



Bradford Metropolitan District
Council Core Strategy and
Waste Management DPD

Habitats Regulations Screening
Assessment

Prepared for:
Bradford Metropolitan District Council

Prepared by:
ENVIRON
Exeter, UK

Date:
June 2012

Project or Issue Number:
UK1817516

Contract/Proposal No:	UK1817516
Issue:	2
Author (signature):	Vicky Pearson
Project Director (signature):	Johanna Curran
Date:	June 2012

This report has been prepared by ENVIRON with all reasonable skill, care and diligence, and taking account of the Services and the Terms agreed between ENVIRON and the Client. This report is confidential to the client, and ENVIRON accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known, unless formally agreed by ENVIRON beforehand. Any such party relies upon the report at their own risk.

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

Version Control Record				
Issue	Description of Status	Date	Reviewer Initials	Authors Initials
A	First Draft	01/03/12	JC	VP
1	First Draft to Client for Comment	12/03/12	JC	VP
2	Final	13/06/12	JC	VP

Contents

	Page
Executive Summary	i
1 Introduction	9
1.1 The need for Habitats Regulations Assessment (HRA)	9
1.2 European Sites	9
1.3 This Report	9
1.4 Consultation	10
2 The Bradford Core Strategy and Waste Management DPDs	10
2.1 Introduction	10
2.2 The Core Strategy DPD	11
2.3 The Waste Management DPD	12
2.4 Sustainability Appraisal	13
3 Methodology	14
3.1 Introduction	14
3.2 Approach to the HRA	14
3.3 In combination effects	15
4 European sites and issues affecting them	17
4.1 Introduction	17
4.2 European sites considered in the screening exercise	17
5 Assessment of the plans	19
5.1 Introduction	19
5.2 Results of the screening exercise	19
5.3 Potential for in-combination effects	22
6 Conclusions	24
Appendix A: Screening Tables	
Appendix B: Figures	

Executive Summary

This report records a Habitats Regulations Assessment (HRA) screening process of the following documents:

- Local Development Framework for Bradford Core Strategy Development Plan Document Further Engagement Draft (October 2011);
- Local Development Framework for Bradford Waste Management DPD Preferred Approach (January 2011); and
- Local Development Framework for Bradford Waste Management DPD Preferred Approach Revised Chapter 5 (October 2011).

The Bradford Waste Management DPD Preferred Approach (January 2011) and the Revised Chapter 5 (October 2011) together form the most recent version of the Waste Management DPD. This is because focussed consultation on a revised version of Chapter 5 (relating to potential waste management sites) of the draft plan was undertaken at the end of 2011.

HRA is required under the EU Habitats Directive (92/43/EEC) for any proposed plan or project which may have a significant effect on one or more European sites. The purpose of HRA is to determine whether or not significant effects are likely and to suggest ways in which they could be avoided.

European sites are Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). National planning policy also recommends that Ramsar sites should be afforded the same level of consideration as SPAs and SACs. HRA relates specifically to the reasons why sites have been identified as European sites (qualifying interests). European sites are often formed of several component Sites of Special Scientific Interest (SSSI).

The purpose of this report is to screen the above-mentioned documents to determine whether they could have significant effects on the conservation objectives of any European site (hereafter referred to as 'Likely Significant Effects' or LSEs). This document will be consulted on with Natural England (and other stakeholders).

The European sites considered in this screening exercise are listed in Table Exec 1.

Table Exec 1 European sites considered in the screening exercise		
SPAs	SACs	Ramsar
South Pennine Moors Phase 2	South Pennine Moors	Malham Tarn
North Pennine Moors	Denby Grange Colliery Pond	
	North Pennine Moors	
	Craven Limestone Complex	
	North Pennine Dales Meadows	
	Kirk Deighton	
	Rochdale Canal	

The HRA screening exercise has identified a risk of Likely Significant Effects (LSEs) on the following sites:

- South Pennine Moors Phase 2 SPA;
- South Pennine Moors SAC;
- North Pennine Moors SPA; and
- North Pennine Moors SAC.

Table Exec 2 below presents a summary of the LSEs identified for each site.

Key to table:

Likely significant effects	✓
No likely significant effects	-
Uncertain effects	?

Table Exec 2: Summary of screening assessment of Bradford Metropolitan District Council Core Strategy and Waste Management DPD										
Nature of potential effects	LSE identified due to the Bradford Metropolitan District Council Core Strategy and Waste Management DPD?									
	South Pennine Moors Phase 2 SPA	North Pennine Moors SPA	South Pennine Moors SAC	North Pennine Moors SAC	Denby Grange Colliery Pond SAC	Craven Limestone Complex SAC	North Pennine Dales Meadows SAC	Malham Tarn Ramsar	Kirk Deighton SAC	Rochdale Canal SAC
Inappropriate habitat management	-	-	-	-	-	-	-	-	-	-
Loss of supporting feeding sites associated with sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	✓	✓	-	-	-	-	-	-	-	-
Increased water demand associated with sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	?	?	?	?	-	-	-	-	-	-

Table Exec 2: Summary of screening assessment of Bradford Metropolitan District Council Core Strategy and Waste Management DPD										
Nature of potential effects	LSE identified due to the Bradford Metropolitan District Council Core Strategy and Waste Management DPD?									
	South Pennine Moors Phase 2 SPA	North Pennine Moors SPA	South Pennine Moors SAC	North Pennine Moors SAC	Denby Grange Colliery Pond SAC	Craven Limestone Complex SAC	North Pennine Dales Meadows SAC	Malham Tarn Ramsar	Kirk Deighton SAC	Rochdale Canal SAC
Increase in emissions to air associated with sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	✓	✓	✓	✓	-	-	-	-	-	-
Increase in emissions to air from allocation of Site 78 – Aire Valley Road, Worth Village Keighley for waste management use.	✓	✓	✓	✓	-	-	-	-	-	-
Impacts on water quality associated with sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	?	?	?	?	-	-	-	-	-	-

Table Exec 2: Summary of screening assessment of Bradford Metropolitan District Council Core Strategy and Waste Management DPD										
Nature of potential effects	LSE identified due to the Bradford Metropolitan District Council Core Strategy and Waste Management DPD?									
	South Pennine Moors Phase 2 SPA	North Pennine Moors SPA	South Pennine Moors SAC	North Pennine Moors SAC	Denby Grange Colliery Pond SAC	Craven Limestone Complex SAC	North Pennine Dales Meadows SAC	Malham Tarn Ramsar	Kirk Deighton SAC	Rochdale Canal SAC
Renewable energy developments (wind turbines) associated with Policy EN6 Energy and the supporting text of Policy PN1 South Pennine Towns and Villages Area Policy 1.	✓	✓	-	-	-	-	-	-	-	-
Pet predation sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	✓	-	-	-	-	-	-	-	-	-
Recreation impacts sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	✓	✓	✓	-	-	-	-	-	-	-

The potential for in combination effects has been considered at this stage and the following risks have been identified, to be considered within the next stage of HRA of the Core Strategy and Waste Management DPD:

- Water supply to neighbouring areas combining with water supply of additional housing and economic development within the plan area could cause changes in groundwater levels potentially affecting the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC.
- Increased air pollution from population and traffic increases in neighbouring areas combining with increased air pollution within the plan area (including from traffic and the proposed new waste management site near Keighley) potentially affecting the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC.
- Development in neighbouring areas combining with development in the plan area and causing an adverse effect on water quality potentially affecting the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC.
- Recreation impacts associated with population increase in the plan area combining with increased visitors from neighbouring areas visiting the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC and the North Pennine Moors SPA.
- Loss of supporting feeding sites in neighbouring districts combining with loss of supporting feeding sites from greenfield development in the plan area affecting the South Pennine Moors Phase 2 SPA and the North Pennine Moors SPA.
- Pet predation of ground nesting birds from new housing development in neighbouring districts combining with predation of ground nesting birds from new housing development in the plan area affecting the South Pennine Moors Phase 2 SPA.
- The combination of numerous potential effects on Rombalds Moor could result in a cumulative effect on the condition and integrity of the site, especially in relation to the Core Strategy. The site is surrounded by existing settlements which are identified for growth and the site could be exposed to increased recreational pressure, changes to hydrology and water quality, increased air pollution, increased pet predation of ground nesting birds, and loss of supporting feeding sites for birds. Population growth within the District as a whole and within surrounding areas could also compound some of these effects, such as in relation to recreation and air quality.

Following the identification of LSEs in relation to the Core Strategy and the Waste Management DPD, a number of recommendations have been made for further work required in order to ensure that adverse effects on European designated sites are avoided. The further work would be undertaken as part of an Appropriate Assessment (AA). The recommendations are as follows:

- Loss of supporting sites associated with the South Pennine Moors Phase 2 SPA and the North Pennine Moors SPA: It is not known whether greenfield sites which provide supporting functions to the SPAs have previously been identified. The potential for supporting sites to exist would need to be investigated in consultation with Natural England;
- Cat predation: Further investigation is needed to ascertain whether new housing could be located within 400m of the South Pennine Moors Phase 2 SPA and the North Pennine Moors SPA and therefore whether a potential effect could occur;
- Recreation effects: Further investigation of existing recreation issues and management of the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC is needed as well as whether the other Core Strategy policies are sufficient to safeguard against this effect occurring;
- Air quality effects: Further investigation is required to ascertain whether other Core Strategy policies contain sufficient safeguards to protect against this effect occurring on South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC and whether any specific sources of air pollution can be identified, such as increased traffic on A roads lying within 200m of the SPA;
- Injury and mortality of birds from wind turbines: Core Strategy Policy EN6 Energy should be strengthened in order to protect European sites; and
- Hydrology and water quality: Further investigation and consultation with Natural England is required to establish whether an adverse effect could occur from increased water demand, flood management measures and effects from developments in the settlements near to the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC and whether the Core Strategy policies provide sufficient safeguards to protect the sites.

In addition, the following recommendations are made for changes to the wording of the plans:

- The wording of Core Strategy Policy EN6 should require AA and the avoidance of adverse effects on Special Protection Areas;
- The potential effects from a waste management use on 'site 78 Aire Valley Road, Worth Village Keighley' on European sites could be avoided by the plan stating that an incinerator, gasification and/or pyrolysis plant is not operated on that site;
- Alternatively, potential effects of an incinerator, gasification and/or pyrolysis plant on the South Pennine Moors Phase 2 SPA, should it be proposed, would need to be assessed and mitigated at the planning application level through a project level appropriate assessment (AA). It is not known whether a project level AA would be able to conclude that such a facility would not have an adverse effect on the South Pennine Moors Phase 2 SPA; and

- Waste Management DPD Preferred Policy WDM2: Assessing All Applications for New, Expanded and Residual Waste Management Facilities – the policy wording should read that “adverse effects on European designated sites are avoided.” Currently the policy requires adverse effects to be minimised which is not strong enough to conclude that the plan will not have an adverse effect on European sites.

At this stage it is not possible to conclude that no adverse effects on European sites will occur as a result of the Bradford Core Strategy and the Bradford Waste Management DPD. The LSEs identified above need to be further considered in Stage 2 of the HRA (Appropriate Assessment) in order to understand whether there could be potential adverse effects on the integrity of the European sites alone and in combination with other plans and projects. If potential effects on site integrity are identified, measures to avoid effects will need to be considered and incorporated into the next versions of the plans, due to be consulted on in the summer of 2012. An Appropriate Assessment Report will accompany the consultation documents.

Natural England is a key stakeholder in the HRA process. Natural England has been consulted on the choice of European designated sites that have been considered in this screening exercise and they will be consulted on this report. Other key stakeholders including the Environment Agency and the local wildlife trust will be provided with an opportunity to comment on this report.

1 Introduction

1.1 The need for Habitats Regulations Assessment (HRA)

The Conservation of Habitats and Species Regulations 2010 transposes into English Law the requirement to carry out Appropriate Assessment for land use plans. Regulation 102 of the Conservation of Habitats and Species Regulations 2010 sets out that “the plan-making authority for that plan shall, before the plan is given effect, make an appropriate assessment for the implications for the site in view of that site’s conservation objectives”.

Regulation 61 of the Conservation of Habitats and Species Regulations 2010 requires Appropriate Assessment of plans and projects likely to have a significant effect on a European site. This means that the effects of such plans/projects on European sites designated for their nature conservation value (Natura 2000 sites) need to be assessed to ensure that the integrity of these sites is maintained.

The preparation of the Bradford Core Strategy and the Bradford Waste Management Development Plan Document (DPD) need to be subject to Habitats Regulations Assessment (HRA) screening to ascertain if there is potential for likely significant effects (LSEs) on any European site as a result of the plans.

1.2 European Sites

European sites are Special Protection Areas (SPAs) and Special Areas of Conservation (SACs. Proposed sites awaiting approval – potential SPAs (pSPAs) and candidate SACs (cSACs) should be treated in the same way as those already classified and approved.

PPS9 also recommends that Ramsar sites should be afforded the same level of consideration as SPAs and SACs, in policy if not in law. All SPAs, (non-marine) SACs and Ramsar sites overlap to some degree with Sites of Special Scientific Interest (SSSIs). HRA relates specifically and exclusively to the qualifying interests of European sites and not to the broader conservation interests or requirements under other SSSIs. However, the latter should be factored into plan-making as part of the SEA / SA process and the planning authority’s duty under section 28G of the Wildlife and Countryside Act 1981 to conserve and enhance SSSIs in carrying out their functions.

1.3 This Report

This report records a HRA screening process of the following documents:

- Local Development Framework for Bradford Core Strategy Development Plan Document Further Engagement Draft (October 2011);
- Local Development Framework for Bradford Waste Management DPD Preferred Approach (January 2011); and

- Local Development Framework for Bradford Waste Management DPD Preferred Approach Revised Chapter 5 (October 2011).

