quality requires development proposals to evaluate the potential to increase pollution from noise, vibration, light, dust and odour, and incorporate measures to prevent or reduce the pollution.
- 5.24 **With the mitigation measures described above, it can be concluded that there is sufficient mitigation incorporated into the Publication Draft Local Plan to conclude that will be no adverse effects on integrity of the South Pennine Moors SPA (Phases 1 and 2) as a result of non-physical disturbance.**

#### *Air pollution*

- 5.25 While the qualifying bird species of the SPA may be indirectly affected by changes to habitat associated with air pollution effects, the Site Improvement Plan for the SPA does not identify air pollution as a current key vulnerability. In addition, none of the South Pennine Moors Phase 1 is within 200m of the M62, and the area of the South Pennine Moors Phase 2 SPA that could be affected by a potential increase in nitrogen deposition (i.e. 200m either side of the M62), is less than 1% (0.87%) of the overall SPA area. Therefore, even if nitrogen deposition does increase in this area, it is unlikely to significantly alter or reduce the overall extent of the habitats supporting the SPA qualifying bird species.
- 5.26 **It is therefore possible to conclude that there will be no adverse effect on the integrity of the South Pennine Moors SPA (Phases 1 and 2) in respect of air pollution.**

#### *Recreation and urban impacts*

- 5.27 The South Pennine Moors SPAs are accessible and attractive for recreational use and their location within the boundary of Kirklees District means that the population growth resulting from the Publication Draft Local Plan is likely to lead to an increase in visitor numbers. The SPAs are located in the southwest of Kirklees, away from the main urban areas where most development will be focussed (the SPA is approximately 8.5km from the centre of Huddersfield). However, there are allocations for residential and other types of development within the south and western parts of the District within fairly close proximity of the SPA, where people would need to travel much shorter distances to use the moors for recreational purposes. In addition, recreational pressure from new development within other authorities surrounding this large SPA is also likely to occur and could cause in-combination effects.
- 5.28 The Site Improvement Plan for the South Pennine Moors SPA identifies public access/disturbance as one of the priority issues for the site, and the impacts of wildfire/arson as another and these impacts could affect the habitats supporting the SPA. The South Pennine Moors Integrated Management Strategy and Conservation Action Programme lists popular types of recreation activities on the South Pennine Moors as including walking, horse-riding, cycling/mountain biking, hang gliding, rock climbing, model aircraft flying, orienteering, fell running, off-road driving (including 4x4 and scrambling), grouse shooting and angling. Effects on breeding birds are most likely to result from uncontrolled dogs, orienteering, large walking events, model aircraft, hang gliders and uncontrolled fires<sup>29</sup>.

<sup>28</sup> The 2015 HRA Report incorrectly referred here to the Proposals for Mineral Extraction policy as DLP39 rather than DLP37, as it was called in the Draft Local Plan.

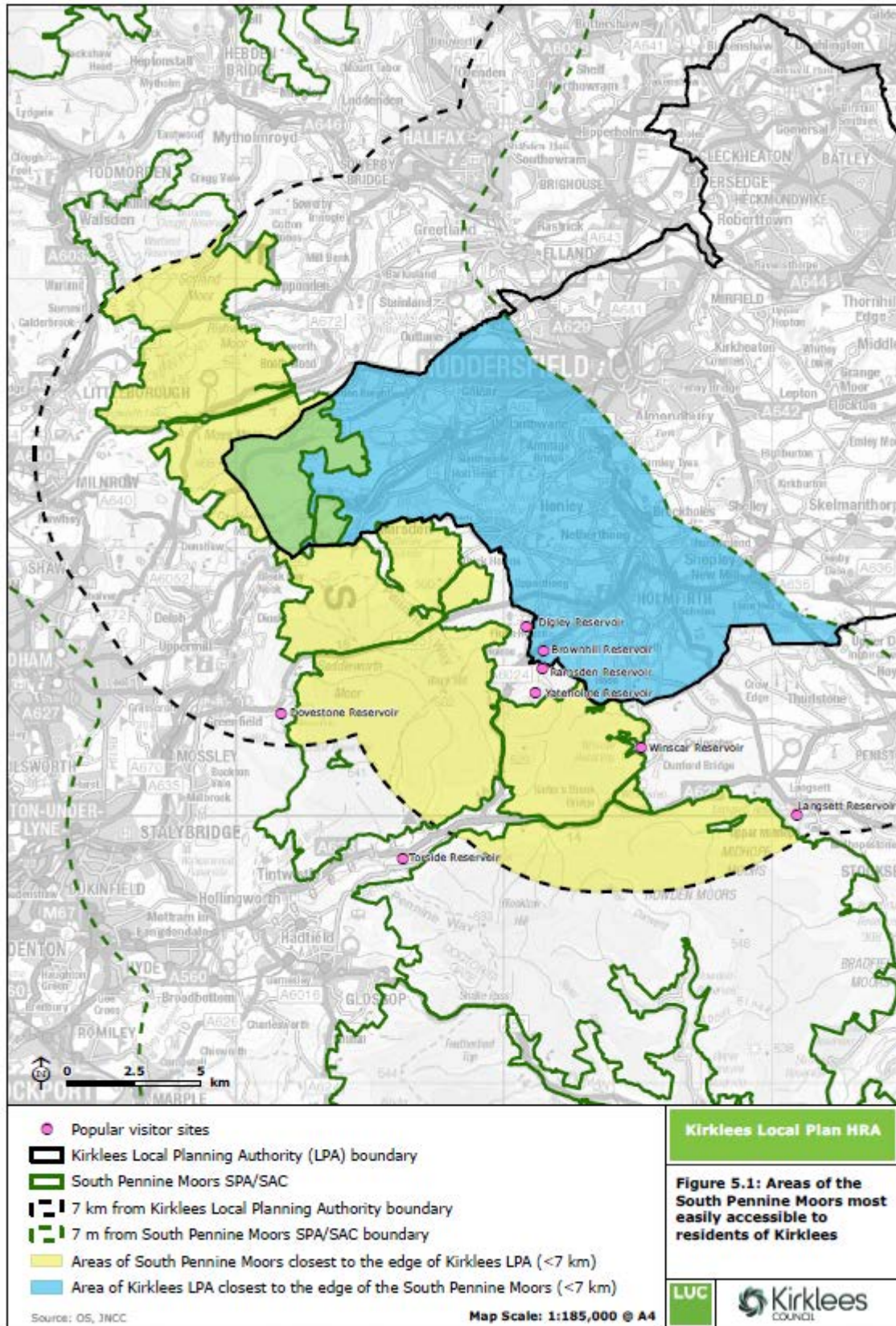
<sup>29</sup> South Pennine Moors Integrated Management Strategy and Conservation Action Programme (1998)

- 5.29 While the provision of green infrastructure (including the allocation of large areas of open space) elsewhere in the District through the Publication Draft Local Plan may provide some mitigation for the potential increased pressure for recreation space at the SPA, the open space provided through allocations for local and urban green space is unlikely to be comparable in nature to the South Pennine Moors SPA and would not provide locations for many of the activities enjoyed by visitors to the moors such as rock climbing or hang gliding.
- 5.30 As explained in **Chapter 3**, 7km has been taken to be the threshold distance at which development could result in impacts upon the South Pennine Moors SPA (and SAC). This is the distance at which studies supporting the Bradford Core Strategy have determined that mitigation may be required for recreation impacts. It is also a distance which encompasses most of the trips made to the South Pennines, as identified in Natural England's visitor study<sup>30</sup>. The number of housing and mixed use sites allocated within the Publication Draft Local Plan means that there is an indicative capacity for 4,579 new dwellings within 7km of the SPA (**Map 5.1**, at the end of this section), within the plan period, and the majority of those sites are within 5-7km. Kirklees has an average household size of 2.3/2.4<sup>31</sup>, so development of all the allocated sites represents 10,532-10,990 new residents. This population growth would be an incremental increase over the plan period, and excludes any other population increase within the 7km zone.
- 5.31 Residents of Kirklees make an average of 13 annual trips to the South Pennines, per capita, which contributes 21.8% or 4.3 million visits to the 20 million visits made each year to the South Pennines. Therefore, the allocated sites would result in c.136,900 to 142,900 additional trips per year. This represents c.0.3% of the total annual trips to the South Pennines.
- 5.32 The southern portion of the Phase 2 SPA and the northern portion of the Phase 1 SPA are the most accessible to residents from Kirklees, but the distribution of additional visitors within the SPA will depend on the specific activities sought, which is likely to include a range of different activities as is the case now.
- 5.33 The parts of the SPA most likely to receive additional visitors are those areas that are within 7km of Kirklees, particularly 'honeypot' locations that are already popular. Popular areas within 7km of Kirklees district include the reservoirs at Digley, Brownhill, Ramsden, Yateholme, Winscar, Langsett, Torside and Dovestone.
- 5.34 **Figure 5.1** shows areas of the South Pennine Moors SPA (and SAC) that are within 7km of the edge of Kirklees district (yellow). It also shows the portion of Kirklees district that is within 7km of the edge of the SPA (blue): only the west and southwest of the district are within easy reach of the SPA. Some areas of the SPA are within Kirklees district, shown where the blue and yellow areas overlap. The figure shows that residents of Hade Edge (in the south of the district) have a larger area of the SPA within easy reach of their homes than residents of west Huddersfield, who are in easiest reach of only the edge of the SPA. The estimated increase in visitors of 0.3% therefore represents a conservative estimate with all areas of the district equally accessible to the South Pennine Moors SPA. In reality, parts of the district are more accessible than others and the figure is likely to be lower than 0.3%.

<sup>30</sup> Natural England (2014) Monitor of engagement with the natural environment survey (2009-2012): Visit taking in the South Pennines

<sup>31</sup> Census 2011

Figure 5.1 Areas of the South Pennine Moors most easily accessible to residents of Kirklees



Contains Ordnance Survey data © Crown copyright and database right 2017; CB:KS EB:Stenson\_K LUC:RIFIGS\_1\_r1\_6225\_S\_Pennines\_Moor\_Access\_A4P 01/03/2017



- 5.35 *Mitigation for the impacts of recreation* will be provided principally by management plans already in place to manage visitor pressure within the South Pennine Moors SPAs and the Peak District National Park. Plans and projects to manage visitor pressure in the South Pennine Moors SPA (and SAC) are the responsibility of several different organisations, authorities and partnerships. The Site Improvement Plan for the South Pennine Moors<sup>32</sup> identifies the measures appropriate for managing various threats and pressures. The issues and measures relating to visitor pressure are summarised below:
- Public access / disturbance: implement habitat and species management plans related to specific disturbance issues;
  - Wildfire / arson: produce and implement wildfire management plans; and
  - Vehicles: increase cross-agency partnership working.
- 5.36 Two main partnership organisations are responsible for delivering these measures. The South Pennines Local Nature Partnership (Pennine Prospects)<sup>33</sup> coordinates the South Pennine Fire Operations Group, which aims to reduce uncontrolled burning of moorland, and runs South Pennines Moorwatch, which has been set up to enable the reporting of antisocial behaviour such as illegal off-road driving. The Moors for the Future Partnership<sup>34</sup>, which includes landowners, Natural England, the RSPB and Environment Agency, works to restore and protect moorland within the Yorkshire Dales, Peak District and South Pennines, including the South Pennine Moors SAC/SPA. Visitor pressure is managed through a combination of stabilising peat, improving habitats, and path management. MoorLIFE 2020<sup>35</sup>, managed by the partnership, is a five year project that began in 2015 and aims to restore and protect blanket bog in the South Pennine Moors. The project includes measures to stabilise eroded peat and strategies for reducing the risk of wildfire.
- 5.37 Policy PLP63: Open space within the Publication Draft Local Plan, which requires new housing developments to provide new open space, may provide some additional mitigation where the spaces provided can be considered to be suitable (ie providing for an activity that would otherwise result in a visit to the South Pennine Moors), accessible and natural. The policy sets out open space provision standards, including a minimum of two hectares of natural/semi-natural greenspace per 1,000 population, to be within 15 minutes / 720 metres walk (or 2km from a 20 ha site). This will help to ensure that any new 'natural' greenspace is 'accessible'.
- 5.38 As well as providing general protection for internationally designated sites, Policy PLP30: Biodiversity and geodiversity also refers to the Kirklees Biodiversity Opportunity Zones maps, in which the habitat characteristics of each part of the district are identified. Policy PLP30 states that all new development shall incorporate biodiversity enhancement and that those measures should be designed to reflect the priority habitats and species listed for the relevant Biodiversity Opportunity Zone. This will help to ensure that any new greenspace is 'suitable' and 'natural'.
- 5.39 **The relatively small increase in overall trips to the South Pennine Moors likely to arise from the increased population within Kirklees, coupled with the mitigation in place through partnership organisations and in the Publication Draft Local Plan, means it is possible to conclude that the Publication Draft Local Plan will not result in adverse effects on the integrity of the South Pennine Moors SPA (Phases 1 & 2) as a result of increased recreation pressure and urban edge impacts.**

### South Pennine Moors SAC

- 5.40 As described in **Chapter 3**, Publication Draft Local Plan proposals could potentially affect the South Pennine Moors SAC in relation to physical damage/loss of habitat (onsite), increased air pollution and recreation and urban impacts. The policies and proposals that could result in these impacts PLP10: Supporting the Rural Economy, PLP12: Accommodation for Travellers, PLP36: Proposals for mineral extraction and the proposals for the overall quantum of development in Kirklees (provision of 23,000 jobs and development of 31,140 homes). Physical damage/loss of

<sup>32</sup> <http://publications.naturalengland.org.uk/file/6518808585961472>

<sup>33</sup> <http://www.pennineprospects.co.uk/>

<sup>34</sup> <http://www.moorsforthefuture.org.uk/>

<sup>35</sup> <http://www.moorsforthefuture.org.uk/moorlife2020>

habitat (offsite), non-physical disturbance and impacts on water quality and quantity were able to be screened out.

*Physical damage/loss of habitat (onsite)*

- 5.41 While the Publication Draft Local Plan does not allocate any development within the boundaries of the SAC, three policies (PLP10: Supporting the Rural Economy, PLP12: Accommodation for Travellers and PLP36: Proposals for Mineral Extraction) could potentially result in development anywhere in the District and therefore within the boundaries of the SAC. However, the safeguards provided by policy PLP30: Biodiversity and Geodiversity are considered adequate to ensure that new development locations will not be permitted within the boundary of the SAC and **there will not be an adverse effect on the integrity of the South Pennine Moors SAC as a result of physical damage/loss of onsite habitat.**

*Air pollution*

- 5.42 Natural England's Site Improvement Plan for the South Pennine Moors SAC identifies air pollution, specifically the impact of atmospheric nitrogen deposition, as one of the priorities for the site and something which can affect the qualifying habitats of the SAC including European dry heaths, blanket bogs, woodland and quaking bogs.
- 5.43 The UK Air Pollution Information System (APIS)<sup>36</sup> provides an online database of air pollutants and deposition levels at Natura 2000 sites and their qualifying habitats and species. For the South Pennine Moors SAC, APIS shows that nitrogen deposition (kg/ha/year) for all of the qualifying habitats is exceeding the critical loads, and has been for a number of years. The major contributor to nitrogen deposition at this SAC is agriculture (37.23%), with road transport contributing 7.68% to the total nitrogen deposition across the site.
- 5.44 Analysis of the conditions reports for the Site of Special Scientific Interest (SSSI) units<sup>37</sup> which make up the SAC provides additional information. The habitats within 200m of the M62 are predominantly blanket bog, although there may be areas of European dry heath, and those SSSI units have all been assessed as being in 'unfavourable recovering' condition in the most recent assessments. Where the reason for the previously unfavourable condition is given, it is grazing and erosion that are identified. None of the conditions report identifies changes that are attributed to air pollution from traffic, for example changes at the road edge.
- 5.45 The overall scale of residential, employment and other types of development proposed through the Publication Draft Local Plan is likely to result in an increase in traffic on the local and national strategic road network in and around Kirklees. A number of strategic roads run through the South Pennine Moors SAC, including the A62 Manchester Road which runs between Huddersfield and Manchester, the A640, also between Huddersfield and Manchester, and the A635 between Holmfirth and Manchester; however data from Kirklees Council has allowed air pollution impacts from these roads to be screened out, because the increase in annual average daily traffic flows along these routes over the plan period is likely to be less than 1,000. The increase in forecast trips on the M62 has the potential to contribute to air pollution at the SAC within 200m either side of the M62 as it is forecast to have an increase in annual average daily traffic flows of more than 1,000 AADT.
- 5.46 While an increase of more than 1,000 AADT indicates the potential for significant effects, it is necessary to understand how much air pollution associated with the increase in traffic along the M62 is likely to be generated in order to determine whether additional nitrogen deposition within 200m either side of the route is likely to have an adverse effect on the integrity of the SAC.
- 5.47 Kirklees Council has commissioned an Air Quality Assessment, carried out by Aecom, which assesses the impact of the Publication Draft Local Plan on air quality, but only within the district itself. To assess the contribution of Publication Draft Local Plan traffic on the M62 where it passes the SAC, outside the district, the traffic model was extended to forecast traffic on the required section of motorway. The DMRB screening method v.1.03c<sup>38</sup> for assessing local air quality was

---

<sup>36</sup> <http://www.apis.ac.uk/>

<sup>37</sup> <http://magic.defra.gov.uk/MagicMap.aspx>

<sup>38</sup> Tool described in DMRB Volume 11, 3(1), HA 207/07 Air Quality

used to estimate nitrogen deposition at the SAC, using traffic flows generated by the traffic model. The use of the DMRB screening method was agreed with Aecom and Natural England.

- 5.48 The DMRB screening method provides an estimated process contribution to nitrogen deposition, with reference to the critical loads<sup>39</sup> of the habitats present. The results of the DMRB screening method<sup>40</sup> are shown in the table below.

**Table 5.2 Outputs from the DMRB screening tool for the M62 between J23-22**

Distance from road (m)	Change in Annual Mean Nitrogen Oxide (NO <sub>x</sub> ) emissions (µg/m <sup>3</sup> )		Change in Nitrogen Deposition (kg N/ha/yr)	
	Difference between 2030 With and Without Local Plan	Difference between 2030 With Local Plan and 2015 Base	Difference between 2030 With and Without Local Plan	Difference between 2030 With Local Plan and 2015 Base
10	+0.3	-7.8	+<0.1	-3.8
12	+0.3	-7.6	+<0.1	-3.8
14	+0.3	-7.5	+<0.1	-3.8
16	+0.3	-7.4	+<0.1	-3.8
18	+0.3	-7.3	+<0.1	-3.8
20	+0.2	-7.2	+<0.1	-3.8
25	+0.2	-7.1	+<0.1	-3.8
30	+0.2	-6.9	+<0.1	-3.8
50	+0.1	-6.5	+<0.1	-3.8
100	+<0.1	-6.2	+<0.1	-3.9
150	+<0.1	-6.0	+<0.1	-3.9
200	+<0.1	-6.1	+<0.1	-3.9

- 5.49 The results in the table above show that development associated with the Publication Draft Local Plan will contribute additional NO<sub>x</sub> emissions compared to without the Publication Draft Local Plan; however the increase is small and drops off rapidly with distance from the road (1st column of results). Overall, however, the NO<sub>x</sub> emissions associated with the Publication Draft Local Plan at 2030 are lower than the existing emissions in 2015 (2nd column of results). This is due to improvements in emission rates and background concentration, over time. When converted into nitrogen deposition, the Publication Draft Local Plan is expected to contribute a negligible increase, even at the roadside (3rd column of results), and this is still lower than the existing deposition in 2015 (4th column of results).
- 5.50 Deposition rates are over the critical loads for the site and the annual mean NO<sub>x</sub> concentrations are also over the 30 µg/m<sup>3</sup> NO<sub>x</sub> objective for ecosystems at all but the most distant measurement points. However, the results show that the contribution from the Kirklees Publication Draft Local Plan will be negligible. Aecom confirmed that the outputs of the screening tool show sufficiently small changes that additional dispersion modelling is not required.
- 5.51 In summary, while there is likely to be an increase in traffic flow on the M62 of greater than 1,000 AADT, at the end of the Publication Draft Local Plan period, this will contribute a negligible increase in nitrogen deposition at the South Pennine Moors SAC.

<sup>39</sup> Obtained from [www.apis.ac.uk](http://www.apis.ac.uk)

<sup>40</sup> Assumptions used in the model were:

2015 emission rates and background concentrations used for 2015 baseline calculations;

2023 emission rates and background concentrations used for 2030 calculations – this is to provide a conservative assessment of future concentrations, whereby not all of the improvements anticipated by Defra are realised and is in line with the air quality assessment;

The DMRB Screening Tool was used to calculate road NO<sub>x</sub>. NO<sub>2</sub> was calculated using the road NO<sub>x</sub>, background concentrations and the Defra issued NO<sub>x</sub> to NO<sub>2</sub> conversion spreadsheet;

The "distance" quoted in the table above is to the westbound carriageway as that the increase in traffic flows with the Local Plan was greater westbound than eastbound therefore smaller changes would be expected north of the M62; and

The closest distance of 10 m was identified as the distance from the centre of the westbound carriageway to the edge of the road.

- 5.52 Mitigation for air pollution effects will be provided by Policy PLP20: Sustainable travel, which seeks to encourage the use of sustainable modes of transport in place of cars. Policy PLP23: Core walking and cycling network also provides for cycling and walking infrastructure, which may also reduce car use.
- 5.53 **Therefore, it is possible to conclude that the Publication Draft Local Plan alone will not result in adverse effects on the integrity of the South Pennine Moors SAC as a result of increased air pollution.**
- 5.54 Potential in-combination effects are discussed further, below.

#### *Recreation and urban impacts*

- 5.55 The boundaries of the South Pennine Moors SAC and SPA (phases 1 and 2) are very similar; therefore much of the information set out above in relation to the South Pennine Moors SPA (Phases 1 and 2) with regards to recreational use of the site is also relevant to the South Pennine Moors SAC. While the disturbance-related impacts of recreation activities are less applicable to the SAC than the SPA, because it is designated on the basis of habitats rather than bird species, the habitats of the SAC can be damaged by human activities such as trampling resulting from people diverting from original paths, due to overuse and erosion and lighting fires.
- 5.56 **The relatively small increase in overall trips to the South Pennine Moors likely to arise from the increased population within Kirklees, coupled with the mitigation described above in relation to the South Pennine Moors SPA (Phases 1 and 2), means it can also be concluded that the Publication Draft Local Plan would not result in adverse effects on the integrity of the South Pennine Moors SAC.**

#### **Rochdale Canal SAC**

- 5.57 As described in **Chapter 3**, Publication Draft Local Plan proposals could potentially affect this SAC in relation to increased air pollution and recreation and urban impacts. However, likely significant effects on water quality and quantity, recreational pressure, habitat loss (onsite or offsite) and non-physical disturbance were able to be screened out. The policies and proposals that could result in air pollution impacts in-combination are PLP10: Supporting the Rural Economy, PLP12: Accommodation for Travellers, PLP36: Proposals for Mineral Extraction and the proposals for the overall quantum of development in Kirklees (provision of 23,000 jobs and development of 31,140 homes).

#### *Air pollution*

- 5.58 Rochdale Canal SAC cuts across a number of strategic roads including the M62 which runs along the northern edge of Kirklees and links with Manchester. Data from Kirklees Council has allowed air pollution impacts from most of these roads to be screened out (see **Table 4.2**), although the M62 has the potential to contribute to air pollution at the SAC as it would have an increase in AADT above 1,000, either from the Publication Draft Local Plan alone or in combination with development from neighbouring districts. Natural England's Site Improvement Plan for the SAC identifies air pollution, specifically the impact of atmospheric nitrogen deposition, as one of the priority issues for the site and something which can affect the qualifying floating water plantain.
- 5.59 For the Rochdale Canal SAC, APIS shows that nitrogen deposition (kg/ha/year) for floating water plantain is exceeding the critical loads for this type of habitat, and has been for a number of years. The highest contributor to nitrogen deposition at this SAC is agriculture (24.01%), with road transport contributing 12.49% to the total nitrogen deposition across the site.
- 5.60 As discussed above for the South Pennine Moors SAC, it is necessary to understand how much air pollution associated with the increase in traffic along the M62 is likely to be generated in order to determine whether nitrogen deposition within 200m either side of the route is likely to have an adverse effect on the integrity of the SAC. The introduction of the Smart Motorway on the M62 between Junctions 20 and 25 plus general improvements in vehicle standards and overall reductions in vehicle emissions means that nitrogen deposition arising from increased traffic over the plan period is unlikely to be significant.
- 5.61 Mitigation of vehicle emissions along the M62 is also provided in the Publication Draft Local Plan through policy PLP19 seeking to encourage the use of sustainable modes of transport including the upgrades to the Transpennine rail line between Leeds and Manchester.

- 5.62 Finally, the area of the Rochdale Canal SAC that could be affected by a potential increase in nitrogen deposition (i.e. 200m either side of the M62), is less than 2% (1.91%) of the overall SAC area. Therefore, even if nitrogen deposition does increase in this area, it is unlikely to significantly alter or reduce the overall extent of the qualifying habitats of the SAC.
- 5.63 In summary, while there is likely to be an increase above 1,000 AADT on the M62 during the Publication Draft Local Plan period, a proportion of which will be linked to the Publication Draft Local Plan, the Highways England SMART Motorway committed scheme, improved rail links on this route and Publication Draft Local Plan policies provide mitigation, and the area of habitats within the SAC that might be affected by any increases in nitrogen deposition either side of the M62 is less than 2% of the overall area of the SAC.
- 5.64 **Therefore, it is possible to conclude that the Publication Draft Local Plan will not result in adverse effects on the integrity of the Rochdale Canal SAC as a result of increased air pollution.**

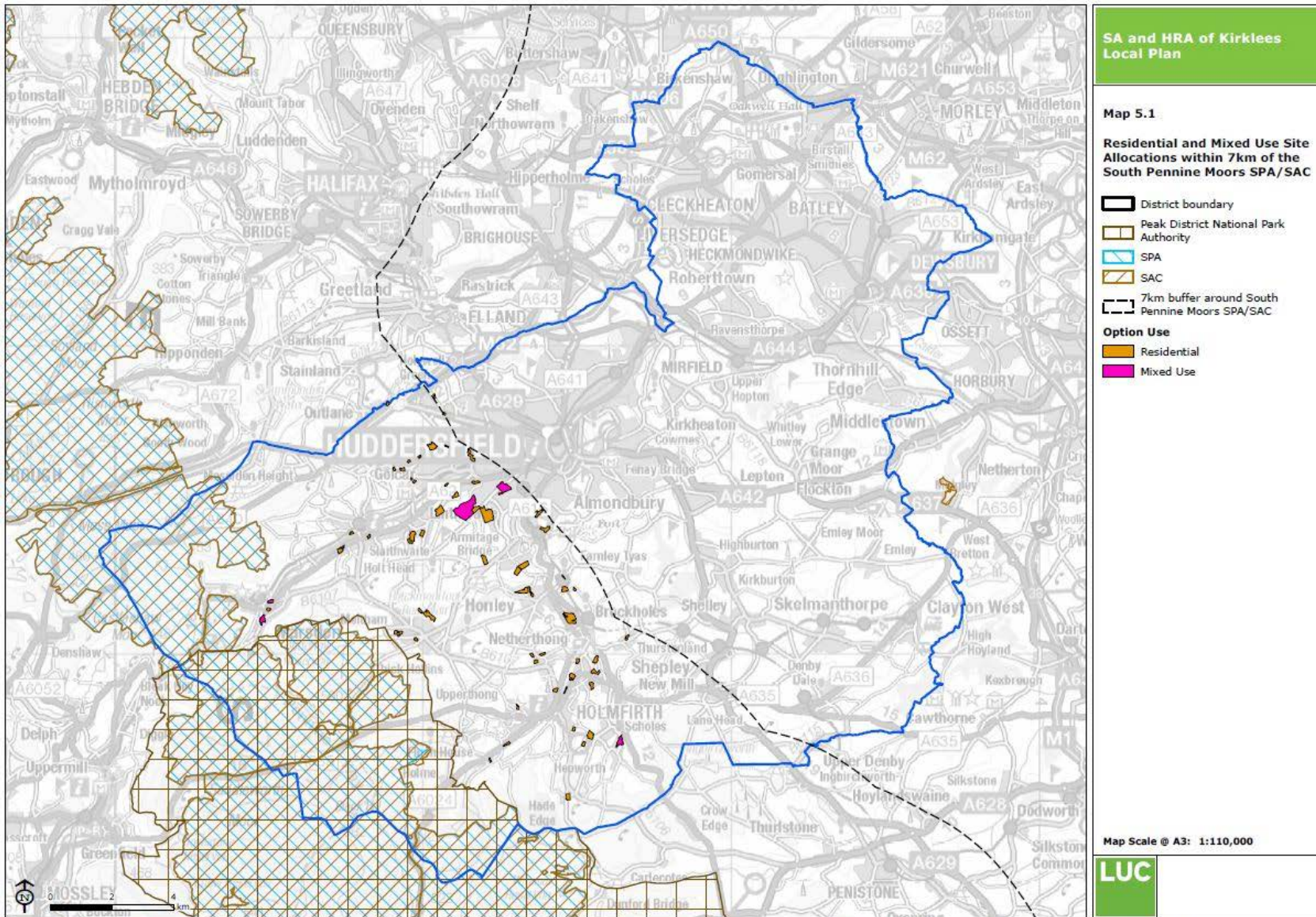
### In-combination effects with neighbouring Local Plans

- 5.65 In most cases, the current HRA work carried out for neighbouring Local Plans has concluded that the plans in question would not result in likely significant effects on Natura 2000 sites, and therefore in-combination effects with the Publication Draft Local Plan can be ruled out (see **Appendix 5**).
- 5.66 The latest HRA for the Burnley Local Plan (2016, Preferred Options stage) concluded that, although not likely, the plan may lead to offsite damage/disturbance to the habitats, affecting the qualifying features of the South Pennine Moors Phase 2 SPA, and increased air pollution and increased recreation affecting South Pennine Moors SAC, South Pennine Moors Phase 2 SPA and Rochdale Canal SAC. The HRA suggests this should be revisited in the next stage of HRA for the Burnley Local Plan and Appropriate Assessment should be carried out if required. **Therefore it is not yet possible to reach a conclusion regarding the potential for in-combination effects with the Kirklees Publication Draft Local Plan.**
- 5.67 In the case of Calderdale District, HRA work for the new combined plan<sup>41</sup> is not yet available, and the HRA for the Craven Local Plan is currently being undertaken, therefore HRA work has either not yet started or has not yet been able to draw any firm conclusions.
- 5.68 A HRA screening has been carried out for the emerging Greater Manchester Spatial Framework, but the HRA itself has not yet been completed. The screening exercise identifies no likely in-combination effects with neighbouring districts; however it does identify potential air pollution impacts on the South Pennine Moors SPA/SAC, due to increases in traffic from the combined Greater Manchester authorities, and potential recreation impacts on the Rochdale Canal SAC.
- 5.69 On the basis of the HRA work that has been undertaken to date, in-combination effects related to air pollution, recreation, loss of habitat or disturbance are not expected. However, where HRA work has not yet been completed by neighbouring authorities, these studies will be reviewed as they develop.