The Bradford Waste Management DPD Preferred Approach (January 2011) and the Revised Chapter 5 (October 2011) together form the most recent version of the Waste Management DPD. This is because some focussed consultation on a revised version of Chapter 5 (relating to potential waste management sites) of the draft plan was undertaken at the end of 2011.

This process is in line with draft guidance produced by Communities and Local Government in 2006¹.

The purpose of this report is to screen the documents to determine whether they could have significant effects on the conservation objectives of any European site (hereafter referred to as 'Likely Significant Effects' or LSEs). This document will be consulted on with Natural England and other stakeholders (see below).

1.4 Consultation

Natural England is a key stakeholder in the HRA process. Natural England has been consulted on the choice of European designated sites that have been considered in this screening exercise and they have been consulted on a draft of this report. Other key stakeholders listed below have also been consulted on a draft of the report:

- The Environment Agency;
- Royal Society for the protection of Birds;
- West Yorkshire Ecology²; and
- Pennine Prospects³.

2 The Bradford Core Strategy and Waste Management DPDs

2.1 Introduction

Bradford Metropolitan District Council is currently preparing a Local Development Framework (LDF) for Bradford which will contain a number of Development Plan Documents

¹ CLG (2006) Planning for the Protection of European Sites – Appropriate Assessment. Guidance for Regional Spatial Strategies and Local Development Documents, Consultation Paper

² West Yorkshire Ecology collect, collate and disseminate information on biodiversity and provide nature conservation advice for the West Yorkshire Districts

³ Pennine Prospects was established to support regeneration for the South Penines and is accompany owned by key stakeholders

(DPD). The Core Strategy and the Waste Management plan are both DPDs being prepared as part of the Bradford LDF. Both DPDs relate to the same geographical area, Bradford District. Figure 1 in Appendix B shows the plan area.

Both DPDs are at a similar stage in their production. This screening assessment has been undertaken at a stage in the plan making process which allows the findings of the assessment to inform the development of draft policies.

The Core Strategy document provides a spatial strategy for the sustainable development of the District including broad locations for new housing, employment and infrastructure. The Waste Management DPD provides a spatial strategy for managing all types of waste within Bradford District and will include potential locations for new waste management facilities. The Waste Management DPD needs to be in line with the Core Strategy, as it will be instrumental in shaping the future Waste Management needs of the District such as the locations of new housing, policies relating to sustainable construction, suitable areas for commercial development and associated infrastructure to be delivered within the District. As the two DPDs relate to each other in this way and both set spatial strategies for the District it is therefore appropriate to screen both documents for potential effects on European sites at the same time.

2.2 The Core Strategy DPD

The Core Strategy is one of the key documents of the emerging LDF for Bradford. It will:

- Set out the broad aims and objectives for sustainable development in the District for the next 15-20 years until 2026;
- Set out broad policies for steering and shaping development within the district;
- Set out the broad locations for new housing, employment and infrastructure investment; and
- Take account of national and regional policy and the Council's aims as set out in the Sustainable Community Strategy - 'The Big Plan'.

The Core Strategy will not allocate specific sites for new housing and employment development.

The final Core Strategy will set out what is to be done, where and by whom to achieve the over-arching vision and objectives of the plan. It needs to co-ordinate the local authority and its partner organisations' policies and actions, which affect what goes where in the district.

The Core Strategy has been developed over a number of stages which have each culminated in the production of a consultation document. The stages are listed below.

- Core Strategy DPD - Issues and Options Stage;
- Core Strategy DPD - Further Issues and Options; and

- Core Strategy DPD - Further Engagement Draft.

The “*Core Strategy Development Plan Document Further Engagement Draft October 2011*” has been subject to HRA screening. The Further Engagement Draft was consulted on between 28th October 2011 and 20th January 2012.

The next stage of the Core Strategy preparation involves the production of a draft Submission Core Strategy, which is expected to be published for consultation in the summer of 2012. Following consultation, the Core Strategy will be submitted to the Government for examination.

2.3 The Waste Management DPD

The Waste Management DPD will set out the Council’s spatial strategy for dealing with all types of waste within the Bradford District. It will identify waste management sites for dealing with the main streams of waste such as:

- Municipal Solid Waste (MSW); and
- Commercial and Industrial waste.

With criteria based policies for the management of the following waste streams:

- Agricultural;
- Construction, Demolition and Excavation;
- Hazardous; and
- Residual.

The Waste Management DPD will:

- Set out the broad vision for the future of waste management within the District and objectives for sustainable development of waste management over the next 10 – 20 years;
- Set out spatial policies for steering and shaping the development of waste management to deliver both the vision and objectives;
- In particular, set out the potential locations for new waste management facilities; and
- Take account of national and regional policy and the Council’s policies in the 2020 Bradford Vision and Community Strategy and the emerging Core Strategy DPD.

The Waste Management DPD is also being developed over a number of stages. The stages completed and related consultation documents are as follows:

- Issues and Options (consultation November 2009 – January 2011);
- Preferred Approach (consultation January – April 2011); and
- Preferred Approach - Revised Chapter 5 (consultation October - December 2011).

The Bradford Waste Management DPD Preferred Approach (January 2011) and the Revised Chapter 5 (October 2011) together form the most recent version of the Waste Management DPD. This is because focussed consultation on a revised version of Chapter 5 (relating to potential waste management sites) of the draft plan was undertaken at the end of 2011.

The “*Waste Management DPD Preferred Approach (January 2011)*” and the “*Waste Management DPD Preferred Approach Revised Chapter 5 (October 2011)*” have been subject to HRA screening.

The next stage of the Waste Management DPD preparation involves the production of a draft Submission version, which is expected to be published for consultation in the summer of 2012. Following consultation, the Core Strategy will be submitted to the Government for examination.

2.4 Sustainability Appraisal

The preparation of the Core Strategy and the Waste Management DPD are also being subject to a Sustainability Appraisal and Strategic Environmental Assessment (hereafter referred to as Sustainability Appraisal (SA)). The SA of the Core Strategy is being carried out by AMEC Environment & Infrastructure UK Limited consultants. The SA of the Waste Management DPD is being carried out by ENVIRON UK Ltd consultants. Both SAs are being carried out in line with the requirements of:

- Statutory Instrument 2004 No. 1633: The Environmental Assessment of Plans and Programmes Regulations 2004 (which requires an environmental assessment to be carried out on certain plans and programmes prepared by public authorities that are likely to have a significant effect upon the environment); and
- The Planning and Compulsory Purchase Act 2004 and Planning Policy Statement 11 (PPS11) (which requires sustainability appraisal (SA) of all emerging Development Plan Documents and Supplementary Planning Documents).

The results of the HRA will inform the SAs for both documents.

3 Methodology

3.1 Introduction

This section sets out the approach adopted for the HRA.

3.2 Approach to the HRA

Figure 3.1 sets out the overall HRA process in accordance with the CLG draft guidance⁴. Current best practice demonstrates that a blurring of the tasks in an iterative manner is the most effective method of assessing a plan as it develops.

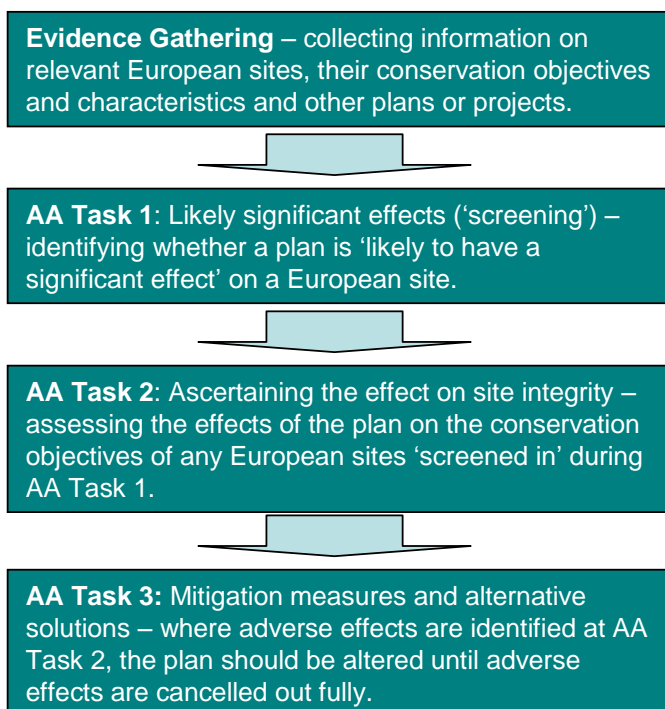


Figure 3.1 The HRA Process

The process set out in Figure 3.1 is an iterative process and should be revisited as policies develop, in response to consultation and as more information becomes available. The approach to the HRA screening of the DPDs focused on identifying potential risks of effects associated with the difference elements of the plans, such as the spatial strategies and policies and puts forward recommendations for impact avoidance through the wording of policies.

⁴ Department for Communities and Local Government (August 2006) Planning for the Protection of European Sites: Appropriate Assessment, Guidance for Regional Spatial Strategies and Local Development Documents, Consultation Document. DCLG Publications

The objectives of the HRA screening are to:

- Identify the European sites which could potentially be effected by the DPDs;
- Identify the potential risks of effects on European sites (including potential for in-combination effects); and
- Identify any recommended measures by which potential effects can be avoided in the development of the DPDs.

The tasks involved in undertaking the screening exercise are as follows:

1. Consult with NE (at project inception meeting) and agree European sites to be considered in the Screening exercise;
2. Collate information about sites and identify other relevant plans or projects;
3. Review the following documents and identify LSEs alone and potential for in-combination effects:
 - Bradford Core Strategy Development Plan Document Further Engagement Draft October 2011;
 - Bradford Waste Management DPD Preferred Approach (January 2011); and
 - Bradford Waste Management DPD Preferred Approach Revised Chapter 5 (October 2011).
4. Prepare screening report including recommendations for avoidance measures to help inform plan development.

The European sites which could potentially be affected by the DPDs are listed in Section 4 of this report and information about the sites is presented in Appendices A and B.

3.3 In combination effects

In considering the potential for in combination effects at this stage it has been identified that the activities presented within the following documents could be relevant to the potential effects of the Bradford Core Strategy and the Bradford Waste Management DPD:

- Craven District Council Local Development Framework Core Strategy;
- Calderdale Metropolitan Borough Council Local Development Framework Core Strategy;
- Leeds City Council Local Development Framework Core Strategy;
- Leeds City Council Local Development Framework Natural Resources DPD (includes waste management facilities);

- Kirklees Metropolitan Borough Council Local Development Framework Core Strategy;
- Harrogate Local Development Framework Core Strategy DPD and Sites and Policies;
and
- Pendle Local Development Framework

The potential for proposed housing and employment growth and other activities, such as recreation, in these neighbouring areas to combine with LSEs identified in the screening exercise has been considered in the assessment (see the assessment tables in Appendix A).

Further consideration of the relevant neighbouring authority plans and projects will take place in the next stage of the HRA (AA) as necessary, when potential effects of the Bradford Core Strategy and Waste management DPD are investigated in more detail.

4 European sites and issues affecting them

4.1 Introduction

The identification of European sites to be considered within the screening exercise was undertaken in consultation with Natural England. European Sites lying wholly or partially within the Bradford District administrative boundary and within a 25km buffer area around the administrative boundary have been included to reflect the fact that the DPDs may affect sites outside the plan area itself. A buffer of 25km was chosen as a reasonable area in which to consider potential impact pathways between the DPDs and the European sites. Impact pathways could include air pollution dispersion, sources of water abstraction, recreational destinations and sources of visitors etc.

The distribution of European sites is shown on Figure 1 in Appendix B. Figure 2 and 3 also in Appendix B show the SPAs (Figure 2) and SACs (Figure 3) in more detail.

4.2 European sites considered in the screening exercise

The European sites considered in this screening exercise are listed in Table 4.1.

Table 4.1 European sites considered in the Bradford Metropolitan District Council Core Strategy & Waste Management DPD screening exercise		
SPAs	SACs	Ramsar
South Pennine Moors Phase 2	South Pennine Moors	Malham Tarn
North Pennine Moors	Denby Grange Colliery Pond	
	North Pennine Moors	
	Craven Limestone Complex	
	North Pennine Dales Meadows	
	Kirk Deighton	
	Rochdale Canal	

Information relating to the reasons for designation of the sites, their conservation objectives, requirements to maintain favourable condition status of the site and the key factors affecting site integrity are all set out within the tables in Appendix A. The information regarding the sites has been obtained from the following sources:

- JNCC website: <http://www.jncc.gov.uk/>; and
- Yorkshire Dales National Park Authority website:
<http://www.yorkshiredales.org.uk/malhamtarnproject.htm>
- National Trust website: <http://www.nationaltrust.org.uk/what-we-do/what-we-protect/nature-and-wildlife/projects/view-page/item703630/>
- Natural England representatives.

5 Assessment of the plans

5.1 Introduction

This section sets out the results of the screening exercise and includes recommendations with regard to the draft submission versions of the DPDs. Summary tables showing the LSEs identified for each site and the elements of the DPDs with which they could be associated are presented in Section 6.

5.2 Results of the screening exercise

5.2.1 South Pennine Moors Phase 2 SPA

Potential LSEs have been identified as follows:

- **Loss of supporting feeding sites outside of the SPA:** The Core Strategy identifies housing and employment development, potentially on greenfield sites, in settlements surrounding Rombalds Moor, an isolated component of the site surrounded by existing settlements. The Core Strategy also identifies housing and employment in settlements such as Oakworth, Howarth and Oxenhope which are also close to the SPA in the south west of the District. Development here may also be on greenfield sites which could be providing a supporting function to the SPA. Greenfield sites could be providing a supporting function to the SPA.
- **Pet predation of ground nesting birds:** Housing development is directed to settlements in close proximity to the SPA, particularly at East Morton, Ilkley and Burley in Wharfedale. There is potential for housing developments to be located within 400m of the SPA, a distance at which research suggests cats could roam.
- **Changes in groundwater levels and water quality from new housing and economic development:** The risk of an LSE is uncertain. On the basis of the precautionary principle, an LSE is identified because the Core Strategy directs development to settlements close to the boundaries of the SPA, particularly at Rombalds Moor, and it is not known whether there are any particular issues relating to water supply and the delivery of the development proposed in these places. Policies SC2 and EN7 in the Core Strategy – Further Engagement draft seek to reduce flood risk overall and manage residual risk in a sustainable manner. Policy EN8 seeks to safeguard water resources and to protect and improve water quality. It states:

‘Proposals for development will only be acceptable provided there is no adverse impact on water bodies and groundwater resources, in terms of their quantity, quality and the important ecological features they support.’

These policies could form the basis for mitigation and management of potential impacts on the hydrology of the site.

- **Population increase from housing development and associated increase in traffic causes eutrophication for wet and dry heaths due to air pollution:** There

is a potential LSE from housing development and associated increase in population and traffic.

- **Air pollution from waste management use of Site 78 – Aire Valley Road, Worth Village Keighley:** This proposed waste management site lies within approximately 2.5km of the SPA. If this site were used for a waste management technology which emitted pollution to the air, this could result in an effect on the vegetative communities of the site, which are already affected by acid and nitrogen deposition.
- **Increased recreation pressure causing trampling of vegetation and disturbance to ground nesting birds:** Population increase in the District as a whole and in certain settlements could increase recreational pressure on the SPA, particularly on Rombalds Moor.
- **Renewable energy developments resulting in injury / mortality of birds:** Policy EN6 Energy encourages renewable energy generation which could include wind turbines and the supporting text of Policy PN1 South Pennine Towns and Villages Area Policy 1 identifies the Queensbury, Thornton and Denholme areas as having the greatest potential for wind turbines. Wind turbines could be associated with bird injury/mortality.

5.2.2 South Pennine Moors SAC

Potential LSEs have been identified as follows:

- **Changes in groundwater levels and water quality from new housing and economic development:** The risk of an LSE is uncertain. On the basis of the precautionary principle, an LSE is identified because the Core Strategy directs development to settlements close to the boundaries of the SPA, particularly at Rombalds Moor, and it is not known whether there are any particular issues relating to water supply and the delivery of the development proposed in these places. Policies SC2 and EN7 in the Core Strategy - Further Engagement draft seek to reduce flood risk overall and manage residual risk in a sustainable manner. Policy EN8 seeks to safeguard water resources and to protect and improve water quality. It states:
- *'Proposals for development will only be acceptable provided there is no adverse impact on water bodies and groundwater resources, in terms of their quantity, quality and the important ecological features they support.'*
- These policies could form the basis for mitigation and management of potential impacts on the hydrology of the site. **Population increase from housing development and associated increase in traffic causes eutrophication for wet and dry heaths due to air pollution:** There is a potential LSE from housing development and associated increase in population and traffic.
- **Air pollution from waste management use of Site 78 – Aire Valley Road, Worth Village Keighley:** This proposed waste management site lies within approximately 2.5km of the SAC. If this site were used for a waste management technology which

emitted pollution to the air (e.g. an incinerator, gasification and/or pyrolysis plant), this could result in an effect on the vegetative communities of the site, which are already affected by acid and nitrogen deposition.

- **Increased recreation pressure causing trampling of vegetation and disturbance to ground nesting birds:** Population increase in the District as a whole and in certain settlements could increase recreational pressure on the SAC, particularly on Rombalds Moor.

5.2.3 North Pennine Moors SPA

- **Loss of supporting feeding sites outside of the SPA:** The Core Strategy identifies housing and employment development in Addingham and Ilkley which are close to the SPA. Development in these settlements may involve development of greenfield sites which could be providing a supporting function to the SPA.
- **Changes in groundwater levels from new housing and economic development:** The risk of an LSE is uncertain. On the basis of the precautionary principle, an LSE is identified. Further investigation is required to ascertain whether water demand for new housing can be accommodated within existing water abstraction consents or if alterations to existing infrastructure or additional infrastructure is required which could directly affect the site. Policies SC2 and EN7 in the Core Strategy - Further Engagement draft seek to reduce flood risk overall and manage residual risk in a sustainable manner. Policy EN8 seeks to safeguard water resources and to protect and improve water quality. It states:

'Proposals for development will only be acceptable provided there is no adverse impact on water bodies and groundwater resources, in terms of their quantity, quality and the important ecological features they support.'

These policies could form the basis for mitigation and management of potential impacts on the hydrology of the site.

- **Population increase from housing development and associated increase in traffic causes eutrophication for wet and dry heaths due to air pollution:** There is a potential LSE from housing development and associated increase in population and traffic.
- **Air pollution from waste management use of Site 78 – Aire Valley Road, Worth Village Keighley:** This proposed waste management site lies within approximately 11km of the SPA. If this site were used for a waste management technology which emitted pollution to the air (e.g. an incinerator), this could result in an effect on the vegetative communities of the site, which are already affected by acid and nitrogen deposition.
- **Increased recreation pressure causing trampling of vegetation and disturbance to ground nesting birds:** Housing development and therefore growth in the population within the District and within certain settlements close to the SPA (i.e. Ilkley and Addingham) could result in increased recreational pressure on the site. The

sub area policies also promote tourism which could increase recreational pressure on the SPA.

- **Renewable energy developments resulting in injury / mortality of birds:** In the interests of the precautionary principle an LSE is identified although the geography of the Ilkley area does not suggest it is suitable for wind turbines. Wind turbines could cause injury or mortality to birds for which the site is designated. The wording of Policy Energy EN6 does not adequately protect the SPA from potential adverse effects.

5.2.4 North Pennine Moors SAC

Potential LSEs have been identified as follows:

- **Changes in groundwater levels and water quality from new housing and economic development:** The risk of an LSE is uncertain. On the basis of the precautionary principle, an LSE is identified. Further investigation is required to ascertain whether water demand for new housing can be accommodated within existing water abstraction consents or if alternations to existing infrastructure or additional infrastructure is required which could directly affect the site.
- Policies SC2 and EN7 in the Core Strategy - Further Engagement draft seek to reduce flood risk overall and manage residual risk in a sustainable manner. Policy EN8 seeks to safeguard water resources and to protect and improve water quality. It states:
'Proposals for development will only be acceptable provided there is no adverse impact on water bodies and groundwater resources, in terms of their quantity, quality and the important ecological features they support.'
These policies could form the basis for mitigation and management of potential impacts on the hydrology of the site.
- **Population increase from housing development and associated increase in traffic causes eutrophication for wet and dry heaths due to air pollution:** There is a potential LSE from housing development and associated increase in population and traffic.
- **Air pollution from waste management use of Site 78 – Aire Valley Road, Worth Village Keighley:** This proposed waste management site lies within approximately 11km of the SAC. If this site were used for a waste management technology which emitted pollution to the air (e.g. an incinerator, gasification and/or pyrolysis plant), this could result in an effect on the vegetative communities of the site, which are already affected by acid and nitrogen deposition.

5.3 Potential for in-combination effects

Potential in combination effects have been identified in the tables in Appendix A and are summarise as follows:

- Water supply to neighbouring areas combining with water supply of additional housing and economic development within the plan area could cause changes in groundwater levels potentially affecting the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC.
- Increased air pollution from population and traffic increases in neighbouring areas combining with increased air pollution within the plan area (including from traffic and the proposed new waste management site near Keighley) potentially affecting the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC.
- Development in neighbouring areas combining with development in the plan area and causing an adverse effect on water quality potentially affecting the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC.
- Recreation impacts associated with population increase in the plan area combining with increased visitors from neighbouring areas visiting the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC and the North Pennine Moors SPA.
- Loss of supporting feeding sites in neighbouring districts combining with loss of supporting feeding sites from greenfield development in the plan area affecting the South Pennine Moors Phase 2 SPA and the North Pennine Moors SPA.
- Pet predation of ground nesting birds from new housing development in neighbouring districts combining with predation of ground nesting birds from new housing development in the plan area affecting the South Pennine Moors Phase 2 SPA.
- The combination of numerous potential effects on Rombalds Moor (a component site of the South Pennine Moors SAC and Phase 2 SPA) could result in a cumulative effect on the condition and integrity of the site, especially in relation to the Core Strategy. The site is surrounded by existing settlements which are identified for growth and the site could be exposed to increased recreational pressure, changes to hydrology and water quality, increased air pollution, increased pet predation of ground nesting birds, and loss of supporting feeding sites for birds. Population growth within the District as a whole and within surrounding areas could also compound some of these effects, such as in relation to recreation and air quality.

Recommendations for avoiding the LSEs identified above can be found in the screening assessment tables in Appendix A and they are presented in Section 6.

6 Conclusions

The HRA screening assessment has screened the most recent versions of the Bradford Core Strategy⁵ and the Bradford Waste Management DPD⁶ and has identified risks of Likely Significant Effects (LSEs) or uncertainty relating to the following sites in connection with changes to water quality, changes to water levels due to water supply, increased recreation, increased pet predation of birds, increased air pollution from traffic, economic developments and a specific site allocated for waste management use, and wind turbines (please note not all LSEs affect all of the sites, please see Section 5 and Appendix A for further details):

- South Pennine Moors Phase 2 SPA;
- South Pennine Moors SAC;
- North Pennine Moors SPA; and
- North Pennine Moors SAC.

Tables 6.1 and 6.2 summarise the potential LSEs identified with each European site and the elements of the DPDs which could be associated with potential effects.

Key to tables

Likely significant effects	✓
No likely significant effects	-
Uncertain effects	?

⁵ Bradford Core Strategy Development Plan Document Further Engagement Draft October 2011

⁶ Bradford Waste Management DPD Preferred Approach (January 2011) and Bradford Waste Management DPD Preferred Approach Revised Chapter 5 (October 2011).

Table 6.1: Summary of screening assessment of Bradford Metropolitan District Council Core Strategy DPD										
Nature of potential effects	LSE identified due to the Bradford Metropolitan District Council Core Strategy DPD?									
	South Pennine Moors Phase 2 SPA	North Pennine Moors SPA	South Pennine Moors SAC	North Pennine Moors SAC	Denby Grange Colliery Pond SAC	Craven Limestone Complex SAC	North Pennine Dales Meadows SAC	Malham Tarn Ramsar	Kirk Deighton SAC	Rochdale Canal SAC
Inappropriate habitat management	-	-	-	-	-	-	-	-	-	-
Loss of supporting feeding sites associated with sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	✓	✓	-	-	-	-	-	-	-	-
Increased water demand associated with sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	?	?	?	?	-	-	-	-	-	-
Increase in emissions to air associated with sub area	✓	✓	✓	✓	-	-	-	-	-	-

Table 6.1: Summary of screening assessment of Bradford Metropolitan District Council Core Strategy DPD										
Nature of potential effects	LSE identified due to the Bradford Metropolitan District Council Core Strategy DPD?									
	South Pennine Moors Phase 2 SPA	North Pennine Moors SPA	South Pennine Moors SAC	North Pennine Moors SAC	Denby Grange Colliery Pond SAC	Craven Limestone Complex SAC	North Pennine Dales Meadows SAC	Malham Tarn Ramsar	Kirk Deighton SAC	Rochdale Canal SAC
policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).										
Impacts on water quality associated with sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	?	?	?	?	-	-	-	-	-	-
Renewable energy developments (wind turbines) associated with Policy EN6 Energy and the supporting text of Policy PN1 South Pennine Towns and Villages Area Policy	✓	✓	-	-	-	-	-	-	-	-

Table 6.1: Summary of screening assessment of Bradford Metropolitan District Council Core Strategy DPD										
Nature of potential effects	LSE identified due to the Bradford Metropolitan District Council Core Strategy DPD?									
	South Pennine Moors Phase 2 SPA	North Pennine Moors SPA	South Pennine Moors SAC	North Pennine Moors SAC	Denby Grange Colliery Pond SAC	Craven Limestone Complex SAC	North Pennine Dales Meadows SAC	Malham Tarn Ramsar	Kirk Deighton SAC	Rochdale Canal SAC
1.										
Pet predation sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	✓	-	-	-	-	-	-	-	-	-
Recreation impacts sub area policies, the spatial strategy and strategic core policies and the quantum of development proposed (Policy HO1).	✓	✓	✓	-	-	-	-	-	-	-

Table 6.2: Summary of screening assessment of Bradford Metropolitan District Council Waste Management DPD										
Options and nature of potential effects	LSE identified due to the Bradford Metropolitan District Council Waste Management DPD?									
	South Pennine Moors Phase 2 SPA	North Pennine Moors SPA	South Pennine Moors SAC	North Pennine Moors SAC	Denby Grange Colliery Pond SAC	Craven Limestone Complex SAC	North Pennine Dales Meadows SAC	Malham Tarn Ramsar	Kirk Deighton SAC	Rochdale Canal SAC
Increase in emissions to air from allocation of Site 78 – Aire Valley Road, Worth Village Keighley for waste management use.	✓	✓	✓	✓	-	-	-	-	-	-
Inappropriate management	-	-	-	-	-	-	-	-	-	-
Changes in water quality	-	-	-	-	-	-	-	-	-	-
Changes in water levels.	-	-	-	-	-	-	-	-	-	-

Potential in combination effects have been identified in relation to the most of the effects identified in Table 6.1 and 6.2 combining with growth in neighbouring areas and in particular a number of different potential effects on Rombalds Moor, a component of the South Pennine Moors Phase 2 PS and the South Pennine Moors SAC combining and leading to an overall deterioration of the integrity of the European sites.