---

<sup>41</sup> The Calderdale Core Strategy previously reached Preferred Options stage but is now being amalgamated into a combined plan along with the Land Allocations Plan that was previously to be prepared.

Map 5.1 Residential and mixed use site allocations within 7km of the South Pennine Moors SPA/SAC



## 6 Conclusions

- 6.1 The HRA of the Publication Draft Local Plan has been undertaken in accordance with currently available guidance and based on a precautionary approach as required under the Habitats Regulations. The overall HRA findings reached during the Appropriate Assessment stage are presented in **Chapter 5** of this report and the HRA conclusions are summarised below.
- 6.2 During the HRA work it was possible to screen out effects on Natura 2000 sites relating to:
- Noise/vibration and light pollution; and
  - Changes to water quality or quantity.
- 6.3 For a number of the Publication Draft Local Plan proposals it was not possible to rule out significant effects at the screening stage. The following proposals would all result in development which could combine to increase air pollution from vehicle traffic and/or pressure for recreation space. In addition, depending on the location of development resulting from the proposals there is a chance that physical damage/loss of habitat or non-physical disturbance could affect the South Pennine Moors SAC or SPA (Phases 1 and 2):
- PLP10: Supporting the rural economy;
  - PLP12: Accommodation for Travellers; and
  - PLP36: Proposals for mineral extraction.
- 6.4 In addition, the proposals for the overall quantum of development in Kirklees were also not able to be screened out for the same reasons (these proposals are set out in the supporting text of the Publication Draft Local Plan rather than in draft policies):
- Provision of 23,000 jobs; and
  - Development of 31,140 homes.
- 6.5 The specific site allocations for residential development (208 sites), employment development (14 sites), mixed use development (13 sites) and minerals site allocations (35 sites) were also not able to be screened out, as all have potential in-combination air pollution impacts, and some have the potential for physical damage / loss of habitat or non-physical disturbance impacts. An Appropriate Assessment was therefore carried out to determine whether these impacts would result in an adverse effect on the integrity of the Natura 2000 sites, as summarised below.

### South Pennine Moors SPA (Phases 1 & 2)

- 6.6 Nine of the site allocations lie within 2.5km of the South Pennine Moors SPA (Phases 1 or 2) and were considered to have potential effects in relation to physical damage / loss of offsite habitats, where habitats on the site could be used by SPA bird species (functionally connected). The Appropriate Assessment considered whether the sites could be functionally connected to the SPA in respect of golden plover, twite and curlew.
- 6.7 No habitat suitable for foraging twite was recorded at the only site (H356) within 2.5km of the SPA (Phase 2), therefore effects on twite were ruled out. The same site has habitat potentially suitable for supporting foraging curlew but, as it is separated from the SPA by other potentially suitable habitats, it was considered unlikely that the site is functionally connected to the SPA (Phase 2), in respect of curlew. However, without mitigation, there would be a low residual risk of the site being used by curlew breeding at the SPA (Phase 2). All nine sites were found to contain habitats that are either suboptimal or unsuitable for supporting foraging golden plover. Without mitigation, there is a low residual risk of the sites being used by golden plover that are breeding in Phase 1 or Phase 2 of the SPA.

- 6.8 Following discussions with Natural England, it has been agreed that the following text will be added to the supporting text (specifically paragraph 13.10) of Policy PLP30 as an additional safeguard:

*In accordance with the findings of the Habitats Regulations Assessment, for those development allocations within 2.5km of the SPA, further surveys will be required at planning application stage to assess detailed impacts on SPA birds and, if found to be necessary, appropriate avoidance and/or mitigation measures will be required to address any identified impacts in line with policy PLP30. Suitable avoidance and mitigation measures may include:*

- *Avoidance of areas used by significant numbers of SPA birds (to be determined by a project level Habitats Regulations Assessment).*
- *Provision of equivalent or greater quantity and quality of replacement habitat onsite (or as a last resort off site within 2.5km) with improved management to ensure use by SPA birds.*
- *Timing of works (construction, operation and decommissioning) outside the period most frequently used by SPA birds.*
- *Monitoring of impacts to assess bird use over time.*

- 6.9 In addition to the above it was also agreed with Natural England that the following text will be added to the site allocation box for the nine sites that fall within 2.5km of the SPA:

*Assessment required for presence of habitats that are important for off-site foraging by South Pennine Moors SPA qualifying bird species (i.e. functionally connected land). Avoidance and mitigation measures may be required to address any identified impacts in line with para 13.10 (as revised) and Policy PLP30.*

- 6.10 With this mitigation in place, it has been possible to conclude that there will be no adverse effects on integrity of the South Pennine Moors SPA (Phases 1 and 2) as a result of physical disturbance or loss of habitat, either onsite or offsite.
- 6.11 The Appropriate Assessment also concluded that there is sufficient mitigation incorporated into the Publication Draft Local Plan to conclude that there will be no adverse effects on integrity of the South Pennine Moors SPA as a result of non-physical disturbance.
- 6.12 While the qualifying bird species of the SPA may be indirectly affected by changes to habitat associated with air pollution effects, air pollution is not currently a key vulnerability for the site. In addition, none of the South Pennine Moors Phase 1 is within 200m of the M62 and the area of the South Pennine Moors Phase 2 SPA that could be affected by a potential increase in nitrogen deposition (i.e. 200m either side of the M62), is less than 1% (0.87%) of the overall SPA area. Therefore, even if nitrogen deposition does increase in this area, it is unlikely to significantly alter or reduce the overall extent of the habitats supporting the SPA qualifying bird species. It was therefore concluded that there will be no adverse effect on the integrity of the South Pennine Moors SPA (Phases 1 and 2) in respect of air pollution.
- 6.13 7km has been taken to be the threshold distance at which development could result in impacts upon the South Pennine Moors SPA (and SAC). The number of housing and mixed use sites allocated within the Publication Draft Local Plan means that there is an indicative capacity for 4,579 new dwellings within 7km of the SPA. Development of all the allocated sites represents 10,532-10,990 new residents and c.136,900 to 142,900 additional trips per year. This represents c.0.3% of the total annual trips to the South Pennines. The relatively small increase in overall trips to the South Pennine Moors likely to arise from the increased population within Kirklees, coupled with the mitigation in place through partnership organisations and in the Publication Draft Local Plan, means it is possible to conclude that the Publication Draft Local Plan will not result in adverse effects on the integrity of the South Pennine Moors SPA (Phases 1 & 2) as a result of increased recreation pressure and urban edge impacts.

### **South Pennine Moors SAC**

- 6.14 It was considered that the Publication Draft Local Plan could potentially affect the South Pennine Moors SAC in relation to physical damage/loss of habitat (onsite), increased air pollution and recreation and urban impacts. However, mitigation provided by policies within the plan is



sufficient to conclude that there will not be an adverse effect on the integrity of the South Pennine Moors SAC as a result of physical damage/loss of onsite habitat.

- 6.15 An assessment of the estimated increase in traffic flows and the nitrogen deposition that would arise as a result has shown that, while there is likely to be an increase in traffic flow on the M62 of greater than 1,000 AADT at the end of the Plan period, this will contribute a negligible increase in nitrogen deposition at the South Pennine Moors SAC. Mitigation for air pollution effects will also be provided by policies within the plan. It has therefore been possible to conclude that the Publication Draft Local Plan alone will not result in adverse effects on the integrity of the South Pennine Moors SAC as a result of increased air pollution.
- 6.16 As with the South Pennine Moors SPA (Phases 1 & 2), has a very similar boundary, the Appropriate Assessment concluded that the relatively small increase in overall trips to the South Pennine Moors likely to arise from the increased population within Kirklees, coupled with the mitigation described above in relation to the South Pennine Moors SPA (Phases 1 and 2), means it can also be concluded that the Publication Draft Local Plan would not result in adverse effects on the integrity of the South Pennine Moors SAC.

### **Rochdale Canal SAC**

- 6.17 The Appropriate Assessment of air pollution impacts on the Rochdale Canal SAC concluded that, while there is likely to be an increase in traffic flows above 1,000 AADT on the M62 during the Publication Draft Local Plan period, a proportion of which will be linked to the Publication Draft Local Plan, the Highways England SMART Motorway committed scheme, improved rail links on this route and Publication Draft Local Plan policies provide mitigation, and the area of habitats within the SAC that might be affected by any increases in nitrogen deposition either side of the M62 is less than 2% of the overall area of the SAC. Therefore, it is possible to conclude that the Publication Draft Local Plan will not result in adverse effects on the integrity of the Rochdale Canal SAC as a result of increased air pollution.

### **In-combination effects**

- 6.18 On the basis of the HRA work that has been undertaken to date, in-combination effects related to air pollution, recreation, loss of habitat or disturbance are not expected. However, where HRA work has not yet been completed by neighbouring authorities, these studies will be reviewed as they develop.

LUC  
March 2017

## **Appendix 1**

Consultation comments received and how these have been addressed

## Comments received in relation to the HRA of the Draft Local Plan

Consultee	Consultation comments – summarised where appropriate	Response and any action taken to address comment
Natural England	Natural England welcomes the assessment framework and presentation of the report however we have a number of concerns regarding the conclusions reached which need to be addressed to ensure compliance with the Conservation of Habitats and Species Regulations 2010 (as amended).	Noted; see responses to specific comments below.
Natural England	<p><u>Bradford Core Strategy Habitats Regulations Assessment</u></p> <p>We are pleased to see reference to the draft Bradford Core Strategy Habitats Regulations Assessment (HRA) however we are concerned about the method in which the assessment findings and draft mitigation have been applied in this assessment. In particular we note that paras 5.24 and 5.25 conclude no adverse effects on the integrity of the South Pennine Moors Special Area of Conservation (SAC) as similar safeguards to those proposed in the Bradford Core Strategy HRA can be adopted. Natural England do not object in principle to the use of data collected by Bradford for their Core Strategy HRA or the adoption of similar approaches to avoidance and mitigation, however we do not consider that adverse effects can be ruled out until proposed mitigation has been detailed in the context of the Kirklees Local Plan.</p> <p>Furthermore much of the data collected and avoidance and mitigation measures proposed by Bradford are specific to local circumstances at Ilkley/Rombolds Moor and may not be appropriate to local circumstances in and adjacent to Kirklees, for instance the visitor surveys carried out by Bradford. We advise that you consider the data available from the Bradford Core Strategy HRA and identify where direct application is applicable and where there are evidence gaps where further data is necessary to support the assessment of the Kirklees Local Plan.</p>	<p>Noted.</p> <p>A revised approach and evidence base has been agreed with Natural England, including undertaking additional survey work on sites that are within 2.5km of the south Pennine Moors. This has been presented in Chapters 3-5 and Appendix 4 of this HRA Report for the Publication Draft Local Plan.</p>
Natural England	<p><u>HRA Screening Methodology</u></p> <p>Natural England note that para 3.13 of the HRA report refers to a 1-2km screening distance for foraging Special Protection Area (SPA) bird species, whereas para 3.28 refers to the 2.5km distance proposed by Bradford. We advise that your reasoning for using this distance rather than Bradford's approach is explained. We recommend that you identify one screening distance with a clear rationale for the decision.</p> <p>Natural England are concerned that development to the east of the plan area may impact on the hydrology of the Denby Grange Colliery SAC, we advise that you provide further details regarding why hydrological impacts on Denby Grange Colliery SAC can be screened out.</p>	<p>A revised approach and evidence base has been agreed with Natural England, including undertaking additional survey work on sites that are within 2.5km of the south Pennine Moors. This has been presented in Chapter 3 and Appendix 4 of this HRA Report for the Publication Draft Local Plan.</p> <p>Further consideration has been given to the potential hydrological impacts on Denby Grange Colliery Ponds SAC as described in Chapter 3.</p>
Natural England	<p><u>HRA Screening Assessment of the Draft Local Plan</u></p> <p>While we note that DLP24 is not promoting development, we advise that the HRA should consider the in-combination effects of this policy with broad targets for growth and specific allocations in the plan. Natural England consider that further details of the assessment are required with regards to DLP27 Renewable and Low Carbon Energy. For example of the assessment of a similar policy we would direct your attention to the assessment of Bradford Core Strategy Policy EN6 in their HRA. It is also worth noting that EN6 includes specific reference to the potential for adverse effects on the integrity of the South Pennine Moors SPA and SAC in the policy text.</p>	<p>DLP24 Core walking and cycling network is now called PLP23. The potential contribution of this to recreational pressure has been considered in Appendix 3.</p> <p>PLP26 Renewable and low carbon energy is now called PLP26. The potential for this to affect the South Pennine Moors SAC/SPA has been considered in Appendix 3. While the HRA of the Bradford Local Plan went into greater detail on</p>

Consultee	Consultation comments – summarised where appropriate	Response and any action taken to address comment
		<p>the potential effects of wind turbines on bird species, ultimately it concluded that, since the plan did not allocated specific sites for wind turbines and contained wording to identify the risk to the SAC/SPA, there would be no significant impact. Kirklees policy PLP26 contains similar safeguards.</p>
<p>Natural England</p>	<p><u>Appropriate Assessment</u></p> <p>Natural England disagree with the assessment of no adverse effects on integrity with regards to allocations within 2km of the South Pennine Moors Phases 1 and 2 SPA in paras 5.13 and 5.14 of the HRA. We do not consider that the potential impacts of the plan on functionally connected land for birds can be effectively passed down the line to the project stage.</p> <p>We advise that evidence will need to be provided to demonstrate either that the specific allocations in the plan are unsuitable for SPA birds and that development on these sites will not impact on adjacent functionally connected land or evidence on the availability and distribution of functionally connected land in the area to show that development at these locations can go ahead without adverse effects on SPA birds.</p> <p>Should assessment be left to the project stage and surveys show that a site cannot be delivered without adverse effects on integrity of the South Pennine Moors Phases 1 or 2 SPA then the Plan would be unsound.</p> <p>Natural England disagree with the argument in para 5.16 that DLP39 will protect Natura 2000 sites from proposals for minerals extraction as this policy makes no reference to protecting natural environmental receptors. As mentioned in this letter Natural England are concerned about the potential for adverse effects on the integrity of Denby Grange Colliery SAC from both changes in hydrology and recreational pressures and consequently disagree with the assessment in paras 3.32 - 3.35 of the HRA.</p>	<p>As described above, a revised approach and evidence base has been agreed with Natural England, including undertaking additional survey work on sites that are within 2.5km of the south Pennine Moors. This is described in Chapters 3-5 and Appendix 4 of this HRA Report for the Publication Draft Local Plan.</p> <p>DLP37 Site Restoration and Aftercare was incorrectly referred to as DLP39 in the 2015 HRA of the Draft Local Plan. Reference to this has been updated in the HRA Report for the Publication Draft Local Plan. Further consideration has also been given to the potential hydrological and recreational impacts on Denby Grange Colliery Ponds SAC, as described in Chapter 3 of the HRA Report for the Publication Draft Local Plan.</p>
<p>CPRE</p>	<p>Object: May not be legally compliant in relation to Habitats Regulations</p> <p>As the Council may be aware, the issue of avoidance and mitigation of impacts on the South Pennine Moors SPA/SAC has been a major reason for proposed main modifications to the Bradford Core Strategy. In particular, MM28 of that Strategy establishes an up-to-date zoning approach that is deemed to be compliant with the Habitats Regulations.</p> <p>By contrast, PLP30 is generalised and only makes passing reference to the Habitats Directive. Considering the importance of the South Pennine Moors to the biodiversity and landscape assets of Kirklees, we do not consider this to be a robust approach, and suggest that a more prescriptive policy be added along the lines of Bradford's MM28. We have supplied a PDF copy of MM28 for your reference.</p>	<p>As noted above by Natural England, consideration has been given to the approach taken by Bradford in its Core Strategy, although as Natural England has stated, transferring the exact same approach may not be appropriate. A revised approach and evidence base has been agreed with Natural England, including undertaking additional survey work on sites that are within 2.5km of the south Pennine Moors.</p>
<p>Mr Michael Stringer</p>	<p>I tried to open the link on the "international and national importance for nature conservation from the detrimental impacts of development (2)" but could not - all I got was the same page on "1.2 Supporting Documents" repeated.</p> <p>Has anybody assessed Oakwell Park in North Kirklees with regard to this? There are foxes, rabbits, grey squirrels, badgers (I'm told but not seen personally) here as well as lesser spotted woodpeckers, jays, sparrow hawks, owls, herons, goldfinches, greenfinches, chaffinches, bullfinches, blue tits, great tits, coal tits, long-tailed tits, nuthatches, dunnocks and wrens as well as the ubiquitous magpies, crows, jackdaws,</p>	<p>Oakwell Park is not designated as a Natura 2000 site (SAC, SPA or Ramsar site); therefore it does not fall within the scope of the HRA.</p>

Consultee	Consultation comments – summarised where appropriate	Response and any action taken to address comment
	<p>blackbirds, robins and sparrows. We have also seen rose-ringed parakeets too. All this birdlife visits us to feed across the Bradford Road (A652). There may be other wildlife present here too that I have not seen personally.</p> <p>I ask about the designation of Oakwell Park because I think it is obviously attractive to a wide variety of wildlife. It is important that we do everything we can to protect and encourage it to thrive. The Green Belt designation is vital in this respect; we cannot allow Oakwell Park to be "developed" into a tiny corner. The wildlife needs the green space to exist and expand. And we need this so people can experience it, wonder at it and enjoy it for generations to come.</p>	
Mr Chris Dean	I would like the council to go further in the local plan than simply protect the SAC from development. There is an opportunity for the plan to recognise the enormous benefit to Kirklees residents in putting the habitat of the SAC into good ecological condition. It presently is not and the Moors for the Future Partnership have as of October 2015 started on a 16m Euro project to improve this. The partnership (led by the Peak District National Park Authority) is also taking advantage of several other funding streams to further this work, much of this across the moorland landscape of Kirklees. It would be at no cost for the local plan to recognise and support this, taking a more proactive role in the partnership and the management of the Kirklees portion of the SAC.	Noted, this comment relates to the Local Plan itself rather than the HRA report.
Mr Robert Bamforth	Paragraph 1.27 specifically mentions the South Pennines Special Protection Area (presumably meaning South Pennines SPA phase 2) and other, more localised, protected areas just beyond the Kirklees boundary. However it fails to mention the Peak District National Park (South Pennines SPA Phase 1) and the extensive cross boundary impacts between Kirklees and the Peak Park Authority in the Colne and Holme Valleys. We are very concerned that the plan as a whole does not place sufficient emphasis on protecting the core Pennine SPAs AND the adjacent areas in the Colne and Holme Valleys, which have an impact on the landscape and habitats of the core areas. Protection of both the core and non-core areas is a central element of the IMSACAP (Programme), which is co-sponsored by Kirklees Metropolitan Council via the Standing Conference of South Pennine Authorities (SCOSPA). Yet there is no mention in the plan of IMSACAP or SCOSPA.	<p>The HRA assesses the likely impacts of the Local Plan on the integrity of South Pennine Moors Phase 2 SPA and Peak District Moors (South Pennine Moors Phase 1) SPA, as well as the South Pennine Moors SAC, as explained in Chapter 3 of the HRA report.</p> <p>The reference to paragraph 1.27 does not relate to the HRA report.</p>

### Comments received in relation to the HRA of the Publication Draft Local Plan

Consultee	Comment	Action
John Dalton on behalf of Hade Edge Fight for the Fields (HEFF)	<p>The consultee discusses various designations and features relevant to site SL2170, including Green Belt, Biodiversity Opportunity Zones, Kirklees BAP habitats, features relevant to the 2020 Biodiversity Action Plan for the UK, the South Pennine Moors SAC and the Peak District SPA (South Pennine Moors Phase 1). The consultee expresses concern regarding the environmental implications of developing this site and suggests there is an opportunity for '<i>combined stewardship management in partnership with biodiversity and the local farming economy</i>' as per relevant BAPs.</p> <p>The consultee also states that the land was originally Green Belt has supported small scale grazing and is semi-improved.</p> <p>The consultee states that Appropriate Assessments should have been carried out with regards to site SL2170</p>	HRA relates to impacts on European designated sites only. Of relevance in this representation are South Pennine Moors SAC and Peak District SPA (South Pennine Moors Phase 1). Other designations referred to by the consultee, such as Green Belt, Biodiversity Opportunity Zones, BAP Habitats, the setting of the national park and the AONB are considered outside of the HRA process.

Consultee	Comment	Action
	<p>after its 're-allocation from safeguarded to development'. The consultee refers to Natural England's response to the November 2015 HRA report and states that Kirklees [Council] did not comply with the requirements of the HRA by not undertaking [further] Appropriate Assessment.</p> <p>The consultee goes on to state that the 'desk study' [Appropriate Assessment] on functionally linked habitat was not sufficient as it relates only to one bird species [golden plover] and does not consider the research done on bird foraging used for the Bradford Core Strategy HRA. They state that the HRA has 'pre-empted' bird survey outcomes, which is 'not a viable mitigation measure'.</p> <p>The consultee discusses possible adverse impacts of noise, light and carbon pollution [implied from traffic arising from development of the site] on supporting habitat. The consultee also expresses concerns with the methodology and conclusions of the HRA in relation to visitor recreation, particularly with regards to dog walking and fly tipping. With regards to traffic, the consultee also raises the potential issue of nitrogen and/or acid deposition on the Dark Peak.</p> <p>The consultee also suggests that the HRA has failed to 'comply at the planning stage' because no 'Visual Land Assessment' has been undertaken and that weight should be given to agricultural land quality. The consultee also highlights the landscape value of the South Pennines.</p>	<p>Site H288 (which has the same boundary as safeguarded land SL2170) was subject to Appropriate Assessment in the November 2016 HRA Update, which revised the 2015 HRA based on the Publication Draft Local Plan and comments received in response to consultation on the 2015 HRA and Draft Local Plan. In response to Natural England's comments on the 2015 HRA and subsequent discussions, additional HRA work has been carried out and Natural England has confirmed that they are happy with the conclusions of the HRA. The additional work will be explained in the next update of the HRA, to be submitted alongside the Local Plan.</p> <p>With regards to adequacy of the Appropriate Assessment, the HRA explains why only golden plover was the only qualifying feature deemed likely to use the site in Table 3.2 and the Bradford Core Strategy is referenced and drawn on throughout the report where appropriate (e.g. paragraphs 1.20, 1.21, 3.13 etc.). The HRA does not seek to 'pre-empt' bird surveys and a 'full assessment' has been undertaken. A detailed desk study has been based on existing survey data and research, and this has been supplemented by habitat surveys at a number of sites including H288, carried out specifically for this HRA. In following guidance such as the HRA Handbook (DTA, [online]) and applying specialist ecological knowledge, LUC has conducted a full HRA to come to reasoned and justifiable conclusions. The requirements of the Habitats Regulations and methodology used in the HRA are detailed in the HRA Report.</p> <p>Damage by motor vehicles, predation by dogs and fly tipping are considered in the 'recreation and urban impacts' sections of the Appropriate Assessment. The consultee claims that fly tipping should be considered as a possible impact within 7-10km of the European sites. It is considered highly unlikely that people would travel such a distance for the purpose of disposing of their rubbish (please note that the HRA considers fly tipping to be distinct from</p>

Consultee	Comment	Action
		<p>littering).</p> <p>The consultee suggested that visitor impacts in the areas of the Peak District National Park near Hade Edge cannot be compared with visitor data for other areas as dog walking is the most frequent recreational activity. The consultee also expresses concern regarding nitrogen pollution and acid deposition in the Dark Peak. Note that the national park has a different boundary to the SAC and SPA. The HRA has explored visitor impacts and air pollution impacts on the SAC and SPA that are likely to arise as a result of the plan in the 'recreation and urban impacts' and 'air pollution' sections of the report. These consider locations which might be subject to the most pressure in terms of recreation and focus on where significant changes are likely. The HRA has considered likely increases in traffic arising from the plan, the deposition that would occur as a result of changes to traffic flows and the effects of that deposition on the habitats present.</p> <p>The consultee has also raised concerns in relation to noise, light and 'carbon pollution' (taken to mean carbon dioxide emissions and associated climate change). Noise and light are considered in the 'non-physical disturbance' section of the HRA. Climate change has been considered where this has been identified as a pressure or threat to a specific site by Natural England.</p> <p>With regards to a 'Visual Land Assessment', we assume this refers to a Landscape and Visual Impact Assessment (LVIA). LVIA is concerned with landscape and visual effects of development, which are not relevant to HRA. Agricultural land quality is also not relevant to HRA, as HRA is only concerned with the effects of a plan or programme on European sites.</p>

## Comments received from Natural England during the preparation of the HRA of the Publication Draft Local Plan

Consultation comments	Response and any action taken to address comment
<b>Air pollution impacts</b>	
<p>Natural England advise that the percentage of the South Pennine Moors Special Area of Conservation (SAC) affected by air pollution from the M62, as described in para 5.44 and 5.45 is a useful or relevant factor in the assessment of air quality impacts from the plan and therefore disagree with the conclusions of appropriate assessment regarding air quality.</p> <p>We advise that, having identified that the proposed increase in the level of traffic on the M62 is significant, the assessment should include a calculation of the estimated process contribution of this increase in traffic on the sensitive habitats in order to determine how significant this is and therefore whether avoidance, mitigation or compensation measures are necessary.</p> <p>Without consideration of the sensitivity of the habitats affected and severity of the impact from the plan we do not consider that adverse effects on integrity can be ruled out.</p> <p>We note that para 5.39 refers to a forthcoming Air Quality Assessment that is forthcoming which may provide sufficient information.</p>	<p>Additional work was undertaken in response to Natural England's comments, as follows:</p> <ul style="list-style-type: none"> <li>• <b>Confirm traffic data:</b> since the HRA work was undertaken, the Kirklees traffic model had been further developed, to feed into their air quality study. This process identified errors in the data provided for the HRA work in 2016 and the data was revised;</li> <li>• <b>Research sensitivity of habitats within 200 metres of the M62:</b> the site condition reports for the SSSI units that make up the SAC were used to add an additional layer of detail to what was already known about the sensitivity of the site to nitrogen. These provided information on the specific pressures on the habitats close to the M62 and their condition;</li> <li>• <b>DMRB screening method for the assessment of local air quality:</b> this was undertaken by the consultants carrying out a wider District air quality study for Kirklees Council (Aecom), because Merlin Ash (Natural England) considered this method appropriate for identifying the process contribution of vehicle emissions to nitrogen deposition at the SAC; and</li> <li>• <b>Consideration of dispersion modelling:</b> Aecom advised that if the results of the DMRB screening showed moderate increases in nitrogen deposition from the M62, then more detailed dispersion modelling to assess potential effects would be required. This was not needed as the results of the screening method showed negligible increases in nitrogen deposition.</li> </ul> <p>The full methodology and findings are presented in the following sections:</p> <ul style="list-style-type: none"> <li>• <b>Screening assumptions:</b> Paragraph 3.24;</li> <li>• <b>HRA screening, uncertain effects:</b> Paragraphs 4.18-4.20, including revised traffic data in Table 4.4; and</li> <li>• <b>Appropriate Assessment, South Pennine Moors SAC:</b> Paragraphs 5.45 &amp; 5.48-5.52.</li> </ul>
<b>Recreation impacts</b>	
<p>Natural England are broadly content with the assessment of recreation and urban impacts in paras 5.27 to 5.33 of the HRA report. However we consider that the assessment would benefit from further details of how sufficient suitable alternative green space will be provided through Policy PLP63, what mechanisms exist to deliver mitigation through management plans and which areas will be affected most by the plan.</p>	<p>Paragraphs 5.32-5.38 explain the areas of the SPAs that are likely to be affected most by recreation pressure, the means by which mitigation can be implemented via existing projects and strategies, and an explanation of how the Publication Draft Local Plan policies will mitigate recreation impacts through the provision of SANGs.</p>



Consultation comments	Response and any action taken to address comment
<b>Impacts on functionally connected land</b>	
<p>Natural England disagrees with the screening assessments in table 4.4 of the Habitats Regulations Assessment (HRA) report with regards to the following sites as we do not consider that there is sufficient certainty or evidence to rule out likely significant effects on the South Pennine Moors Phase 2 Special Protection Area (SPA) and Peak District Moors (South Pennine Moors Phase 1) SPA with regards to loss of functionally linked land for golden plover and curlew:</p> <ul style="list-style-type: none"> <li>• E1866</li> <li>• H67</li> <li>• H200</li> <li>• H342</li> <li>• H343</li> <li>• H356</li> <li>• H626</li> </ul> <p>We note that the assessments of all sites in Appendix 4, with the exception H200, identify habitat on site that is potentially suitable for golden plover and do not consider that the constraints described are sufficient to provide sufficient certainty to rule out use South Pennine Moors Phase 2 Special Protection Area (SPA) and Peak District Moors (South Pennine Moors Phase 1) SPA golden plover and curlew. Therefore we advise that all of these allocations should be screened through to the Appropriate Assessment stage.</p> <p>With regards to the assessment of allocations H288A and ME1966 we do not consider that sufficient evidence has been provided in order to rule out adverse effects on integrity from the loss of these sites. Natural England does not consider that data from the Huddersfield Birdwatchers Group alone is sufficient to determine that these allocations will not affect habitat that is vital for SPA birds. We advise that data from the ecological data centre should be considered along with the 2014 South Pennine Moors Phase 2 breeding bird review survey carried out by Brown and Shepherd. Unfortunately similar bird survey work for the Peak District Moors (South Pennine Moors Phase 1) will not be undertaken until 2017.</p> <p>With regards to the availability of similar habitat in proximity to these sites we advise that this should only be considered a mitigating factor where there is sufficient evidence to rule out significant functional linkage to the SPA. For instance where surveys have been undertaken which show only intermittent use of the site by a small number of birds.</p> <p>Natural England advise that, unless robust evidence can be found which clearly demonstrates that the allocations are in areas that are not used by South Pennine</p>	<p>In response to the issues raised the HRA has presented additional supporting information with regard to functionally connected land in Appendix 4. This has also been summarised in the Appropriate Assessment (paragraphs 5.10-5.20).</p>

Consultation comments	Response and any action taken to address comment
<p>Moors Phase 2 Special Protection Area (SPA) and Peak District Moors (South Pennine Moors Phase 1) SPA birds, then bird surveys will need to be undertaken at all of the sites considered in table 4.4 of the Habitats Regulations Assessment report.</p> <p>We note that Kirklees attended the 'South Pennine/North Pennine Moors – supporting habitat &amp; planning issues' workshop hosted by the RSPB, Bradford MBC and Natural England on 27 September 2016 and advise that you refer to the information provided at that workshop regarding survey design.</p>	

## **Appendix 2**

### Attributes of Natura 2000 sites within Kirklees District (+ 15km)

Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity
<b>Natura 2000 sites within Kirklees District</b>				
South Pennine Moors SAC	64,983	Fragmented sites to the north and west of the boundary, some within the boundary and some parts further out towards the 15km buffer boundary.	<u>Annex I Habitats:</u> European Dry Heaths Blanket Bogs (priority feature <sup>42</sup> ) Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Northern Atlantic Wet Heaths with <i>Erica Tetralix</i> Transition mires and quaking bogs <sup>43</sup>	<ul style="list-style-type: none"> <li>• Agricultural activities and moorland management regime, particularly rotational burning and fire management are thought to be altering plant species composition and soil nutrients. Current management plans may be maintaining unfavourable conditions.</li> <li>• Changes to the hydrological regime, have led to erosion and lowering of the water table. This is a threat to the hydrological integrity of blanket bog habitat.</li> <li>• Public recreation activities such as rock climbing and dog walking, are likely to disturb qualifying features, particularly at sensitive times of the year. Poor air quality puts pressure on this site, as levels of nitrogen deposits are in exceedance of critical loads.</li> </ul> <p>The conservation objectives are to<sup>44</sup> -</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> <li>• The extent and distribution of the qualifying natural habitats.</li> </ul>

<sup>42</sup> Some of the natural habitats and species listed in the Habitats Directive and for which SACs or SPAs have been selected are considered to be particular priorities for conservation at a European scale and are subject to special provisions in the Directive and the Habitats Regulations.