Following the identification of LSEs in relation to the Core Strategy and the Waste Management DPD, a number of recommendations have been made for further work required in order to ensure that adverse effects on European designated sites are avoided. The further work would be undertaken as part of an AA. The recommendations are as follows:

- Loss of supporting sites associated with the South Pennine Moors Phase 2 SPA and the North Pennine Moors SPA: It is not known whether greenfield sites which provide supporting functions to the SPAs have previously been identified. The potential for supporting sites to exist would need to be investigated in consultation with Natural England;
- Cat predation: Further investigation is needed to ascertain whether new housing could be located within 400m of the South Pennine Moors Phase 2 SPA and the North Pennine Moors SPA and therefore whether a potential effect could occur;
- Recreation effects: Further investigation of existing recreation issues and management of the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC is needed as well as whether the other Core Strategy policies are sufficient to safeguard against this effect occurring;
- Air quality effects: Further investigation is required to ascertain whether other Core Strategy policies contain sufficient safeguards to protect against this effect occurring on South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC and whether any specific sources of air pollution can be identified, such as increased traffic on A roads lying within 200m of the SPA;
- Injury and mortality of birds from wind turbines: Core Strategy Policy EN6 Energy should be strengthened in order to protect European sites; and
- Hydrology and water quality: Further investigation and consultation with Natural England is required to establish whether an adverse effect could occur from increased water demand and effects from developments near to the South Pennine Moors Phase 2 SPA, South Pennine Moors SAC, the North Pennine Moors SPA and the North Pennine Moors SAC.

In addition, the following recommendations are made for changes to the wording of the plans:

- The wording of Core Strategy Policy EN6 should require Appropriate Assessment and the avoidance of adverse effects on Special Protection Areas;
- The potential effects from a waste management use on 'site 78 Aire Valley Road, Worth Village Keighley' on European sites could be avoided by the plan stating that an incinerator, gasification and/or pyrolysis plant is not operated on that site;
- Alternatively, potential effects of an incinerator, gasification and/or pyrolysis plant on the South Pennine Moors Phase 2 SPA, should it be proposed, would need to be assessed and mitigated at the planning application level through a project level appropriate assessment (AA). It is not known whether a project level AA would be able to conclude that such a facility would not have an adverse effect on the South Pennine Moors Phase 2 SPA; and
- Waste Management DPD Preferred Policy WDM2: Assessing All Applications for New, Expanded and Residual Waste Management Facilities – the policy wording should read that “adverse effects on European designated sites are avoided.” Currently the policy requires adverse effects to be minimised which is not strong enough to conclude that the plan will not have an adverse effect on European sites.

At this stage it is not possible to conclude that no adverse effects on European sites will occur as a result of the Bradford Core Strategy and the Bradford Waste Management DPD. A Stage 2 of the HRA (Appropriate Assessment) is required in order to understand whether there could be potential adverse effects on the integrity of the European sites alone and in combination with other plans and projects. If potential effects on site integrity are identified, measures to avoid effects will need to be considered and incorporated into the plans. An Appropriate Assessment Report will accompany the next iterations of the Core Strategy and the Waste Management DPD which are due to consultation in the summer of 2012.

Appendix A: Screening tables

Table 1

Name	<u>South Pennine Moors Phase 2 SPA</u> UK9007022
Location with regards to plan area	A component site lies within Bradford District south of Ilkley and north of Keighley and Baildon. Other component sites are located within the District to the west and south of Oakworth/Howarth. Remainder of site lies outside of the District boundary, within 25 km of the District boundary.
Reason(s) for designation:	
<p>This qualifies under Article 4.1 of the Directive (79/409/EEC):</p> <p>Breeding;</p> <ul style="list-style-type: none"> • <i>Asio flammeus</i> Short-eared owl; • <i>Falco columbarius</i> Merlin; and • <i>Pluvialis apricaria</i> Golden plover. <p>This site qualifies under Article 4.2 of the Directive (79/409/EEC) for supporting the following internationally important assemblages of birds:</p> <ul style="list-style-type: none"> • <i>Actitis hypoleucos</i> Common sandpiper • <i>Oenanthe oenanthe</i> Northern wheatear • <i>Calidris alpina schinzii</i> Dunlin • <i>Saxicola rubetra</i> Whinchat • <i>Carduelis flavirostris</i> Twite • <i>Tringa totanus</i> Redshank • <i>Gallinago gallinago</i> Snipe • <i>Turdus torquatus</i> Ring ouzel 	

- *Numenius arquata* Eurasian curlew
- *Vanellus vanellus* Northern lapwing

Conservation objectives	Maintenance of the ecosystems on which the birds depend.
--------------------------------	--

Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
<p>Maintenance of the extent of suitable habitat mosaic including areas of tall mature heath and grass sward suitable for nesting short-eared owl and merlin whilst maintaining shorter, recently grazed and burnt areas suitable for nesting golden plover.</p> <p>Maintenance of appropriate grazing and burning regimes, and avoidance of overgrazing by sheep is a key pressure on the site.</p> <p>Maintenance of bird feeding areas outside the site (avoidance of agricultural intensification), maintaining the extent of habitats suitable for providing adequate food supply such as small mammals, nesting birds and invertebrates.</p> <p>Maintaining low levels of disturbance and predation are especially important for ground nesting birds and management of human access should direct disturbance away from sensitive areas. Predator control may be required.</p> <p>Recreational disturbance - the SPA is flanked two sides by large industrial urban areas, which means that large numbers of people use the area for recreational activities.</p> <p>Appropriate grazing regimes are required to maintain the extent of the moorland and heaths, the structural diversity including undisturbed dwarf shrub, varied age structure and vegetational mosaic. Grazing plays an important role in this management. The control of inappropriate and invasive species is required.</p> <p>Maintaining hydrological conditions as wet heaths require wet soils during winter with a dry surface in summer. Also importance of water quality, including lack of eutrophication and maintenance of</p>	<ul style="list-style-type: none"> • Maintenance of habitats on site • Maintenance of bird feeding areas outside the site (avoidance of agricultural intensification), in particular Golden Plover. • Ground nesting birds - Maintaining low levels of disturbance and predation, i.e. where humans, dogs and predators are. Management of human access should direct disturbance away from sensitive areas. • Wet heaths - Maintaining hydrological conditions. Water quality, including lack of eutrophication and maintenance of oligotrophic character. • Air quality - Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths. • Mires and bogs – changes in hydrology and maintenance of natural regimes, water quality, and water table levels. • Absence of barriers e.g. wind farms

<p>oligotrophic character.</p> <p>Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths.</p> <p>Mires and bogs are sensitive to changes in hydrology and maintenance of natural regimes, water quality, and avoidance of water table lowering are important factors.</p>	
---	--

Assessment of significance of effects relating to the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Inappropriate management	None	None	No LSE. The Core Strategy is unlikely to affect the habitat management regime of the site.
<p>Loss of supporting feeding sites outside of the SPA associated with the following parts of the plan:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) 	<p>Yes. The Core Strategy identifies housing and employment development in settlements surrounding Rombalds Moor, an isolated component of the site surrounded by existing settlements. Development in the surrounding settlements may involve development of greenfield sites which could be providing a supporting function to the SPA.</p> <p>The Core Strategy also identifies housing and employment in settlements such as Oakworth, Howarth and Oxenhope which are also close to the SPA in the south west of the District.</p>	<p>Possibly if other supporting sites in neighbouring Districts are lost to development. E.g. in Craven District, Calderdale or Pendle.</p>	<p>LSE. Greenfield developments could result in the loss of supporting sites to the SPA. It is not known whether sites which provide supporting functions to the SPA have been identified. Potential in combination effect with development in neighbouring districts.</p>

<p>Hierarchy of Settlements;</p> <ul style="list-style-type: none"> • Policy HO1 the Scale of Housing Required; • Airedale Sub Area Policy 1 (AD1); • Wharfedale Sub Area Policy 1 (WD1); and • South Pennine Towns and Villages Sub Area Policy (PN1). 	<p>Development here may also be on greenfield sites which could be providing a supporting function to the SPA.</p>		
<p>Pet predation of ground nesting birds associated with housing (i.e. cats) in connection with the following policies:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 the Scale of Housing Required; • Airedale Sub Area Policy 1 	<p>Yes. Housing development is directed to settlements in close proximity to the SPA, particularly at East Morton, Ilkley and Burley in Wharfedale. There is potential for housing developments to be located within 400m of the SPA, a distance at which research suggests cats could roam.</p>	<p>Possibly associated with housing growth in areas such as Halifax, Burnley and Colne.</p>	<p>LSE. Housing developments within 400m of the SPA could potentially result in an adverse effect on ground nesting birds from cat predation. Potential in combination effect with development in neighbouring districts.</p>

<p>(AD1);</p> <ul style="list-style-type: none"> • Wharfedale Sub Area Policy 1 (WD1); and • South Pennine Towns and Villages Sub Area Policy (PN1). 			
<p>Changes in hydrology and water quality associated with the following policies:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 the Scale of Housing Required; • Airedale Sub Area Policy 1 (AD1); • Wharfedale Sub Area Policy 1 (WD1); and • South Pennine Towns and 	<p>The potential for the housing and employment growth proposed within the Core Strategy to affect the hydrology of the SPA is unknown. Development is proposed close to the boundary of the SPA particularly at Rombalds Moor. It is not known whether there are any issues relating to water supply and the delivery of the Core Strategy. Further investigation and consultation with Natural England is required to establish whether an adverse effect could occur and whether the Core Strategy policies provide sufficient safeguards to protect the SPA.</p>	<p>Potential in combination effects of increased water demand from neighbouring districts.</p>	<p>Risk of LSE unknown. On the basis of the precautionary principle, an LSE is identified because the Core Strategy directs development close to the boundaries of the SPA, particularly at Rombalds Moor and it is not known whether there are any issues relating to water supply and the delivery of the Core Strategy. Further investigation and consultation with Natural England is required.</p>

<p>Villages Sub Area Policy (PN1).</p>			
<p>Recreation – trampling of vegetation/ disturbance of ground nesting bird species associated with the following policies:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 the Scale of Housing Required; • Airedale Sub Area Policy 1 (AD1); • Wharfedale Sub Area Policy 1 (WD1); and • South Pennine Towns and Villages Sub Area Policy (PN1). 	<p>Housing development and therefore growth in the population within the District and within certain settlements close to the SPA could result in increased recreational pressure on the site, particularly at Rombalds Moor which is surrounded by settlements and which is reportedly well used for recreation. The sub area policies also promote tourism which could increase recreational pressure on the SPA.</p>	<p>Possibly in combination with population increases in surrounding Districts to the south and west of the SPA/District boundary.</p>	<p>LSE. Population increase in the District as a whole and in certain settlements could increase recreational pressure on the SPA, particularly on Rombalds Moor. Potential in combination effect with development in neighbouring districts.</p>
<p>Population increase from housing development and associated increase</p>	<p>The Core Strategy is planning for 28,000 new homes and employment development up to</p>	<p>Possibly, with increased air pollution in</p>	<p>LSE. Potential eutrophication effect on SPA heath habitats from potential</p>

<p>in traffic causes eutrophication for wet and dry heaths due to air pollution and hence affect bird populations. Associated with the following:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 The Scale of Housing Required. 	<p>2028 and this could result in increased traffic and air pollution, which could result in eutrophication of the wet and dry heaths on the SPA.</p>	<p>neighbouring areas although dispersed air pollution is a regional, if not, national issue.</p>	<p>increases in traffic from growth proposed in the Core Strategy.</p>
<p>Renewable energy developments resulting in injury / mortality of birds associated with:</p> <ul style="list-style-type: none"> • EN6 Energy; and • Supporting text of Policy PN1 South Pennine Towns and Villages Area Policy 1. 	<p>Policy EN6 Energy promotes renewable energy developments. Supporting text of Policy PN1 South Pennine Towns and Villages Area Policy 1 identifies the Queensbury, Thornton and Denholme areas as having the greatest potential for wind turbines. Wind turbines could be associated with bird injury/mortality.</p> <p>However, Policy EN6 Energy includes text (B) requiring full assessment of wind turbine proposals and integration of measures to minimise adverse effects but this wording does not deal specifically with potential impacts on Natura 2000 sites.</p>	<p>It is unlikely that projects in neighbouring areas would be given planning permission which would also have this potential effect. No in-combination effects therefore identified.</p>	<p>LSE. In the interests of the precautionary principle an LSE is identified. Policy Energy EN6 does not adequately protect the SPA from potential adverse effects. Wording of Policy EN6 Energy should be tightened in order to avoid an effect on European designated sites.</p>

Recommendations:

Loss of supporting sites: Greenfield developments could result in the loss of supporting sites to the SPA. It is not known whether sites which provide supporting functions to the SPA have been identified. The potential for supporting sites to exist would need to be investigated through AA.

Cat predation: Further investigation is needed through AA to ascertain whether new housing could be located within 400m of the SPA.

Recreation effects: Further investigation of existing recreation issues and management of the SPA is needed through AA as well as whether the other Core Strategy policies are sufficient to safeguard against this effect occurring.

Air quality effects: Further investigation is required to ascertain whether other Core Strategy policies contain sufficient safeguards to protect against this effect occurring and whether any specific sources of air pollution can be identified, such as increased traffic on A roads lying within 200m of the SPA.

Injury and mortality of birds from wind turbines: Policy EN6 should require Appropriate Assessment and the avoidance of adverse effects on Special Protection Areas.

Hydrology and water quality: Further investigation and consultation with Natural England is required to establish whether an adverse effect could occur and whether the Core Strategy policies provide sufficient safeguards to protect the SPA.

Assessment of significance of effects of the Bradford Waste Management DPD:

Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Inappropriate management	None	None	No LSE. The plan is unlikely to affect the habitat management regime of the SPA.

Loss of supporting feeding sites outside of the SPA	None	None	No LSE. The plan is unlikely to result in the loss of supporting feeding sites outside of the SPA because it does not promote the development of greenfield sites.
Changes in water quality	None	None	No LSE. The plan does not promote developments which are close to the boundaries of the SPA or which discharge waste water.
Changes in groundwater levels through increased water demand from waste management activities.	None	None	No LSE. The plan does not promote developments which have a large demand for water.
Air pollution from waste management use of Site 78 – Aire Valley Road, Worth Village Keighley	This proposed waste management site lies within approximately 2.5km of the SPA. If this site were used for a waste management technology which emitted pollution to the air, this could result in an effect on the vegetative communities of the site, which are already affected by acid and nitrogen deposition.	Potential in-combination effect with housing and economic development in the Core Strategy and in neighbouring areas although dispersed air pollution is a regional, if not, national issue.	LSE. As the type of waste management technology to be used on the site is not being determined by the plan, it is uncertain whether this is a likely significant effect. An effect might only occur if the technology involved emissions of pollution to the air. However, in the interests of the precautionary principle, an LSE is identified, alone and in combination with development within the plan area and surrounding areas.
Introduction of barriers to bird flight	None	None	No LSE. The waste plan does not promote any development which would result in creating a barrier to birds for which the SPA is designated.

Recommendations:

The potential effects from a waste management use on 'site 78 Aire Valley Road, Worth Village Keighley' on European sites could be avoided by the plan stating that an incinerator, gasification and/or pyrolysis plant is not operated on that site.

Alternatively, potential effects of an incinerator, gasification and/or pyrolysis plant on the South Pennine Moors Phase 2 SPA, should it be proposed, would need to be assessed and mitigated at the planning application level through a project level appropriate assessment (AA). It is not known whether a project level AA would be able to conclude that such a facility would not have an adverse effect on the South Pennine Moors Phase 2 SPA.

Preferred Policy WDM2: Assessing All Applications for New, Expanded and Residual Waste Management Facilities – the policy wording should read that 'adverse effects on European designated sites are avoided.' Currently the policy requires adverse effects to be minimised which is not strong enough to conclude that the plan will not have an adverse effect on European sites.

Table 2			
Name	<u>South Pennine Moors SAC</u> UK0030280		
Location with regards to plan area	Within plan area		
Reason(s) for designation:			
<p>ANNEX 1</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Primary</p> <ul style="list-style-type: none"> • 4030 European dry heaths. • 7130 Blanket bogs * Priority feature • 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. </td> <td style="width: 50%; vertical-align: top;"> <p>Non Primary</p> <ul style="list-style-type: none"> • 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>. • 7140 Transition mires and quaking bogs </td> </tr> </table>		<p>Primary</p> <ul style="list-style-type: none"> • 4030 European dry heaths. • 7130 Blanket bogs * Priority feature • 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. 	<p>Non Primary</p> <ul style="list-style-type: none"> • 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>. • 7140 Transition mires and quaking bogs
<p>Primary</p> <ul style="list-style-type: none"> • 4030 European dry heaths. • 7130 Blanket bogs * Priority feature • 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. 	<p>Non Primary</p> <ul style="list-style-type: none"> • 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i>. • 7140 Transition mires and quaking bogs 		
SSSI component sites	<ul style="list-style-type: none"> • Via Gellia Woodlands SSSI • The Dark Peak SSSI • Goyt Valley SSSI • Eastern Peak District Moors SSSI 		
Conservation objectives	Maintenance of the Annex I habitats that are a primary reason for selection of this site and maintenance of non-primary habitats.		

Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
<p>Heaths</p> <ul style="list-style-type: none"> • Appropriate heathland management is required to maintain the extent of the heaths, the structural diversity including undisturbed dwarf shrub, varied age structure and vegetational mosaic. Grazing plays an important role in this management. The control of inappropriate and invasive species is required. Specific grouse moor management contributes to the maintenance of habitat mosaic. • Maintaining hydrological conditions as wet heaths require wet soils during winter with a dry surface in summer. Also importance of water quality, including lack of eutrophication and maintenance of oligotrophic character. • Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths. <p>Mires and Bogs</p> <ul style="list-style-type: none"> • Maintenance of habitat extent and species composition are important for this habitat, with some areas requiring management of scrub encroachment in addition to minimising the levels of trampling and damage from recreational activities including fire-setting. • Mires and Bogs are sensitive to changes in hydrology and maintenance of natural regimes, water quality, and avoidance of water table lowering are important factors. • Areas that have suffered previous damaging activities require enhancement including re-vegetation of bare peat, increased vegetational diversity in response to past heavy sheep grazing and a reduction of erosion through gullying. <p>Woodlands</p> <ul style="list-style-type: none"> • Appropriate woodland management is required in particular to maintain natural processes and create a 	<ul style="list-style-type: none"> • Maintenance of habitats on site • Heaths - Maintaining hydrological conditions. Water quality, including lack of eutrophication and maintenance of oligotrophic character. • Air quality - Air pollution and atmospheric deposition is likely to be an important cause of eutrophication for wet and dry heaths. • Mires and bogs - minimising the levels of trampling and damage from recreational activities including fire-setting. • Mires and bogs – changes in hydrology and maintenance of natural regimes, water quality, and water table levels.

<p>diverse woodland structure, allow tree regeneration potential, control invasive species, and support characteristic species and habitat types.</p> <ul style="list-style-type: none"> To increase the extent of native character woodland without detriment to other key habitats. 	
--	--

Assessment of significance of effects of the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale
<p>Changes in hydrology and water quality affecting bogs, mires and heaths associated with the following policies:</p> <ul style="list-style-type: none"> The preferred spatial development option; Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; Strategic Core Policy 4 (SC4) Hierarchy of Settlements; Policy HO1 the Scale of Housing Required; Airedale Sub Area 	<p>The potential for the housing and employment growth proposed within the Core Strategy to affect the hydrology of the SPA is unknown. Development is proposed close to the boundary of the SAC particularly at Rombalds Moor. It is not known whether there are any issues relating to water supply and the delivery of the Core Strategy. Further investigation and consultation with Natural England is required to establish whether an adverse effect could occur and whether the Core Strategy policies provide sufficient safeguards to protect the SAC.</p>	<p>Potential in combination effects of increased water demand from neighbouring districts.</p>	<p>Risk of LSE unknown. On the basis of the precautionary principle, an LSE is identified because the Core Strategy directs development close to the boundaries of the SAC, particularly at Rombalds Moor and it is not known whether there are any issues relating to water supply and the delivery of the Core Strategy. Further investigation and consultation with Natural England is required.</p>

<p>Policy 1 (AD1);</p> <ul style="list-style-type: none"> • Wharfedale Sub Area Policy 1 (WD1); and • South Pennine Towns and Villages Sub Area Policy (PN1). 			
<p>Population increase from housing development and associated increase in traffic causes eutrophication for wet and dry heaths due to air pollution and hence affect bird populations. Associated with the following:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 The Scale of Housing Required. 	<p>The Core Strategy is planning for 28,000 new homes and employment development up to 2028 and this could result in increased traffic and air pollution, which could result in eutrophication of the wet and dry heaths on the SAC.</p>	<p>Possibly, with increased air pollution in neighbouring areas although dispersed air pollution is a regional, if not, national issue.</p>	<p>LSE. Potential eutrophication effect on SAC heath habitats from potential increases in traffic from growth proposed in the Core Strategy.</p>

<p>Recreation – trampling of vegetation/ increased risk of fire setting associated with the following policies:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 the Scale of Housing Required; • Airedale Sub Area Policy 1 (AD1); • Wharfedale Sub Area Policy 1 (WD1); and • South Pennine Towns and Villages Sub Area Policy (PN1). 	<p>Housing development and therefore growth in the population within the District and within certain settlements close to the SAC could result in increased recreational pressure on the site, particularly at Rombalds Moor which is surrounded by settlements and which is reportedly well used for recreation. The sub area policies also promote tourism which could increase recreational pressure on the SAC.</p>	<p>Possibly in combination with population increases in surrounding Districts to the south and west of the SAC/District boundary.</p>	<p>LSE. Population increase in the District as a whole and in certain settlements could increase recreational pressure on the SAC, particularly on Rombalds Moor. Potential in combination effect with development in neighbouring districts.</p>
<p>Inappropriate management</p>	<p>None</p>	<p>None</p>	<p>No LSE. The Core Strategy is unlikely to affect the habitat</p>

			management regime of the site.
Recommendations:			
<p>Recreation effects: Further investigation of existing recreation issues and management of the SAC is needed through AA as well as whether the other Core Strategy policies are sufficient to safeguard against this effect occurring.</p> <p>Air quality effects: Further investigation is required to ascertain whether other Core Strategy policies contain sufficient safeguards to protect against this effect occurring and whether any specific sources of air pollution can be identified, such as increased traffic on A roads lying within 200 m of the SAC.</p> <p>Hydrology and water quality: Further investigation and consultation with Natural England is required to establish whether an adverse effect could occur and whether the Core Strategy policies provide sufficient safeguards to protect the SAC.</p>			

Assessment of significance of effects of the Bradford Waste Management DPD:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale
Inappropriate management	None	None	No LSE. The plan is unlikely to affect the habitat management regime of the site.
Changes in water quality	None	None	No LSE. The plan does not promote developments which are close to the boundaries of the SAC or which discharge waste water.
Changes in groundwater levels through increased water demand from waste	None	None	No LSE. The plan does not promote developments which have a large

management activities.			demand for water.
Air pollution from waste management use of Site 78 – Aire Valley Road, Worth Village Keighley	This proposed waste management site lies within approximately 2.5km of the SAC. If this site were used for a waste management technology which emitted pollution to the air, this could result in an effect on the vegetative communities of the site, which are already affected by acid and nitrogen deposition.	Potential in-combination effect with housing and economic development in the Core Strategy and in neighbouring areas although dispersed air pollution is a regional, if not, national issue.	LSE. As the type of waste management technology to be used on the site is not being determined by the plan, it is uncertain whether this is a likely significant effect. An effect might only occur if the technology involved emissions of pollution to the air. However, in the interests of the precautionary principle, an LSE is identified, alone and in combination with development within the plan area and surrounding areas.
<p>Recommendations:</p> <p>The potential effects from a waste management use on ‘site 78 Aire Valley Road, Worth Village Keighley’ on European sites could be avoided by the plan stating that an incinerator, gasification and/or pyrolysis plant is not operated on that site.</p> <p>Alternatively, potential effects of an incinerator, gasification and/or pyrolysis plant on the South Pennine Moors Phase 2 SPA, should it be proposed, would need to be assessed and mitigated at the planning application level through a project level appropriate assessment (AA). It is not known whether a project level AA would be able to conclude that such a facility would not have an adverse effect on the South Pennine Moors Phase 2 SPA.</p> <p>Preferred Policy WDM2: Assessing All Applications for New, Expanded and Residual Waste Management Facilities – policy wording should read that ‘adverse effects on European designated sites are avoided.’ Currently the policy requires adverse effects to be minimised which is not strong enough to conclude that the plan will not have an adverse effect on European sites.</p>			

Table 3	
Name	<u>North Pennine Moors SPA</u>
Location with regards to plan area	Approx. 1.5 km to the north/north-east of the District boundary. Outside of the plan area.
Reason(s) for designation:	
<p>Primary</p> <p>ANNEX 1 SPECIES</p> <ul style="list-style-type: none"> • A082 <i>Circus cyaneus</i> 2.2% of the GB breeding population (Count as at 1993 and 1994) • A098 <i>Falco columbarius</i> 10.5% of the GB breeding population (Estimated population) • A103 <i>Falco peregrinus</i> 1.3% of the GB breeding population (Count as at 1991) • A140 <i>Pluvialis apricaria</i> (North-western Europe - breeding) at least 6.2% of the GB breeding population (Estimated population) 	
<p>Non Primary:</p> <p>none</p>	
Additional information from Natural England:	
<p>The SPA is designated for its breeding populations of golden plover, hen harrier, merlin and peregrine, which are of European importance. In 2001, a review of the UK's SPA network carried out by the JNCC identified two further populations of international importance within the SPA - breeding curlew and dunlin. Underpinning the SPA designation is the Bollilhope, Pikestone, Eggleston & Woodland Fells SSSI, which is notified for a range of breeding upland bird species including, in addition to those listed above, short-eared owl, snipe, redshank and black grouse. The North Pennines is now the English stronghold for black grouse, holding approximately 90% of the English population. More generally, the North Pennines and its fringes hold a nationally significant</p>	

<p>population of breeding waders, with the North Pennines Area of Outstanding Natural Beauty (AONB) alone estimated to hold an estimated 22,000 pairs of breeding waders. These populations are hugely important due to significant declines in the UK populations of lapwing, curlew, redshank and snipe.</p>	
<p>Conservation objectives</p>	<p>Maintenance of the Annex I habitats that are a primary reason for selection of this site and maintenance of non-primary habitats.</p>
<p>Requirements to maintain favourable condition status of site (relating to conservation objectives)</p>	<p>Key factors affecting site integrity (relating to designated features)</p>
<p>The North Pennine Moors covers nearly 150,000 hectares and is largely heather moorland, either as blanket bog or drier heathland, with smaller associated areas of wetland, grassland, bracken, scrub, woodland and cliff. The habitats and qualifying breeding bird populations are mostly dependent upon stock grazing and burning at sympathetic levels. The continuation of these practices relies on their profitability, including any subsidy or incentive payments. Over-grazing, over-burning and other forms of intensive agricultural or sporting management (e.g. drainage) may be damaging. These issues are being partly addressed through management agreements and related incentives. Further legislation relating to Common land and reform of the Common Agricultural Policy would achieve sustainable solutions.</p> <p>Recreational activity may be problematic but is addressed through Site Management Statements and through continuing working with Local Authorities to manage access. There is evidence that acidic and nitrogen deposition are having damaging effects on the vegetation and hence on the bird populations. Such issues are being addressed through existing pollution control mechanisms.</p> <p>Within this large site there is scope to enhance many of the more natural habitats and species whilst maintaining the core SPA interests.</p>	<ul style="list-style-type: none"> • Maintenance of habitats on site – burning and grazing. • Absence of draining as it could be causing damage e.g. associated with sporting management. • Control of recreational activity. • Air quality - Air pollution and atmospheric deposition is having a damaging effect on vegetation and hence on bird populations. • Functionally important land outside of the SPA boundary which is important for SPA birds.