<sup>43</sup> South Pennine Moors SAC Site Citation, 2005 (from <http://publications.naturalengland.org.uk/publication/4973604919836672?category=5758332488908800>).

<sup>44</sup> European Site Conservation Objectives for South Pennine Moors SAC (UK0030280), Natural England, July 2014.

Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity
				<ul style="list-style-type: none"> <li>The structure and function (including typical species) of the qualifying natural habitats.</li> <li>The supporting processes on which the qualifying natural habitats rely.</li> </ul>
Peak District Moors SPA (South Pennine Moors Phase 1)	45,270	Fragmented site lying to the south and west of Kirklees, very slightly within the district boundary to the south and stretching out towards the 15km buffer.	<p><u>Annex 1 Birds (breeding):</u></p> <p>Merlin <i>Falco columbarius</i></p> <p>Golden plover <i>Pluvialis apricaria</i></p> <p>Short-eared Owl <i>Asio flammeus</i></p> <p><u>Non-qualifying species of interest:</u></p> <p>The site supports a rich upland breeding bird assemblage which, as well as the qualifying species listed above, includes important numbers of</p> <p>Peregrine <i>Falco peregrinus</i></p> <p>Lapwing <i>Vanellus vanellus</i></p> <p>Dunlin <i>Calidris alpina schinzii</i></p> <p>Snipe <i>Gallinago gallinago</i></p> <p>Curlew <i>Numenius arquata</i></p> <p>Redshank <i>Tringa tetanus</i></p> <p>Common Sandpiper <i>Actitis hypoleucos</i></p> <p>Whinchat <i>Saxicola rubetra</i></p> <p>Wheatear <i>Oenanthe oenanthe</i></p>	<ul style="list-style-type: none"> <li>Historic air pollution, fires and land management have led to erosion, gullying, lowered water tables and other hydrological changes. These threaten a range of qualifying species and their supporting habitat.</li> <li>The moorland management regime, particularly rotational burning and fire management are thought to be altering plant species composition and soil nutrients. Current management plans may be maintaining unfavourable conditions.</li> <li>Major urban and industrial centres near to the Peak District Moors provide significant visitor pressure.</li> <li>Grazing pressure is generally being lowered and appropriate burning encouraged by two separate ESAs which encourage and support habitat restoration.</li> <li></li> <li>Low breeding success is an issue at this site, as suitable habitat exists to support more breeding pairs than currently recorded. It is thought this may be linked to hunting/poaching as, since 2000, two gamekeepers with responsibility for land management within the SPA have been convicted of wildlife crimes.</li> </ul>

Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity
			<p>Ring Ouzel <i>Turdus torquatus</i></p> <p>Twite <i>Carduelis flavirostris</i><sup>45</sup></p>	<p>The conservation objectives are to<sup>46</sup> -</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> <li>• The extent and distribution of the habitats of the qualifying features.</li> <li>• The structure and function of the habitats of the qualifying features.</li> <li>• The supporting processes on which the habitats of the qualifying features rely.</li> <li>• The population of each of the qualifying features.</li> <li>• The distribution of the qualifying features within the site.</li> </ul>
South Pennine Moors SPA (Phase 2)	20,936	Fragmented site lying to the north and west of Kirklees, slightly within the district boundary and stretching out over the 15km buffer line.	<p><u>Article 4.1: Annex 1 Birds (breeding):</u></p> <p>Merlin <i>Falco columbarius</i></p> <p>Golden plover <i>Pluvialis apricaria</i></p> <p><u>Article 4.2: Regularly occurring migratory birds – internationally important assemblage of breeding birds:</u></p> <p>Golden plover <i>Pluvialis apricaria</i></p> <p>Northern Lapwing <i>Vanellus vanellus</i></p>	<ul style="list-style-type: none"> <li>• Historic air pollution, fires and land management have led to erosion, gully, lowered water tables and other hydrological changes. These threaten a range of qualifying species and their supporting habitat.</li> <li>• The moorland management regime, particularly rotational burning and fire management are thought to be altering plant species composition and soil nutrients. Current management plans may be maintaining unfavourable conditions.</li> <li>• Large numbers of people use the area for recreational activities, particularly those from large nearby urban areas.</li> </ul>

<sup>45</sup> Peak District Moors (South Pennine Moors Phase 1) SPA Site Citation, 2000 (from <http://publications.naturalengland.org.uk/publication/6145889668169728?category=5758332488908800>).

<sup>46</sup> European Site Conservation Objectives for Peak District Moors (South Pennine Moors Phase 1) SPA (UK9007021), Natural England, June 2014.

Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity
			<p>Dunlin <i>Calidris alpina</i></p> <p>Snipe <i>Gallinago gallinago</i></p> <p>Curlew <i>Numenius arquata</i></p> <p>Redshank <i>Tringa totanus</i></p> <p>Common Sandpiper <i>Actitis hypoleuca</i></p> <p>Short-eared owl <i>Asio flammeus</i></p> <p>Whinchat <i>Saxicola rubetra</i></p> <p>Wheatear <i>Oenanthe oenanthe</i></p> <p>Ring Ouzel <i>Turdus torquatus</i></p> <p>Twite <i>Carduelis flavirostris</i><sup>47</sup></p>	<ul style="list-style-type: none"> <li>• Pressures outside the site, in particular the loss of functionally connected land through agricultural intensification, increase the vulnerability of the bird populations.</li> <li>• Low breeding success is an issue at this site, as suitable habitat exists to support more breeding pairs than currently recorded. It is thought this may be linked to hunting/poaching as, since 2000, two gamekeepers with responsibility for land management within the SPA have been convicted of wildlife crimes.</li> </ul> <p>The conservation objectives are to<sup>48</sup> -</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> <li>• The extent and distribution of the habitats of the qualifying features.</li> <li>• The structure and function of the habitats of the qualifying features.</li> <li>• The supporting processes on which the habitats of the qualifying features rely.</li> <li>• The population of each of the qualifying features.</li> <li>• The distribution of the qualifying features within the site.</li> </ul>

<sup>47</sup> South Pennine Moors SPA (Phase 2) Site Citation, 1995 (from <http://publications.naturalengland.org.uk/publication/4885083764817920?category=5758332488908800>).

<sup>48</sup> European Site Conservation Objectives for South Pennine Moors Phase 2 SPA (UK9007022), Natural England, March 2015. This document updates and replaces earlier versions dated 29 May 2012 and 30 June 2014 to reflect Natural England's Strategic Standard on European Site Conservation Objectives 2014. Previous references to the additional features identified in the 2001 UK SPA Review (Peregrine, Short-eared Owl, Dunlin) have been removed.

Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity
<b>Natura 2000 sites within 15km of Kirklees but outside the district boundary</b>				
Denby Grange Colliery Ponds SAC	18	Very small site located approximately 2km outside of the site boundary to the east.	<u>Annex II Species:</u> Great crested newt <i>Triturus cristatus</i> <sup>49</sup>	<ul style="list-style-type: none"> <li>• Hydrological pressures include the fact that the Old Pond dries out too early to allow newts to develop their terrestrial stage.</li> <li>• Maintenance of a buffer of appropriate terrestrial habitat should allow greater habitat connectivity and strengthen the metapopulation, consisting of populations both inside and outside the SAC.</li> <li>• The surrounding woodland needs managing to ensure that the margins of the ponds are not shaded, as this reduces growth of plants suitable for egg-laying.</li> <li>• Himalayan Balsam, a non-native invasive species, could dominate the woodland flora and hamper tree regeneration. This could over-shade the Old Pond and reduce suitability of surrounding terrestrial habitat.</li> <li>• Groundwater pollution is associated with poor water quality of the Old Pond.</li> </ul> <p>The conservation objectives are to<sup>50</sup> -</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p>

<sup>49</sup> Denby Grange Colliery Ponds SAC Site Citation, 2005 (from <http://publications.naturalengland.org.uk/publication/5474466230435840?category=5758332488908800>).

<sup>50</sup> European Site Conservation Objectives for Denby Grange Colliery Ponds Special Area of Conservation Site Code: UK0030036, Natural England, March 2014.



Site name	Area (ha)	Location	Qualifying features	Key vulnerabilities and environmental conditions to support site integrity
				<ul style="list-style-type: none"> <li>The extent and distribution of the habitats of qualifying species.</li> <li>The structure and function of habitats of qualifying species.</li> <li>The supporting processes on which qualifying natural habitats rely.</li> <li>The populations of qualifying species.</li> <li>The distribution of qualifying species within the site.</li> </ul>
Rochdale Canal SAC	25	A long thin site to the west of Kirklees, stretching inwards from the 15km buffer to around 5km from the site boundary.	<u>Annex II Species:</u> Floating water-plantain <i>Luronium natans</i> <sup>51</sup>	<ul style="list-style-type: none"> <li>Changes in hydrology, such as dredging and draining of the canal are likely to have negative effects on the site's qualifying feature.</li> <li>Air pollution has been identified as a pressure on the site, as current nitrogen deposition is in exceedance of critical loads at the site.</li> </ul> <p>The conservation objectives are to<sup>52</sup> -</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> <li>The extent and distribution of the habitats of qualifying species.</li> <li>The structure and function of habitats of qualifying species.</li> <li>The supporting processes on which qualifying natural habitats rely.</li> <li>The populations of qualifying species.</li> <li>The distribution of qualifying species within the site.</li> </ul>

<sup>51</sup> Rochdale Canal SAC Site Citation, 2005 (from <http://publications.naturalengland.org.uk/publication/6015060228964352?category=4582026845880320>).

<sup>52</sup> European Site Conservation Objectives for Rochdale Canal Special Area of Conservation Site code: UK0030266, Natural England, June 2014.

In the time between the preparation of the HRA Report for the Draft Local Plan and the preparation of this HRA for the Publication Draft Local Plan, many Natura 2000 standard data forms were revised. The table below summarises the changes in vulnerabilities listed on those data forms since the previous HRA report was published. Note that there were no changes to the qualifying species of each site.

Site name	'New' vulnerabilities (listed on current forms but not listed on Natura 2000 forms at the time of the previous HRA)	No longer vulnerabilities (listed on Natura 2000 forms at the time of the previous HRA but no longer listed on current forms)
South Pennine Moors SAC	Air pollution	None
Peak District Moors SPA (South Pennine Moors SPA Phase I)	Fire and fire suppression Human-induced changes in hydrology Reduced fecundity/genetic depression Hunting/taking of terrestrial animals	Agriculture
South Pennine Moors SPA Phase 2	Fire and fire suppression Human-induced changes in hydrology Reduced fecundity/genetic depression Hunting/taking of terrestrial animals	Grazing
Denby Grange Colliery Ponds SAC	Invasive non-native species Pollution to groundwater Forest and plantation management and use	None
Rochdale Canal SAC	None	Shading Boat traffic

# Appendix 3

## HRA Screening of the Publication Draft Local Plan

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
PLP1: Presumption in favour of sustainable development	None - while this policy sets out a presumption in favour of sustainable development, the likely effects on Natura 2000 sites of any development proposed are considered separately in relation to other Publication Draft Local Plan policies. In addition, the policy aims to ensure that development improves the environmental conditions of the area.	N/A	N/A	N/A	N/A
PLP2: Place shaping	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP3: Location of new development	None – the policy sets out the broad spatial strategy for directing development within Kirklees but does not determine the amount or type of development that will take place – this is considered separately below in relation to other more specific policies. In addition, directing most	N/A	N/A	N/A	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
	development to the larger urban areas will help to steer it away from sensitive Natura 2000 sites.				
PLP 4: Providing infrastructure	Infrastructure development	Physical damage/loss of habitat.  Non-physical disturbance such as noise/vibration and light pollution.	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.	No: While this policy could lead to the development of infrastructure there is no certainty about its type or location until the planning application stage. The Natura 2000 sites within Kirklees are in the south western corner of the district away from the main urban areas where most development is allocated, which reduces the likelihood of significant effects, and policy PLP30 provides robust mitigation for impacts on the SAC and SPA.

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
PLP 5: Masterplanning large sites	None – the policy will not itself result in new development; rather it sets out criteria that will apply to new development proposed under other Publication Draft Local Plan policies. In addition, the policy requires masterplans for developments to demonstrate a good understanding and respect for the natural environment.	N/A	N/A	N/A	N/A
PLP 6: Safeguarded land (Land to be safeguarded for potential future development)	Will not result in development within the plan period.	N/A	N/A	N/A	N/A
PLP7: Efficient and effective use of land and buildings	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
Employment strategy: provision of 23,000 jobs	Employment development Increased vehicle traffic Increased demand for water treatment	Physical damage/loss of habitat.  Non-physical disturbance such as noise/vibration and light	Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving	Uncertain: The policy would result in large-scale employment development within Kirklees which could have significant effects on

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
		<p>pollution.</p> <p>Air pollution.</p>	<p>only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p> <p>Policy PLP20: Sustainable travel seeks to encourage the use of sustainable modes of transport in place of cars.</p>	<p>Natura 2000 sites and this needs to be considered in more detail during the Appropriate Assessment stage of the HRA. Specific sites allocated for employment development have been subject to HRA screening separately further ahead in this matrix.</p>
PLP8: Safeguarding employment land and premises	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP9: Supporting skilled and flexible communities	None – the policy will not itself result in new	N/A	N/A	N/A	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
and workforce	development.				
PLP10: Supporting the rural economy	<p>Economic and tourism-related development in rural areas</p> <p>Increase in recreation pressure</p> <p>Increased vehicle traffic</p> <p>Increased demand for water treatment</p>	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p> <p>Disturbance from recreation.</p> <p>Air pollution.</p>	<p>Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.</p> <p>Disturbance from recreation could affect any of the Natura 2000 sites in and around Kirklees but is most likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA as they are within Kirklees.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in</p>	<p>Uncertain: This policy could result in development in rural areas of Kirklees, which could be within close proximity of the Natura 2000 sites in the south west of the District. As it could stimulate tourism-related activities it could also contribute to an increase in visitor pressure at the South Pennine Moors SAC and South Pennine Moors SPA (Phases 1 and 2) in combination with other development. There may also be an increase in vehicle movements in and around the District with the associated air pollution. These issues therefore need to be considered in more detail during the Appropriate Assessment stage of the HRA.</p>



Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				<p>place of cars.</p> <p>The allocation of open space in Kirklees through the Publication Draft Local Plan and improvements to green infrastructure through policies such as PLP31: Strategic Green Infrastructure may help to mitigate the potential impacts of increased recreation pressure on Natura 2000 sites.</p>	
<p>Housing strategy: development of 31,140 homes</p>	<p>Residential development</p> <p>Increase in recreation pressure</p> <p>Increased vehicle traffic</p> <p>Increased demand for water treatment</p>	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p> <p>Air pollution.</p> <p>Disturbance from recreation.</p>	<p>Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.</p> <p>Disturbance from recreation could affect any of the Natura 2000 sites in and around Kirklees but is most</p>	<p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p>	<p>Uncertain: The policy would result in large-scale residential development within Kirklees which could have significant effects on Natura 2000 sites and this needs to be considered in more detail during the Appropriate Assessment stage of the HRA. Specific site allocations for residential development have been subject to HRA screening separately further ahead</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
			<p>likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA as they are within Kirklees.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p> <p>The allocation of open space in Kirklees through the Publication Draft Local Plan and improvements to green infrastructure through policies such as PLP31: Strategic Green Infrastructure may help to mitigate the potential impacts of increased recreation pressure on Natura 2000 sites.</p>	in this matrix.
PLP11: Housing mix and affordable housing	None – the policy will not itself result in new	N/A	N/A	N/A	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
	development.				
PLP12: Accommodation for Travellers	<p>Development of sites for Gypsies, Travellers and Travelling Showpeople</p> <p>Increase in recreation pressure</p> <p>Increased vehicle traffic</p> <p>Increased demand for water treatment</p>	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p> <p>Air pollution.</p> <p>Disturbance from recreation.</p>	<p>Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.</p> <p>Disturbance from recreation could affect any of the Natura 2000 sites in and around Kirklees but is most likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA as they are within Kirklees.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p> <p>The allocation of open space in Kirklees through the Publication Draft Local Plan and improvements to green infrastructure through</p>	<p>Uncertain: The policy would result in the development of sites for Gypsies, Travellers and Travelling Showpeople within Kirklees, which in combination with other development, could contribute to increases in traffic and pressure for recreation which could have significant effects on Natura 2000 sites. This needs to be considered in more detail during the Appropriate Assessment stage of the HRA. Specific site allocations for Gypsies, Travellers and Travelling Showpeople have been subject to HRA screening separately further ahead in this matrix.</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				policies such as PLP31: Strategic Green Infrastructure may help to mitigate the potential impacts of increased recreation pressure on Natura 2000 sites.	
PLP13: Town centre uses	None – the policy seeks to direct development to the main urban centres and therefore away from sensitive Natura 2000 sites.	N/A	N/A	N/A	N/A
PLP14: Shopping frontages	None – the policy seeks to direct development to the main urban centres and therefore away from sensitive Natura 2000 sites.	N/A	N/A	N/A	N/A
PLP15: Residential use in town centres	Residential development Increase in recreation pressure Increased vehicle traffic Increased demand for water treatment	Air pollution. Disturbance from recreation.	Disturbance from recreation could affect any of the Natura 2000 sites in and around Kirklees but is most likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate	No: The policy would result in residential development in town centres, which would therefore be located away from sensitive Natura 2000 sites and so would not have impacts associated with habitat

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
			<p>Peak District Moors (South Pennine Moors Phase 1) SPA as they are within Kirklees.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p> <p>The allocation of open space in Kirklees through the Publication Draft Local Plan and improvements to green infrastructure through policies such as PLP31: Strategic Green Infrastructure may help to mitigate the potential impacts of increased recreation pressure on Natura 2000 sites.</p>	<p>loss or non-physical disturbance. While the policy could contribute to an increase in the population and therefore increased traffic, air pollution and recreation pressure, these issues are considered separately through the HRA of the overall quantum of development for Kirklees.</p>
PLP16: Food and drink uses and the evening	None – the policy relates to criteria that would apply to proposals for food and	N/A	N/A	N/A	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
economy	drink uses in defined centres.				
PLP17: Huddersfield town centre	Residential development Employment development Increase in recreation pressure Increased vehicle traffic Increased demand for water treatment	Air pollution. Disturbance from recreation.	Disturbance from recreation could affect any of the Natura 2000 sites in and around Kirklees but is most likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA as they are within Kirklees.  Air pollution could affect any of the Natura 2000 sites in and around Kirklees.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.  The allocation of open space in Kirklees through the Publication Draft Local Plan and improvements to green	No: Any development resulting from the policy would be at Huddersfield which is located away from sensitive Natura 2000 sites. While the policy could contribute to an increase in the population and economic activity in Kirklees and therefore increased traffic, air pollution and recreation pressure, these issues are considered separately through the HRA of the overall quantum of development for Kirklees.

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				infrastructure through policies such as PLP31: Strategic Green Infrastructure may help to mitigate the potential impacts of increased recreation pressure on Natura 2000 sites.	
PLP18: Dewsbury town centre	Residential development Employment development Increase in recreation pressure Increased vehicle traffic Increased demand for water treatment	Air pollution. Disturbance from recreation.	Disturbance from recreation could affect any of the Natura 2000 sites in and around Kirklees but is most likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA as they are within Kirklees.  Air pollution could affect any of the Natura 2000 sites in and around Kirklees.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in	No: Any development resulting from this policy would be at Dewsbury which is located away from sensitive Natura 2000 sites. While the policy could contribute to an increase in the population and economic activity in Kirklees and therefore increased traffic, air pollution and recreation pressure, these issues are considered separately through the HRA of the overall quantum of development for Kirklees.

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				<p>place of cars.</p> <p>The allocation of open space in Kirklees through the Publication Draft Local Plan and improvements to green infrastructure through policies such as PLP31: Strategic Green Infrastructure may help to mitigate the potential impacts of increased recreation pressure on Natura 2000 sites.</p>	
PLP19: Strategic transport infrastructure	Development of transport infrastructure	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p>	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.	No: Most of the transport improvement schemes identified in the policy are located away from sensitive Natura 2000 sites. While improvements to the M62 (smart motorway between junctions 20 and 25) could affect the South Pennine Moors SAC and the South Pennine Moors SPA (Phases 1 and 2) as the motorway cuts through the sites, the scheme is coming



Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
					forward separately to the Publication Draft Local Plan and it is assumed that it is being subject to HRA at the project level.
PLP20: Sustainable travel	None – the policy will not itself result in new development.	N/A	N/A	The policy promotes the use of sustainable modes of transport and as such may provide mitigation for the impacts of other policies in relation to increased car use and the associated air pollution.	N/A
PLP21: Highways safety and access	Development of transport infrastructure	Physical damage/loss of habitat.  Non-physical disturbance such as noise/vibration and light pollution.	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats	No: While this policy could lead to the development of transport infrastructure there is no certainty with regards to its nature or location until the planning application stage. The Natura 2000 sites within Kirklees are in the south western corner of the district away from the main urban areas where most development is directed through the Publication

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				Directive.	Draft Local Plan, which reduces the likelihood of significant effects, and policy PLP30 provides robust mitigation for impacts on the SAC or SPA.
PLP22: Parking	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP23: Core walking and cycling network	New cycling and walking routes  Opportunities for recreation	Disturbance from recreation	South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Policy PLP47 provides for well maintained and accessible open spaces	No: While this policy could improve accessibility to the Natura 2000 sites for walkers and cyclists from existing settlements or the residential / mixed use site allocations (in combination), it will also provide opportunities for recreation elsewhere. Mitigation provided by other policies in the plan will contribute to reducing recreational pressure on the SAC/SPA. Overall, it is not considered that policy PL23 will have a

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				<p>which may help to mitigate pressure on Natura 2000 sites for recreation resulting from other Publication Draft Local Plan policies.</p> <p>The allocation of open space in Kirklees through the Publication Draft Local Plan and improvements to green infrastructure through policies such as PLP31: Strategic Green Infrastructure may help to mitigate the potential impacts of increased recreation pressure on Natura 2000 sites.</p>	significant effect on Natura 2000 sites.
PLP24: Design	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP25: Advertisements and shop fronts	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP26: Renewable and low carbon energy	Development of renewable energy infrastructure	Physical damage/loss of habitat.	South Pennine Moors SAC (onsite loss of habitat only), South	Policy PLP30: Biodiversity and Geodiversity states that	No: While this policy could lead to the development of

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
		Non-physical disturbance such as noise/vibration and light pollution.	Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA	<p>proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>The wording of PLP26 states that proposals will only be supported where they will “not have an unacceptable impact on protected species, designated sites of importance for biodiversity.”</p>	<p>renewable energy infrastructure there is no certainty with regards to its type or location until the planning application stage.</p> <p>Wind turbine developments can adversely affect bird species and could therefore cause physical damage or disturbance to qualifying species of the South Pennine Moors SPA. However, protection for designated sites within the policy itself is considered to provide sufficient safeguard.</p> <p>Policy PLP30 provides robust mitigation for impacts on the SAC or SPA.</p>
PLP27: Flood risk	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP28: Drainage	None – the policy will not itself result in new	N/A	N/A	N/A	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
	development.				
PLP29: Management of water bodies	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP30: Biodiversity and geodiversity	None – the policy will not itself result in new development.	N/A	N/A	This policy does not permit development which would directly or indirectly compromise achieving the conservation objectives of Natura 2000 sites unless the proposal were to meet the requirements relating to Article 6 (3) - (4) of the Habitats Directive. Therefore, it provides mitigation for the potential impacts of other Publication Draft Local Plan policies on Natura 2000 sites.	N/A
PLP31: Strategic Green Infrastructure Network	None – the policy will not itself result in new development.	N/A	N/A	This policy should help to provide mitigation against the potential impacts of the development proposed elsewhere in the	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				Publication Draft Local Plan as it seeks to protect and enhance existing Green Infrastructure and to provide for the delivery of new Green Infrastructure. This could help to mitigate the potential impacts of development in terms of increased recreation pressure at Natura 2000 sites. However, it is uncertain how effective this will be at mitigating increased recreational use of Natura 2000 sites, as it will depend on factors such as the comparable nature and quality of the greenspace to be protected under this policy.	
PLP32: Landscape	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP33: Trees	None – the policy will not	N/A	N/A	N/A	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
	itself result in new development.				
PLP34 Conserving and enhancing the water environment	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP35: Historic environment	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP36: Proposals for mineral extraction	Minerals-related development Increased vehicle traffic Increased demand for water treatment	Physical damage/loss of habitat. Non-physical disturbance such as noise/vibration and light pollution. Air pollution.	Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.  Air pollution could affect any of the Natura 2000 sites in and around Kirklees.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Policy PLP20: Sustainable travel and demand management seeks to encourage the	Uncertain: The policy could result in minerals-related development within Kirklees which could have significant effects on Natura 2000 sites and this needs to be considered in more detail during the Appropriate Assessment stage of the HRA. Specific site allocations for minerals-related development have been subject to HRA screening separately further ahead in this matrix.

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				use of sustainable modes of transport in place of cars.	
PLP37: Site restoration and aftercare	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP38: Minerals safeguarding	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP39: Protecting existing and planned minerals infrastructure	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP40: Alternative development on protected minerals infrastructure sites	<p>Redevelopment of sites containing minerals infrastructure</p> <p>Increase in recreation pressure (if sites are redeveloped for residential uses)</p> <p>Increase in vehicle traffic (depending on what use sites are redeveloped for)</p> <p>Increased demand for water treatment.</p>	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p> <p>Disturbance from recreation.</p> <p>Air pollution.</p>	<p>Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.</p> <p>Disturbance from recreation could affect any of the Natura 2000 sites in and around</p>	<p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats</p>	<p>No: The policy could result in the redevelopment of sites containing minerals infrastructure which, depending on the nature of the redevelopment could have significant effects on Natura 2000 sites. However, there is no certainty with regards to the type or location of development that may result until the planning application stage and</p>



Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
			<p>Kirklees but is most likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA as they are within Kirklees.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p> <p>The allocation of open space in Kirklees through the Publication Draft Local Plan and improvements to green infrastructure through policies such as PLP31: Strategic Green Infrastructure may help to mitigate the potential impacts of increased recreation pressure on Natura 2000 sites.</p>	<p>policy PLP30 provides robust mitigation for impacts on Natura 2000 sites.</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
PLP41: Proposals for exploration and appraisal of hydrocarbons	Onshore oil and gas exploration	Physical damage/loss of habitat.  Non-physical disturbance such as noise/vibration and light pollution.	Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Policy PLP41 itself requires that any adverse impacts must be avoided or mitigated to the satisfaction of the Mineral Planning Authority, with safeguards to protect environmental interests put in place as necessary.	No: While the policy could result in the exploration of onshore oil and gas within Kirklees, there is no certainty about the nature or location of activities until the planning application stage. In addition, policy PLP30 and PLP41 itself provide robust mitigation for impacts on Natura 2000 sites.

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
PLP42: Proposals for production of hydrocarbons	Production of hydrocarbons	Physical damage/loss of habitat.  Non-physical disturbance such as noise/vibration and light pollution.	Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Policy PLP42 itself requires that any adverse impacts, both individual and cumulative are avoided or mitigated to the satisfaction of the Mineral Planning Authority.	No: While the policy could result in the production of hydrocarbons within Kirklees, there is no certainty about the nature or location of activities until the planning application stage. In addition, policy PLP30 and PLP42 itself provide robust mitigation for impacts on Natura 2000 sites.
PLP43: Waste management hierarchy	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
PLP44: New waste management facilities	<p>Development of waste management facilities</p> <p>Increased vehicle traffic</p> <p>Increased demand for water treatment</p>	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p> <p>Air pollution.</p>	<p>Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>Policy PLP44 itself states that proposals for waste management facilities should be located in sustainable locations where potentially adverse impacts on biodiversity can be avoided or adequately mitigated.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p> <p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions</p>	<p>No: While the policy could result in the development of waste management facilities within Kirklees, there is no certainty about the nature or location of developments until the planning application stage. In addition, policy PLP30 and policy PLP44 itself provide robust mitigation for impacts on Natura 2000 sites. The waste site allocation made in the Publication Draft Local Plan has been subject to HRA screening separately further ahead in this matrix.</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				<p>specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p>	
PLP45: Safeguarding waste management facilities	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP46: Waste disposal	<p>Development of waste management facilities (landfill or land raising)</p> <p>Increased vehicle traffic</p> <p>Increased demand for water treatment</p>	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p> <p>Air pollution.</p>	<p>Physical damage/loss of habitat and non-physical disturbance could affect South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats</p>	<p>No: While the policy could result in the development of landfill facilities at a number of former quarries, none are located within 2.5km of the South Pennine Moors SAC and SPA (Phase 2). The policy could also result in landfilling at other locations, however the policy makes it clear that this type of development will only take place if need cannot be met by treatment</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				<p>Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p>	<p>higher in the waste hierarchy. In addition, policy PLP30 provides robust mitigation for impacts on Natura 2000 sites and it is assumed that proposals for waste management facilities would be assessed at that time in relation to their potential impacts on Natura 2000 sites.</p>
PLP47: Healthy, active and safe lifestyles	Development of sports, leisure and cultural facilities	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p>	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	<p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Using good practice construction techniques</p>	<p>No: The policy could result in the development of sports, leisure and cultural facilities which could result in damage or disturbance to Natura 2000 sites; however there is no certainty with regards to the type or location of development that may result until the planning application stage and policy PLP30 provides robust mitigation for impacts on the SAC or SPA.</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				<p>could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p> <p>Policy PLP47 itself provides for well maintained and accessible open spaces which may help to mitigate pressure on Natura 2000 sites for recreation resulting from other Publication Draft Local Plan policies.</p>	
PLP48: Community facilities and services	Development of community services and facilities	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p>	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats	No: The policy could result in the development of community services and facilities which could result in damage or disturbance to Natura 2000 sites; however there is no certainty until the planning application stage with regards to the type or location of development that may result and policy PLP30 provides robust mitigation for impacts on

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				<p>Directive.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p>	<p>the SAC or SPA.</p>
<p>PLP49: Educational and health care needs</p>	<p>Development of education and healthcare facilities</p>	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p>	<p>South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.</p>	<p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the</p>	<p>No: The policy could result in the development of education and healthcare facilities which could result in damage or disturbance to Natura 2000 sites; however there is no certainty with regards to the type or location of development that may result until the planning application stage and policy PLP30 provides robust mitigation for impacts on the SAC or SPA.</p>



Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				construction phase.	
PLP50: Sport and physical activity	Development of sport and leisure facilities	Physical damage/loss of habitat.  Non-physical disturbance such as noise/vibration and light pollution.	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.	No: The policy could result in the development of sport and leisure facilities which could result in damage or disturbance to Natura 2000 sites; however there is no certainty with regards to the type or location of development that may result until the planning application stage and policy PLP30 provides robust mitigation for impacts on the SAC or SPA.
PLP51: Protection and improvement of local air quality	None – the policy will not itself result in new development.	N/A	N/A	This policy requires development which has the potential to increase levels of local air pollution to unsafe	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				levels to incorporate mitigation measures. As such, the policy could provide mitigation for the potential impacts of other Publication Draft Local Plan policies on Natura 2000 sites in relation to increased air pollution.	
PLP52: Protection and improvement of environmental quality	None – the policy will not itself result in new development.	N/A	N/A	This policy requires development which has the potential to increase pollution in Kirklees to incorporate mitigation to avoid unacceptable impacts on the environment. The policy also states that development should where possible improve the existing environment. As such, the policy could provide mitigation for the potential impacts of other Publication Draft Local Plan policies on Natura 2000 sites in relation to air or water	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				pollution.	
PLP53: Contaminated and unstable land	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP54: Buildings for agriculture and forestry	Development of buildings for agriculture and forestry in the green belt	Physical damage/loss of habitat.  Non-physical disturbance such as noise/vibration and light pollution.	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.	No: The policy could result in the development of buildings for agriculture and forestry in the Green Belt which could result in damage or disturbance to Natura 2000 sites (the Green Belt in Kirklees overlaps with the South Pennine Moors SAC and the South Pennine Moors SPA (Phase 2) and is adjacent to the Peak District Moors (South Pennine Moors Phase 1) SPA; however there is no certainty until the planning application stage with regards to the type or location of development that may result and policy PLP30 provides robust mitigation for impacts on the SAC or SPA.

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
PLP55: Agricultural and forestry workers' dwellings	Development of residential properties for agricultural and forestry workers in the green belt	Physical damage/loss of habitat. Non-physical disturbance such as noise/vibration and light pollution.	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.	No: The policy could result in the development of dwellings for agriculture and forestry workers in the Green Belt which could result in damage or disturbance to Natura 2000 sites (the Green Belt in Kirklees overlaps with the South Pennine Moors SAC and the South Pennine Moors SPA (Phase 2) and is adjacent to the Peak District Moors (South Pennine Moors Phase 1) SPA; however there is no certainty until the planning application stage with regards to the type or location of development that may result and policy PLP30 provides robust mitigation for impacts on the SAC or SPA.
PLP56: Facilities for outdoor sport, outdoor recreation and cemeteries	Development of sport and recreation facilities in the green belt	Physical damage/loss of habitat. Non-physical disturbance such as	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA	Policy PLP30: Biodiversity and Geodiversity states that proposals which may	No: The policy could result in the development of sport and recreation facilities in the Green Belt

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
		noise/vibration and light pollution.	(Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	<p>directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p>	which could result in damage or disturbance to Natura 2000 sites (the Green Belt in Kirklees overlaps with the South Pennine Moors SAC and the South Pennine Moors SPA (Phase 2) and is adjacent to the Peak District Moors (South Pennine Moors Phase 1) SPA; however there is no certainty until the planning application stage with regards to the type or location of development that may result and policy PLP30 provides robust mitigation for impacts on the SAC or SPA.
PLP57: The extension, alteration or replacement of existing buildings	Extension, alteration or replacement of existing buildings in the green belt	<p>Physical damage/loss of habitat.</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p>	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site	No: The policy could result in the redevelopment or extension of existing buildings in the Green Belt which could result in damage or disturbance to Natura 2000 sites (the Green Belt in Kirklees overlaps with the South

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				<p>will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p>	<p>Pennine Moors SAC and the South Pennine Moors SPA (Phase 2) and is adjacent to the Peak District Moors (South Pennine Moors Phase 1) SPA; however there is no certainty until the planning application stage with regards to the type or location of development that may result and policy PLP30 provides robust mitigation for impacts on the SAC or SPA. In addition, the policy relates to the replacement or extension of existing buildings rather than entirely new development.</p>
PLP58: Garden extensions	None – the policy will not itself result in new development.	N/A	N/A	N/A	N/A
PLP59: Infilling and redevelopment of brownfield sites	None – the policy could result in the redevelopment of or infilling at existing	N/A	N/A	N/A	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
	brownfield sites but is not expected to result in new development.				
PLP60: The re-use and conversion of buildings	None – the policy would potentially permit the reuse or conversion of existing buildings within the green belt but is not expected to result in new development.	N/A	N/A	N/A	N/A
PLP61: Urban green space	None – the policy seeks to protect urban green space and would not result in new development.	N/A	N/A	This policy will protect urban green spaces in Kirklees. This may help to mitigate impacts of the development proposed elsewhere in the Publication Draft Local Plan in terms of increased recreation pressure at Natura 2000 sites.	N/A
PLP62: Local green space	None – the policy seeks to protect local green space and would not result in new development.	N/A	N/A	This policy will protect local green spaces in Kirklees. This may help to mitigate impacts of the development proposed elsewhere in the Publication Draft	N/A

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				Local Plan in terms of increased recreation pressure at Natura 2000 sites.	
PLP63: New open space	Development of sport and recreation facilities	Physical damage/loss of habitat.  Non-physical disturbance such as noise/vibration and light pollution.	South Pennine Moors SAC (onsite loss of habitat only), South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.  Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.	No: The policy could result in the development of sport and recreation facilities which could result in damage or disturbance to Natura 2000 sites; however there is no certainty with regards to the type or location of development that may result until the planning application stage and policy PLP30 provides robust mitigation for impacts on the SAC or SPA.
Residential site allocations (the	Residential development	Physical damage/loss of habitat offsite (none of	Physical damage/loss of habitat (offsite) and	Policy PLP30: Biodiversity and	Uncertain: The residential site allocations in



Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
<p>Allocations and Designations document identifies 209 site allocations for residential development).</p>	<p>Increase in recreation pressure</p> <p>Increased vehicle traffic</p> <p>Increased demand for water treatment</p>	<p>the residential site allocations are located within the boundaries of Natura 2000 sites).</p> <p>Non-physical disturbance such as noise/vibration and light pollution.</p> <p>Air pollution.</p> <p>Disturbance from recreation.</p>	<p>non-physical disturbance could affect South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.</p> <p>Disturbance from recreation could affect any of the Natura 2000 sites in and around Kirklees but is most likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA as they are within Kirklees.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p> <p>Policy PLP47 provides for well maintained and accessible open spaces which may help to mitigate pressure on Natura 2000 sites for recreation resulting from other Publication Draft Local Plan policies.</p>	<p>combination would result in large-scale residential development within Kirklees which could result in an increase in vehicle traffic and the associated air pollution, and increased pressure for recreation.</p> <p>While none of the allocated residential sites are within the boundaries of Natura 2000 sites, as shown in <b>Map 4.1</b> in <b>Chapter 4</b>, 11 are within 2.5km of the South Pennines Moors SPAs and could therefore result in offsite habitat loss and/or non-physical disturbance in those areas, particularly during the construction phase.</p> <p>Of those sites, seven have been identified during the initial screening stage as having the potential to contain habitat used by the qualifying bird species of the South Pennine Moors</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.	SPA (Phases 1 and 2). 62 of the residential sites are within 7km of one of the Natura 2000 sites in and around Kirklees and are therefore most likely to contribute to recreational pressure.  These issues therefore need to be considered in more detail during the Appropriate Assessment stage of the HRA.
Employment site allocations (the Allocations and Designations document identifies 14 site allocations for employment development).	Employment development  Increased vehicle traffic  Increased demand for water treatment	Physical damage/loss of habitat offsite (none of the employment site allocations are located within the boundaries of Natura 2000 sites).  Non-physical disturbance such as noise/vibration and light pollution (offsite).  Air pollution.	Physical damage/loss of habitat (offsite) and non-physical disturbance (also offsite) could affect South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA.  Air pollution could affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2), Peak District Moors (South Pennine	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.	Uncertain: The employment site allocations in combination would result in large-scale employment development within Kirklees which could result in an increase in vehicle traffic and the associated air pollution.  While none of the allocated employment sites are within the boundaries of Natura 2000 sites, (as shown in <b>Map 4.2 in Chapter 4</b> )

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
			Moors Phase 1) SPA and Rochdale Canal SAC.	<p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the construction phase.</p>	<p>two are within 2.5km of the South Pennines Moors SPAs and could therefore result in offsite habitat loss and/or non-physical disturbance in those areas, particularly during the construction phase.</p> <p>Of those sites, one has been identified during the initial screening stage as having the potential to contain habitat used by the qualifying bird species of the South Pennine Moors SPA (Phases 1 and 2).</p> <p>These issues need to be considered in more detail during the Appropriate Assessment stage of the HRA.</p>
Mixed use site allocations (the Allocations and Designations document identifies 13 site allocations for mixed use development).	<p>Mixed use development</p> <p>Increase in recreation pressure</p> <p>Increased vehicle traffic</p> <p>Increased demand for water treatment</p>	<p>Physical damage/loss of habitat offsite (none of the mixed use site allocations are located within the boundaries of Natura 2000 sites).</p> <p>Non-physical</p>	Physical damage/loss of habitat (offsite) and non-physical disturbance (also offsite) could affect South Pennine Moors SPA (Phase 2) and Peak District Moors	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a	Uncertain: The mixed use site allocations in combination would result in large-scale development within Kirklees which could result in an increase in vehicle traffic and the

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
		<p>disturbance such as noise/vibration and light pollution (offsite).</p> <p>Air pollution.</p> <p>Disturbance from recreation.</p>	<p>(South Pennine Moors Phase 1) SPA.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p> <p>Disturbance from recreation could affect any of the Natura 2000 sites in and around Kirklees but is most likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors Phase 1) SPA as they are within Kirklees.</p>	<p>designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p> <p>Policy PLP47 provides for well maintained and accessible open spaces which may help to mitigate pressure on Natura 2000 sites for recreation resulting from other Publication Draft Local Plan policies.</p> <p>Using good practice construction techniques could mitigate the potential impacts of noise, vibration and light pollution during the</p>	<p>associated air pollution.</p> <p>While none of the allocated mixed use sites are within the boundaries of Natura 2000 sites (as shown in <b>Map 4.3</b> in <b>Chapter 4</b>); two are within 2.5km of the South Pennines Moors SPAs and could therefore result in offsite habitat loss and/or non-physical disturbance in those areas, particularly during the construction phase.</p> <p>Of those sites, none have been identified during the initial screening stage as having the potential to contain habitat used by the qualifying bird species. Habitat loss and/or non-physical disturbance will therefore not occur.</p> <p>Five of the sites are within 7km of one of the Natura 2000 sites in and around Kirklees and are therefore most likely to</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
				construction phase.	contribute to recreational pressure.  Therefore, only air quality and recreation pressure need to be considered in more detail during the Appropriate Assessment stage of the HRA.
Open space site allocations (the Allocations and Designations document identifies 503 site allocations for local and urban greenspace).	None – the allocations for open space in Kirklees would not result in new development.	N/A	N/A	The allocation of open space may help to mitigate impacts of the development proposed elsewhere in the Publication Draft Local Plan in terms of increased recreation pressure at Natura 2000 sites.	N/A
Traveller site allocations (the Allocations and Designations document identifies two site allocations for Traveller sites).	Development of sites for Gypsies, Travellers and Travelling Showpeople  Increase in recreation pressure  Increased vehicle traffic  Increased demand for water treatment	Air pollution.  Disturbance from recreation.	Disturbance from recreation could affect any of the Natura 2000 sites in and around Kirklees but is most likely to affect South Pennine Moors SAC, South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors	Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted	No: The Publication Draft Local Plan allocates two sites for Travellers; however they are both located in the north of the District, well away from the nearest Natura 2000 sites as shown in <b>Map 5.4 in Chapter 5</b> . While the allocation of the sites could contribute

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
			<p>Phase 1) SPA as they are within Kirklees.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p> <p>Policy PLP47 provides for well maintained and accessible open spaces which may help to mitigate pressure on Natura 2000 sites for recreation resulting from other Publication Draft Local Plan policies.</p>	<p>to an increase in vehicle traffic and the associated air pollution, and increased pressure for recreation space, these impacts are likely to be minimal due to the small number of site allocations and the distance of the site allocations from Natura 2000 sites means that significant effects are unlikely.</p>
<p>Minerals site allocations (the Allocations and Designations document identifies 35 site allocations for minerals extraction, infrastructure or preferred areas).</p>	<p>Minerals-related development</p> <p>Increased vehicle traffic</p> <p>Increased demand for water treatment</p>	<p>Physical damage/loss of habitat offsite (none of the minerals site allocations are located within the boundaries of Natura 2000 sites).</p> <p>Non-physical disturbance such as</p>	<p>Physical damage/loss of habitat (offsite) and non-physical disturbance (also offsite) could affect South Pennine Moors SPA (Phase 2) and Peak District Moors (South Pennine Moors</p>	<p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate</p>	<p>Uncertain: These site allocations would result in minerals-related development within Kirklees which could result in an increase in vehicle traffic and the associated air pollution.</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
		<p>noise/vibration and light pollution (offsite).</p> <p>Air pollution.</p>	<p>Phase 1) SPA.</p> <p>Air pollution could affect any of the Natura 2000 sites in and around Kirklees.</p>	<p>European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p>	<p>While none of the allocated minerals sites are within the boundaries of Natura 2000 sites (as shown in <b>Map 4.3 in Chapter 4</b>), six are within 2.5km of the South Pennines Moors SPAs and could therefore result in offsite habitat loss and/or non-physical disturbance in those areas, particularly during the construction phase.</p> <p>Of those, one site has been identified during the initial screening stage as having the potential to contain habitat used by the qualifying bird species (as shown in <b>Map 5.5 in Chapter 5</b>) and so could result in habitat loss and/or non-physical disturbance in those areas. Therefore, these issues need to be considered in more detail during the Appropriate Assessment stage of the HRA.</p>

Publication Draft Local Plan policy/ allocation	Likely activities (operations) to result as a consequence of the proposal	Likely effects if proposal implemented	Natura 2000 site(s) potentially affected	Potential mitigation measures – if implemented would avoid likely significant effect	Could the proposal have likely significant effects on Natura 2000 sites (taking mitigation into account)?
Waste site allocation (the Allocations and Designations document identifies one site allocation for waste development).	<p>Development of waste management facility at Emerald Street, Huddersfield</p> <p>Increased vehicle traffic</p> <p>Increased demand for water treatment</p>	Air pollution.	Air pollution could affect any of the Natura 2000 sites in and around Kirklees.	<p>Policy PLP30: Biodiversity and Geodiversity states that proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.</p> <p>Policy PLP20: Sustainable travel and demand management seeks to encourage the use of sustainable modes of transport in place of cars.</p>	No: This site is located in the north of Kirklees, well away from the nearest Natura 2000 sites (as shown in <b>Map 4.5</b> in <b>Chapter 4</b> ) and the site is already in operation as a waste management facility. Policy PLP30 provides robust mitigation for impacts on Natura 2000 sites.
Safeguarded land (the Allocations and Designations document identifies 66 sites to be safeguarded for future development).	None – the site allocations will not result in development within the plan period.	N/A	N/A	N/A	N/A



**Appendix 4**  
Kirklees Council Ecology report

# **Habitats Regulations Assessment**

**Physical damage/loss of habitats – loss of functionally connected land**

**March 2017**

## Contents

1	Summary .....	1
2	Introduction .....	2
2.1	The South Pennines SPA and Legal Protection .....	2
2.2	Designated Features.....	6
3	Ecology of Upland Breeding Birds.....	9
3.1	Twite.....	9
3.2	Curlew .....	9
3.3	Golden Plover .....	10
3.4	Mitigating Aspects of Golden Plover Ecology .....	11
4	Methodology.....	13
4.1	Data Collection and Analysis .....	13
4.2	Data Mapping.....	17
4.3	Habitat Survey.....	18
4.4	Assessment.....	18
5	Results and Discussion .....	20
5.1	Maps Included .....	20
5.2	Distribution of Golden Plover in Kirklees .....	20
5.3	Site Assessments .....	20
5.4	Mitigation Contained in Local Plan Policy.....	31
6	Conclusions .....	33
7	References .....	34
8	Figures.....	36

## 1 Summary

An extensive area of the South Pennine Moors is designated as Special Protection Area in order to conserve a range of bird species that use the area for breeding. Natural England has indicated that there is potential for development of allocation sites identified within the Kirklees Publication Draft Local Plan, and within 2.5 km of the Special Protection Area, to impact these species by displacing them from regular foraging sites. Such regular foraging sites are known as Functionally Connected Land.

The South Pennine Moors is covered by two separate Special Protection Area designations with different qualifying species. As a result, the nine allocation sites within 2.5km have been assessed for their potential to be functionally connected to the Special Protection Areas in relation to golden plover (*Pluvialis apricaria*) and one of these sites has also been assessed for its potential to be functionally connected in relation to twite (*Carduelis flavirostris*) and curlew (*Numenius arquata*).

Habitat surveys, peer reviewed literature and local expert knowledge have been used to describe the nature of suitable foraging habitats for the assessed species, as well as the degree to which golden plover rely on individual foraging sites. Descriptions of the individual allocation sites based on survey data have been compared with the descriptions of suitable foraging habitat compiled from the evidence base, and referenced to the distribution of golden plover within Kirklees as indicated by the available biological records.

This process has indicated a low likelihood of any of the allocation sites of the Kirklees Publication Draft Local Plan being functionally connected to the South Pennine Moors Special Protection Area. It is concluded that the low residual risk to the Special Protection Area will be avoided through the policies and supporting text included within the Local Plan, and that no adverse effects on the integrity of the South Pennine Moors Special Protection Area will occur as a result of physical disturbance or loss of habitat.

## **2 Introduction**

Natural England has raised concern that the Habitat Regulations Assessment (HRA) accompanying the Publication Draft of the Kirklees Local Plan did not provide enough certainty to discount the possibility of significant effects on European protected sites. Natural England's comments are included in a letter dated 19<sup>th</sup> December 2016 and included as Appendix 1.

The purpose of this report is to expand on the assessment presented in the earlier HRA, in light of further literature review and analysis of data, in order to demonstrate that implementation of the Kirklees Local Plan will not result in the loss of land functionally connected to the Peak District Moors (South Pennine Moors Phase 1) Special Protection Area (SPA) or South Pennine Moors Phase 2 SPA.

This report is produced by Tom Stephenson. I am a full member of the Chartered Institute Ecology and Environmental Management (CIEEM) and have a BSc in Wildlife Conservation from Liverpool John Moores University and MSc in Wildlife Conservation and Management from University of Newcastle upon Tyne. Since becoming an ecological consultant in 2006, and aside from numerous ecological impacts assessments, I have been involved in a wide variety of projects including Environmental Impacts Assessments and research and survey projects for the Statutory Nature Conservation Organisations in England, Scotland and Wales. I joined Kirklees Council as biodiversity officer in 2016 and primarily assess the sustainability of planning proposals from an ecological perspective and review submitted ecological assessments. I have also inputted into the development of biodiversity and geodiversity policy included in the Kirklees Publication Draft Local Plan.

### ***2.1 The South Pennines SPA and Legal Protection***

The major moorland block of the South Pennine Moors is subject to two separate SPA designations: Peak District Moors (South Pennine Moors Phase 1) SPA and South Pennine Moors Phase 2 SPA. Hereafter, these areas are referred to as Phase 1 and Phase 2 of the SPA. Phase 1 of the SPA covers the area of land from Leek and Matlock to the south, to Marsden in the north, and Phase 2 covers the area north of Marsden to Ilkley. Together, these designations cover 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. Some of these species are known to use habitats outside of the SPA for foraging.

Under the provisions of the Conservation of Habitats and Species Regulations 2010 (as amended) Kirklees Council is required to undertake a formal assessment of the implications of the Local Plan on the designated features of the South Pennine Moors SPA (Phase 1 and Phase 2) before adoption. Initially, this assessment (referred to as HRA) should determine if implementation of the plan will have Likely Significant Effects on the SPA. If Likely Significant Effects are identified then the HRA should proceed to an Appropriate Assessment

stage, which is intended to determine if the plan will have an adverse effect on the integrity of the SPA.

The SPA is designated for breeding birds only and, as some of the species that breed within the SPA also forage on habitats adjacent to the SPA but outside of the designated area, there is potential for activities close to the SPA to affect the species for which the SPA is designated. Land that is used for foraging by individual birds that are also nesting within the SPA is known as functionally connected land.

Natural England’s concern relates to the potential for Likely Significant Effects to the South Pennine Moors SPA through loss of functionally connected land.

Sites for which Natural England has concerns, and which are given further consideration here are listed in the Table 1 below, along with the conclusions of the 2016 HRA and Appropriate Assessment undertaken by LUC (LUC, 2016).

**Table 1: Summary of HRA and Appropriate Assessment findings for the sites considered by Natural England to require further assessment**

<b>Allocated site</b>	<b>Habitats present</b>	<b>Suitability for use by SPA bird species</b>	<b>Conclusion</b>
Minerals site ME1966	Amenity grassland, improved grassland, heathland, buildings.	Unlikely to be connected in relation to golden plover, but possible due to location and topography of site and surrounding land.  Highly unlikely to be functionally connected to SPA in relation to merlin, short-eared owl, dunlin, twite, curlew or lapwing.	Uncertain effects on South Pennine Moors SPA. Appropriate Assessment required.  The Appropriate Assessment concluded that, even if the site is used by SPA golden plover, there is sufficient similar habitat adjacent to the site that there would be no adverse effect on the integrity of the SPA.

<b>Allocated site</b>	<b>Habitats present</b>	<b>Suitability for use by SPA bird species</b>	<b>Conclusion</b>
Housing site H288A	Improved grassland.	<p>Could be used by golden plover for foraging.</p> <p>Land used occasionally by hunting merlin is not considered to be functionally linked to the SPA.</p> <p>Highly unlikely to be functionally connected to SPA in relation to short-eared owl, dunlin, twite, curlew or lapwing.</p>	<p>Uncertain effects on South Pennine Moors SPA. Appropriate Assessment required.</p> <p>The Appropriate Assessment concluded that, even if the site is used by SPA golden plover, there is sufficient similar habitat adjacent to the site that there would be no adverse effect on the integrity of the SPA.</p>
Housing site H342	Semi-improved neutral grassland, improved grassland.	<p>Unlikely to be functionally connected in relation to short-eared owl, due to limited extent of potentially suitable foraging habitat.</p> <p>Highly unlikely to be functionally connected to SPA in relation to golden plover, merlin, dunlin, twite, curlew or lapwing.</p>	No likely significant effects on South Pennine Moors SPA.

<b>Allocated site</b>	<b>Habitats present</b>	<b>Suitability for use by SPA bird species</b>	<b>Conclusion</b>
Housing site H356	Improved grassland, semi-improved neutral grassland.	<p>Unlikely to be functionally connected in relation to golden plover due to sloping topography and disturbance levels.</p> <p>Land used occasionally by hunting merlin is not considered to be functionally linked to the SPA.</p> <p>Highly unlikely to be functionally connected to SPA in relation to short-eared owl, dunlin, twite, curlew or lapwing.</p>	No likely significant effects on South Pennine Moors SPA.
Housing site H67	Active construction site, improved grassland, and possibly cattle-grazed permanent pasture.	Highly unlikely to be functionally connected to SPA in relation to golden plover, merlin, short-eared owl, dunlin, twite, curlew or lapwing.	No likely significant effects on South Pennine Moors SPA.
Housing site H200	Species poor semi-improved neutral grassland.		
Housing site H343	Improved grassland.		
Housing site H626	Improved grassland.		
Employment site E1866	Standing water, buildings & hardstanding, semi-improved neutral grassland, and improved grassland.		



Natural England does not disagree with screening out of any other allocation site with regards to the potential for impacts to habitats functionally linked to the Peak District Moors (South Pennine Moors Phase 1) SPA or South Pennine Moors Phase 2 SPA.

## **2.2 Designated Features**

### **2.2.1 Features Included in the Designation**

The two separate areas within Kirklees that are designated as SPA are designated for a different set of qualifying species.

The qualifying features of Phase 1 of the SPA, as taken from the relevant citation (English Nature, 2000), are as follows.

- Merlin (*Falco columbarius*),
- golden plover (*Pluvialis apricaria*), and
- short-eared owl (*Asio flammeus*).

The qualifying features of Phase 2 of the SPA, as taken from the relevant citation (English Nature, 1995), are as follows.

- Merlin,
- golden plover, and
- the breeding bird assemblage, which is comprised of:
  - golden plover,
  - lapwing (*Vanellus vanellus*),
  - dunlin (*Calidris alpina*),
  - snipe (*Gallinago gallinago*),
  - curlew (*Numenius arquata*),
  - redshank (*Tringa tetanus*),
  - common sandpiper (*Actitis hypoleucos*),
  - short-eared owl (*Asio flammeus*),
  - whinchat (*Saxicola rubetra*),
  - wheatear (*Oenanthe oenanthe*),
  - ring ouzel (*Turdus torquatus*), and
  - twite (*Carduelis flavirostris*).

Additional species, e.g. peregrine falcon (*Falco peregrinus*), are listed as qualifying features by the Joint Nature Conservation Committee (JNCC) following a review of the UK network of SPAs, which was published in 2001. However JNCC has also issued a statement on its website (JNCC, 2016) confirming that citations held by the individual country Statutory Nature Conservation Organisations (in this case Natural England) contain the lists to be used

in assessment and development control. Natural England has confirmed in an email on 9<sup>th</sup> September 2016 that peregrine falcon is not a qualifying species and that dunlin should be considered only as an assemblage species.

The lists for Phase 1 and Phase 2 of the SPA presented above have been used throughout the Habitat Regulations Assessment (HRA) presented in this document, and the species of the assemblage, unless they are also listed as a qualifying feature in their own right, have been considered in relation to Phase 2 of the SPA only.

### **2.2.2 Features Included in the Assessment**

The predatory species within the above lists, i.e. merlin and short-eared owl, where individuals are nesting within the SPA, may hunt in areas outside of the SPA. Areas used for hunting would therefore be considered as functionally linked to the SPA. However, both of these species hunt over large territories and their distribution is linked to the availability of prey rather than fidelity to specific sites. The loss of any, or all, of the habitats within the allocation site up to 2.5 km from the SPA is considered most likely, where these species occur, to result in displacement of these species from functionally connected land only. If displacement were to occur, this is considered highly unlikely to result in a significant impact to the population of these species. Merlin and short-eared owl are therefore excluded from assessment at the level of specific allocation sites.

Of the remaining species included in the breeding bird assemblage, dunlin, snipe, redshank, common sandpiper, whinchat, wheatear and ring ouzel all nest and forage within the habitats of the SPA during their respective breeding seasons. These species therefore do not make significant use of land functionally connected to the SPA during the breeding season and are excluded from assessment at the level of specific allocation sites.