Assessment of significance of effects of the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Inappropriate management	None	None	The Core Strategy is unlikely to affect the habitat management regime of the site. No LSE.
<p>Water levels affected by increased water demand and flood risk management measures. associated with the following policies:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 the Scale of Housing Required; 	<p>The source of water for existing and new housing development and whether there are any issue associated with it are unknown e.g. whether water demand for new housing can be accommodated within existing water abstraction consents or if alternations to existing infrastructure or additional infrastructure is required which could directly affect the site.</p>	<p>Potential in combination effects of increased water demand from neighbouring districts.</p>	<p>Risk of LSE unknown. Further investigation is required to ascertain whether water demand for new housing can be accommodated within existing water abstraction consents or if it requires the creation of new reservoirs on the SPA. The plan does not promote development on the SPA site itself and the closest development would be at Ilkley and Addingham which are approximately 1km from the site. No development is specifically promoted which requires large amounts of water.</p>

<ul style="list-style-type: none"> • Airedale Sub Area Policy 1 (AD1); and • Wharfedale Sub Area Policy 1 (WD1). 			
<p>Recreation – trampling / disturbance of ground nesting bird species associated with the following policies:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 the Scale of Housing Required; • Airedale Sub Area Policy 1 (AD1); • Wharfedale Sub 	<p>Housing development and therefore growth in the population within the District and within certain settlements close to the SPA (i.e. Ilkley and Addingham) could result in increased recreational pressure on the site. The sub area policies also promote tourism which could increase recreational pressure on the SPA.</p>	<p>Possibly in combination with population increases in surrounding Districts such as Craven District and Harrogate Borough.</p>	<p>LSE. Population increase in the District as a whole and in certain settlements could increase recreational pressure on the SPA Potential in combination effect with development in neighbouring districts.</p>

<p>Area Policy 1 (WD1).</p>			
<p>Population increase from housing development and associated increase in traffic causes eutrophication for heaths due to air pollution and hence affect bird populations. Associated with the following:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 The Scale of Housing Required. 	<p>The Core Strategy is planning for 28,000 new homes and employment development up to 2028 and this could result in increased traffic and air pollution, which could result in eutrophication of the wet and dry heaths on the SPA.</p>	<p>Possibly, with increased air pollution in neighbouring areas although dispersed air pollution is a regional, if not, national issue.</p>	<p>LSE. Potential eutrophication effect on SPA heath habitats from potential increases in traffic from growth proposed in the Core Strategy.</p>
<p>Loss of supporting feeding sites outside of the SPA associated with the following parts of the plan:</p>	<p>Yes. The Core Strategy identifies housing and employment development in Addingham and Ilkley which are close to the SPA. Development in these settlements may involve development of greenfield sites</p>	<p>Possibly if other supporting sites in neighbouring Districts are lost to development. E.g. in Craven District and Harrogate Borough.</p>	<p>LSE. Greenfield developments could result in the loss of supporting sites to the SPA. It is not known whether sites which provide supporting functions to the SPA have been</p>

<ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; and • Wharfedale Sub Area Policy 1 (WD1). 	<p>which could be providing a supporting function to the SPA.</p>		<p>identified. Potential in combination effect with development in neighbouring district.</p>
<p>Pet predation of ground nesting birds associated with housing (i.e. cats)</p>	<p>None</p>	<p>None</p>	<p>No LSE. The plan does not propose new housing developments which could be within 400 m of the SPA boundary. The nearest settlements are approximately 1.5 km from the SPA boundary.</p>
<p>Renewable energy developments resulting in injury / mortality of birds.</p>	<p>Unlikely due to the geography of the Ilkley area.</p> <p>Policy EN6 Energy includes text (B) requiring full assessment of wind turbine proposals and integration of measures to minimise adverse effects but this wording does not deal specifically with potential impacts on Natura 2000 sites.</p>	<p>It is unlikely that projects in neighbouring areas would be given planning permission which would also have this potential effect. No in-combination effects therefore identified.</p>	<p>LSE. In the interests of the precautionary principle an LSE is identified. Policy Energy EN6 does not adequately protect the SPA from potential adverse effects. Wording of Policy EN6 Energy should be tightened in order to avoid an effect on European designated sites.</p>

Recommendations:

Recreation effects: Further investigation of existing recreation issues and management of the SPA is needed through AA as well as whether the other Core Strategy policies are sufficient to safeguard against this effect occurring.

Air quality effects: Further investigation is required to ascertain whether other Core Strategy policies contain sufficient safeguards to protect against this effect occurring and whether any specific sources of air pollution can be identified, such as increased traffic on A roads lying within 200 m of the SPA.

Loss of supporting sites: Greenfield developments could result in the loss of supporting sites to the SPA. It is not known whether sites which provide supporting functions to the SPA have been identified. The potential for supporting sites to exist would need to be investigated through AA.

Hydrology - Further investigation and consultation with Natural England is required to establish whether an adverse effect could occur and whether the Core Strategy policies provide sufficient safeguards to protect the SPA.

Injury and mortality of birds from wind turbines: The wording of Policy EN6 Energy should be tightened in order to avoid an effect on European designated sites.

Assessment of significance of effects of the Bradford Waste Management DPD:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Inappropriate management	None	None	No LSE. The plan is unlikely to affect the habitat management regime of the site.
Drainage activities and changes in groundwater levels through increased water demand from new waste management developments. Associated with the quantum of development proposed in the plan.	None	None	No LSE. The plan does not promote any new waste management sites which are located near to the SPA.
Loss of supporting feeding sites outside of the SPA	None	None	No LSE. The plan is unlikely to result in the loss of supporting feeding sites outside of the SPA because it does not promote the development of greenfield sites.
Introduction of barriers to bird flight	None	None	No LSE. The waste plan does not promote any development which would result in creating a barrier to birds for which the SPA is designated.
Air pollution from waste	This proposed waste management site lies within	Potential in-combination	LSE. As the type of waste management

<p>management use of Site 78 – Aire Valley Road, Worth Village Keighley</p>	<p>approximately 11km of the SPA. If this site were used for a waste management technology which emitted pollution to the air, this could result in an effect on the vegetative communities of the site, which are already affected by acid and nitrogen deposition.</p>	<p>effect with housing and economic development in the Core Strategy and in neighbouring areas although dispersed air pollution is a regional, if not, national issue.</p>	<p>technology to be used on the site is not being determined by the plan, it is uncertain whether this is a likely significant effect. An effect might only occur if the technology involved emissions of pollution to the air. Due to the distance involved, it is unlikely that air pollution emitted from this site could affect the SPA. However, in the interests of the precautionary principle, an LSE is identified, alone and in combination with development within the plan area and surrounding areas.</p>
<p>Recommendations:</p> <p>The potential effects from a waste management use on ‘site 78 Aire Valley Road, Worth Village Keighley’ on European sites could be avoided by the plan stating that an incinerator is not operated on that site</p> <p>Alternatively, potential effects of an incinerator, gasification and/or pyrolysis plant on the South Pennine Moors Phase 2 SPA, should it be proposed, would need to be assessed and mitigated at the planning application level through a project level appropriate assessment (AA). It is not known whether a project level AA would be able to conclude that such a facility would not have an adverse effect on the South Pennine Moors Phase 2 SPA.</p> <p>Preferred Policy WDM2: Assessing All Applications for New, Expanded and Residual Waste Management Facilities – policy wording should read that ‘adverse effects on European designated sites are avoided.’ Currently the policy requires adverse effects to be minimised which is not strong enough to conclude that the plan will not have an adverse effect on European sites.</p>			

Table 4	
Name	<u>North Pennine Moors SAC</u>
Location with regards to plan area	Approx. 1.5 km to the north/north-east of the District boundary
Reason(s) for designation:	
<p>ANNEX 1 habitats</p> <p>Primary</p> <ul style="list-style-type: none"> • European dry heaths • <i>Juniperus communis</i> formations on heaths or calcareous grasslands • Petrifying springs with tufa formation (<i>Cratoneurion</i>) * Priority feature • Siliceous rocky slopes with chasmophytic vegetation • Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles • Blanket bogs 	<p>Non Primary</p> <p>ANNEX 1 HABITATS</p> <ul style="list-style-type: none"> • 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> • 6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i> • 6150 Siliceous alpine and boreal grasslands • 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) • 7230 Alkaline fens • 8110 Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladanii</i>) • 8210 Calcareous rocky slopes with chasmophytic vegetation <p>ANNEX 2 SPECIES</p> <ul style="list-style-type: none"> • Marsh saxifrage <i>Saxifraga hirculus</i>

Conservation objectives	Maintenance of the Annex I habitats that are a primary reason for selection of this site and maintenance of non-primary habitats.	
Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)	
<p>All interest features have been affected by excessive livestock grazing levels across parts of the site. These have been, and are still, encouraged by headage payments, but agreements with graziers and moorland owners, including those in Wildlife Enhancement and Countryside Stewardship schemes, are starting to overcome the problems of overgrazing. In places, the difficulty of reaching agreements on commons, which cover much of the site, means that successes are limited at present, and continues to prevent restoration. Drainage of wet areas can also be a problem; drains have been cut across many areas of blanket bog, disrupting the hydrology and causing erosion, but in most parts these are being blocked and the habitat restored under agreements. Burning is a traditional management tool on these moorlands, which contributes to maintaining high populations of SPA breeding birds. However, over-intensive and inappropriate burning is damaging to heath and blanket bog and further agreements are needed with the landowners to achieve sympathetic burning regimes. Restoration, to some degree, of a mosaic of more natural habitats across parts of the site is desirable. Acid and nitrogen deposition continue to have damaging effects on the site.</p>	<ul style="list-style-type: none"> • Management of habitats - Grazing levels and burning • Hydrology – drainage of wet areas, disruption of hydrology • Erosion of blanket bogs from drainage channels • Air quality - Air pollution and atmospheric deposition is having a damaging effect on vegetation. 	

Assessment of significance of effects of the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Inappropriate management	None	None	No LSE. The plan will not affect the management of the site, especially in terms of grazing and burning regimes.

<p>Water levels affected by increased water demand and flood risk management measures associated with the following policies:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 the Scale of Housing Required; • Airedale Sub Area Policy 1 (AD1); and • Wharfedale Sub Area Policy 1 (WD1). 	<p>The source of water for existing and new housing development and whether there are any issue associated with it are unknown e.g. whether water demand for new housing can be accommodated within existing water abstraction consents or if alternations to existing infrastructure or additional infrastructure is required which could directly affect the site.</p>	<p>Potential in combination effects of increased water demand from neighbouring districts.</p>	<p>Risk of LSE unknown. Further investigation is required to ascertain whether water demand for new housing can be accommodated within existing water abstraction consents or if alternations to existing infrastructure or additional infrastructure is required which could directly affect the site. The plan does not promote development on the SAC site itself and the closest development would be at Ilkley and Addingham which are approximately 1 km from the site. No development is specifically promoted which requires large amounts of water.</p>
<p>Changes to hydrology and erosion through cutting of drains</p>	<p>None</p>	<p>None</p>	<p>No LSE. The plan will not result in the cutting of new drains on the site.</p>
<p>Population increase from housing development and associated</p>	<p>The Core Strategy is planning for 28,000 new homes and employment</p>	<p>Possibly, with increased air pollution in neighbouring areas although</p>	<p>LSE. Potential eutrophication effect on SPA heath habitats from potential</p>

<p>increase in traffic causes eutrophication for heaths due to air pollution and hence affect bird populations. Associated with the following:</p> <ul style="list-style-type: none"> • The preferred spatial development option; • Strategic Core Policy 1 (SC1) overall Approach and Key Spatial Priorities; • Strategic Core Policy 4 (SC4) Hierarchy of Settlements; • Policy HO1 The Scale of Housing Required. 	<p>development up to 2028 and this could result in increased traffic and air pollution, which could result in eutrophication of the wet and dry heaths on the SAC.</p>	<p>dispersed air pollution is a regional, if not, national issue.</p>	<p>increases in traffic from growth proposed in the Core Strategy.</p>
<p>Recommendations:</p> <p>Recreation effects: Further investigation of existing recreation issues and management of the SAC is needed through AA as well as whether the other Core Strategy policies are sufficient to safeguard against this effect occurring.</p> <p>Air quality effects: Further investigation is required to ascertain whether other Core Strategy policies contain sufficient safeguards to protect against this effect occurring and whether any specific sources of air pollution can be identified, such as increased traffic on A roads lying within 200 m of the SAC.</p> <p>Hydrology - Further investigation and consultation with Natural England is required to establish whether an adverse effect could occur and whether the Core Strategy policies provide sufficient safeguards to protect the SPA.</p>			

Assessment of significance of effects of the Bradford Waste Management DPD:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale
Inappropriate management	None	None	The plan will not affect the management of the site, especially in terms of grazing and burning regimes.
Changes to hydrology and erosion through cutting of drains	None	None	The plan will not result in the cutting of new drains on the site.
Air pollution from waste management use of Site 78 – Aire Valley Road, Worth Village Keighley	This proposed waste management site lies within approximately 21km of the SAC. If this site were used for a waste management technology which emitted pollution to the air, this could result in an effect on the vegetative communities of the site, which are already affected by acid and nitrogen deposition.	Potential in-combination effect with housing and economic development in the Core Strategy and in neighbouring areas although dispersed air pollution is a regional, if not, national issue.	LSE. As the type of waste management technology to be used on the site is not being determined by the plan, it is uncertain whether this is a likely significant effect. An effect might only occur if the technology involved emissions of pollution to the air. Due to the distance involved, it is unlikely that air pollution emitted from this site could affect the SAC. However, in the interests of the precautionary principle, an LSE is identified, alone and in combination with development within the plan area and surrounding areas.
Recommendations: The potential effects from a waste management use on 'site 78 Aire Valley Road, Worth Village Keighley' on European sites could be avoided by the plan stating that an incinerator is not operated on that site.			