Lapwing are typical of the moorland edge where they breed and forage for invertebrates. Breeding within the SPA is relatively rare and will only occur where the habitats have become degraded to such an extent that bare ground is available. Breeding individuals will walk with chicks to nearby habitats, therefore on occasions where lapwing are breeding on the SPA only land immediately adjacent to the SPA boundary is likely to be functionally linked in respect of lapwing. There are no proposed allocation sites immediately adjacent to the SPA, therefore any loss of habitats within these sites will not affect lapwing that could be considered part of the breeding bird assemblage of Phase 2 of the SPA. This species is excluded from assessment at the level of specific allocation sites.

Golden plover, curlew and twite will all nest within the habitats of the SPA and forage within agricultural habitats outside of the SPA. Any such habitats would be considered functionally linked to the SPA in respect of that species. The screening distance for foraging birds in Kirklees has been agreed with Natural England to be 2.5 km, which is appropriate for the species present at the South Pennine Moors SPA and consistent with the foraging distance used for birds in the South Pennines in the HRA of the Bradford Core Strategy.

As curlew and twite are included in the designation for Phase 2 of the SPA only, as part of the breeding bird assemblage, the potential for allocation sites to include functionally connected land has been assessed only in relation to sites within 2.5 km of Phase 2 of the SPA. Only allocation site H356 is located within 2.5 km of Phase 2 of the SPA.

Breeding golden plover are a qualifying feature of Phase 1 and Phase 2 of the SPA and are therefore considered in relation to all allocation sites within 2.5 km of both Phases of the SPA.

## 3 Ecology of Upland Breeding Birds

### 3.1 Twite

The distribution of twite is strongly linked to the availability of unimproved grasslands managed as hay meadows, which provide the food sources for this species (primarily the seeds of common sorrel and dandelion) together with the open sward structure that permits their feeding technique of landing on the stalks of the food plants to lay these on the ground before picking off individual seeds. Within this assessment only habitats managed in this way have been considered as potentially functionally linked to Phase 2 of the SPA in respect of twite.

### 3.2 Curlew

Curlew will nest within tall vegetation that may include habitats of the SPA and within farmland in the moorland edge. Only habitats used for foraging by curlew that are nesting in Phase 2 of the SPA are considered to be functionally linked to the SPA.

Curlew may forage in grassland or in moorland habitats and individuals have high fidelity for breeding sites (Valkama *et al*, 1998). A study undertaken in Sweden (Berg, 1992) indicates that distance from nest site strongly influences choice of foraging habitat and that proximity of suitable foraging habitat influences choice of nest site; curlew will therefore nest within close proximity to suitable foraging habitat wherever possible. Curlew typically forage at locations within 1 km of the nest site, although they will forage up to approximately 2.5 km from the nest, and show a strong preference for foraging sites closest to the nest (Robson & Percival, 2002). The same study also identified that larger fields were preferred, but habitat type (pasture, rough grassland or moorland) was a poor indicator of curlew presence.

Very little evidence of the distance at which curlew are affected by human disturbance has been published in the peer reviewed literature, however curlew have been defined as a wary species in this literature (Pearce-Higgins *et al*, 2007). A study commissioned by the Exe Estuary Management Partnership, undertaken to examine the response of various bird species to different sources of human disturbance at the Exe Estuary in Dorset, categorised the type of response exhibited and calculated the median distance at which this occurred (Liley *et al*, 2011). For curlew, the median distance at which no response was observed was 80 m. The median distances at which curlew walked, flew a short distance or flew a long distance from the source of disturbance was 22.5 m, 50 m and 40 m respectively. For the purpose of this assessment curlew are considered to be affected by human activity at a distance of 50 m.

Several studies indicate that selection of foraging site for curlew is also influenced by availability of prey, due to both abundance and accessibility (Berg, 1992; Valkama *et al*, 1998; and Fisher & Walker, 2015) and that accessibility of invertebrate prey may be negatively affected by dry soil conditions (Fisher & Walker, 2015). Optimal habitat for

foraging curlew can therefore be characterised as large, poorly drained fields of any habitat type except woodland and scrub that is more than 50 m from a source of human disturbance.

### **3.3 Golden Plover**

#### **3.3.1 Habitat Preference**

Golden plover nest on blanket bog habitats, however, this species is well documented to utilise habitats other than blanket bog for foraging. Male and female golden plover share incubation and parental roles and forage while off-duty. During the breeding season males forage exclusively at night and females forage exclusively during the day, while the other partner is on-duty. A study undertaken on the west of the South Pennine Moors showed that the majority of golden plover nesting on the moors foraged in moorland fringe habitats during the breeding season, and that the proportion of individuals foraging outside of the moors changed throughout the season, with more birds remaining within the moors to forage and chaperone chicks after hatching (Pearce-Higgins & Yalden, 2003).

In selecting foraging habitat golden plover were shown to avoid meadows and unimproved grasslands, and have a preference for level rather than sloping fields, fields with a short sward and larger field sizes (Pearce-Higgins & Yalden, 2003). There is evidence that the very shortest swards are preferred and that there is active avoidance of sward heights over 10 cm (Pearce-Higgins & Yalden, 2003 and Bengston, 1976). A study in the North Pennines showed that the most significant indicator of field choice was molehill density, which was shown to be an indicator of earthworm abundance (Whittingham *et al*, 2000).

#### **3.3.2 Timing of Breeding Season**

Pearce-Higgins & Yalden (2003) showed that golden plover are breeding on the South Pennine Moors (i.e. incubating eggs or feeding chicks) primarily in May and June, and that elevated numbers of golden plover on pasture in the moorland fringe in April was due to the presence of birds on passage to breeding grounds in northern Europe. In Kirklees there is evidence, from the date range of records and from the local interest group (pers. comm. Mike Denton, president of Huddersfield Birdwatchers Club) that golden plover are present throughout the year. Habitats are considered to be functionally connected to the SPA in respect of golden plover only during the breeding season; i.e. during May and June.

#### **3.3.3 Disturbance**

A study undertaken in relation to windfarms and levels of displacement of waders between construction and operational phases (Pearce-Higgins *et al*, 2012) showed that displacement during construction far exceeded that during operation. It has been assumed that this displacement is due to higher disturbance from human activity, to which golden plover appear to be highly susceptible. A local expert has also indicated that golden plover are

easily disturbed from foraging by human presence, particularly by people on foot (eg dog walking) (pers. comm. Tim Melling, RSPB Senior Conservation Officer for Northern England).

Two studies undertaken on the Pennine Moors indicate that golden plover are sensitive to irregular and unpredictable disturbance at a distance of approximately 200 m (Yalden & Yalden, 1990 and Finney *et al*, 2005). Distance from roads has been shown to have a small but significant effect on field choice by foraging golden plover (Whittingham *et al*, 2000).

### **3.3.4 Description of Functionally Connected Land**

Based on the information presented above in section 3.3, which has been drawn from peer reviewed literature and local expert knowledge, land connected to the South Pennine Moors SPA in respect of golden plover is described below.

During May and June some golden plover nesting within the SPA will use pasture or arable fields for foraging. Fields used are likely to be relatively level, with a high density of molehills (a surrogate measure for earthworm prey density) and vegetation sward height will be short, likely below 10 cm, during May and June. Where several suitable fields are available golden plover are most likely to utilise the largest fields, so as to avoid field boundaries that may conceal perceived predators, and select fields furthest from roads. Areas of high disturbance by humans, particularly irregular visits by people that are less predictable by golden plover, will be avoided. In preference, golden plover are more likely to make use of fields that are accessible from the SPA without birds having to overfly urban areas.

## **3.4 Mitigating Aspects of Golden Plover Ecology**

Scottish Natural Heritage commissioned a study to investigate the use of moorland fringe fields by golden plover breeding on the Caithness and Sutherland Peatlands SPA (Whitfield & Thomas, 2006). This study included a review of earlier work undertaken to investigate the use of moorland fringe habitats around the North Pennine Moors SPA (Whittingham *et al*, 2000) and Phase 1 of the South Pennine Moors SPA (Pearce-Higgins & Yalden, 2003). The study in Caithness and Sutherland differed in its approach by surveying a large number of fields and attempted to predict the use of these fields by golden plover based on measurable characteristics. The studies undertaken in Northern England used radio-telemetry to identify fields used by golden plover and attempted to determine why these fields were selected.

All three studies found that there were many more 'suitable' fields within the moorland fringe than were used by golden plover. All three studies found that prey densities (either earthworms or tipulid larvae) were the most valuable predictor of use of fields by golden plover. Distance from roads was also found to be significant in predicting field choice (Whittingham *et al*, 2000). Multivariate analysis failed to predict field choice by golden plover in the study involving 1,368 fields, where only 44 of the surveyed fields were used by golden plover over the three survey visits (Whitfield & Thomas, 2006).

The results of these studies indicate that golden plover in each of the study areas utilise only a portion of the available suitable moorland fringe foraging habitats, and that the availability of suitable foraging habitat outside Special Protection Areas is not a limiting factor on the abundance of breeding golden plover. This is supported by the much wider use of moorland fringe habitats by other wader species with similar diets and feeding strategies, such as lapwing and curlew (Whitfield & Thomas, 2006).

## **4 Methodology**

### **4.1 Data Collection and Analysis**

#### **4.1.1 Scope**

As set out in section 2.2 only golden plover, curlew and twite are sufficiently reliant on habitats outside of the SPA that loss of agricultural habitats has the potential to result in significant effects on the abundance or distribution of these species within the SPA. As stated, because the two Phases of the SPA have been designated for different bird species, the potential for land to be functionally connected to the SPA has been considered for all allocation sites within 2.5 km of the SPA (Phase 1 and 2) in respect of golden plover, and within 2.5 km of Phase 2 of the SPA only in respect of twite and curlew.

As twite distribution is reliant on a single specific and uncommon habitat type, identification of the presence of this habitat is considered sufficient to determine likely presence or absence. Existing records of twite have not been collected.

Curlew are able to nest in a range of habitats supporting tall vegetation, including those outside of the SPA, and only individuals nesting within the SPA are considered within this report. As it is not possible to determine if existing records are of individuals nesting within or outside of the SPA, records of this species have not been collected.

Within and adjacent to Kirklees golden plover nest only within blanket bog, which is found only within the SPA, therefore it is reasonable to assume that all records of golden plover in Kirklees during the breeding season are of individuals nesting in the SPA. Records of golden plover have therefore been obtained as a means of characterising the distribution of golden plover within Kirklees.

#### **4.1.2 Sources and Types of Data**

##### ***Primary Sources***

Natural England has produced standing advice on how to assess potential impacts to protected species, which is aimed at local planning authorities (Natural England, 2016). Guidance has been produced for the following protected species and species groups: bats; great crested newts; badgers; hazel dormice; water voles; otters; wild birds; reptiles; protected plants; white-clawed crayfish; invertebrates; freshwater fish and natterjack toads. The guidance for each of these species and groups, with the exception of wild birds, indicates that the spatial distribution of historical records should be used in deciding if survey for that species or group will be undertaken. For wild birds the triggers for survey are the type of habitat to be affected, however, this guidance (Natural England, 2015) also specifies that historical bird records should be obtained prior to survey and should include records from local biological record centres, bird clubs, county bird reports and the British Trust for Ornithology's Bird Track website.



The Bird Track website (British Trust for Ornithology) was used to display the distribution of golden plover records within Kirklees. As the location of records shown coincide with the location of records provided by Huddersfield Birdwatchers Club (HBC), the local bird club, and in the knowledge that Bird Track is populated by local enthusiasts, it was considered unnecessary to obtain data from Bird Track. Similarly, the county bird report for Kirklees is produced by HBC members using their own data set.

Records of golden plover have been obtained from three primary sources, including West Yorkshire Ecological Services (WYES), Huddersfield Birdwatchers Club (HBC) and Natural England. Data were obtained from these sources on 29<sup>th</sup> December 2016, 10<sup>th</sup> January 2017 and 13<sup>th</sup> January 2017 respectively.

The West Yorkshire county bird recorder for the Yorkshire Naturalist Union was also contacted on 25<sup>th</sup> January 2017 to enquire about the existence of additional records, but confirmed that the majority of records obtained by YNU are supplied by local birdwatchers groups, i.e. HBC for the Kirklees area (pers. comm. Andy Jowett, West Yorkshire County Bird Recorder for Yorkshire Naturalists Union). No other significant repositories of bird data have been identified, and it is considered that the data collected represents the most complete and up-to-date set available.

In total, 1544 records of golden plover have been obtained for the area in and around Kirklees; 162 from WYES, 786 from HBC and 596 from Natural England.

It should be noted that the majority of data collected relates to daytime records of golden plover only, and are therefore biased towards including females, as males typically forage at night and potentially in different locations to females. However studies undertaken in northern England and Scotland have shown that male golden plover typically forage closer to the nest site (Pearce-Higgins & Yalden, 2003) or use the same foraging sites as females (Whittingham *et al*, 2000). Instances where males forage further from the nest site than females are considered likely to be rare, as during the golden plover breeding season day length is long, corresponding with a short night time and limited time available for males to forage.

### **Source Type**

Within the supplied data five source types have been identified, which are:

- Data arising from surveys undertaken by the Local Biological Records Centre (WYES);
- Data arising from surveys commissioned by the Statutory Nature Conservation Organisation (Natural England/English Nature);
- Data arising from surveys undertaken in relation to development;
- Data arising from surveys undertaken by a Non-Governmental Organisation (British Trust of Ornithology); and
- Data provided by local naturalist groups (HBC and Calderdale Bird Conservation Group (CBCG)).

For a small number of records it was not possible to determine the source and these data have been categorised as unknown source type.

Data from WYES includes all of the above data types, while data from HBC and Natural England include only local naturalist group data and Statutory Nature Conservation Organisation (SNCO) data respectively.

The characteristics and resulting limitations of these data are described below, and have been used to place the data into one of two data type categories, as described below.

### ***Data Type***

Data from the five source types has been categorised as either spatially explicit or spatially indicative.

Data from surveys undertaken by WYES has been collected where funding has become available to undertake surveys to fill knowledge gaps. These data are collected using the aid of handheld Global Positioning System (GPS) units and are therefore accurate to within a few metres.

Studies commissioned by English Nature and Natural England are the South Pennine Moors SPA Breeding Bird Survey 2005 and South Pennine Moors SPA Breeding Bird Survey 2014 (Keystone Environmental, 2014). The 2014 survey were undertaken using GPS units, and the same is believed to be true of the 2005 survey, therefore the spatial accuracy of these data is also high.

Data arising from development related surveys and surveys undertaken by the British Trust for Ornithology (BTO) represent a total of five records and are therefore considered to have only a small influence of the following assessment. As it is standard practice to use GPS while undertaking survey for the private sector, and the BTO records relate to specific named surveys it has been assumed that these data are spatially accurate.

Data originating from local naturalist groups (HBC and CBCG) have been treated in the same way. Huddersfield Birdwatchers Club hold data collected by their members, the majority of whom are amateur ornithologists. There is therefore a likely bias towards 'known' plover foraging areas, with a high likelihood that this is where significant sightings would occur within the district. It is not possible to quantify survey effort for these records except to say that some clearly important areas of functionally linked land, such as fields around Blackmoorfoot Reservoir, are visited almost daily throughout the year (pers. comm. Mike Denton, president of HBC). Records obtained from HBC include records from habitats outside of the SPA (foraging individuals) and within the SPA (nesting and foraging individuals). Huddersfield Birdwatchers Club members submit records based on standardised location descriptions, for with the club recorder holds a database of six figure grid references (accurate to 100 m). These data are therefore less accurate than the above data types, however are still highly likely to be accurate to within 100 m.

Data from surveys undertaken or commissioned by WYES, Natural England, English Nature, BTO or private consultants have been classified as 'Spatially Explicit'. Data from HBC and CBCG have been classified as 'Spatially Indicative'.

When mapped (see Figures 1 to 3), there is a high level of agreement between the two types of data, which provides a degree of certainty that the spatially indicative data are accurate to within at least 100 m.

### ***Accuracy of Species Records and Verification***

Natural England use a tendering process to assess contract bids, which includes consideration of surveyor competence, therefore the accuracy of species identification within the 2014 South Pennine Moors Breeding Birds Survey can be considered high. West Yorkshire Ecological Services and HBC also have an internal verification process, which in line with other record centres involves scrutinising records where there is reason to believe that the accuracy is low and disregarding these records where necessary. Scrutiny would be triggered by unusual locations or habitats for species in question, or unknown sources. In addition HBC also hold a list of rare birds, for which an accompanying and satisfactory description is required for the record to be accepted. Golden plover, which is considered to be readily identifiable and not easily mistaken for other species, is not included on this list. Several of the records supplied by HBC go into a high level of detail in the description provided, often describing plumage coloration that indicates various races of golden plover from 'northern' breeding grounds. The accuracy of records in terms of species is considered to be high confidence for all sources used.

#### **4.1.3 Treatment and Analysis of Data**

- Data from the three primary sources has been combined into a single data set with standardised data fields. A total of 1544 records of golden plover are available.
- All data older than 1990 has been removed from the data set, along with all data from an unknown source type. These records have been considered as historic, and their value in determining present distribution as limited, or it is unclear as to how the location accuracy should be treated in the assessment. A total of 21 records were removed in this way.
- Data supplied by West Yorkshire Ecological Services and recorded as part of the 2014 South Pennine Moors Breeding Bird Survey (Keystone Environmental, 2014) was removed from the data set, as this is a duplicate of data supplied by Natural England. A total of 12 additional records were removed in this way.
- Where a date range has been provided for records, as with many records from HBC, the record is treated as originating on the first date. Of 799 records provided with a date range, 49 had start and end dates that differed.
- Where only a year is provided for a record it has been assumed that the record is from the month of May, which has allowed these records to be potentially treated as breeding birds or as birds on passage to northern breeding grounds (see below for

definition of breeding and passage birds). A total of 47 records were provided with a year only date. These years were 2014, 2005 or 1990.

- Where the abundance has been given as “present” only or no abundance was provided (total of 63 records), these have been mapped and the abundance assumed as 1 for the purpose of identifying likely passage birds (see below).
- Likely passage birds, i.e. those migrating to breeding ground in northern Europe, have been identified as records of 100 individuals or more present in April and May. A total of 26 records of likely passage birds have been identified in this way.
- Breeding birds are defined as those not on passage (see above) and present in May and June. A total of 732 records of likely breeding birds have been identified in this way.
- Other records, i.e. not passage birds or birds on functionally connected land, have been identified as the total data set excluding records from May and June, and excluding records of 100 individuals or more occurring in April. These records have been termed pre/post breeding.
- It is worth noting that these species records may include birds in flight, alongside those records where birds have been recorded on the ground; this is most likely to occur where the number of recorded birds is higher and most likely relates to passage birds.

## **4.2 Data Mapping**

### **4.2.1 Seasonal Golden Plover Distribution in Kirklees**

The data categorised according to the above process has been mapped for the Kirklees area, and immediately adjoining areas. Maps have been produced showing the South Pennine Moors SPA (Phase 1 and Phase 2) (Natural England, 2013), distribution of blanket bog habitats (Natural England, 2013), urban areas and slope, with golden plover records plotted separately as pre/post breeding birds (Figure 1), likely passage birds (Figure 2) and likely breeding birds (Figure 3). Within these figures the separate data categories identified in section 4.1.2 have been displayed.

Slope has been displayed on the maps as a colour ramp calculated using QGIS from OS Terrain 5 Digital Terrain Model (DTM) data. This underlying data is a DTM of the bare Earth comprised of a grid of height values at 5 m horizontal intervals. The DTM has been used to calculate slope values for individual cells of the model, which have then been categorised and displayed on the map as varying colour intensities. Darker renders indicate steeper slopes.

Urban areas have been identified as part of the Local Plan process and the layer reused for this purpose. Urban areas have been identified by digitising the outer extent of significant areas of development. Individual buildings, such as farmhouses and barns, have been disregarded in this process.

#### **4.2.2 Land in Kirklees Functionally Connected to the SPA**

In addition to the above maps, aerial imagery and slope have been plotted together with the distribution of likely breeding birds (as shown on Figure 3). The purpose here is to use information about factors that influence the use of particular areas by golden plovers (see section 3.3.5 above), together with the location of area known to be used by golden plover during the breeding season, to identify areas within Kirklees that represent potential functionally connected land, i.e. those areas potentially suitable for use by golden plover during the breeding season but for which there is no evidence of this use.

Figure 4 indicates areas of 'known functionally connected land', which incorporate the known distribution of golden plover outside of the SPA during the breeding season (as identified on Figure 3). The areas of 'potential functionally connected land' shown incorporate these areas and other areas with similar characteristics of land form and land use. Detailed habitat information has not been used in identifying these areas, which are intended to identify broad areas that are potentially accessible to golden plover while nesting within the SPA. The areas identified in this way are shown on Figure 4 and have been used in the assessments presented in section 5.3.

#### **4.3 Habitat Survey**

The habitat survey data collected by Tom Stephenson, an experienced ecologist, as part of the previous HRA has been reused here and is presented in Appendix 2. For completeness, the survey method is outlined below. Data was collected September 2016.

All allocation sites assessed in this report were surveyed to collect information on the nature of the habitats present that would indicate the suitability, or otherwise, for SPA breeding birds, including:

- Phase 1 habitat classification of the habitats at a field level.
- Where grassland habitats were recorded:
  - A measurement of typical sward height and vegetation structure.
  - Information on grassland management, including grazing species and/or cutting regime.
- Presence of flushes and/or marshy grassland within the field unit.

An additional visit to each site was undertaken in February 2017 to record the presence of molehills as an indicator of earthworm density.

#### **4.4 Assessment**

##### **4.4.1 Factors affecting SPA Qualifying Feature Presence at Allocation Sites**

A description of the types of habitat that are potentially suitable for use by golden plover, curlew and twite is provided in section 3. This information has been used together with the

results of the habitat survey described above and the mapped distribution of the species (where mapping has been undertaken) to assess, in a qualitative way, the suitability of individual field units for supporting SPA birds during the breeding season.

## **5 Results and Discussion**

### **5.1 Maps Included**

The figures produced following the protocol described in section 4.2 are provided in section 8 and include:

- Figure 1 – pre/post breeding records
- Figure 2 – likely passage records
- Figure 3 – likely breeding records
- Figure 4 – functionally connected land (key diagram)

### **5.2 Distribution of Golden Plover in Kirklees**

Using existing data records, the location of Known Functionally Connected land has been mapped, by highlighting all concentrations of likely breeding golden plover (see Figure 3), and is indicated on Figure 4. Based on the location of Known Functionally Connected Land for golden plover and information about the selection of foraging sites by this species summarised above, Potential Functionally Connected Land has also been identified and is indicated on Figure 4. These areas are located on the plateaus between the sloping ground of the valleys, through which the River Colne, Meltham Dike and River Holme and their tributaries flow from the South Pennine Moors.

None of the proposed allocation sites are within areas of Known Functionally Connected Land and, with the exception of ME1966, none of the allocation sites are within areas identified as Potential Functionally Connected Land. With the exception of ME1966, all allocation sites are immediately adjacent to residential development and/or on the slopes of river valleys. As golden plover have been shown to avoid steeply sloping sites and are disturbed by human activity within approximately 200 m, these sites are considered highly unlikely to be suitable as foraging sites for golden plover during the breeding season.

### **5.3 Site Assessments**

The individual site assessments presented below are based on an understanding of the factors affecting the suitability of areas of habitat as a foraging resource for the species included within the assessment. The assessments are accompanied by tables displaying the factors that, as identified in section 3, affect the suitability of sites for foraging SPA birds. No weighting has been given to the importance of individual factors.

### 5.3.1 Allocation E1866

**Table 2: factors affecting the suitability of areas for foraging golden plover (*Pluvialis apricaria*) used to guide the assessment of allocation E1866**

Field Unit	Factors Affecting Suitability					
	Does the field support grassland or arable habitats?	Is the field level, rather than steeply sloping?	Are molehills present?	Is the field managed as pasture?	Is the field remote from potential sources of disturbance?	Is the site within or adjacent to an area identified as potential functionally connected land?
TN1	No	-	-	-	-	-
TN2	No	-	-	-	-	-
TN3	Yes	Yes	No	Yes	No	No
TN4	Yes	Yes	No	No	No	No
TN5	Yes	Yes	No	No	No	No
TN6	Yes	Yes	No	Yes	No	No

The site is located on the eastern edge of Meltham, Holmfirth. Only the grassland habitat of TN3 is of a sufficiently large area with sufficiently short sward height to be of potential value as foraging habitat for golden plover. However, this field is bordered to the north and south by public footpaths, which will result in disturbance, and no molehills were recorded during the survey in 2017, which suggests a low abundance of earth worms. A public footpath runs along the southern boundary of the site, which is expected to result in disturbance in this area of the site. The habitats are therefore considered to be suboptimal in relation to foraging golden plover.

In addition to the suboptimal nature of the habitats on site, the location of the site to the east of the town of Meltham, which would be require SPA nesting birds to overfly approximately 1.38 km of urban development, is likely to discourage golden plover from accessing the site.



### 5.3.2 Allocation H67

**Table 3: factors affecting the suitability of areas for foraging golden plover (*Pluvialis apricaria*) used to guide the assessment of allocation H67**

Field Unit	Factors Affecting Suitability					
	Does the field support grassland or arable habitats?	Is the field level, rather than steeply sloping?	Are molehills present?	Is the field managed as pasture?	Is the field remote from potential sources of disturbance?	Is the site within or adjacent to an area identified as potential functionally connected land?
TN1	No	-	-	-	-	-
TN2	No	-	-	-	-	-
TN3	No	-	-	-	-	-
TN4	No	-	-	-	-	-
TN5	Yes	Yes	No	Yes	No	No
TN6	Yes	Yes	No	Yes	Yes	No
TN7	Yes	Yes	No	Yes	No	No

The site is located on the eastern edge of Meltham, Holmfirth. Potentially suitable habitats within the site are the grasslands of TN5, TN6 and TN7. These habitats have sufficiently short sward height to be of value to foraging golden plover, however, no molehills were recorded during the survey in 2017, which indicates that the site is likely to have a low abundance of earthworms. These habitats are therefore considered to be suboptimal for foraging golden plover.

The location of the site on the east of Meltham would require golden plover nesting in the SPA to overfly approximately 0.77 km of urban development, which is considered to be a discouraging factor.

This site is currently under construction, and is unsuitable for use foraging habitat.

### 5.3.3 Allocation H200

**Table 4: factors affecting the suitability of areas for foraging golden plover (*Pluvialis apricaria*) used to guide the assessment of allocation H200**

Field Unit	Factors Affecting Suitability					
	Does the field support grassland or arable habitats?	Is the field level, rather than steeply sloping?	Are molehills present?	Is the field managed as pasture?	Is the field remote from potential sources of disturbance?	Is the site within or adjacent to an area identified as potential functionally connected land?
TN1	Yes	Yes	No	No	No	No

The site is located on the western edge of Meltham, Holmfirth. Mill Moor Road forms the northern boundary of the site and residential properties are located on the east and west boundaries. This is expected to result in disturbance to this small field.

At the time of the survey in September 2016 the sward height was approximately 35 cm with little accumulated leaf litter, indicating that the field is cut for silage or hay with no aftermath grazing. Typical first silage cuts are taken in June in northern England, and it can therefore be expected that sward height for at least the first part of the breeding season are too high to be suitable for golden plover foraging.

The site is considered to be too highly disturbed and the sward height too high, and therefore this site is considered to be unsuitable for golden plover foraging.

This site is currently under construction, and is unsuitable for use foraging habitat.

### 5.3.4 Allocation H288A

**Table 5: factors affecting the suitability of areas for foraging golden plover (*Pluvialis apricaria*) used to guide the assessment of allocation H288A**

Field Unit	Factors Affecting Suitability					
	Does the field support grassland or arable habitats?	Is the field level, rather than steeply sloping?	Are molehills present?	Is the field managed as pasture?	Is the field remote from potential sources of disturbance?	Is the site within or adjacent to an area identified as potential functionally connected land?
TN1	Yes	Yes	No	No	No	No
TN2	Yes	Yes	No	No	No	No
TN3	Yes	Yes	No	No	No	No
TN4	Yes	Yes	No	No	No	No
TN5	Yes	Yes	No	No	No	No

The site comprising a series of small fields is located on the eastern side of Hade Edge, Holmfirth. Dunford Road forms the western boundary and the site with housing beyond this and to the north of the site. The site is therefore considered to be highly disturbed.

At the time of the survey in September 2016 the sward height was approximately 25 cm in all fields with little accumulated leaf litter, indicating that the field is cut for silage or hay with no aftermath grazing.

The site is considered to be too highly disturbed and the sward height too high for the site to be suitable for golden plover foraging. The RSPB has been consulted directly in relation to this site and also considers this site to be unsuitable for golden plover (pers. comm. Tim Melling, RSPB Senior Conservation Officer for Northern England).

### 5.3.5 Allocation H342

**Table 6: factors affecting the suitability of areas for foraging golden plover (*Pluvialis apricaria*) used to guide the assessment of allocation H342**

Field Unit	Factors Affecting Suitability					
	Does the field support grassland or arable habitats?	Is the field level, rather than steeply sloping?	Are molehills present?	Is the field managed as pasture?	Is the field remote from potential sources of disturbance?	Is the site within or adjacent to an area identified as potential functionally connected land?
TN1	Yes	No	No	No	No	No
TN2	Yes	No	No	Yes	No	No
TN3	Yes	Yes	No	Yes	No	No
TN4	Yes	No	No	Yes	No	No
TN5	Yes	No	No	Yes	No	No

The site is located on the western edge of Meltham, Holmfirth. Mill Moor Road forms the southern boundary and all fields within the site with the exception of the most southerly (TN3) slope steeply towards Meltham Dike at the north. Residential properties are located to the east and west of the most southerly field and at the northwest corner of the site.

During the survey undertaken in September 2016 the grassland vegetation of fields TN1 and TN2 was found to be rank (i.e. much accumulated leaf litter), with a sward height of between 10 and 30 cm. This indicates that the fields are not managed and that the sward height can be expected to be similar during the golden plover breeding season. Due to the steep slope and tall sward, fields TN1 and TN2 are considered to be unsuitable for foraging golden plover.

Fields TN4 and TN5 are considered to be too small and steeply sloping to be suitable for golden plover foraging, despite the short sward height.

The whole site is disturbed by the presence of residential properties, however this is most pronounced around field TN3, which is adjacent to Mill Moor Road, bordered by housing and used to graze horses, which will be attended by people regularly. This field is considered unsuitable for supporting foraging golden plover.

### 5.3.6 Allocation H343

**Table 7: factors affecting the suitability of areas for foraging golden plover (*Pluvialis apricaria*) used to guide the assessment of allocation H343**

Field Unit	Factors Affecting Suitability					
	Does the field support grassland or arable habitats?	Is the field level, rather than steeply sloping?	Are molehills present?	Is the field managed as pasture?	Is the field remote from potential sources of disturbance?	Is the site within or adjacent to an area identified as potential functionally connected land?
TN1	Yes	Yes	No	Yes	Yes	No
TN2	Yes	Yes	No	Yes	Yes	No

The site is located on the eastern edge of Meltham, Holmfirth, and is located between an area of woodland to the east and residential properties to the west. Although the sward height is suitable for use by foraging golden plover, no molehills were recorded during the survey in 2017, which suggests a low abundance of earthworms. The habitats are therefore considered to be suboptimal for foraging golden plover. In addition the location of the site on the east of Meltham would require golden plover nesting in the SPA to overfly approximately 0.72 km of urban development, which is considered likely to discourage golden plover from accessing the site.

### 5.3.7 Allocation H356

#### **Twite**

Twite have been shown to fly up to 3 km to forage in suitable habitats, therefore this site is within accessible range of Phase 2 of SPA. However, twite forage exclusively on unimproved grasslands managed as hay meadows. The habitats of this site are predominantly improved and semi-improved grasslands and do not include habitats suitable for foraging twite.

The site is not considered to include habitats suitable for supporting foraging twite and no other mechanism by which twite could be affected by development within the site has been identified.

## Curlew

**Table 8: factors affecting the suitability of areas for foraging curlew (*Numenius arquata*) used to guide the assessment of allocation H356**

Field Unit	Factors Affecting Suitability				
	Does the field support grassland, arable, or heath vegetation?	Is the field less than 1 km from Phase 2 of the SPA?	Does the field support habitats, such as wet flush, indicative of poor drainage?	Is the field the closest potentially suitable foraging habitat to Phase 2 of the SPA?	Is the field remote from potential sources of disturbance?
TN1	Yes	No	Yes	No	No
TN2	Yes	No	Yes	No	No
TN3	Yes	No	No	No	No
TN4	Yes	No	No	No	No
TN5	Yes	No	No	No	No

The site is approximately 2.37 km from the closest part of Phase 2 of the SPA. Curlew have been shown to have a strong preference for foraging sites close to the nest, and select nest sites at least in part according to the availability of nearby foraging areas.

Curlew typically forage within 1 km of the nest site and use the closest available foraging site where possible. Due to the distance between the site and the SPA and the availability of habitats suitable for foraging curlew between the site and the SPA, which any curlew originating in the SPA would have to overfly, it is considered highly unlikely that curlew nesting within Phase 2 of the SPA are also foraging with the site.

## Golden Plover

**Table 9: factors affecting the suitability of areas for foraging golden plover (*Pluvialis apricaria*) used to guide the assessment of allocation H356**

Field Unit	Factors Affecting Suitability					
	Does the field support grassland or arable habitats?	Is the field level, rather than steeply sloping?	Are molehills present?	Is the field managed as pasture?	Is the field remote from potential sources of disturbance?	Is the site within or adjacent to an area identified as potential functionally connected land?
TN1	Yes	No	No	Yes	No	No
TN2	Yes	No	No	Yes	No	No
TN3	Yes	No	No	Yes	No	No
TN4	Yes	No	No	Yes	No	No
TN5	Yes	No	No	No	No	No

The site is located on the western edge of Slaithwaite, Huddersfield. The roughly triangular site slopes up to Lingards Road at the south of the site, and beyond this is housing that overlooks the site. To the north of the site, along Manchester Road, is a row of houses that back onto the site. A footpath runs along the western boundary of the site. The largest field within the site is used to graze horses, which will be attended by people on a reasonably regular basis. Due to its location and landuse within and surrounding the site, the site is considered to be heavily disturbed by human activity. The site is also relatively steeply sloping over much of the area. No molehills were recorded during the survey in 2017.

Due to the levels of disturbance, the topography of the site and the likely low abundance of earthworms, the habitats within the site are considered unsuitable for foraging golden plover.

### 5.3.8 Allocation H626

**Table 10: factors affecting the suitability of areas for foraging golden plover (*Pluvialis apricaria*) used to guide the assessment of allocation H626**

Field Unit	Factors Affecting Suitability					
	Does the field support grassland or arable habitats?	Is the field level, rather than steeply sloping?	Are molehills present?	Is the field managed as pasture?	Is the field remote from potential sources of disturbance?	Is the site within or adjacent to an area identified as potential functionally connected land?
TN1	Yes	Yes	No	No	No	No
TN2	Yes	No	No	No	No	No

The site is located at the southwest of Holmbridge, Holmfirth. A public footpath runs along the southern boundary of the site, which slopes down towards Dobb Top Road at the north. The eastern boundary of the site abuts the rear garden of the residential properties along Bankfield Drive.

No molehills were recorded during the survey in 2017, indicating low abundance of earthworms, and the sward height in September 2016 was approximately 15 cm and there was evidence of recent mowing. This indicates that the site is managed for silage or hay and that the sward height will be too high during the golden plover breeding season to facilitate foraging by this species.

Due to the sloping nature of the site, the level of disturbance and the sward height, the habitats of this site are considered unsuitable for foraging golden plover.



### 5.3.9 Allocation ME1966

**Table 11: factors affecting the suitability of areas for foraging golden plover (*Pluvialis apricaria*) used to guide the assessment of allocation ME1966**

Field Unit	Factors Affecting Suitability					
	Does the field support grassland or arable habitats?	Is the field level, rather than steeply sloping?	Are molehills present?	Is the field managed as pasture?	Is the field remote from potential sources of disturbance?	Is the site within or adjacent to an area identified as potential functionally connected land?
TN1	Yes	Yes	No	Yes	No	Yes
TN2	Yes	Yes	No	Yes	No	Yes
TN3	Yes	Yes	No	Yes	No	Yes
TN4	Yes	Yes	No	No	No	Yes
TN5	Yes	Yes	No	Yes	No	Yes
TN6	No	-	-	-	-	-
TM7	No	-	-	-	-	-

This site is located on Cartworth Moor, approximately 0.7 km southeast of Holmbridge, Holmfirth and 1.38 km northwest of Hade Edge, Holmfirth, and is the only site of those considered in this assessment to be located within an area identifies as ‘potential functionally connected land’.

At this site fields TN1, TN2 and TN3 are permanent pastures with low sward height, and as such are potentially suitable for foraging golden plover. However, no molehills were recorded during the 2017 survey, indicating low abundance of earthworms, and active quarry sites are located to the north and south of this area. Due to the levels of disturbance and likely low abundance of earthworms, these fields are considered to be suboptimal for foraging golden plover.

Field TN4 is located immediately to the east of an active quarry and is managed for silage. Due to the level of disturbance and the high sward height during the golden plover breeding season, this field is considered unsuitable for golden plover.

The only other field at this site supporting a grassland habitat is TN5, which is small and located immediately adjacent to the farm buildings. No molehills were recorded in this field. Due to the level of disturbance and the small size of the field, TN5 is considered unsuitable for foraging golden plover.

#### **5.4 Mitigation Contained in Local Plan Policy**

All of the sites have been identified as currently being of low potential to support qualifying bird species from the SPA. In addition, mitigation has been included within the Local Plan, as set out below.

##### **Plan Policy Providing Mitigation**

Appendix 3 includes the Publication Draft Local Plan Biodiversity and Geodiversity Policy (PLP 30). It is recommended that the following text replaces the previous paragraph 13.10, to provide clarification to the policy wording with specific regard to the mitigation required:

*“In accordance with the findings of the Habitats Regulations Assessment, for those development allocations within 2.5km of the SPA, further surveys will be required at planning application stage to assess detailed impacts on SPA birds and, if found to be necessary, appropriate avoidance and/or mitigation measures will be required to address any identified impacts in line with policy PLP30. Suitable avoidance and mitigation-measures may include:*

- *Avoidance of areas used by significant numbers of SPA birds (to be determined by a project level Habitats Regulations Assessment).*
- *Provision of equivalent or greater quantity and quality of replacement habitat onsite (or as a last resort off site within 2.5km) with improved management to ensure use by SPA birds.*
- *Timing of works (construction, operation and decommissioning) outside the period most frequently used by SPA birds.*
- *Monitoring of impacts to assess bird use over time”*

##### **Allocation Site Boxes**

The site allocation boxes in the Publication Draft Local Plan Allocation and Designations document for Employment, Housing, Minerals Extraction and Mixed Use sites within 2.5km of the SPA boundary include the following text:<sup>1</sup>

*“Assessment required for presence of habitats that are important for off-site foraging by South Pennine Moors SPA qualifying bird species (i.e. functionally connected*

---

<sup>1</sup> Due to an editing error this text was not previously added to the site boxes ME1966 and H342, this text will be inserted.

land.) Avoidance and mitigation measures may be required to address any identified impacts in line with para 13.10 (as revised) and Policy PLP30”.

To provide additional clarification to the site box it is recommended that the above underlined text is added to the existing text box wording.

## 6 Conclusions

No habitat suitable for foraging twite has been recorded in the single allocation site within 2.5 km of Phase 2 of the South Pennine Moors SPA. It is therefore concluded that there is no likely significant effect in respect of twite.

The single allocation site within 2.5 km of Phase 2 of the South Pennine Moors SPA is potentially suitable for supporting foraging curlew, although this site is also separated from the SPA by other potentially suitable habitats. Due to this separation it is considered highly unlikely that the site is used by curlew nesting within Phase 2 of the SPA. Without mitigation, there would be a low residual risk of the site being used by curlew that are breeding in Phase 2 of the SPA.

All allocation sites included within this assessment are found to contain habitats that are either suboptimal or unsuitable for supporting foraging golden plover. Without mitigation, therefore, there is a low residual risk of the sites being used by golden plover that are breeding in Phase 1 or Phase 2 of the SPA.

When consideration is given to the mitigation contained within the policy (PDLP 30) and supporting text of the policy (specifically revised text 13.10), as set out in section 5.4 above, it can be concluded that there are **no adverse effects on the integrity of the South Pennine Moors SPA (Phase 1 and Phase 2) as a result of physical disturbance or loss of habitat, either onsite or offsite**, as a result of implementation of the Kirklees Local Plan.

## 7 References

- Bengston, S. A. (1976). Effect of bird predation on Lumbricid. *Oikos*(27), 9-12.
- Berg, Å. (1992). Habitat selection by breeding Curlews *Numenius arquata* on mosaic farmland. *Ibis*, 134(4), 355–360.
- British Trust for Ornithology. (n.d.). *Bird Track*. Retrieved February 24, 2017, from BTO Website: <http://app.bto.org/birdtrack/main/data-home.jsp>
- English Nature. (1995, January). *European Site Conservation Objectives for South Pennine Moors (Phase II) SPA (UK9007022)*. Retrieved January 23, 2017, from Natural England: [Access to Evidence: http://publications.naturalengland.org.uk/publication/4885083764817920](http://publications.naturalengland.org.uk/publication/4885083764817920)
- English Nature. (2000, November). *European Site Conservation Objectives for Peak District Moors (South Pennine Moors Phase I) SPA (UK9007021)*. Retrieved January 23, 2017, from Natural England: [Access to Evidence: http://publications.naturalengland.org.uk/publication/6145889668169728](http://publications.naturalengland.org.uk/publication/6145889668169728)
- Finney, S. K., Pearce-Higgins, J. W., & Yalden, D. W. (2005). The effects of recreational disturbance on an upland breeding bird, the golden plover *Pluvialis apricaria*. *Biological Conservation*, 121(1), 53-63.
- Fisher, G., & Walker, M. (2015). Habitat restoration for curlew *Numenius arquata* at the Lake Vyrnwy reserve, Wales. *Conservation Evidence*, 12, 48-52.
- JNCC. (2016, October 20). *The status of 'qualifying' species on individual SPAs*. Retrieved January 23, 2017, from Joint Nature Conservation Committee website: <http://jncc.defra.gov.uk/page-5485>
- Keystone Environmental. (2014). *South Pennine Moors SSSI/SPA Phase 2: Breeding Bird Surveys 2014*. Technical report [to Natural England].
- Liley, D., Cruickshanks, K., Waldon, J., & Fearnley, H. (2011). *Exe Estuary Disturbance Study*. Wareham: Footprint Ecology.
- LUC. (2016). *Publication Draft Kirklees Local Plan: Habitats Regulations Assessment Report*. Technical report [to Kirklees Council].
- Natural England. (2013, May). *Magic Map*. Retrieved January 23, 2017, from Magic: <http://magic.defra.gov.uk/MagicMap.aspx>
- Natural England. (2015, March 28). *Wild birds: surveys and mitigation for development projects*. Retrieved February 24, 2017, from GOV.UK: <https://www.gov.uk/guidance/wild-birds-surveys-and-mitigation-for-development-projects>

- Natural England. (2016, August 12). *Protected species: how to review planning applications*. Retrieved February 24, 2017, from GOV.UK: <https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications#standing-advice-for-protected-species>
- Pearce-Higgins, J. W., & Yalden, D. W. (2003). Variation in the use of pasture by breeding European Golden Plovers *Pluvialis apricaria* in relation to prey availability. *Ibis*(145), 365-381.
- Pearce-Higgins, J. W., Finney, S. K., Yalden, D. W., & Langston, R. H. (2007). Testing the effects of recreational disturbance on two upland breeding waders. *Ibis*, 149(s1), 45–55.
- Pearce-Higgins, J. W., Stephen, L., Douse, A., & Langston, R. H. (2012). Greater impacts of wind farms on bird populations during construction than subsequent operation: results of a multi-site and multi-species analysis. *Journal of Applied Ecology*, 49(2), 386–394.
- Robson, G., & Percival, S. M. (2002). The use of marginal farmland by curlew *Numenius arquata* breeding on upland moors. *Aspects of Applied Biology*(67), 75–84.
- Valkama, J., Robertson, P., & Currie, D. (1998). Habitat selection by breeding curlews (*Numenius arquata*) on farmland: the importance of grassland. *Annales Zoologici Fennici*(35), 141–148.
- Whitfield, D. P., & Thomas, C. J. (2006). *Analysis of a survey of golden plover around the Caithness and Sutherland Peatlands Special Protection Area*. Scottish Natural Heritage Commissioned Report No. 181 (ROAME No. F01LB205/5).
- Whittingham, M. J., Percival, S. M., & Brown, A. F. (2000). Time budgets and foraging of breeding golden plover *Pluvialis apricaria*. *Journal of Applied Ecology*, 37(4), 632–646.
- Yalden, P. E., & Yalden, D. W. (1990). Recreational disturbances of breeding golden plovers *Pluvialis apricarius*. *Biological Conservation*, 51(4), 243-262.

## **8 Figures**

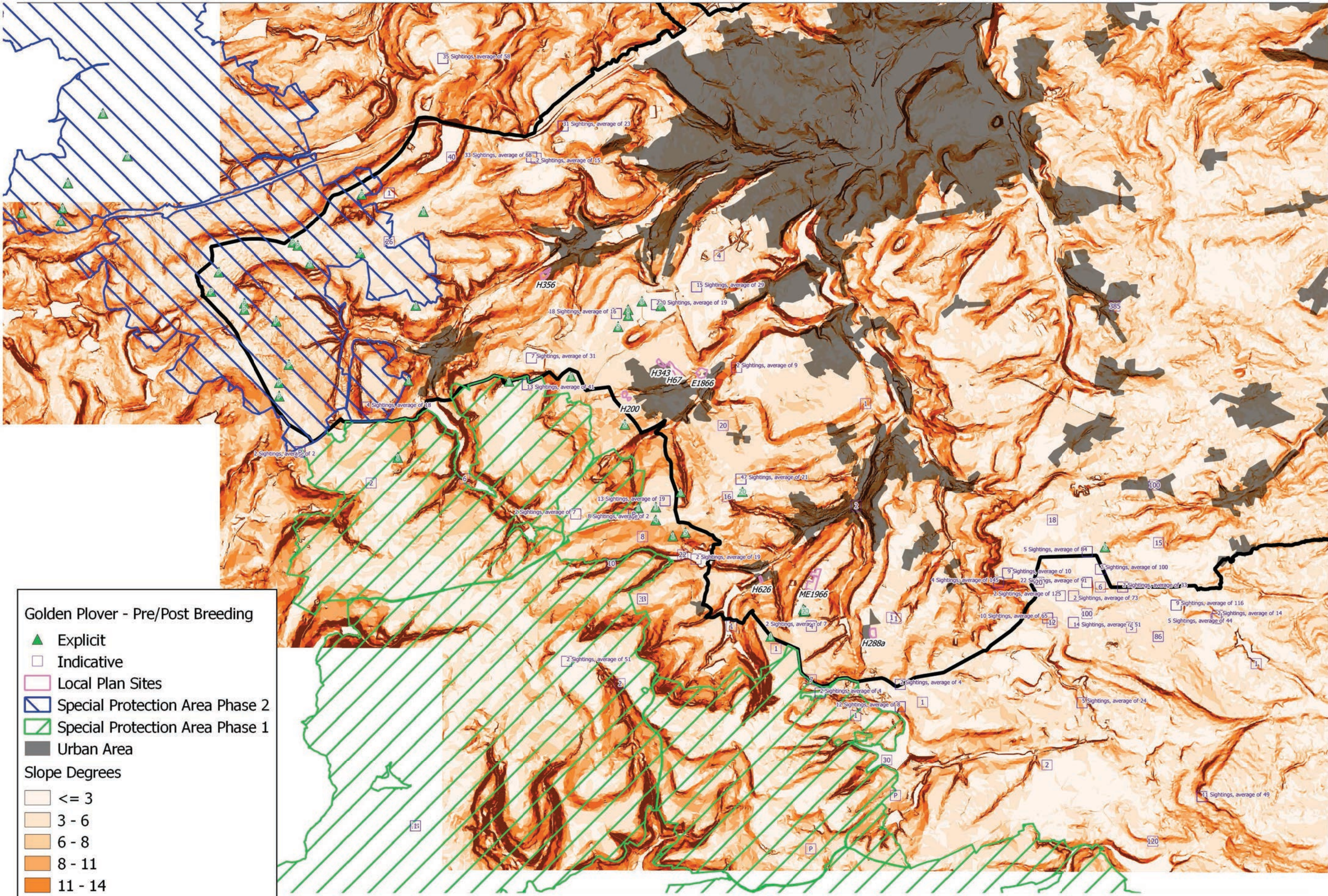
*Figure 1 – pre/post breeding records*

*Figure 2 – likely passage records*

*Figure 3 – likely breeding records*

*Figure 4 – functionally connected land (key diagram)*

**FIGURE 1 - GOLDEN PLOVER PRE/POST BREEDING RECORDS**

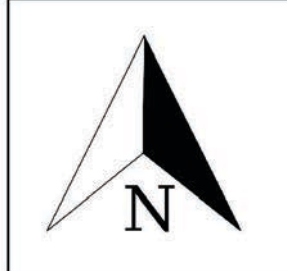


**Golden Plover - Pre/Post Breeding**

- ▲ Explicit
- Indicative
- Local Plan Sites
- Special Protection Area Phase 2
- Special Protection Area Phase 1
- Urban Area

**Slope Degrees**

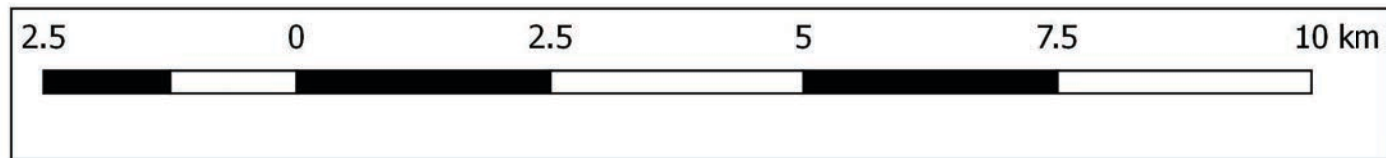
- <= 3
- 3 - 6
- 6 - 8
- 8 - 11
- 11 - 14
- 14 - 17
- 17 - 19
- 19 - 21
- > 21



Date: 23/02/2017  
Scale: 1:75,000

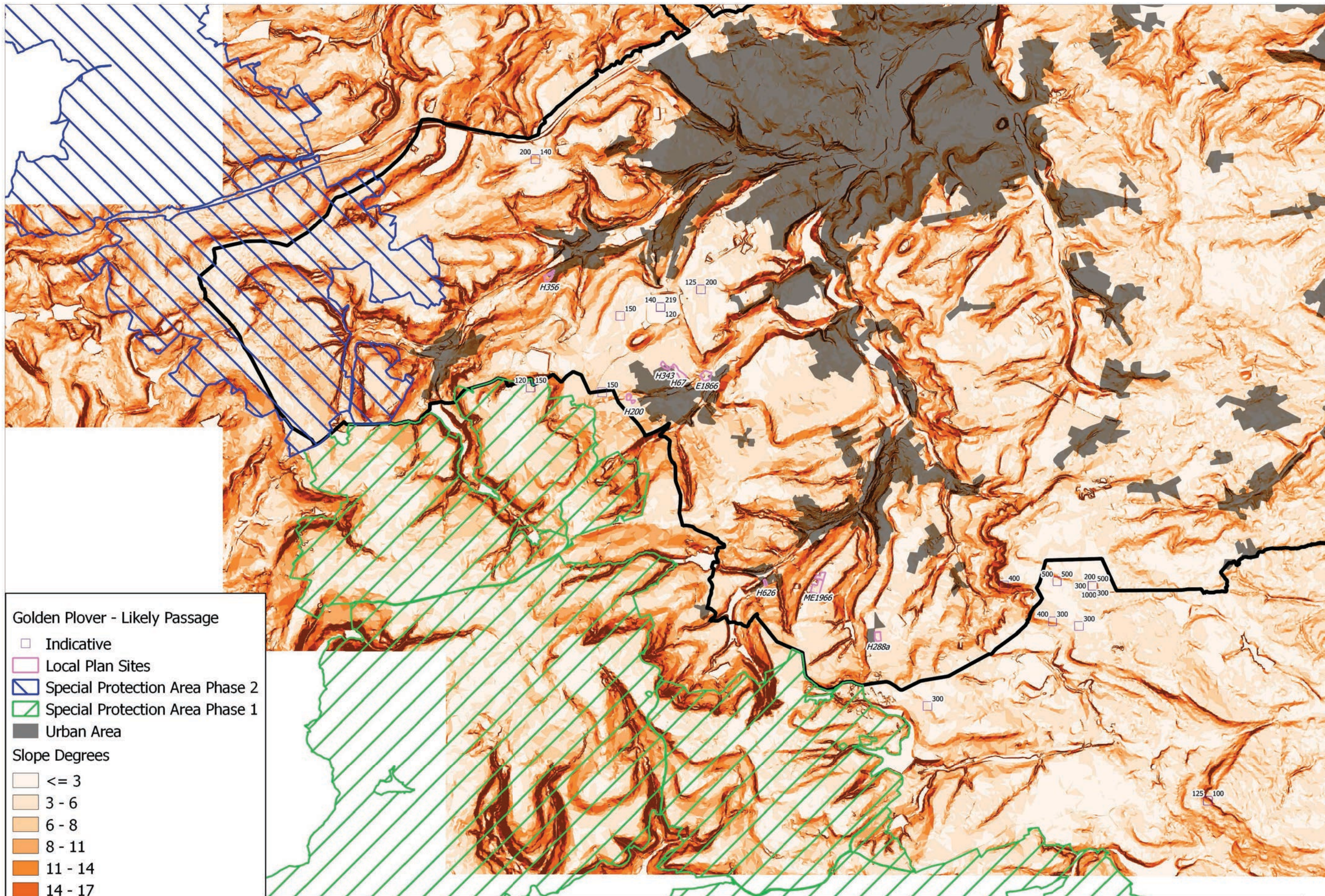
Policy Unit  
Research &  
Intelligence Team

© Crown Copyright  
and database right  
2017. Ordnance  
Survey 100019241





**FIGURE 2 - GOLDEN PLOVER LIKELY PASSAGE RECORDS**

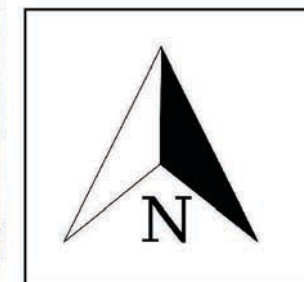
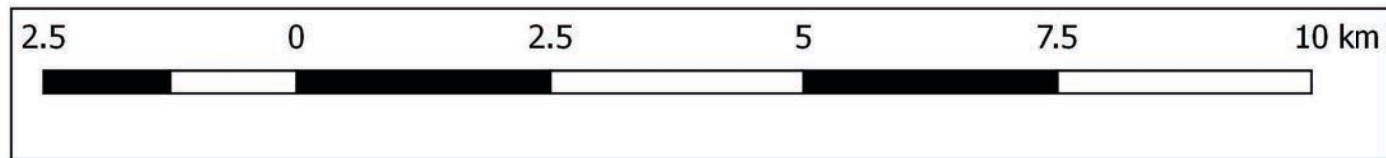


**Golden Plover - Likely Passage**

- Indicative
- Local Plan Sites
- ▨ Special Protection Area Phase 2
- ▨ Special Protection Area Phase 1
- Urban Area

**Slope Degrees**

- ≤ 3
- 3 - 6
- 6 - 8
- 8 - 11
- 11 - 14
- 14 - 17
- 17 - 19
- 19 - 21
- > 21



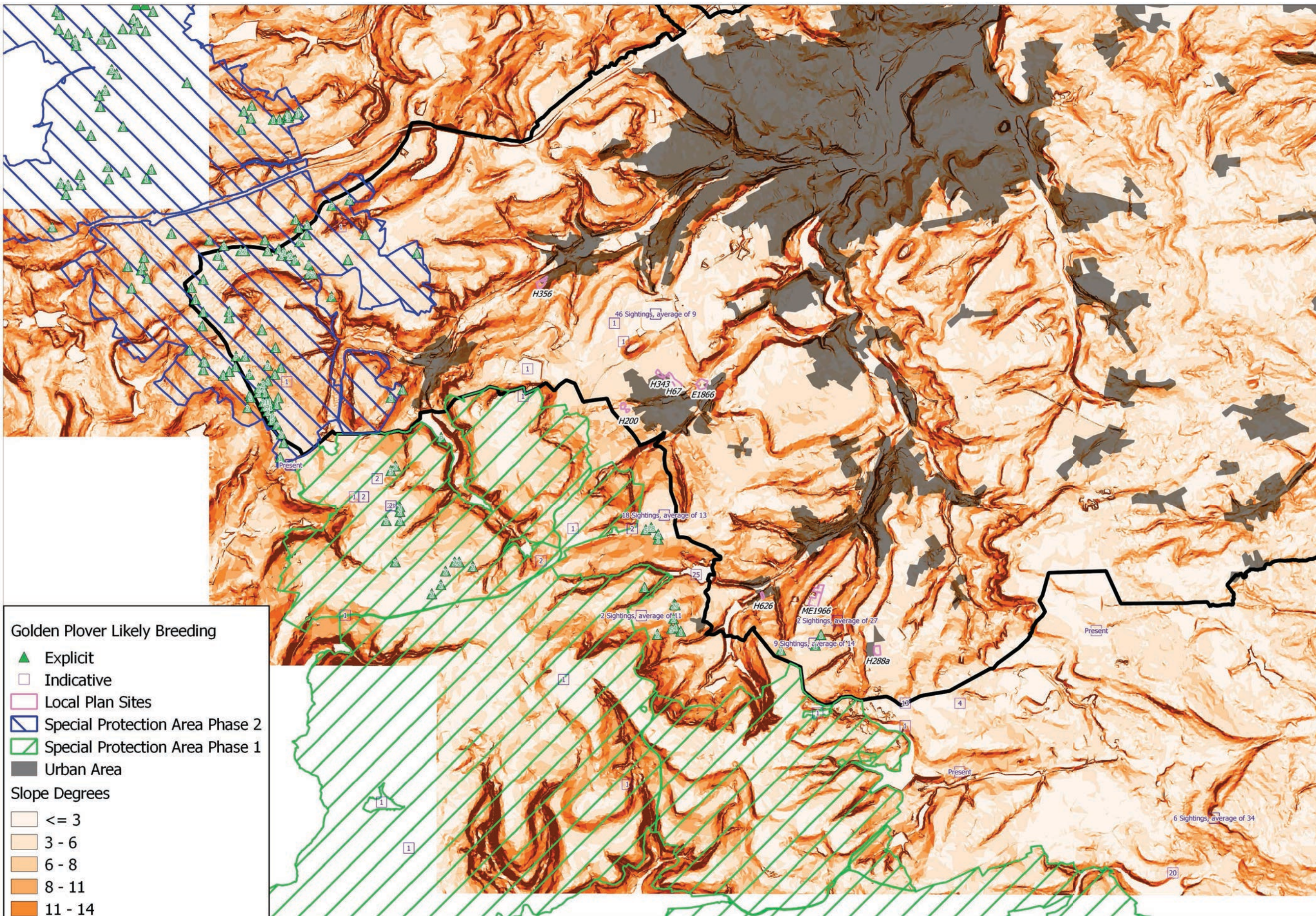
Date: 23/02/2017  
Scale: 1:75,000

Policy Unit  
Research &  
Intelligence Team

© Crown Copyright  
and database right  
2017. Ordnance  
Survey 100019241



**FIGURE 3 - GOLDEN PLOVER LIKELY BREEDING RECORDS**

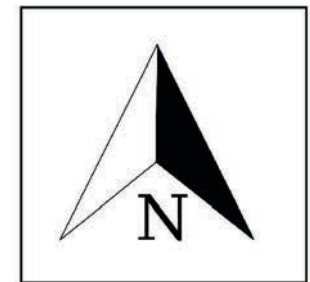
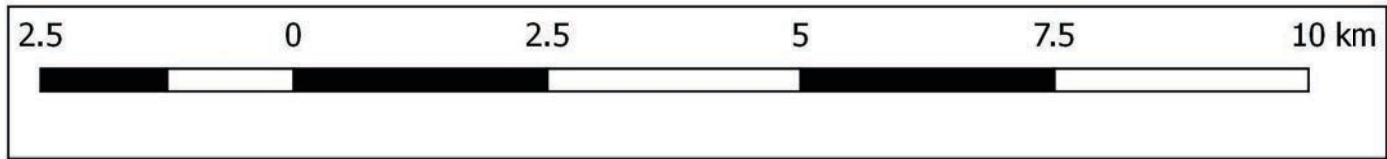