Alternatively, potential effects of an incinerator, gasification and/or pyrolysis plant on the South Pennine Moors Phase 2 SPA, should it be proposed, would need to be assessed and mitigated at the planning application level through a project level appropriate assessment (AA). It is not known whether a project level AA would be able to conclude that such a facility would not have an adverse effect on the South Pennine Moors Phase 2 SPA.

Preferred Policy WDM2: Assessing All Applications for New, Expanded and Residual Waste Management Facilities – policy wording should read that ‘adverse effects on European designated sites are avoided.’ Currently the policy requires adverse effects to be minimised which is not strong enough to conclude that the plan will not have an adverse effect on European sites.

Table 5	
Name	<u>Denby Grange Colliery Pond SAC UK0030036</u>
Location with regards to plan area	Approx. 16 km to the south to the District boundary
Reason(s) for designation:	
Primary: ANNEX 1 <ul style="list-style-type: none"> 1166 Great crested newt <i>Triturus cristatus</i> 	Non-primary: None
Conservation objectives	Maintenance of the Annex I habitats that are a primary reason for selection of this site.
Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
This site supports the sixth-highest recorded count of great crested newts for recent years in Great Britain. No real problems currently exist. Natural England has already addressed the issue of possible introduction of fish by re-routing of the public footpath away from the pond. Occasional drying-out of the pond has been known, which will prevent fish establishing permanently. Natural England has negotiated the creation of a new pond at the site, which will enhance the sustainability of the newt population. Natural England has concluded a management agreement with the owners to address the loss of terrestrial hibernation habitat.	<ul style="list-style-type: none"> Maintenance of habitats on site Absence of fish species

Assessment of significance of effects of the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Changes in water levels or quality.	None	None	No LSE. The plan will not influence any activities in close proximity to the site.
Introduction of fish species	None	None	No LSE. The plan will not influence any activities in close proximity to the site.
Inappropriate management	None	None	No LSE. The plan will not influence any activities in close proximity to the site.
Recommendations: None			

Assessment of significance of effects of the Bradford Waste Management DPD:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Changes in water levels or quality.	None	None	No LSE. The plan will not influence any activities in close proximity to the site.
Introduction of fish species	None	None	No LSE. The plan will not influence any activities in close proximity to the site.
Inappropriate management	None	None	No LSE. The plan will not influence any activities in close proximity to the site.
Recommendations: None			

Table 5

Name	<u>Craven Limestone complex SAC</u>	
Location with regards to plan area	Approx. 14 km to the north of the District boundary	
Reason(s) for designation:		
Primary		Non-primary:
ANNEX 1 HABITATS		ANNEX I HABITATS:
<ul style="list-style-type: none"> • 3140 Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. • 6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>) • 6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) • 7110 Active raised bogs • 7220 Petrifying springs with tufa formation (Cratoneurion) • 7230 Alkaline fens • 8240 Limestone pavements 		<ul style="list-style-type: none"> • 6130 Calaminarian grasslands of the <i>Violetalia calaminariae</i> • 9180 <i>Tilio-Acerion</i> forests of slopes, screes and ravines
ANNEX 2 SPECIES		

<ul style="list-style-type: none"> • <i>Austropotamobius pallipes</i> (freshwater crayfish) • <i>Cottus gobio</i> (bullhead) • <i>Cypripedium calceolus</i> (lady's slipper orchid) 	
Conservation objectives	Maintenance of the Annex I habitats that are a primary reason for selection of this site and maintenance of non-primary habitats.
Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
The diversity of interest of the limestone pavements, grasslands and springs is dependent on there being a range of grazing intensities, from moderate to light to areas with no livestock grazing. Heavy livestock or rabbit grazing has been damaging and the Wildlife Enhancement Scheme and other forms of agri-environmental agreement are being used, successfully, to promote appropriate management. Removal of limestone pavement for sale as rockery stone and limestone quarrying have both caused problems in the past but are now well controlled through Limestone Pavement Orders and the development planning process. The raised bog has suffered some past drainage but the hydrology has been made secure and the site is carefully managed. Malham Tarn is vulnerable to nutrient enrichment in the catchment and action has been taken to minimise such inputs.	<ul style="list-style-type: none"> • Management of habitats – grazing • Continued protection from limestone pavement removal • Continued protection of hydrological regime • Continued management of nutrient enrichment

Assessment of significance of effects of the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Enrichment of Malham Tarn	None	None	No LSE. The plan will not result in nutrient enrichment of Malham Tarn. Action has been taken to minimise nutrient inputs.

Removal of limestone pavement	None	None	No LSE. The plan will not result in limestone pavement removal. This is strictly controlled through Limestone Pavement Orders and the development planning process.
Inappropriate management	None	None	No LSE. The plan will not affect grazing on the site.
Recommendations: None			

Assessment of significance of effects of the Bradford Waste Management DPD:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Enrichment of Malham Tarn	None	None	No LSE. The plan will not result in nutrient enrichment of Malham Tarn. Action has been taken to control nutrient inputs.
Changes in groundwater levels	None	None	No LSE. The plan will not affect groundwater levels.
Removal of limestone pavement	None	None	No LSE. The plan will not result in limestone pavement removal. This is strictly controlled through Limestone Pavement Orders and the development planning process.
Inappropriate management	None	None	No LSE. The plan will not affect grazing on the site.
Recommendations: None			

Table 6

Name		<u>North Pennine Dales Meadows SAC</u>	
Location with regards to plan area		Approx. 16 km to the north of the District boundary	
Reason(s) for designation:			
Primary: ANNEX 1 HABITATS <ul style="list-style-type: none"> 6520 Mountain hay meadows for which this is one of only two known outstanding localities in the United Kingdom, which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 1000 hectares. 		Non Primary: ANNEX 1 HABITATS <ul style="list-style-type: none"> 6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) 	
Conservation objectives		Maintenance of the Annex I habitats that are a primary reason for selection of this site and maintenance of non-primary habitats.	
Requirements to maintain favourable condition status of site (relating to conservation objectives)			Key factors affecting site integrity (relating to designated features)
These grasslands are dependent upon traditional agricultural management, with hay-cutting and no or minimal use of agrochemicals. Such management is no longer economic. Management agreements and ESA payments are being used to promote the continuation of traditional management. The refining of the prescriptions underpinning these schemes in the light of the findings of monitoring programmes is an important, continuing, part of delivering favourable condition.			<ul style="list-style-type: none"> Maintenance of habitats on-site through traditional agricultural management.

Assessment of significance of effects of the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Inappropriate management	None	None	No LSE. The plan will not affect the management of the site. The component sites of the SAC are well beyond the boundary of the District.
Recommendations: None			

Assessment of significance of effects of the Bradford Waste Management DPD:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Inappropriate management	None	None	No LSE. The plan will not affect the management of the site. The component sites of the SAC are well beyond the boundary of the District.
Recommendations: None			

Table 7	
Name	<u>Kirk Deighton SAC</u>
Location with regards to plan area	Approximately 22 km from the Bradford District boundary.
Reason(s) for designation:	
Primary: ANNEX 2 SPECIES <ul style="list-style-type: none"> • 1166 Great crested newt <i>Triturus cristatus</i> 	Non-Primary: None
Conservation objectives	Maintenance of the Annex I habitats that are a primary reason for selection of this site and maintenance of non-primary habitats.
Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
Kirk Deighton is subject to variable water levels which mean the ponds do not hold water some years. The situation will need to be kept under review. The ponds are situated in a heavily grazed pasture. While this is not a problem in itself the pond edges tend to be heavily poached and there is little aquatic vegetation. An agreement will be sought with the land manager that would involve fencing of the pond and setting aside a small section of the pasture to improve the habitat for newts.	<ul style="list-style-type: none"> • Maintenance of habitats on-site

Assessment of significance of effects of the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Inappropriate management	None	None	No LSE. The plan will not affect the management of the habitat on-site. The site is well beyond the boundary of the District.
Recommendations: None			

Assessment of significance of effects of the Bradford Waste Management DPD:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Inappropriate management	None	None	No LSE. The plan will not affect the management of the habitat on-site. The site is well beyond the boundary of the District.
Recommendations: None			

Table 8	
Name	<u>Rochdale Canal SAC</u>
Location with regards to plan area	Approximately 18km south west from the Bradford District boundary.
Reason(s) for designation:	
Primary: ANNEX 2 SPECIES <i>Luronium natans</i> (floating water plantain)	Non-Primary: none
Conservation objectives	Maintenance of the Annex I habitats that are a primary reason for selection of this site and maintenance of non-primary habitats.
Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
The Rochdale Canal extends approximately 20 km from Littleborough to Failsworth, passing through urban and industrialised parts of Rochdale and Oldham and the intervening areas of agricultural land (mostly pasture). Water supplied to the Rochdale Canal in part arises from the Pennines. This water is acidic and relatively low in nutrients, while water from other sources is mostly high in nutrients. The aquatic flora of the canal is thus indicative of a mesotrophic water quality (i.e. is moderately nutrient rich) although there is evidence of some local enrichment. The Rochdale Canal supports a significant population of floating water-plantain <i>Luronium natans</i> in a botanically diverse waterplant community, which also holds a wide range of pondweeds <i>Potamogeton</i> spp. The canal has predominantly mesotrophic water. This population of <i>Luronium</i> is representative of the formerly more widespread canal populations of north-west England, although the Rochdale Canal supports unusually dense populations of the plant.	<ul style="list-style-type: none"> • Increased boat traffic on the canal • Dredging activity • Draining of the canal • Pollution of the canal • Shading of the canal • Use of herbicides in or adjacent to the

	canal
--	-------

Assessment of significance of effects of the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Boat traffic on canal	None	None	No LSE. It is not considered likely that the plan will affect boat traffic using the canal.
Dredging	None	None	No LSE. The plans will not require dredging of the canal.
Pollution of the canal	None	None	No LSE. The plan will not lead to increased pollution of the canal.
Shading to the canal	None	None	No LSE. The plan will not result in increased shading of the canal.
Use of herbicides in or adjacent to the canal	None	None	No LSE. The plan will not result in changes to the use of herbicides near the canal.
Recommendations: None			

Assessment of significance of effects of the Bradford Waste Management DPD:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion

Boat traffic on canal	None	None	No LSE. It is not considered likely that the plan will affect boat traffic using the canal.
Dredging	None	None	No LSE. The plans will not require dredging of the canal.
Pollution of the canal	None	None	No LSE. The plan will not lead to increased pollution of the canal.
Shading to the canal	None	None	No LSE. The plan will not result in increased shading of the canal.
Use of herbicides in or adjacent to the canal	None	None	No LSE. The plan will not result in changes to the use of herbicides near the canal.
Recommendations: None			