**Golden Plover Likely Breeding**

- ▲ Explicit
- Indicative
- Local Plan Sites
- Special Protection Area Phase 2
- Special Protection Area Phase 1
- Urban Area

**Slope Degrees**

- <= 3
- 3 - 6
- 6 - 8
- 8 - 11
- 11 - 14
- 14 - 17
- 17 - 19
- 19 - 21
- > 21



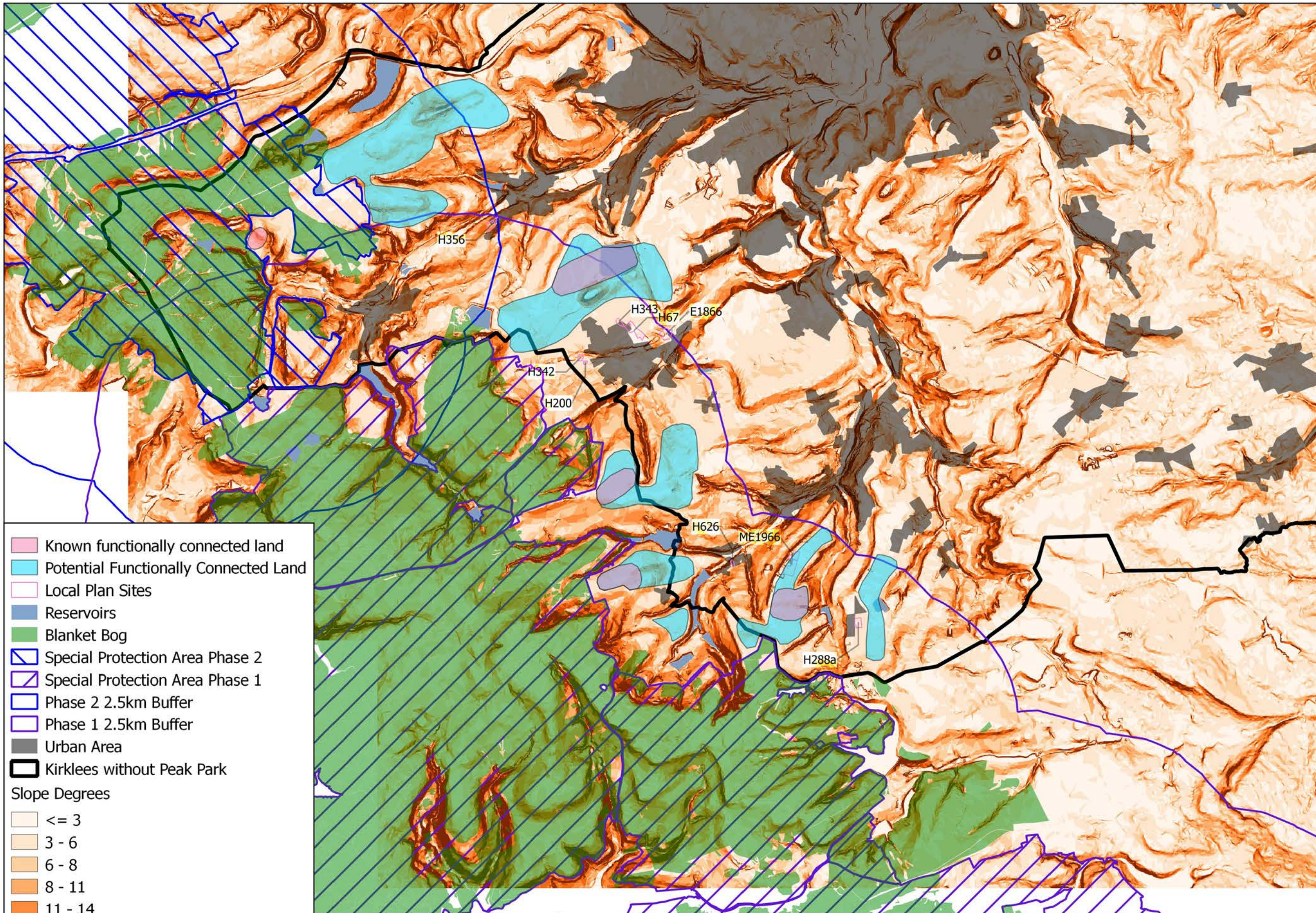
Date: 23/02/2017  
Scale: 1:75,000

Policy Unit  
Research &  
Intelligence Team

© Crown Copyright  
and database right  
2017. Ordnance  
Survey 100019241



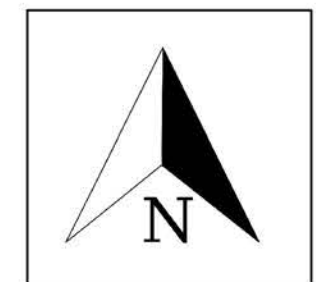
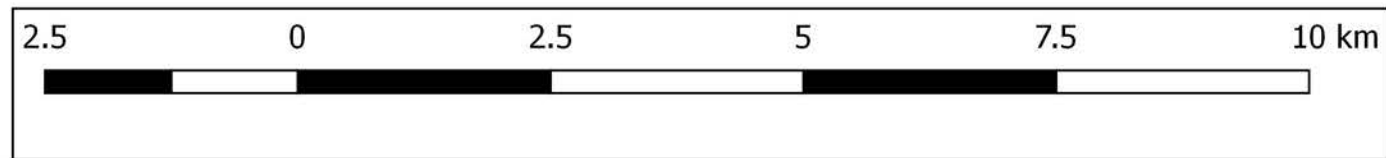
**FIGURE 4 - GOLDEN PLOVER FUNCTIONALLY CONNECTED LAND**



- Known functionally connected land
- Potential Functionally Connected Land
- Local Plan Sites
- Reservoirs
- Blanket Bog
- Special Protection Area Phase 2
- Special Protection Area Phase 1
- Phase 2 2.5km Buffer
- Phase 1 2.5km Buffer
- Urban Area
- Kirklees without Peak Park

**Slope Degrees**

- <= 3
- 3 - 6
- 6 - 8
- 8 - 11
- 11 - 14
- 14 - 17
- 17 - 19
- 19 - 21
- > 21



Date: 02/03/2017  
Scale: 1:75,000

Policy Unit  
Research &  
Intelligence Team

© Crown Copyright  
and database right  
2017. Ordnance  
Survey 100019241



# Appendices

**Appendix 1:**

**Natural England letter dated 19 December 2016**

**Included on next page**

Date: 19 December 2016  
Our ref: 200705



Planning Policy Group  
PO Box B93  
Civic Centre 3  
Market Street  
Huddersfield  
HD1 2JR  
[local.development@kirklees.gov.uk](mailto:local.development@kirklees.gov.uk)

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

T 0300 060 3900

**BY EMAIL ONLY**

Dear Planning Policy Group

**Planning consultation:** Kirklees Publication Draft Local Plan consultations

Thank you for your consultation on the above dated 07 November 2016 which was received by Natural England on the same date.

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

Unfortunately Natural England has had limited capacity to review the Kirklees Publication Draft Local Plan consultations and have therefore concentrated on areas of greatest concern with regards to our interests. If there are any additional specific issues or elements of the consultation documents you would like us to provide comments on then please contact Merlin Ash at [merlin.ash@naturalengland.org.uk](mailto:merlin.ash@naturalengland.org.uk) or on 02080 266382.

**1. Habitats Regulations Assessment**

1.1 Natural England has a number of concerns with the Habitats Regulations Assessment which should, in our view, be addressed in order that the plan can be considered legally compliant.

1.2 Physical damage/loss of habitat

1.2.1 Natural England disagrees with the screening assessments in table 4.4 of the Habitats Regulations Assessment (HRA) report with regards to the following sites as we do not consider that there is sufficient certainty or evidence to rule out likely significant effects on the South Pennine Moors Phase 2 Special Protection Area (SPA) and Peak District Moors (South Pennine Moors Phase 1) SPA with regards to loss of functionally linked land for golden plover and curlew.

- E1866
- H67
- H200
- H342
- H343
- H356
- H626

1.2.3 We note that the assessments of all sites in Appendix 4, with the exception H200, identify habitat on site that is potentially suitable for golden plover and do not consider that the constraints described are sufficient to provide sufficient certainty to rule out use of South Pennine Moors Phase 2 Special Protection Area (SPA) and Peak District Moors (South Pennine Moors Phase 1) SPA

golden plover and curlew. Therefore we advise that all of these allocations should be screened through to the Appropriate Assessment stage.

1.2.4 With regards to the assessment of allocations H288A and ME1966 we do not consider that sufficient evidence has been provided in order to rule out adverse effects on integrity from the loss of these sites. Natural England does not consider that data from the Huddersfield Birdwatchers Group alone is sufficient to determine that these allocations will not affect habitat that is vital for SPA birds. We advise that data from the ecological data centre should be considered along with the 2014 South Pennine Moors Phase 2 breeding bird review survey carried out by Brown and Shepherd. Unfortunately similar bird survey work for the Peak District Moors (South Pennine Moors Phase 1) will not be undertaken until 2017.

1.2.5 With regards to the availability of similar habitat in proximity to these sites we advise that this should only be considered a mitigating factor where there is sufficient evidence to rule out significant functional linkage to the SPA. For instance where surveys have been undertaken which show only intermittent use of the site by a small number of birds.

1.2.6 Natural England advise that, unless robust evidence can be found which clearly demonstrates that the allocations are in areas that are not used by South Pennine Moors Phase 2 Special Protection Area (SPA) and Peak District Moors (South Pennine Moors Phase 1) SPA birds, then bird surveys will need to be undertaken at all of the sites considered in table 4.4 of the Habitats Regulations Assessment report.

1.2.7 We note that Kirklees attended the 'South Pennine/North Pennine Moors – supporting habitat & planning issues' workshop hosted by the RSPB, Bradford MBC and Natural England on 27 September 2016 and advise that you refer to the information provided at that workshop regarding survey design.

### 1.3 Recreation and urban impacts

1.3.1 Natural England are broadly content with the assessment of recreation and urban impacts in paras 5.27 to 5.33 of the HRA report. However we consider that the assessment would benefit from further details of how sufficient suitable alternative green space will be provided through Policy PLP63, what mechanisms exist to deliver mitigation through management plans and which areas will be affected most by the plan.

### 1.4 Air Pollution

1.4.1 Natural England advise that the percentage of the South Pennine Moors Special Area of Conservation (SAC) affected by air pollution from the M62, as described in para 5.44 and 5.45 is a useful or relevant factor in the assessment of air quality impacts from the plan and therefore disagree with the conclusions of appropriate assessment regarding air quality.

1.4.2 We advise that, having identified that the proposed increase in the level of traffic on the M62 is significant, the assessment should include a calculation of the estimated process contribution of this increase in traffic on the sensitive habitats in order to determine how significant this is and therefore whether avoidance, mitigation or compensation measures are necessary.

1.4.3 Without consideration of the sensitivity of the habitats affected and severity of the impact from the plan we do not consider that adverse effects on integrity can be ruled out.

1.4.4 We note that para 5.39 refers to a forthcoming Air Quality Assessment that is forthcoming which may provide sufficient information.

## **2. PDLP Sustainability Appraisal**

2.1 Natural England are broadly content with the Sustainability Appraisal report however we advise that the above concerns regarding the Habitats Regulations Assessment are also relevant to the

Sustainability Appraisal and that this should be updated once these concerns have been addressed.

### **3. PDLP Allocations and Designations**

3.1 Notwithstanding our comments on the Habitats Regulations Assessment set out in section one of this letter (above) Natural England has only limited comments to make on the PDLP Allocations and Designations.

3.2 Natural England has been made aware that allocation H2089 lies immediately adjacent to Jordan and Oliver Wood Local Wildlife Site and advise that the site brief should include avoidance and mitigation measures in order to avoid significant impacts upon this locally designated site.

### **4. PDLP Strategies and Policies**

4.1 Natural England has no further comments to make on the PDLP Strategies and Policies document.

### **5. PDLP Green Belt Boundary**

Natural England has no comments to make on this consultation document.

### **6. PDLP Rejected Site Options**

Natural England has no comments to make on this consultation document.

### **7. Community Infrastructure Levy - Draft Charging Schedule**

Natural England has no comments to make on this consultation document.

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

For any queries relating to the specific advice in this letter please contact Merlin Ash at [merlin.ash@naturalengland.org.uk](mailto:merlin.ash@naturalengland.org.uk) or on 02080 266382. For any new consultations, or to provide further information on this consultation please send your correspondences to [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

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

Yours faithfully

Merlin Ash  
Yorkshire and Northern Lincolnshire Team  
Natural England



## Appendix 2: Habitat Survey Information

### Allocation E1866



- TN1) Standing water. Fishing lake.
- TN2) Buildings and hard standing.
- TN3) Improved grassland. Sheep grazed permanent pasture. Sward height approx. 4 cm.



TN4) Semi-improved neutral grassland. Rank and unmanaged. Sward height approx. 20 cm. Some tall ruderal vegetation present.



TN5) Semi-improved neutral grassland. Rank and unmanaged. Sward height approx. 20 cm. Some tall ruderal present, with mature trees around periphery of field.

TN6) Improved grassland. Sheep grazed permanent pasture. Sward height approx. 10 cm.

## Allocation H67



- TN1) Active construction site.
- TN2) Active construction site.
- TN3) Active construction site.
- TN4) Active construction site.

TN5) Improved grassland. Sheep grazed permanent pasture. Sward height approx. 8 cm.



TN6) Improved grassland. Possibly cattle grazed permanent pasture (no livestock present during survey). Sward height approx. 5 cm. Minor area of acid/neutral flush present in field, dominated by soft-rush (*Juncus effusus*).



TN7) Possibly cattle grazed permanent pasture (no livestock present during survey). Sward height approx. 4 cm. Some areas of tall ruderal vegetation and areas dominated by soft-rush (*Juncus effusus*).



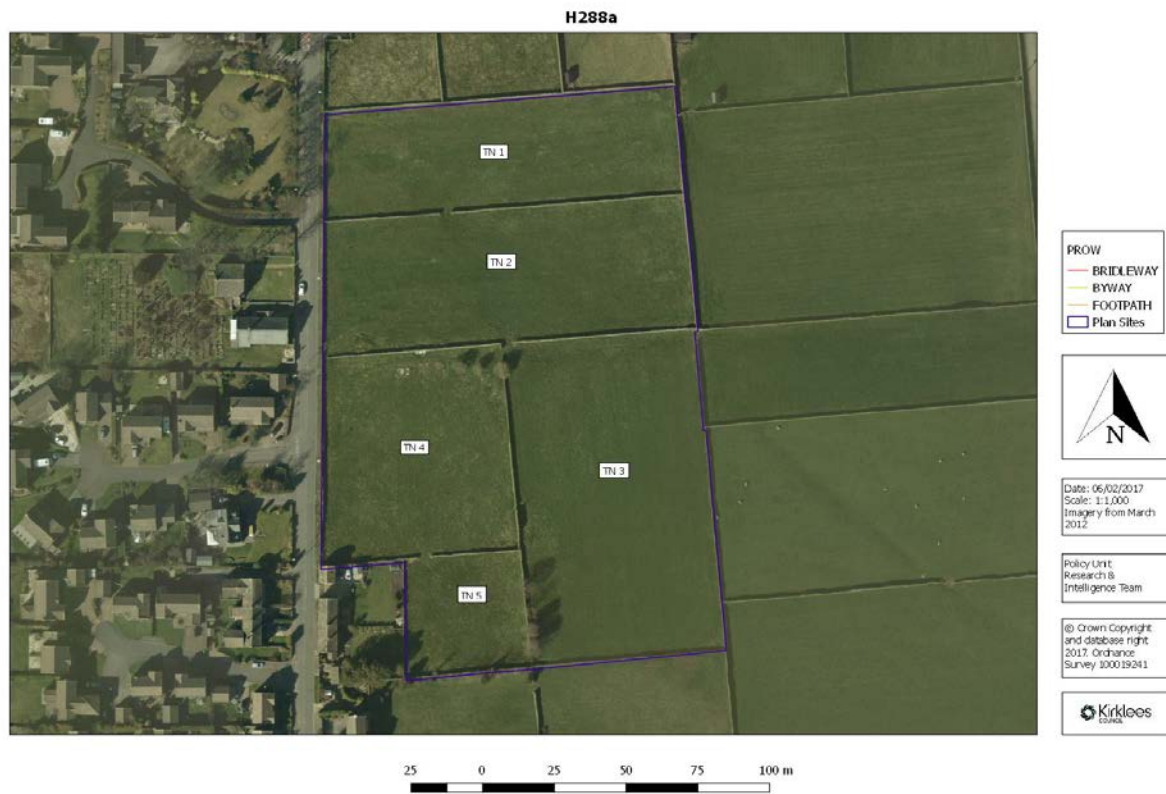
## Allocation H200



- TN1) Species poor semi-improved neutral grassland. Unmanaged at time of survey but little accumulation of leaf litter, indicating management in previous years. Sward height approx. 35 cm.



## Allocation H288A



- TN1) Improved grassland. No management evident at the time of survey. Vegetation not rank therefore likely that the grassland is managed with a hay or silage cut during summer. Ward height approx. 25 cm.



TN2) Improved grassland. No management evident at the time of survey. Vegetation not rank therefore likely that the grassland is managed with a hay or silage cut during summer. Ward height approx. 25 cm.



TN3) Improved grassland. No management evident at the time of survey. Vegetation not rank therefore likely that the grassland is managed with a hay or silage cut during summer. Ward height approx. 25 cm.





- TN4) Improved grassland. No management evident at the time of survey. Vegetation not rank therefore likely that the grassland is managed with a hay or silage cut during summer. Ward height approx. 28 cm.



- TN5) Improved grassland. No management evident at the time of survey. Vegetation not rank therefore likely that the grassland is managed with a hay or silage cut during summer. Ward height approx. 25 cm.



## Allocation H342



- TN1) Semi-improved neutral grassland. Rank and unmanaged. Sward height approx. 30 cm. Some tall ruderal species present.



TN2) Semi-improved neutral grassland. Possibly light grazing by horses. Sward height variable within field, approx. 10 to 20 cm. Large areas of tall ruderal vegetation present.



TN3) Improved grassland. Horse grazed permanent pasture. Sward height approx. 4 cm.



TN4) Semi-improved neutral grassland. Light grazing by horses. Sward height approx. 5 cm.

TN5) Semi-improved neutral grassland. Light grazing by horses. Sward height approx. 5 cm.

## Allocation H343



TN1) Improved grassland. Sheep grazed permanent pasture. Sward height approx. 5 cm.



TN2) Improved grassland. Sheep grazed permanent pasture. Sward height approx. 5 cm.

## Allocation H356



- TN1) Improved grassland. Horse grazed permanent pasture. Sward height approx. 5 cm. This field includes an area of acid/neutral flush dominated by soft-rush (*Juncus effusus*).



- TN2) Improved grassland. Horse grazed permanent pasture. Sward height approx. 3 cm. This field includes an area of acid/neutral flush dominated by soft-rush (*Juncus effusus*).

TN3) Improved grassland. Horse grazed permanent pasture. Sward height approx. 20 cm.

## Allocation H626



- TN1) Improved grassland. Mown – possibly for hay or silage, potentially with follow-up grazing. Sward height approx. 15 cm.



- TN2) Improved grassland. Mown – possibly for hay or silage, potentially with follow-up grazing. Sward height approx. 15 cm.

# Allocation ME1966



TN1) Cricket ground.





TN2) Improved grassland. Sheep grazed permanent pasture. Sward height approx. 5 cm.



TN3) Improved grassland. Sheep grazed permanent pasture. Sward height approx. 10 cm.



TN4) Improved grassland. Silage cut. Sward height approx. 15 cm.



TN5) Improved grassland. Sheep and cattle grazed permanent pasture. Sward height variable within field approx. 5 to 20 cm.



TN6) Heathland vegetation, with spoil from quarry workings on eastern end of field.



TN7) Agricultural buildings with areas of improved grassland.



**Appendix 3:**

**Biodiversity and Geodiversity Policy and supporting text**

**Included on next page**

## 13 Natural environment

### 13 Natural environment

- 13.1** The National Planning Policy Framework (NPPF) recognises that the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, geological conservation interests and soils and minimise impacts on biodiversity, providing net gains in biodiversity where possible. Local authorities should also plan positively for networks of biodiversity and green infrastructure.
- 13.2** Kirklees contains a natural environment of very diverse character and varied landscapes. Extensive areas and a large number of sites are designated and protected for their biodiversity and geodiversity importance. At an international level, the South Pennine Moors Special Protection Area (SPA)<sup>(40)</sup> has the highest level of statutory protection being of European importance for several upland breeding bird species and is also designated a Special Area of Conservation (SAC). The South Pennine Moors SPA/SAC is also a Site of Special Scientific Interest (SSSI). There are a further two SSSI's in Kirklees and many important local wildlife and geological sites.
- 13.3** The Wildlife Habitat Network in Kirklees has been identified by West Yorkshire Ecology and connects designated sites of biodiversity and geological importance and notable habitat links. It is intended to protect and strengthen ecological links within the district and to adjoining authorities.
- 13.4** Some of these areas have been identified as strategic green infrastructure through Natural England's Yorkshire and the Humber Green Infrastructure Mapping Project. These provide defined networks of accessible greenspaces and natural habitats which occur within, and connects, towns and villages and comprise the river corridors and the South Pennine Moors SPA/SAC.
- 13.5** The landscape of Kirklees is diverse and a number of distinct landscape character types have been identified throughout the district in the Kirklees Landscape Character Assessment 2015, ranging from moorland to industrial lowland valleys. In the west, upland moorland provides a continuation of character from the Peak District National Park which provides a nationally important landscape and backdrop to many views throughout Kirklees. Further east, there is a transition to mature farmland and wooded river valleys of the Colne, Holme, Fenay Beck and the Dearne and rural moorland around Emley Moor and Flockton Moor.
- 13.6** The policies in the Plan will ensure the protection of the special attributes of these areas. The council recognises the importance of protecting and enhancing the hierarchy of international, national and locally designated sites and aims to conserve and enhance biodiversity through development proposals. It is important to ensure that development is also sensitive to its location and considers its impact on the landscape character of the area and on important trees.

#### 13.1 Biodiversity & geodiversity

##### **Policy PLP 30**

##### **Biodiversity & Geodiversity**

The council will seek to protect and enhance the biodiversity and geodiversity of Kirklees, including the range of international, national and locally designated wildlife and geological sites, Habitats and Species of Principal Importance and the Kirklees Wildlife Habitat Network.

##### **South Pennine Moors**

40 Peak District Moors SPA (South Pennine Moors Phase 1) and South Pennine Moors SPA (Phase 2)

Proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.

### **Statutory Designated Sites**

Statutory designated sites, including the South Pennine Moors Special Protection Area (SPA) and Special Area for Conservation (SAC) and Sites of Special Scientific Interest, are already highly protected through existing laws and legislation. In accordance with legislation, the Council will seek to ensure that harmful impacts to these areas as a result of development proposals are avoided.

Development proposed within or outside a designated Site of Special Scientific Interest, likely to have an adverse effect on the site's special nature conservation features, will not normally be permitted. Exceptionally development will be allowed where the benefits of the development clearly outweigh the impacts on the site's special conservation features and measures are provided to mitigate harmful impacts.

### **The Dark Peak Nature Improvement Area**

Proposals that contribute to the aims and objectives of the Dark Peak Nature Improvement Area will in principle be supported, subject to other policies in this plan. Development likely to have an adverse impact on the aims and objectives of the NIA will not be permitted.

### **Local Designated Sites & Important Local Ecological Features**

Proposals having a direct or indirect adverse effect on a Local Wildlife Site or Local Geological Site, Ancient Woodland, Veteran Tree or other important tree, will not be permitted unless the development can be shown to be of an overriding public interest and there is no alternative means to deliver the proposal. In all cases, full compensatory measures would be required and secured in the long term.

### **Habitats and Species of Principal Importance**

Proposals will be required to protect Habitats and Species of Principal Importance unless the benefits of the development clearly outweigh the importance of the biodiversity interest, in which case long term compensatory measures will need to be secured.

### **Biodiversity and Development**

Development proposals will be required to:-

- (i) avoid significant loss or harm to biodiversity in Kirklees through protection, mitigation and compensatory measures secured through the establishment of a legally binding agreement;
- (ii) minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;
- (iii) safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;
- (iv) establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and
- (iv) incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.

# 13 Natural environment

## Policy justification

- 13.7** Biodiversity and geodiversity are important components of a high quality natural environment which help strengthen the connection between people and nature and contribute to health and well-being. A core principle of the planning system, as set out in national planning policy, is to conserve and enhance the natural environment. Planning policies and decisions should minimise impacts on biodiversity and geodiversity and aim to maintain and enhance biodiversity when determining planning applications.
- 13.8** Within Kirklees, there is an extensive range of sites designated and protected for their biodiversity and geodiversity importance. These include international and European designations, such as Special Protection Areas, Special Areas of Conservation, national designations, such as Sites of Special Scientific Interest, Ancient Woodland, Local Wildlife Sites, Local Geological Sites and the Wildlife Habitat Network.
- 13.9** At the international level, the South Pennine Moors Special Protection Area (SPA) has the highest level of statutory protection being of European importance for several upland breeding species classified under the Birds Directive. The SPA is also designated as a Special Area for Conservation (SAC) which provides protection for a variety of wildlife, plants and habitats through the European Habitats Directive.
- 13.10** The Council has undertaken a Habitats Regulations Assessment (HRA) of the local plan. Within this, consideration was given to the potential for adverse effects on the integrity of the Special Protection Area through the loss of any functionally connected land within 2.5km of its boundary, and a conclusion reached that adverse effects on integrity from the local plan would not occur. However, as a precautionary approach and to allow for potential changes in habitat over time or use of land by the SPA birds, the site allocation box for sites within 2.5km of the boundary of the SPA indicates if additional evidence at the time of a planning application may be required to determine if there is any potential for adverse effects on the integrity of the SPA as a result of the development proposed. These issues alongside DEFRA's 'Impact Risk Zones' should be considered when submitting any planning application that falls within the remit of the Habitats and Species Regulations 2010 (as amended).
- 13.11** At the national level, Sites of Special Scientific Interest (SSSIs) are sites designated for their national importance and protected by law to conserve their wildlife or geology. There are three designated SSSI's in Kirklees: The South Pennine Moors SPA/SAC; Park Clough, Marsden; and Honley Station Cutting, Honley. These sites are protected by law under the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000 and the Natural Environment and Rural Communities Act 2006. Development which is likely to have an adverse effect on a SSSI will not be permitted. Exceptions will only be made where the benefits of development outweigh any impact and measures are provided to mitigate harmful impacts.
- 13.12** A small part of Kirklees outside the South Pennine Moors SPA/SAC is within the Dark Peak Nature Improvement Area (NIA) which aims to improve, expand and link up existing wildlife-rich areas within the Dark Peak, connecting nature with nature and nature with people. Development proposals that adversely impact on the aims and objectives of the NIA will not be permitted. Proposals that can contribute a quantifiable benefit to the NIA are likely to be supported subject to other policies in the plan.
- 13.13** At the local level, Local Wildlife Sites and Local Geological Sites have been designated for their significant local value, containing habitats, species or geological features of local importance. These are shown on the Policies Map and have been designated by the West Yorkshire Local Sites Partnership in accordance with locally agreed selection criteria used to identify and designate the sites.

- 13.14** West Yorkshire Ecology have identified the Kirklees Wildlife Habitat Network which connects designated sites of biodiversity and geological importance and notable habitat links within the district, such as woodlands, watercourses, natural and semi-natural areas. The identification of the Wildlife Habitat Network is intended to protect and strengthen ecological links within the district. The purpose of the network is to enable species populations to be sustained by protecting and enhancing the ecological corridors and linkages within the wider environment, including links to adjoining districts. Development within the Wildlife Habitat Network will not necessarily be prevented but the council will seek to ensure that development proposals maintain the integrity and continuity of the network and protect the nature conservation value of the land affected. The Wildlife Habitat Network forms the basis for increasing the robustness and inter-connectivity of ecological corridors. As such, development proposals within and adjacent to the Wildlife Habitat Network should be considered as opportunities to enhance and expand its functionality.
- 13.15** Ancient woodland (approximately 1,000 hectares) and some ancient and veteran trees are still present in areas of Kirklees. It is important to preserve those which are not protected by statutory designation and resist development which threatens them.
- 13.16** Habitats and Species of Principal Importance are identified for protection and enhancement in the Kirklees Biodiversity Action Plan 2009 (BAP). Habitats and Species of Principal Importance in England are identified under the Natural Environment and Rural Communities Act 2006.
- 13.17** For international and nationally designated sites, there is a duty to protect these sites from development as required by law. For locally designated sites, and habitats and species of principal importance, the council will not allow development proposals that would have a direct or indirect adverse effect on their biodiversity or geological value. Exceptions may be made where the benefits of the development clearly outweigh the impacts on the features of the site's special conservation features. habitats and prevention, mitigation and compensation (biodiversity offsetting) measures are provided.
- 13.18** The council has identified a series of Biodiversity Opportunity Zones across Kirklees, which reflect the habitats found in these areas. These are shown on the Biodiversity Opportunity Zones Map and include the uplands; mid-altitudinal grasslands; valley slopes; floodplain and riverine corridors; the Pennine foothills and urban areas. The council has identified the range of species of principal importance that occur within each of these zones based on how these species use the habitats present and these are shown in the Biodiversity Opportunity Zones Map Tables document.
- 13.19** All development in Kirklees, as set out in national policy and the policies described in this document, will be expected to avoid significant loss or harm to biodiversity through protection, mitigation and compensatory measures and seek opportunities to enhance biodiversity value and ecological links. Opportunities to achieve net gains in biodiversity within development proposals will be sought through good design, including specific habitat creation and biodiversity enhancements. Regard will need to be given to the relevant Biodiversity Opportunity Zone in which the proposed development is located and biodiversity enhancement measures will be sought which reflect the priority habitats and species identified for each zone. The purpose of the Biodiversity Opportunity Zones and associated tables of species is to guide developers in providing appropriate compensation and enhancements of maximum benefit for nature conservation. In order to safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network, the council will also seek to ensure that development proposals do not result in the fragmentation of the network and provide improved ecological links, particularly to the Kirklees Wildlife Habitat Network, where opportunities exist.