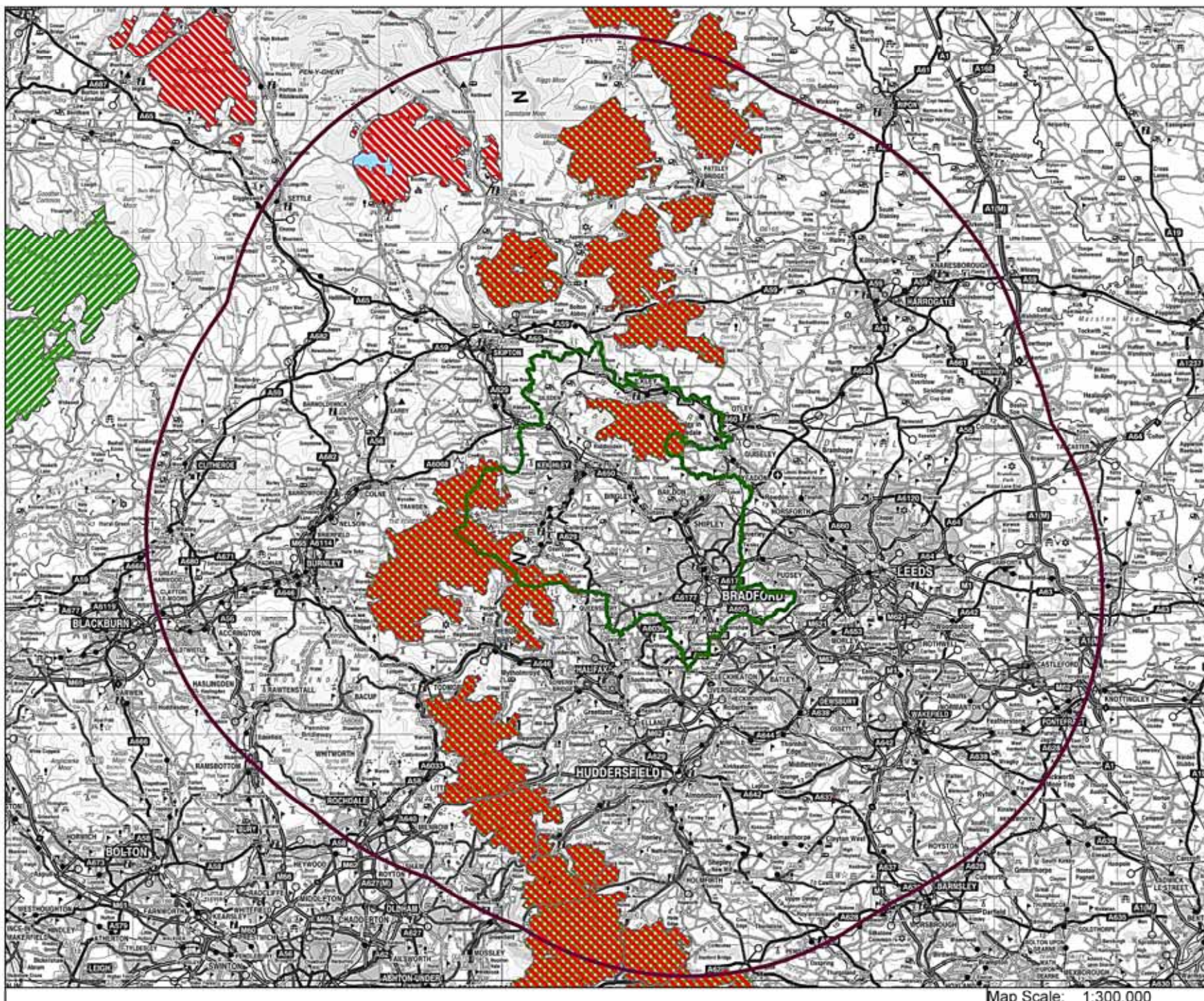
Table 9	
Name	<u>Malham Tarn Ramsar site</u>
Location with regards to plan area	Approx. 18km to the north west of the district boundary
Reason(s) for designation:	
<p>Ramsar criterion 1</p> <ul style="list-style-type: none"> Contains the highest marl lake in Britain, along with acidophilous bog, calcareous fen and soligenous mire. <p>Nationally important species occurring on the site:</p> <ul style="list-style-type: none"> Fish - <i>Cottus gobio</i> (bullhead) Invertebrates - <i>Austropotamobius pallipes</i> (freshwater crayfish) 	<p>Ramsar criterion 2</p> <p>Supports the nationally rare alpine bartisia <i>Bartsia alpina</i> and narrow small reed <i>Calamagrostis stricta</i> and seven nationally scarce species. Supports five listed British Red Data Book invertebrates including the caddis fly <i>Agrypnia crassicornis</i>.</p>
Additional information from Natural England:	
<p>The Malham Tarn Ramsar site is a wetland of international importance comprising areas of open water, fen raised bog and soligenous mire. The Tarn is a shallow, calcareous lake, which is the highest marl lake in Britain, at 380 m. Associated with the Tarn are habitats demonstrating all the stages of hydrosere development - open water, swamp, fen, and raised bog lying immediately south of the fen. East of the Tarn are two soligenous mires, Ha Mire and the extensive complex of Great Close Mire. These fen systems are highly calcareous with vegetation often encrusted with tufa. Outflows from these mires are tributaries to Gordale Beck, a rich calcareous stream that flows southwards to the boundary of the site. The Malham Tarn Ramsar site is entirely within the Craven Limestone Complex SAC.</p>	
Conservation objectives	Not known

Requirements to maintain favourable condition status of site (relating to conservation objectives)	Key factors affecting site integrity (relating to designated features)
<p>The tarn is particularly sensitive to changes in the water chemistry of its catchment – especially with respect to surrounding farmland. Research is on-going into the best way to deal with erosion of peat cliffs near the Tarn.</p>	<ul style="list-style-type: none"> Maintenance of the water chemistry within the tarn.

Assessment of significance of effects of the Bradford Core Strategy:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford Core Strategy?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Changes in water chemistry	None	None	No LSE. The plan will not have an effect on the water chemistry of the Tarn.
Recommendations: None			

Assessment of significance of effects of the Bradford Waste Management DPD:			
Nature of potential effect (relating to site integrity)	LSE due to the Bradford District Council Waste Management DPD?	Possible effects in combination with other plans and policies.	Assessment of significance and rationale for conclusion
Changes in water chemistry	None	None	No LSE. The plan will not have an effect on the water chemistry of the Tarn.
Recommendations: None			

Appendix B: Figures



Map Scale: 1:300,000

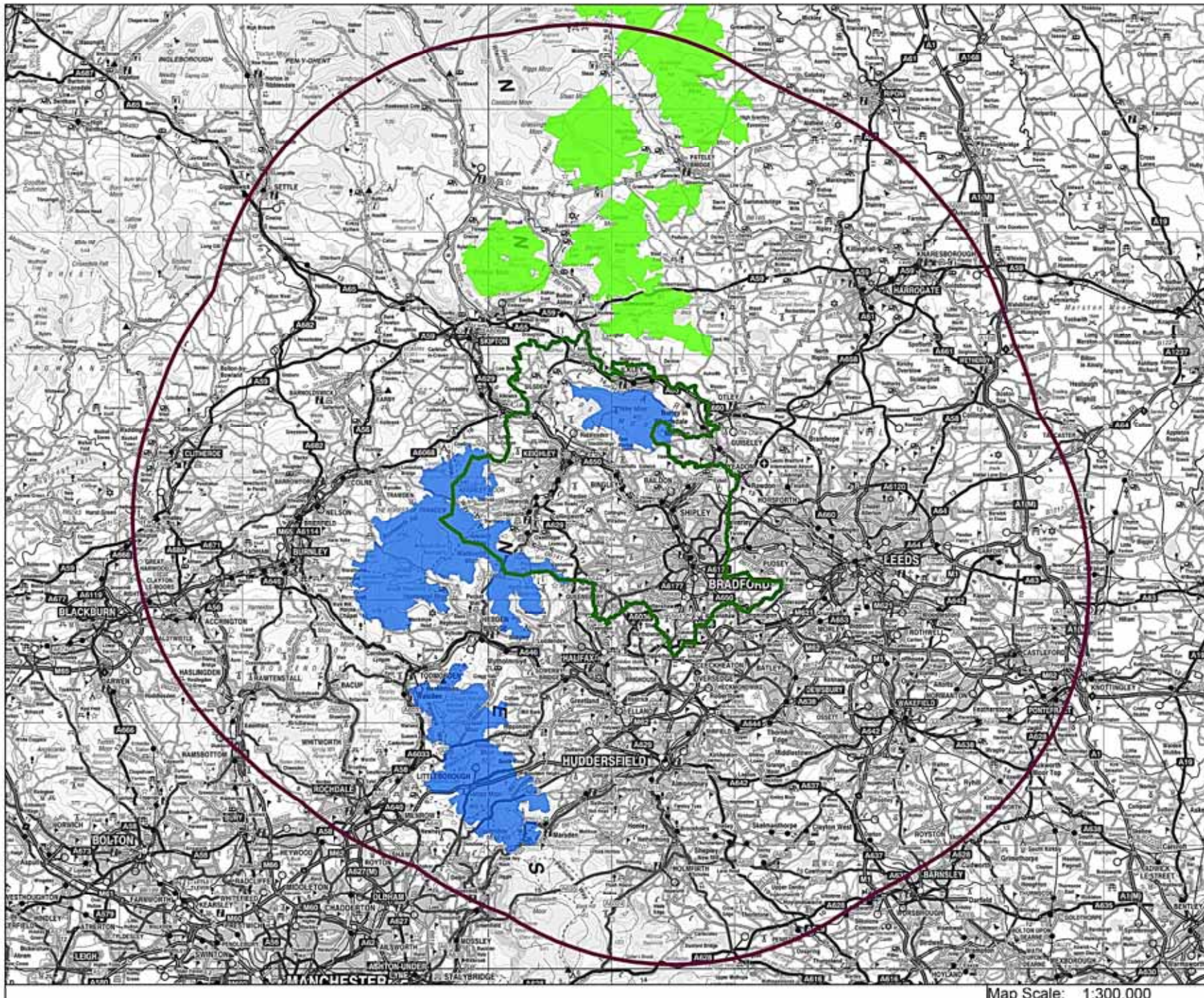
Legend

-  Bradford District
-  25km Study Area
-  Ramsar
-  SAC
-  SPA

Title
 Figure 1: European Designated Sites in and surrounding Bradford District
 Site: Bradford District

Client: City of Bradford Metropolitan District Council
 Project No. UK18 17516
 Issue: 1
 Date: February 2012
 Drawn By: CD





Legend

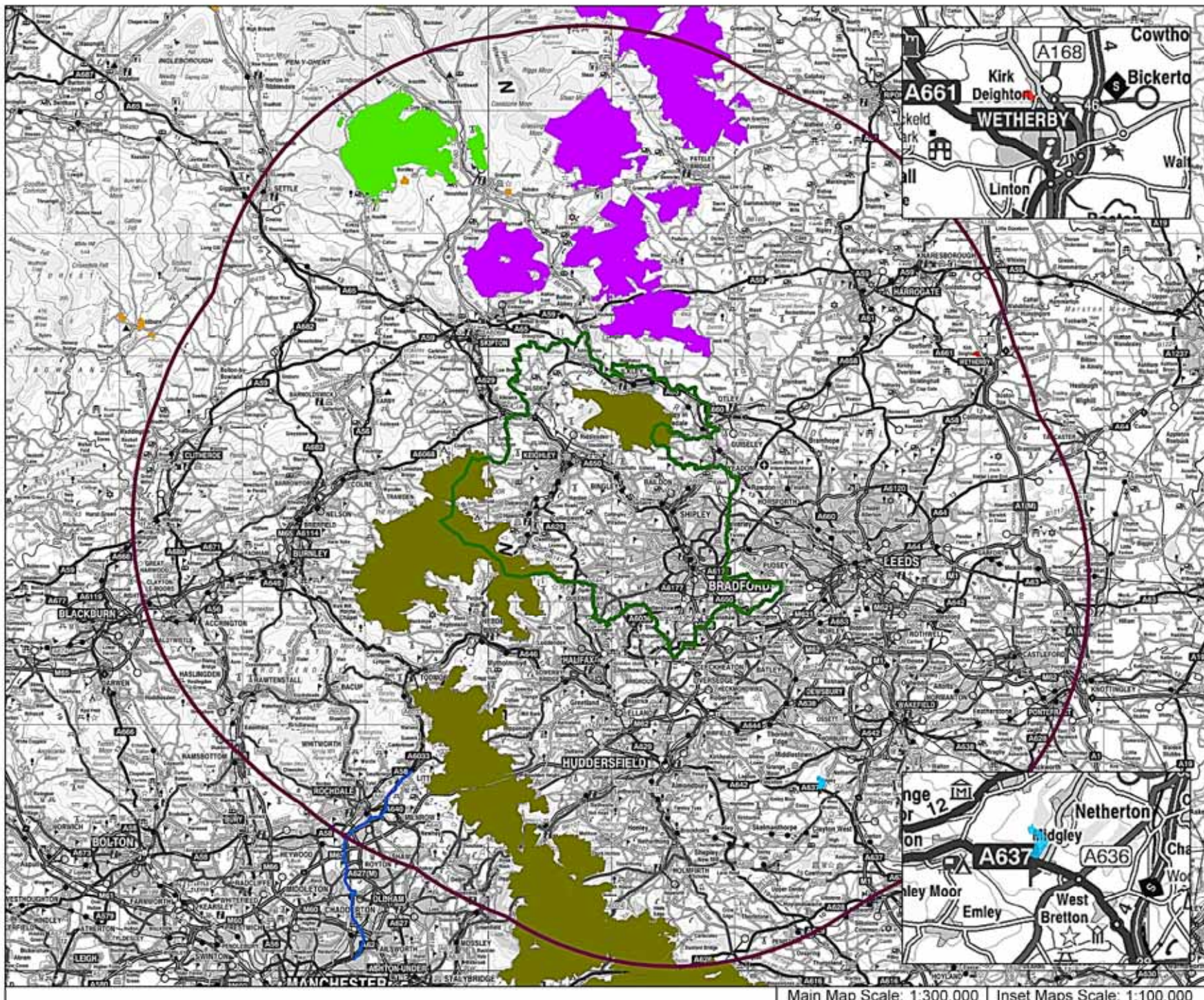
- Bradford District
- 25km Study Area
- SPA**
- South Pennine Moors Phase 2
- North Pennine Moors

Title
 Figure 2: SPAs in and surrounding Bradford District
 Site: Bradford District

Client: City of Bradford Metropolitan District Council
 Project No. UK18 17516
 Issue: 1
 Date: February 2012
 Drawn By: CD



Map Scale: 1:300,000



Legend

- Bradford District
- 25km Study Area

SAC

- Craven Limestone Complex
- Denby Grange Colliery Ponds
- Kirk Deighton
- North Pennine Dales Meadows
- North Pennine Moors
- Rochdale Canal
- South Pennine Moors

Title
 Figure 3: SACs in and surrounding Bradford District
 Site: Bradford District

Client: City of Bradford Metropolitan District Council
 Project No. UK18 17516
 Issue: 1
 Date: February 2012
 Drawn By: CD



Main Map Scale: 1:300,000 Inset Maps Scale: 1:100,000