# 13 Natural environment

## Links with strategic objectives

- Protect and improve green infrastructure to support health and well-being, giving residents access to good quality open spaces, sport and recreation opportunities, and to support habitats, allowing wildlife to flourish.
- Protect and enhance the characteristics of the built, natural and historic environment, and local distinctiveness which contribute to the character of Kirklees, including the South Pennine Moors, Moorland fringe and the area's industrial heritage.

## Delivery and implementation

**13.20** The policy will be implemented through the development management process, council policies and plans and delivered through a wide range of public and private sector organisations, community groups and volunteers. The council will assist the implementation of the work of the Yorkshire West Local Nature Partnership in supporting their principles and priorities to protect and improve the natural environment in the area.

## Supporting evidence

- West Yorkshire Local Wildlife Site Selection Criteria (2011)
- West Yorkshire Ecology - Wildlife Habitat Network & Methodology (2015)
- Kirklees Biodiversity Action Plan (2009)
- Kirklees Biodiversity Strategy
- Kirklees Biodiversity Opportunity Zones Mapping

## 13.2 Strategic Green Infrastructure Network

### Policy PLP 31

#### Strategic Green Infrastructure Network

Within the Strategic Green Infrastructure Network identified on the Policies Map, priority will be given to safeguarding and enhancing green infrastructure networks, green infrastructure assets and the range of functions they provide.

Development proposals within and adjacent to the Strategic Green Infrastructure Network should ensure:-

- (i) the function and connectivity of green infrastructure networks and assets are retained or replaced;
- (ii) new or enhanced green infrastructure is designed and integrated into the development scheme where appropriate, including natural greenspace, woodland and street trees;
- (iii) the scheme integrates into existing and proposed cycling and walking routes, particularly the Core Walking and Cycling Network, by providing new connecting links where opportunities exist;
- (iv) the protection and enhancement of biodiversity and ecological links, particularly within and connecting to the Kirklees Wildlife Habitat Network.

The council will support proposals for the creation of new or enhanced green infrastructure provided these do not conflict with other local plan policies.

## **Appendix 5**

### Review of Potential for In-Combination Effects with other Local Authority Plans

## Local Plans

### **Bradford Core Strategy: Publication version (February 2014) (submitted for Examination December 2014)**

*In October 2016 the Minister of State (Housing and Planning) issued a holding direction under section 21A of the Planning and Compulsory Purchase Act. This advised that the City of Bradford Metropolitan Council was not to take any further steps in connection with the adoption of the Core Strategy. This is to allow the Minister time whether to formally intervene in relation to issues raised by Phillip Davies MP. The information below considers the Core Strategy as submitted to the Inspector, along with Main Modifications from the Inspector.*

Bradford Metropolitan District lies to the north of Kirklees and includes almost the entire area of Rombalds/Ikley Moor (part of the South Pennine Moors SAC/SPA) in the north of the District, and edges of the central SSSI component South Pennine Moors SAC/SPA along the western boundary of the District.

#### **Housing**

The provision of 42,100 dwellings will be accommodated in the District between 2013 and 2030. Most will be apportioned (28,650) to the Regional City of Bradford (with Shipley and Lower Baildon), 6,700 to the Principal Towns of Ilkley, Keighley and Bingley, 3,400 to the Local Growth Centres at Queensbury, Silsden, Steeton with Eastburn and Thornton and the remaining 3,350 to the Local Service Centres.

#### **Employment Land Provision**

The Core Strategy supports the delivery of at least 1,600 jobs through planning for a supply of at least 135 ha of developable employment land over the Local Plan period by allocating a range of sites for general employment purposes; distributed as follows:

1. 100 ha within City of Bradford
2. 30 ha in the Airedale Corridor
3. 5 ha in the Wharfedale corridor

#### **HRA Findings**

The December 2014 HRA Report for the Bradford Core Strategy identifies that without adequate policy avoidance or mitigation measures, adverse effects on the integrity of the South Pennine Moors SAC and SPA could occur due to recreation pressure, loss of functionally linked land used by the breeding bird assemblage and urban edge pressures. These adverse effects should be able to be avoided or mitigated through the inclusion of the specific measures in Strategic Core Policy 8 in the Bradford Core Strategy and a planned Supplementary Planning Document to guide implementation of the South Pennine Moors Zones of Influence set out in the policy, which includes developer contributions towards greenspace improvements to deflect visitors away from the SPA (and avoid effects), implementation of onsite access management measures and a programme of habitat management and monitoring (for residential developments within 7km of the SAC/SPA boundary). During the Examination, Natural England raised concerns that there had not been a sufficient demonstration of how the mitigation measures will be achieved. A number of Main Modifications to the Core Strategy addressed this point, setting clearer guidance on buffer zones and requiring the production of an SPD. The HRA of the Proposed Modifications (2015) concluded that these measures are sufficient and that the Core Strategy (Proposed Modifications) would not result in adverse effects on the ecological integrity of this site. **Therefore, in-combination effects with the new Publication Draft Local Plan can be ruled out.**

### **Leeds Core Strategy: Adopted (November 2014)**

Leeds lies to the north east of Kirklees and includes a very small portion of the South Pennine Moors SAC/SPA in its north western corner.

#### **Housing**

The provision of 70,000 new dwellings will be accommodated in Leeds between 2012 and 2028. This will be distributed most heavily through the centre and south of the District, with less housing development taking place to the north of the city centre. The Outer South West Housing Market Characteristic Area, which

## Local Plans

borders Kirklees, will accommodate 7,200 new homes, which equates to 11% of the new housing proposed in the District.

### **Employment Land Provision**

Spatial Policy 9 sets out the provision that will be made for offices, industry and warehouse employment land and premises. It specifies that a minimum of 706,250sqm of office floorspace will be provided within the District, with a minimum of an additional 160,000sqm to be identified in or on the edge of the city centre and town centres.

A minimum of 493ha of general employment land for uses such as research and development, industrial and distribution/warehousing uses will be provided in the District.

### **HRA Findings**

The December 2012 HRA Screening Report for the Core Strategy (taking into account Pre-Submission changes) revisited the conclusion of the earlier Habitats Regulations Assessment: Screening Determination (February 2012) that the Core Strategy policies do not give rise to any likely significant effects on the nature conservation objectives of European designated sites, either alone or in-combination with other plans and/or projects and therefore that an Appropriate Assessment was not required. It was again concluded that, even taking into account the Pre-Submission changes to the Core Strategy, Appropriate Assessment was not required as the new and amended policies did not give rise to any likely significant effects on the nature conservation objectives of European designated sites, either alone or in-combination with other plans and/or projects. Where needed, avoidance mechanisms had already been built into policies either in the Natural Resources and Waste DPD or the Core Strategy. No further updates to the HRA Report were made during the Examination. **Therefore, in-combination effects with the new Publication Draft Local Plan can be ruled out.**

## Wakefield Core Strategy: Adopted (April 2009)

Wakefield District lies to the east of Kirklees and includes the Denby Colliery Grange Ponds SAC in the west of the district, near to the border with Kirklees.

### **Housing**

The largest number of additional houses will be built in Wakefield, with smaller, but significant, numbers in Castleford and Pontefract. As a Sub Regional City it is expected that the urban area of Wakefield, including its suburbs will accommodate at least 30% of the district's housing requirement. As Principal Towns, Castleford and Pontefract are expected to accommodate at least 20% and 10% respectively.

The towns of Normanton, Featherstone, Knottingley, Hemsworth and South Elmsall/Kirkby will be the main focus for new housing growth after the Sub Regional City and Principal Towns. The towns of Horbury, Ossett and Stanley/Outwood have experienced significant growth in recent years and therefore growth will be more constrained in these settlements in order to ensure a sustainable development pattern. Together these settlements are expected to accommodate at least 25% of the district's housing requirement.

### **Employment Land Provision**

In total a gross supply of 350 ha of prime employment land is proposed in the district up to 2021. 255 hectares of this land is available as follows:

- 75 hectares will be primarily for commercial office development;
- 85 hectares will be primarily for light and general industry;
- 95 hectares will be primarily for wholesale and freight distribution.

An additional 95 ha of new land will be identified for wholesale and freight distribution. Beyond 2021 employment land will come forward in accordance with the requirements of the spatial development strategy and in accordance with policy CS8: The Local Economy, which states that most new employment development will be located within the urban areas of the district, particularly within city and town centres, Employment Zones, and on sites allocated for employment use.

### **HRA Findings**

The Appropriate Assessment Report for the Core Strategy and Development Policies Development Plan

## Local Plans

Documents (January 2008) considered the potential impacts on Denby Grange Colliery Ponds SAC and concluded that the majority of the objectives, policies and proposals will not have any impact on the integrity of the SAC. Some objectives and proposals were identified as likely to have an impact on the SAC; however when considered in combination with policies that provide mitigation, no likely significant effects were identified and the full Appropriate Assessment stage of the HRA was not required. **Therefore, in-combination effects with the Publication Draft Local Plan can be ruled out.**

### Barnsley Core Strategy: Adopted Version (September 2011)

#### Barnsley Local Plan Publication Draft (June 2016)

Barnsley borough is located to the south east of Kirklees and includes a small portion of the South Pennine Moors SAC/SPA in its western corner. The current key planning document in the borough is the 2011 Adopted Core Strategy. Barnsley Borough Council is preparing a Local Plan, which is intended to replace the 2011 Core Strategy. The most recent stage in the preparation of the emerging Local Plan was a consultation on the Publication Draft of the Local Plan, which closed on 5 August 2016.

#### Housing

The adopted Core Strategy states that the Council will seek to complete 21,500 new homes between 2008 and 2026. The emerging Local Plan seeks completion of at least 20,900 net additional homes between 2014 and 2033. These are to be distributed as follows:

- Urban Barnsley – 45%
- Cudworth – 6%
- Dearne – 14%
- Hoyland – 11%
- Penistone – 5%
- Royston – 6%
- Wombwell – 10%
- Other settlements – 3%

#### Employment Land Provision

The Adopted Core Strategy states that 350ha of land is to be provided to meet the development needs of business and industry. The emerging Local Plan proposes an allocation of around 309ha new employment land, focused on Barnsley town centre. The emerging Local Plan also allows for reserved employment land at Goldthorpe to be brought forward if there is a proven need.

#### HRA Findings

The February 2010 Appropriate Assessment Screening Report for the Core Strategy concluded that the Core Strategy was not likely to have any significant effects on Natura 2000 sites, and that the full Appropriate Assessment stage of the HRA was not required.

The Habitat Regulations Assessment 2016 for the new Barnsley Local Plan considers the potential impacts of Barnsley's policies and proposals in the Local Plan on South Pennine Moors SPA/SAC and Denby Grange Colliery Ponds SAC. It concludes that the majority of policies and proposed sites within the Local Plan will not result in any harm to the Natura 2000 sites. By concentrating development in existing settlements and proposed environmental and habitat protection allocations, the Local Plan will help to protect the integrity of the SAC and SPA. There is however a risk of a potentially negative effect on the Natura 2000 sites arising from the proposed housing allocations within a 2km buffer zone, and further assessment will be required if they are to be allocated in the next stage of the plan.

There is potential for emerging Local Plan site allocations to have in-combination effects with the Publication Draft Local Plan, however **the Barnsley proposals are not sufficiently advanced to reach a conclusion regarding the potential for in-combination effects with the Publication Draft Local Plan.**

### High Peak Local Plan: Adopted Version (April 2016)

High Peak District lies to the south of Kirklees and includes a large area of the southern part of the South

## Local Plans

Pennine Moors SAC/SPA.

### Housing

Provision will be made for at least 7,200 dwellings over the period 2011-2031 at an overall average annual development rate of 360 dwellings. The Glossopdale Sub area will accommodate 27-35%, the Central Sub Area will accommodate 30-33% and the Buxton Sub Region will accommodate 32-43% of this provision.

### Employment Land Provision

The Local Plan identifies gross employment land requirements from 2011 to 2031 of 45.216ha. Employment land for offices is to be encouraged primarily in the main Market Towns while the focus of retail, leisure and office developments should be town centres. The local plan states that a minimum of 7.7ha of employment land should be allocated by the Neighbourhood Plan for Chapel-en-le-Frith Parish to support the Borough wide identified need for employment land.

### HRA Findings

The March 2014 Habitats Regulations Assessment for the Local Plan presents the findings of the screening and Appropriate Assessment stages of the HRA and concluded that likely significant effects could not be ruled out in relation to the Plan as currently worded in relation to certain Natura 2000 sites, including South Pennine Moors SAC and Peak District Moors (South Pennine Moors Phase 1) SPA. The potential significant effects relate to possible air quality effects from operation of employment development close to the sites, possible urban effects associated with development close to the site and (in the case of Peak District Moors (South Pennine Moors Phase 1) SPA), the possible effects of wind turbine development on designated birds.

Following amendments to the Local Plan by the Council, an HRA addendum was produced (August 2014). The addendum concluded that the amendments made it possible to rule out any adverse effects on Natura 2000 sites. **Therefore, in-combination effects with the Publication Draft Local Plan can be ruled out.**

## Oldham Joint Core Strategy and Development Management Policies: Adopted Version (November 2011)

Oldham Borough lies to the west of Kirklees and includes edges of the central SSSI component South Pennine Moors SAC/SPA along the eastern boundary of the Borough.

### Housing

The council will allocate sufficient land, in whole or as part of a mixed use scheme in the Site Allocations DPD, to accommodate at least 289 dwellings per year, net of clearance, on average over the LDF plan period up to 2026, informed by the findings of the SHLAA. At least 80% of the housing provision will be on previously developed land. Around 60% of the new dwellings will be provided in East and West Oldham, while 10% will be distributed within each of Failsworth and Hollinwood, Saddleworth and Lees, Royton, Shaw and Crompton, and Chadderton.

From 2010/11 to 2025/26 the borough will provide sufficient land for 4,624 new dwellings.

### Employment Land Provision

Approximately 82 ha of land will be allocated for business, industry and office developments. The focus will be on areas that are accessible by public transport, walking and cycling as alternatives to the car. This includes Oldham Town Centre and the centres of Chadderton, Failsworth, Hill Stores, Lees, Royton, Shaw and Uppermill. Other accessible employment areas – known as 'Business and Employment Areas' and 'Saddleworth Employment Areas' - will be designated as part of Oldham's economic land supply. The principal employment areas will form an 'arc of opportunity' from Oldham Town Centre through to Foxdenton and on to Hollinwood Business District with its links to Manchester City Centre.

### HRA Findings

The November 2011 HRA Report for the Joint Core Strategy and Development Management Policies DPD concluded at the screening stage that the Rochdale Canal SAC could experience significant effects in relation to the development proposed in the Plan. The Appropriate Assessment stage of the HRA was then carried out, and it was concluded that, although development is proposed in areas relatively close to the

## Local Plans

SAC, providing that mitigating plans, policies and strategies are adopted and implemented appropriately through the development management process, development areas planned for in the Joint DPD can be allowed to go forward without harm being caused to the special interest of the Rochdale Canal SAC.

**Therefore, in-combination effects with the Publication Draft Local Plan can be ruled out.**

### Rochdale Adopted Core Strategy (October 2016)

Rochdale lies to the west of Kirklees and includes the Rochdale Canal SAC as well as edges of the central SSSI component South Pennine Moors SAC/SPA along the north eastern boundary of the District.

#### Housing

The Core Strategy seeks to provide sufficient land to deliver at least 460 additional dwellings per year up to 2028. It aims to maximise the potential of previously developed sites and targets development of 80% of housing on previously developed land. The south of the borough has been highlighted as the focus of the majority of future housing development due to its accessibility to the core of the city region. Development in the north of the borough will be of an overall scale and density that reflects the accessibility and character of the Pennine fringe.

#### Employment Land Provision

The Core Strategy makes provision for the supply of up to 210ha of land for employment needs. This land is provided mostly in the south of the borough in the following growth corridors:

- Rochdale town centre / Kingsway corridor
- Sandbrook Park / Crown Business Park / Castleton corridor
- Middleton town centre / Oldham Road corridor
- South Heywood employment sites
- Stakehill Business Park

Office development is mainly to be confined to town centres. In the north of the borough the Core strategy aims to protect existing employment zones.

#### HRA Findings

The January 2013 HRA report for the Rochdale Core Strategy concluded that, providing the recommended mitigation measures, which take the form of amending and controlling development in the strategic locations through the Plan and amending the core policies, are put into place, controlled development within the identified areas can proceed without harm being caused to the special interests of any Natura 2000 sites. It is therefore important that the Plan must restrict the scale, form and location of development within the strategic locations identified in the Plan, but it is not justifiable to not allow development at all in these areas. From the Examination library, there is a letter from Natural England to the Council in August 2013, explaining that the proposed changes to the HRA the Core Strategy outlined in a note by the Council to the Inspector (dated August 2013), follow a meeting between Natural England and Rochdale Borough Council on 1 August 2013, where Natural England's discussed concerns with the publication draft of the plan; in particular our view that the Core Strategy did not adequately contain mitigation measures recommended by the HRA. Natural England's letter states that provided the changes outlined in the note to Inspector are incorporated into the Core Strategy and amendments made to the HRA, Natural England is satisfied with the conclusions made by the Council. The HRA confirms that the Core Strategy will not give rise to any likely significant effects as sufficient mitigation and avoidance measures are contained within the Plan. As such an Appropriate Assessment is not required. However, Natural England notes that further assessment will be necessary with respect to lower tier development plan documents, particularly in relation to subsequent land allocations Development Plan Documents and any future Masterplans. The Core Strategy HRA has assessed as much as possible at this stage without having the exact details of land allocations and future proposals. **Therefore, in-combination effects of any lower tier plans with the Publication Draft Local Plan will need to be kept under review as the HRA progresses.**

### Calderdale Core Strategy Preferred Options (2012)

*Please note that the Council is in the process of streamlining the production of the Local Plan and will merge the Core Strategy and Land Allocations into a single plan. A consultation on Potential Sites and Other*

## Local Plans

*Aspects of the Local Plan took place between November 2015 and March 2016.*

Calderdale District lies to the north west of Kirklees and includes areas of the South Pennine Moors SAC/SPA in the southwest and northwest parts of the District.

### Housing

The Core strategy makes provision for 16,800 additional dwellings to be created within Calderdale between 2008 and 2029. This housing requirement will be delivered in two phases:

- Phase 1: 2008 - 2015 = 600 units per annum
- Phase 2: 2016 - 2029 = 900 units per annum

Priority will be given to using brownfield land with an interim target of approximately 55% for the proportion of new housing built on brownfield land or arising through the conversion of existing buildings. Housing development is proposed to be concentrated to the larger towns of Halifax and Brighouse with each location allocated 47.9% and 20.0% of new housing to be completed in the District respectively. The Local Towns of Elland (10.0%), Sowerby Bridge (8.0%), Todmorden (6.0%) and Hebden Bridge (2.4%) have been designated as areas where smaller levels of housing development are to be located.

### Employment Land Provision

The employment gross floorspace requirement in the District until 2029 has been projected at a minimum of 98,000m<sup>2</sup> of (B1a) office space and 215,000m<sup>2</sup> of (B1b,c, B2, B8) industrial/ warehouse space. Sites of this development have been identified in masterplans for Halifax, Brighouse, Elland, Todmorden and Sowerby Bridge town centres.

### HRA Findings

No HRA work in relation to the emerging new Local Plan for Calderdale has yet been carried out, **therefore it is not yet possible to reach a conclusion regarding the potential for in-combination effects with the Publication Draft Local Plan.**

## Peak District National Park Core Strategy: Adopted version (October 2011)

The Peak District National Park area covers part of the south of Kirklees District and includes a large area of the South Pennine Moors SPA/SAC.

### Housing

Housing land is not identified in the Core Strategy; however new housing can be accepted in exceptional circumstances where it addresses particular local needs, provides housing for key workers or it is required for conservation reasons e.g. the enhancement of local vernacular.

### Employment Land Provision

New sites and buildings for business development will be permitted within or on the edge of the named settlements in the overarching development strategy. Proposals must be of a scale that is consistent with the needs of the local population.

Proposals for business development in the countryside outside the Natural Zone and the named settlements must take account of certain principles including a preference for using existing buildings that fit with local character and the need to conserve and enhance landscape character.

### HRA Findings

The HRA Report for the Core Strategy (August 2010) concluded that it should be entirely possible to avoid and mitigate any adverse impacts on Natura 2000 Sites as a result of the Core Strategy, either alone or in combination with other plans or projects, providing that a number of recommendations are implemented.

**Therefore, in-combination effects with the Publication Draft Local Plan can be ruled out.**

**LOCAL AUTHORITIES THAT DO NOT BORDER KIRKLEES BUT INCLUDE THE SOUTH PENNINE MOORS SAC/SPA AND ROCHDALE CANAL SAC**



## Local Plans

### Tameside Joint Core Strategy and Development Management Policies Document: Preferred Options (January 2013)

*The Council has been involved in the preparation of the Greater Manchester Spatial Framework and as such work on the Core Strategy is currently on hold.*

Tameside Metropolitan Borough lies to the south west of Kirklees and includes a very small portion of the South Pennine Moors SAC/SPA on its eastern boundary.

#### **Housing**

The Core Strategy makes provision for 11,000 additional dwellings to be created within Tameside between 2012 and 2029. Phased housing targets are set out in five year intervals over the Plan period, to be reviewed every 2 to 3 years:

- Phase 1: Years 1-5 = 500 units per annum (total homes = 2,500)
- Phase 2: Years 6-10 = 650 units per annum (total homes = 3,250)
- Phase 3: Years 11-17 = 750 units per annum (total homes = 5,250)

A target for the provision of affordable housing has been set at around 20% of new residential developments. Priority will be given to using brownfield land with a target of 80% being setting with regard future development occurring on brownfield land. Housing is proposed to be supplied in sustainable locations – Ashton-under-Lyne (16%), the other towns and villages in the Borough [Droylsden (5%), Hyde (10%), Longdendale and Hattersley (15%), Denton and Audenshaw (18%), and Stalybridge (21%)], and at appropriate locations that are, or could become, sustainable and accessible, utilising public transport, walking and cycling options available.

#### **Employment Land Provision**

The Plan proposes focussing employment development in Ashton-under-Lyne, the Boroughs other town centres, existing employment sites and the identified proposed strategic sites (Ashton Moss West, Mottram M67 and Dukinfield Gate Street). The primary focus of the strategic sites is expected to be employment related uses and development.

#### **HRA Findings**

The HRA Report for the Joint Core Strategy and Development Management Policies DPD (August 2012) includes an assessment of the likely in-combination effects of the Core Strategy with other plans and proposals. This involved reviewing the emerging plans for the neighbouring authorities, including Oldham District which is located between Tameside and Kirklees Districts and includes fragments of the South Pennine Moors SAC and Peak District Moors (South Pennine Moors Phase 1) SPA. The review of the HRA of Oldham Council's Joint Core Strategy and Development Policies DPD identified a number of potential site allocations and other potential threats which could have a potential significant effect on the Rochdale Canal SAC. However, it was concluded that providing mitigating plans, policies and strategies are adopted and implemented appropriately through the development management process, development within these sites could proceed without harm being caused to the special interest of the SAC. No likely significant in-combination effects on the South Pennine Moors SAC and Peak District Moors (South Pennine Moors Phase 1) SPA were identified. **Therefore, in-combination effects with the Publication Draft Local Plan can be ruled out.**

### Sheffield Core Strategy (March 2009)

*Work has commenced on the preparation of a new Local Plan but the first iteration has not yet been published and no HRA work has been published.*

Sheffield lies to the south east of Kirklees and includes a large area of the South Pennine Moors SAC/SPA in the northwest of the district.

#### **Housing**

The Core Strategy identifies a net requirement for 29,750 new houses in Sheffield for the period 2004/05 to

## Local Plans

2025/26. This overall provision of housing has been targeted for the city as follows:

- Net annual requirement 2004/05 to 2015/16: 1,292 homes (15,500 homes total)
- Net annual requirement 2016/17 to 2020/21: 1,425 homes (7,125 homes total)
- Net annual requirement 2020/21 to 2025/26: 1,425 homes (7,125 homes total)

The Core Strategy also identifies that total net supply of dwellings for the same period is 28,305 giving a margin of 1,445 dwellings for the period 2004/05 to 2025/26. The majority (at least 90%) of new housing development is to be concentrated within or adjacent to the main urban area of Sheffield at suitable, sustainably located sites. Further new housing development for the period 2008/09 to 2020/21 is to be concentrated in the Stocksbridge/Deepcar urban area. After 2020/21, and before then as opportunities arise, additional housing growth is targeted to be supplied in parts of the city where significant change and regeneration are taking place. This is identified as being primarily in the main urban area of Sheffield (with an emphasis on the Lower Don Valley and North East Urban Area) and Stocksbridge/Deepcar. Priority is to be given to housing development on previously developed sites and been the period of 2004/05 and 2025/26 no more than 12% of dwelling completions will be on greenfield sites.

### **Employment Land Provision**

The Core Strategy identified a requirement for 72ha of land for office use and 450ha of land for other business and industry use for the period 2008-2026. This development is to be focussed to brownfield sites and the Core Strategy stipulated that no more than 4 hectares or 2.5% of all land developed for business and industry use over any five-year period, whichever is the lowest, will be greenfield land. Development locations for offices will be concentrated in the City Centre and its edges and this will make up at least 65% of total office development in the city.

### **HRA Findings**

The HRA Report for the Core Strategy (November 2007) concluded that detrimental effects on the integrity of Natura 2000 as a result of the policies of the Strategy are unlikely. **Therefore, in-combination effects with the Publication Draft Local Plan can be ruled out.**

## Pendle Core Strategy: Adopted version (December 2015)

Pendle Borough lies to the north west of Kirklees District (beyond Calderdale) and includes a small area of the South Pennine Moors SAC/SPA in the southeast of the borough.

### **Housing**

Over the 19 year period from 2011 to 2030 provision will be made to deliver 5,662 (net) dwellings, equating to an average of 298 dwellings per annum. The majority will be delivered in the M65 Corridor and the remainder in the West Craven Towns and rural Pendle.

### **Employment Land Provision**

The Local Plan will ensure that 68.0 hectares (gross) of land is brought forward for employment uses – Use Classes B1, B2 and B8 – over the plan period.

### **HRA Findings**

The HRA Screening Report for the Core Strategy (September 2014) notes that only 9.1% of the South Pennine Moors SAC/SPA, is within the Borough boundary. The other Natura 2000 sites are at least 10.8 Km distant from Borough boundary therefore, it is concluded that any effects of the Pendle Borough Council Core Strategy (Pre-Submission Report) DPD upon Natura 2000 Sites are not likely to be significant and therefore the sites can be screened out as being unlikely to be affected. The proposed plan is not likely to have a significant effect on a Natura 2000 Site (in combination with other plans or projects). **Therefore, in-combination effects with the Publication Draft Local Plan can be ruled out.**

## Craven Second Draft Local Plan Pre-Publication Draft (April 2016)

## Local Plans

*From July to August 2016 the Council carried out a preferred housing sites consultation.*

Craven District lies to the north west of Kirklees District (beyond Bradford) and includes a small area of the South Pennine Moors SAC/SPA in the south of the borough.

### **Housing**

Over the plan period, a minimum of 5,120 new homes will be provided, within the plan area, to meet local housing requirements.

### **Employment Land Provision**

The Local Plan will ensure that about 28 hectares of land is brought forward for employment use over the plan period.

### **HRA Findings**

The Draft Craven Local Plan Update from February 2015<sup>53</sup> states that in relation to HRA: "A Screening exercise is currently being undertaken by the Planning Policy team to determine whether an Appropriate Assessment will be required. The Bradford Core Strategy Local Plan is of note, as during the preparation of the Core Strategy, the HRA process in considering the scale of growth for the district together with the proximity to designated sites (including the South Pennine Moors SPA/SAC) has necessitated in modifications to the distribution strategy to limit potential impacts." **Therefore it is not yet possible to reach a conclusion regarding the potential for in-combination effects with the Publication Draft Local Plan.**

## **Burnley Local Plan Preferred Options (July 2016)**

Burnley District lies to the north west of Kirklees District (beyond Calderdale) and includes a small area of the South Pennine Moors SAC/SPA in the east of the borough.

### **Housing**

The Local Plan Policy SP2 states that around 4,180 net additional dwellings will be delivered over the plan period.

### **Employment Land Provision**

Policy SP3 stated that around 90ha of employment land will be delivered over the plan period.

### **HRA Findings**

The Local Plan Preferred Options HRA Report (July 2016) concludes that, although not likely, the plan may lead to offsite damage/disturbance to the habitats, affecting the qualifying features of the South Pennine Moors Phase 2 SPA, and increased air pollution and increased recreation affecting South Pennine Moors SAC, South Pennine Moors Phase 2 SPA and Rochdale Canal SAC. The HRA suggests this should be revisited in the next stage of HRA for the Burnley Local Plan and Appropriate Assessment should be carried out if required. **Therefore it is not yet possible to reach a conclusion regarding the potential for in-combination effects with the Publication Draft Local Plan.**

<sup>53</sup> <http://www.cravenc.gov.uk/newlocalplan>

